The supervision of school nurses in New Jersey: parallel needs, actions, and impacts on student care

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THE SUPERVISION OF SCHOOL NURSES IN NEW JERSEY:
PARALLEL NEEDS, ACTIONS, AND IMPACTS ON STUDENT CARE

by

Lee-Ann Halbert

A Dissertation

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Department of Educational Services and Leadership
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Dissertation Chair: Mark Raivetz, Ed.D
Dedications

The beneficiaries of the support the school nurses receive from their supervisors are the children and other members of the school communities these nurses serve. For that reason, I make the first dedication of this dissertation to those individuals in the nurses’ care. The people who shared with me their limited time in providing their insights and experiences are members of the New Jersey Certified School Nurses profession. You are a special group of nurses, and I also wish to dedicate this work to you. Please know I appreciate all your input to this research.
Acknowledgements

To Marc, if I haven’t said it enough, thank you for taking care of everything at home. Your efforts there allowed me to complete my work here.

To my children, Bess, Tal, and Adira, thank you for making me want to work harder. To my brother and sisters, Andy, Esther, and Lisa, thank you for picking me up when I was down.

To Mom and Dad, your ethics of hard work, perseverance, and love of learning have carried me from the beginning to now. I know you did and continue to lovingly support me (Dad in spirit, if not in body) without any expectation of repayment. The most meaningful thing I can do is to say, “thank you.” You have always been inspirations, singularly and jointly, and I appreciate everything.

To my dissertation committee chair, Dr. Mark Raivetz, and my dissertation methodologist, Dr. Jonathon Ponds: this journey has had some unexpected twists and turns in it. You have guided me, provided the emotional support necessary to enable me to continue, and generally been here for me. I cannot thank you both enough for your time and emotional investment in my work and me. To my dissertation generalist, Dr. Patricia Price, it was fortuitous that you were still available to participate on the committee when I asked you. My appreciation for your generosity in agreeing to jump in when requested is beyond words. Together, the three committee members formed the team to guide me in completing this work. I must give all of you a thank you

Marc, now it’s time to play!
Abstract

Lee-Ann Halbert
THE SUPERVISION OF SCHOOL NURSES IN NEW JERSEY:
PARALLEL NEEDS, ACTIONS, AND IMPACTS ON STUDENT CARE
2016-2017
Mark Raivetz, Ed.D.
Doctor of Education

New Jersey Certified School Nurses (NJ-CSNs) practice in an environment of parallel needs and actions where the primary goal is the education of the students in the building, yet the health and safety of each student are paramount. The research presented here evaluates how the supervision provided to the NJ-CSNs affects their clinical practice and other areas of decision-making in the school setting. This mixed methods research study of 557 NJ-CSNs reveals that school nurses who are supervised by an educator whose background includes being a registered nurse are better able to provide the optimal support for the nurses, and enable the nurses to support the students better, than those whose supervisor does not have the nursing background. Implications for practice and policy are provided, as well as recommendations for future research.
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Chapter 1

Introduction

According to New Jersey law, children ages 6-16 must either attend a school or be provided an education in an alternative setting (New Jersey Statutes Annotated 18A:38-25). The only professional in the school setting with “the education, the knowledge, and the expertise to determine what is needed to promote the lifelong health and well-being of children within the community” (Mattey, 2016, p. 9) in the school setting in New Jersey is the Certified School Nurse (NJ-CSN). With many school children experiencing chronic or acute health needs, and alarming reports on the numbers of students experiencing chronic absenteeism (Balfanz & Byrnes, 2012; US Department of Education, 2016), the need for qualified and properly supported NJ-CSNs is evident. Students have multiple reasons for chronic absences, among them are health conditions that make school attendance difficult, and emotional reasons such as a fear of being bullied or feeling subject to an unsafe school climate (Balfanz & Byrnes, 2012). Addressing the health of students and the school safety conditions are within the scope of practice for NJ-CSNs, as noted in the newest model presented by the National Association of School Nurses (NASN) for practice in school nursing entitled Framework for 21st Century School Nursing Practice (NASN, 2016a). This framework for practice presents multiple facets of school nursing in a way to encompass over 50 different puzzle pieces that form the basis of the clinical care offered by NJ-CSNs (NASN, 2016a). The NASN has divided these different areas of school nursing practice into five domains: “standards of practice, care coordination, leadership, quality improvement, and community/public health” (NASN, 2016a, p. 47). Within each of these components clinical examples are provided, such as
“direct care,…motivational interviewing/counseling,…documentation/data
collection,…disease prevention” (NASN, 2016a, p. 47). It should be noted, however, that
the extensive list of clinical and non-clinical activities to be performed by the school
nurse within the Framework for 21st Century School Nursing Practice is neither exclusive
nor exhaustive (Maughan, 2016).

**Problem Statement**

With so many components to the school nurse role, proper support and
supervision of the NJ-CSN are essential. The challenge to this is that school nurses may
not be supervised by someone with clinical nursing experience and knowledge.
Administrators, whose background is specifically in educational practice, have the
authority over the NJ-CSNs, but not the necessary background to provide the support the
nursing professionals need to carry out their duties most effectively. As a result of these
divergent professional backgrounds and needs, the school nurse is at risk for practice
challenges related to the school nursing role. Specifically, the NJ-CSN may have practice
limitations when abiding by the directives from the administrator overseeing the school
nurse. As noted by one school nurse, she either had to abide by the superintendent’s
directive that she leave a building and risk abandoning the patients in the building under
her care, or risk losing her job by following sound nursing practice and remaining with
the patients. In this case, the nurse stated she lost her job when she stayed with the
students in her care (N.T., personal communication, May 2015). According to the New
Jersey Board of Nursing (NJBON), no specific definition of patient abandonment exists
in a written law; however, “both nurse managers/supervisors and nurses in direct patient
care positions are accountable for providing safe nursing care to their patients” (NJBON,
2015, para. 4). The school nurse made a clinical decision in what she determined was the best interest of her patients, even though it was in direct contradiction of what her educational supervisor directed. This exemplifies just one of the many situations in which the supervisor’s experience can affect the clinical practice of the school nurse.

The risk to students becomes even more obvious when medication errors are introduced as a potential result of a nurse experiencing role ambiguity or conflict. This issue presents a more clinically direct relationship between the nurse and an individual student. If a school nurse makes a medication error with a student, the supervisor who lacks the clinical expertise to fully investigate the cause of this also lacks the clinical knowledge to implement a plan to prevent future medication errors.

The issue of how nurses are supervised and the relationship to practice has been well studied and reported. Among others, Brunetto, Shriberg, Farr-Wharton, Shacklock, Newman, and Dienger (2013) reported on the value of the relationship between the subordinate nurse and the supervisor. Brunetto, Farr-Wharton, and Shacklock (2011) specifically addressed the impact role issues can have on nursing practice. Similarly, Butterworth and Faugier (1992) support the supervision of nursing using appropriate personnel as a way to achieve optimal nursing practice and growth. The limitation of these studies is that they do not address the relationship of the professional background of the supervisors and the practice of the school nurses.

**Purpose of the Study**

The purpose of this study is to understand the relationship between the professional background of the school nurse’s direct supervisor and the NJ-CSN’s ability to practice to his or her fullest professional scope, as defined by the state Nurse Practice
Act (New Jersey Nurse Practice Act, 2015) in the school setting. The study investigates how adequately the nurses are able to provide nursing services in the school setting while supervised either by a supervisor with a registered nurse (RN) credential, or an educational administrator with no nursing background. This relationship between the supervisor’s professional background and school nursing services is assessed based on any potential nursing and educational conflicts, and any limitations imposed on nursing practice by the supervisor. Other clinical areas related to nursing scope of practice, as well as support from the supervisor, that have an impact on school nursing practice are also investigated.

**Research questions.** The following research questions guide the study:

1. How do the school nurses’ understandings of their roles affect their clinical practice?
2. How does the nursing supervisor’s professional and educational background relate to how the nurse provides services in the school setting?

The limitation noted for school nursing is the lack of research into how the divergent professional backgrounds of the clinical practitioner and the supervisor – nursing and education – relate to the care provided to the students. The overriding question centers around whether the different professional backgrounds provide the optimal conditions for student health and academic achievement. Taken further, the differing backgrounds raise the question of whether the nurse is adequately supported to grow and meet the changing needs of the individual students and those of the school community. Finally, these questions lead to a discussion of whether there is a better and safer way to provide support to the nurses as they provide care to the students or if the
current and most common method of nursing supervision is the best way to support the students in reaching their academic and personal goals.

**Conceptual Framework**

The current research considers the supervisory relationship as reported by the NJ-CSNs, how they perceive those relationships, what correlation exists with their nursing practice and what is best practice for the health and safety of the students. Issues related to role performance, specifically any areas of conflict that may arise because of the professional background of the supervisors are discussed and explored. The research is analyzed and reviewed through a lens of role conflict to determine how role issues can affect school nursing practice (Rizzo, House, & Lirtzman, 1970).

**Significance of the Study**

Although the primary work to be conducted in the school setting is the education of the students, this must happen within the safest and healthiest manner for the students. Any practices that compromise the health and safety of the students must be further investigated to determine how to make the school environment the safest possible for the student population. The goal of this study is to determine what is the best practice for the health and safety of the students in the school setting. Results may be used either to support how nursing care is presently delivered in schools, or to improve provision of care. This may also lead to research on any results that need further investigation.

**Conclusion**

This paper will present a review of the literature related to school nursing. Specifically, the background of the specialty and the recent trends of the health issues the students face will be presented. These health issues will be related to the academic
challenges school students must face. The literature review will also present a discussion of nursing supervision, including the benefits of appropriate support for nurses. Finally, the literature will present a discussion of role conflict and role ambiguity, two aspects related to role theory (Rizzo et al., 1970). The potential consequences to the nurses of role conflict and/or role ambiguity are presented in detail.

Following the literature review is a discourse on the methodology used to research school nursing practice among NJ-CSNs, specifically as related to how they are supervised. Background information is presented on the methodology used for the current research, as well as a research tool that has been identified for the process of research. Findings from the research study will be presented and discussed. The final section will provide information on implications and recommendations for practice, as well as future opportunities for further areas of research.
Chapter 2

Literature Review

The manner of how a school nurse responds to directives in his or her work setting may be considered as a function of two factors: the way the nurse conceptualizes his or her role, and the way he or she is supervised in the job. Organizational Role Theory will be used as the context for issues related to the practice of school nursing. This theory considers how the various entities – employee, employer, and the organization as a whole – interact to achieve the goals of the system (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964). Multiple constituents are considered when evaluating an institution from an Organizational Role Theory lens, including the personnel, the materials used within the system, and the output, whether a concrete product or a service (Kahn et al., 1964).

Among the perspectives of Organizational Role Theory is one that assesses how the individuals in the institution understand their specific roles in the system. Research into the application of Organizational Role Theory to school nursing reveals that investigation into the issues that can result from role conflict or role ambiguity is limited. One study was identified that considered role issues of Pennsylvania school nurses and how these related to the nurses’ perceptions of their practice (Zimmerman, Wagoner, & Kelly, 1996). While Tseng (2014) researched New Jersey school nurses, it was from the limited perspective of the specific support the nurses were provided by the school systems they worked in, and how that support related to the nurses’ beliefs about their practice abilities and satisfaction with their work. No research was located specifically addressing how the supervision of NJ-CSNs relates to the role perceptions nurses hold or the ability to practice vis-a-vis any issues of role ambiguity or role conflict. For these
reasons, this literature review will present research and information about role ambiguity and role conflict both as broad concepts, and as applied to the general practice of nursing.

This literature review will initially focus on the background, need for, and value of school nurses. This will be followed by a review of material related to Organizational Role Theory. The third section of the literature review will discuss the supervision of school nurses. The issues will be merged in the final section of the literature review.

Research Strategy

For the research regarding role issues and school nursing, multiple searches of the databases in Rowan University library were conducted. Key terms used were “role conflict,” “role ambiguity,” and “role theory” in various combinations. These terms were combined with “school nurse,” “nurse” or “nursing,” and then run without the nursing specific language. When expanded beyond nursing, discipline searches were limited to education, nursing, medicine, and social work because of the therapeutic nature of these specialties. Only scholarly and peer-reviewed articles or scholarly books were included. Limiters were English language and available in full-text online or through Rowan University interlibrary accession. Initially the limitation on publication was set at no older than the year 2005, then increased to 2000. As the literature was reviewed, older, classic sources that had been referenced frequently in subsequent research were included because of their significance to the topic.

Searches on student achievement were conducted similarly, using the key terms of “achievement” or “student achievement” and “nurse” or “school nurse.” Timing and limiters were similar to that noted for role theory. When conducting research on student
health issues, “school nurse” or “school nursing” was combined with “student health,” “health,” and specific clinical concerns.

**School Nursing as a Specialty**

**Clinical issues of school students.** Children face complex health issues today that affect more than just school attendance. Children can face life everyday with the challenges of asthma, attention deficit hyperactivity disorder, or a learning disability (U.S. Department of Health and Human Services, 2012). Other students must deal with other chronic conditions such as diabetes (American Diabetes Association, 2011). As many as 15% of school children have dealt with emotional or behavior issues by consulting with school staff about their concerns, and as many as 1/3 of these students take medications to help with these issues (U.S. Department of Health and Human Services, 2008). It is also estimated that as many as 20% of school students have a mental health issue that can affect their ability to perform optimally in school (Puskar & Bernardo, 2007, p. 216). Students encounter violence that can have an impact on growth and development, as well as on academic achievement, and nurses assist these students regularly (King, 2014). Encounters with the school nurse may be the children’s most common interaction with any health care provider (Rice, Biordi, & Zeller, 2005). These statistics reveal the widespread need of a clinical nursing presence at all times in the school setting.

**Student achievement and school nursing.** Researchers have considered the relationship between school attendance and student achievement. Multiple positive results are achieved with improved student attendance in school. The research by Balfanz and Byrnes (2007) identifies the benefits of school attendance, particularly for students in
lower socioeconomic classes, as a way to break out of poverty. This is supported by the later work by Gottfried (2010). Gottfried (2010) reported on the direct relationship between urban elementary and middle school student attendance and improved grade point average.

A related concept is that of school engagement, or being involved in the school both academically and socially (Chase, Hilliard, Geldof, Warren, & Lerner, 2014). Academic engagement, as defined to include school attendance, is positively correlated with student academic achievement (Balfanz & Byrnes, 2006). As noted in later research by Gottfried (2013), the presence of a school nurse in the building can have a positive impact on student attendance and, by extension, engagement (Chase et al., 2014).

One way of supporting student attendance and its corollary of improved student achievement is through the work of the school nurse. Researchers have reported on the positive connection between the presence of school nurses and improved student results, including on standardized examinations (Allen, 2003; Gottfried, 2013). Research by Rodriguez et al. (2013) found that having a school nurse in the building is associated both with greater school attendance and reduced emergency room visits.

With a basis of improved student academic success related to the presence of a school nurse in the building, the case can be made for the value of an ongoing, established relationship between one specific school nurse and the students. Multiple researchers have noted the value of the relationship between the patient and nurse (Curley, 1998; DeSochio & Hootman, 2004; Dinc & Gastmans, 2013; Finn 2011; Kirtley, 2013; Kraft & Erikkson, 2015; Shannon, Bergren, & Matthews, 2010). Familiarity with and trust of the nurse by the patient is beneficial to the health improvement of the patient
Trust is an essential component of supporting the relationship between patient and nurse (Curley, 1998; Dinc & Gastmans, 2013; Finn 2011). It is this trusting relationship, based on consistent and sustained time with the patient-student in the school setting, which can lead to the student sharing essential information related to his or health (DeSochio & Hootman, 2004; Kirtley, 2013; Kraft & Eriksson, 2015; Shannon, Bergren, & Matthews, 2010). Within the context of this study, supervisory decisions about how to staff the health office have the potential to affect the student and nurse relationship, which has the potential of having an impact on both how the student is cared for by the nurse, and achieves academically

Organizational Role Theory

Organizational Role Theory generally considers how the dynamics of an organization and the individuals within that organization fulfill their job functions (Kahn et al., 1964). This theory extends consideration of the impact the work can have beyond the organization to address how the individual perception of the role can “affect the physical and emotional state of the person” (p. 11). Multiple issues arise from the understanding the NJ-CSN has of the role in the school setting. Confusion in the role can lead to challenges both within the school setting, and in the personal life of the nurse (Dierdorff & Rubin, 2007; Gormley & Kennerly, 2010; Kahn et al., 1964; Tarrant & Sabo, 2010; Zimmerman et al., 1996).

To discuss role theory effectively the definition of “role” must be clarified. Levinson (1959) rejected a single component definition for role, defining the concept as comprised of three parts: “structurally given demands (norms, expectations, taboos, responsibilities)...the member’s orientation or conceptions of the part he is to play in the
organization...the *actions* of the individual members” (p. 172). Rizzo, House, and Lirtzman (1970) simplify the definition of role as “a set of expectations about behavior for a position in a social structure” (p. 155). The expectations for that role may be self-imposed, or those established by someone else. These expectations set the level of practice and behavior that the individual is assumed to use in the role (Rizzo et al., 1970).

The important aspect of both definitions is that the meaning of role is composed of both the individual’s beliefs, and the requirements established for the actor by the various people to whom the individual must answer.

Role theories as applied in the work setting derive from Organizational Role Theory (Kahn et al., 1964; Rizzo et al., 1970). Biddle (1986) provides the explanation for Organizational Role Theory as one in which work roles “are assumed to be associated with identified social positions and to be generated by normative expectations” (Biddle, 1986, p. 73). A risk to the individual employee and the organization results from multiple, incongruent inputs of expectations to the staff member. According to “chain of command and the principle of unity of command and direction” (Rizzo et al., 1970, p. 150) view, the flow of communication regarding directives moves from one individual at the top of the organization to the subordinates below. This single direction of orders flowing from one individual is designed to reduce confusion for the subordinate employee, ensuring both accurate implementation of the instruction, and decreased confusion by the employee (Rizzo et al., 1970).

Organizational structure must also be viewed in parallel to role theory, which tells us that when the instructions or practice of the subordinate are in conflict or confusing, the employee – with respect to this study, the NJ-CSN – may experience stress, anxiety,
decreased job fulfillment, all leading to decreased job execution (Rizzo et al., 1970). Stress is a mediating factor in multiple responses in the school nurse setting including, among others, clinical performance, satisfaction with the job, attrition, experiencing “burnout...defined by the dimensions of exhaustion, cynicism, and inefficacy” (Maslach, Schaufeli, & Leiter, 2001, p. 397), impacts on relationships, and personal emotional responses (Kahn et al., 1964; Tunc & Kutanis, 2009). One factor that impacts the stress experienced in a work setting is the employee’s understanding of the actual practice role (Kahn et al., 1964; Rizzo et al., 1970; Tarrant & Sabo, 2010).

A corollary to the organizational perspective of Role Theory is the viewpoint of what perspective is under consideration. Role Theory situates the individual within the context of the larger organization (Biddle, 1986). Role Theory concerns itself with three components: individual behaviors, the persona the individual takes on as a social being, and how an individual understands his organizational place and performs within the institution (Biddle, 1986, p. 68). Taken from this larger understanding of Role Theory, the work of the school nurse can be understood to include multiple components, including those that apply to nursing in general, such as “personal carer (sic), clinician, educator, manager, administrator and researcher” (Brookes, Davidson, Daly, & Halcomb, 2007, p. 147), as well as those that are specific to practice within the educational framework. These latter job components include performing the work of the care coordinator, surveillance of communicable diseases, identification of students with educational or health needs, provision of nutrition counseling, counseling, and crisis intervention, among other services (Wolf, 2013). In this sense, the school nurse can be seen as having expectations of his or her work, as well as understandings of the role of
the nurse different from those of other participants in the school setting. Among those to whom the nurse answers, in addition to the formal authorities in the school system and the nursing profession, are the parents of the children who are served, teaching and other staff colleagues in the school setting, professional organizations to which the nurse belongs, physicians from whom the nurses take orders, and the students themselves.

A more general issue related to Role Theory relates to all professionals, regardless of type of work. O’Rourke and White (2011) point out the overriding issue of an individual’s set of beliefs is based on the concept of being a professional in any line of work. In this context, the employee has this added layer of what it means to be a professional in any discipline. For the nurse, O’Rourke and White (2011) define the three layers as “a professional first, an RN second (discipline specific role), and third is engaged in a functional role (staff nurse, manager, educator, researcher, consultant)” (p. 185). According to O’Rourke and White (2011), the professional component leads the individual to act in a more self-determinant capacity. As such, issues related to role conflict and role ambiguity have the potential to be more complicated.

**Role conflict and role ambiguity.** Both role conflict and role ambiguity have been found to be correlated with feelings toward work. Tosi (1971) used Kahn, Wolfe, Quinn, Snoek, & Rosenthal’s (1964) work to research the effect ambiguity or conflict can have on an employee’s attitudes toward work and performance. The work of Tosi (1971) points to the impact organizational relationships among the sender of a message and recipient employees can have on work outcome and attitudes toward work. Among the factors that can lead to negative outcomes on both work product and approach toward the
work are the congruency of all messages sent to the employee, and the clarity of the information (Tosi, 1971).

The understanding a nurse has of his or her role is dependent, in part, on the expectations of the employer. For all school employees, that is a school system. For a school nurse, the expectations are also a function of the nursing occupation and the regulatory body of nursing practice. In New Jersey, RNs are governed by the NJBON. As a school employee reporting to a supervisor the nurse must abide by the directives from a school administrator. As an RN, the NJ-CSN must work within the scope of the RN license and the Nurse Practice Act (New Jersey Nurse Practice Act, 2015), administered by the NJBON. An inconsistent or incomplete understanding of the work roles can lead to “negative consequences” (Tubre & Collins, 2000, p. 157) in the work setting. Two distinct role issues potentially emerge as related to how the subordinate understands the job: role conflict and role ambiguity.

An additional layer of role questions relates specifically to the specialty of school nursing practice. The limited research on role issues and nursing distinguishes between nursing in acute care settings, and that in community settings. The history of school nursing points to its derivation from public health nursing - a community health concept (Zaiger, 2013). At the same time, school nurses care for children who experience acute episodes. Major (2003), building on the work of McKenna, Kenney, and Bradley (2003) address the confusing question of whether community nursing may be considered as part of acute care nursing. This confusion and specialization of nursing practice in itself may lead to issues related to role challenges (Major, 2003). For the purposes of this literature
review, and because of these tensions between acute and community care nursing, research on role issues is not limited to any specific type of nursing practice.

Role conflict is defined as the challenge an employee faces when two different authorities give incongruent directives (Kahn et al., 1964). Biddle (1986) states that the conflict may also arise not only from overt directives, but also from a difference in “consensus” (Biddle, 1986, p. 76), or hidden beliefs, held by the different authorities. In this context, consensus includes both the apparent and the overt messages of expectations by the members of the organizations. These contradictory directives or expectations may arise from four different origins: (1) challenges the individual faces between his or her own internal beliefs and the explicit expectations of the work; (2) incompatibility between the expectations for the work, and the allocated resources, such as time or supplies; (3) inconsistencies between the multiple expectations and requirements of the job, leading to “role overload” (Rizzo et al., 1970, p. 155); and (4) inconsistent expectations and requirements from competing interests, such as differences between school policy and a professional standard (Rizzo et al., 1970).

Major (2003) defines role conflict as putting the individual facing the conflict in the position of having to choose between incompatible choices. The following scenario makes this issue clear. If the supervisor of the sole nurse in a school building directs the nurse to leave the building to attend to a school bus accident off the school grounds, for which 911 has already been called, the nurse is faced with a role conflict. For the RN who is directed to leave a building full of school children to attend to a few children away from the building, and for whom 911 has already been called, the nurse may feel a conflict. The NJBON may interpret leaving the children in the building without a nurse as
“patient abandonment” (NJBON, Policy Statements, 2015, para. 1) within the definition of “professional misconduct” (NJBON, Policy Statements, 2015, para. 1). In opposition to this is the nursing supervisor’s knowledge that he or she directed the nurse to attend to the children at the scene of the bus accident. This supervisor views the nurse as a school district employee who, if the nurse refuses to attend at the bus, may be acting in an insubordinate manner. Doing either action – leaving the building or staying – puts the NJ-CSN’s role in conflict with an unheeded directive.

A related but different concept is that of role ambiguity. Role ambiguity arises when the message sent to the subordinate is consistent, yet incomplete (Kahn et al., 1964; Rizzo et al., 1970) or vague (Tubre & Collins, 2000). Such incomplete information may derive from lack of specific policies, instructions, or guidelines. With this challenge, the school nurse may not know all that is expected of him or her in the school setting, or may not have access to all necessary information to complete the nursing role effectively (Rizzo et al., 1970). In this case, the NJ-CSN may then create a path to complete a duty that may, or may not, be congruent with the school system’s approaches. For example, if a nurse is hired as a NJ-CSN, the nurse may experience role ambiguity if the job description is not complete. The nurse who is criticized for not offering classroom health lessons but has never been requested to teach, nor given the schedule to enter the classrooms may experience ambiguity about the role of the nurse in the school. In an effort to resolve the problem, the nurse may try to create a health education schedule and lesson plans, only to be informed it is not part of his or her job description. Such role ambiguity – is the nurse a classroom teacher or not? – has consequences that affect the nurse, and extend beyond the nurse to impacts on the school colleagues and students.
The earliest research identified that investigated school nursing from the perspective of role issues is that by Zimmerman, Wagoner, & Kelly (1996). In this study of 251 Pennsylvania school nurses, the authors reported that the study sample nurses defined their roles differently from how their school nurse peers described their work roles, depending somewhat on the expectations of the requirements in their individual school settings. Although the nurses were required to adhere to both their state Nurse Practice Act and their own school policies, the implementation and time management for the school nurse activities differed significantly among the nurses, depending on needs in their schools. Two specific limitations are noted from this study. The first is the remote time frame of the research. The study was published over 20 years ago. Since that time it is possible that the needs of the students have changed related to the student populations and differences in laws in place then and now, as well as any changes to the Nurse Practice Act. Further, the study was conducted in Pennsylvania, which has its own Nurse Practice Act, different from that of New Jersey. One final limitation is that the research does not specifically ask the question of whether the nurses experienced role ambiguity. The authors draw that conclusion from the different responses the nurses provided relative to the specific work performed in their offices. It raises the question of whether, even though the nurses implement their practice differently, they actually experience any role confusion in doing their work.

Tarrant and Sabo (2010) examined role ambiguity, in addition to role conflict, among nurse executives. Their findings for role ambiguity were similar to those for role conflict. The results demonstrated an inverse relationship between job satisfaction and role ambiguity, meaning that as confusion about the role increased, their enjoyment of the
work decreased (p. 77). These researchers took their investigation further, considering how role ambiguity could relate to depression, as reported by the participants. The authors reported a direct relationship between increased role ambiguity and increased reports of depression (p. 78). Although the authors reported this relationship, one limitation of this study, in addition to the participant qualification of nurse executive, is the self-report of depression. It is questionable whether the participants would be considered clinically depressed, and if a clinician could relate any such depression directly to the reported job issues.

Chang and Hancock’s (2003) research took a unique approach: how role ambiguity is related to length of time in practice of nurses. It should not be surprising that new nurses reported high levels of role ambiguity in this study because nursing is a complex practice, involving sophisticated clinical and critical thinking skills. Overall, the 154 newly graduated nurses specifically reported greater role ambiguity in the earlier months of practice than they did a feeling of having too much work; 10 months later, they reported greater work overload than they did role ambiguity (p. 160). One major limitation is noted from this research. The nurses in this study all worked in a hospital setting. This specifically limits the possible ambiguity of the role to that of practicing in tertiary care setting, as opposed to working in a community setting that may have confusing job requirements or obligations. School nurses work in the community setting, seeing patients experiencing both acute and chronic conditions. This is distinguished from acute care nurses, who are limited to a specific patient population.

Fried, Ben-David, Tiegs, Avital, & Yeverechyahu (1998) took their research in a different direction, assessing how the combination of role conflict and role ambiguity
interact in the work setting. Their study of 359 employees in different locations of plants for a single employer indicated that the increasing convergence of both role conflict and role ambiguity led to lower levels of productivity among the employees (p. 24). The limited scope of their study, to workers in one company performing manual labor at the experience level of “journeyman” (p. 21) raises the question of whether the study results would be applicable to nurses, who work with people, not machines. Further, the overwhelming majority of participants were male, the exact opposite for the demographics of school nursing. However, the interplay between role conflict and role ambiguity does raise questions for research and practice related to school nursing.

**Potential consequences of role conflict or role ambiguity.** Both role conflict and role ambiguity have the potential to affect an employee’s ability to perform his or her work in multiple ways. The issues of job satisfaction and outcome of displeasure at work will be addressed.

**Job stress, job dissatisfaction, and commitment to the work setting.** The research points to a relationship between role conflict or role ambiguity, increased stress, and feelings toward work. This relationship must be investigated to enable administrators to work in an effective manner that supports the employees in the organization. Satisfaction with the job and that relationship in general will be discussed, as well as that specific to nursing and the school setting.

Multiple researchers have considered how role conflict or role ambiguity can affect an employee’s enjoyment of work, as manifested by increased stress (Acker, 2004; Hemingway & Smith, 1999; Lu, Barriball, Zhang, & While, 2012; O’Brien-Pallas, Murphy, Shamian, Li, & Hayes, 2010; Tarrant & Sabo, 2010; Tosi, 1971). Acker’s
(2004) study of 259 social workers resulted in the finding of “statistically significant negative correlations” (p. 68) between role ambiguity and role conflict, and the employees’ enjoyment of work as measured by the Rizzo, House, and Lirtzman (RHL) scale, detailed in chapter 3 on the methodology used in the present study. Similarly, both role conflict and role ambiguity increased the risk that a social worker might leave his or her job. There were some differences when the data considered length of experience and other demographics of the participants; however, the consistent findings were between role issues and the outcomes of job satisfaction or intent to leave work. Although this research was conducted on social workers, not nurses, there is similarity related to the therapeutic nature of the work. As related to school nurses, a particularly important conclusion made by this study author is the value of finding support in the work setting and pleasure in the job.

Tarrant and Sabo’s (2010) research into role conflict of 380 nurse executives yielded results indicating nurses experienced reduced satisfaction in the job as role conflict increased (p. 77). Similar results were found for the relationship between role conflict and job enjoyment (p. 77). A specific aspect of the emotional response of the participants, self-reported depression in the nurse executives, was found to be increased as the conflict in the role increased (p. 78). The study was limited by its participant qualifications, that of being a nurse executive belonging to a professional nurse executive organization. It is questionable if such results are generalizable to other nurse roles. The dependent variable of depression also presents a limitation. This is based only on the study participants’ own feelings. No clinical diagnoses were required for this study.
Future research may be needed to address whether the nurse executives were accurate in their self-reports of depression, and any relationship to the work setting.

A unique but equally concerning possible result from role conflict is that identified by Gormley and Kennerly (2009). These researchers raise the concern of increased “role confusion about how to prioritize and accomplish the work. This can lead to role ambiguity and a decrease in organizational commitment” (p. 110). Their study of faculty at 45 nursing schools indicated results that as role conflict increased, commitment to the work environment decreased. As noted with other research related to nursing, this was limited to nursing faculty who face the issues of higher education teachers: “teaching, research, and service and...a willingness to effectively balance these three roles” (p. 110). While school nurses have multiple roles to attend to, they typically are not required to produce research.

Biton and Tabak’s (2003) limited research into issues nurses face addressed the relationship between specific professional standards, and how the nurses were able to implement them in the hospital setting. This dynamic was correlated with feelings of role conflict and related job satisfaction. The study of 158 nurses reported a lower level of role conflict than other researchers have reported in healthcare settings (p. 150). Although this is a positive finding regarding role conflict, because the study was conducted with hospital nurses, this has limited applicability to school nurses where the nurses practice in an environment devoted to education. The authors point out that one specific code was used by the nurses, limiting the issue of role conflict related to competing sources of professional governance. In the school setting, both educational and nursing documents guide nursing care by school nurses.
Role ambiguity was addressed by Gormley and Kennerly (2009) in their investigation of nurse faculty. They found a “significant” (p. 110) relationship between role ambiguity and commitment to the teaching institution. Allegiance to the institutions was reduced as role ambiguity increased among the nurse faculty (p. 113). The roles of the nurse faculty member are different from those of school nurses. Further research would clarify if the different types of roles would yield different results.

In an effort to identify why nurses were leaving hospital units, O’Brien-Pallas, Murphy, Shamian, Li, and Hayes (2010) studied nurses in high acuity settings. These researchers discussed the need for this study as a result of the concerns of nursing practice. Conditions of the practice environment within a healthcare organization are thought to represent a major contributing problem in work stress and job dissatisfaction. Often the role of nursing itself is associated with multiple and conflicting demands imposed by nurse supervisors and managers, and by medical and administrative staff (p. 1074).

Although school nurses do not typically practice in the high acuity setting that were the sites of the participants in this study, the issues are similar: possible conflicting directives by various administrative and clinical supervisors or colleagues in addition to meeting the wants and desires of the students. In the O’Brien-Pallas et al. (2010) study, the finding related to job stress was directly related to either role conflict or role ambiguity, with job attrition increasing as conflict or ambiguity increased (p. 1083). This job turnover was also directly related to the dissatisfaction level the nurses experienced as a result, among other reasons, of the role conflict or role ambiguity. The major limitations of this study were that it was not conducted on school nurses, and that data was collected
on nurses practicing in Canada. It is possible that the health care system in Canada might have a different practice environment from that in the United States. Even with these limitations, the issue of job satisfaction as a function of role conflict or role ambiguity, and the potential of nurses leaving the current employment because of these role issues is important to consider.

Lu, Barriball, Zhang, and While (2012) reviewed multiple studies on nursing job satisfaction and its correlation to issues of role conflict and role ambiguity in their review of the literature of the subject. Among their findings was the direct relationship between role conflict and role ambiguity and increased job dissatisfaction among hospital nurses (p. 1021). It should be noted that these authors reviewed literature from international locations, as well as including studies conducted on nurses practicing in hospitals in the United States. As with the other studies, this one did not specify that any of the literature used in their review was from the school nurse specialty. This leaves open the question of how role conflict or role ambiguity might be correlated to job satisfaction if included in their review.

Role conflict was found to be the only variable that could be used to predict work-related stress and job separation in Hemingway and Smith’s (1999) study of 252 Canadian hospital nurses. Job stress was able to predict the nurses’ intent to leave work (p. 293). Role ambiguity was not seen as a predictor of stress or intent to leave in this study (p. 292). Among specific stress issues these authors studied was the response nurses had to the experience of patients dying. Fortunately, the death of a student in school is a rare event, and such stress would be difficult to study among school nurses on a large scale. As with other studies held in traditional, inpatient, clinical settings, the
question of the transferability to school nursing is in question, as is the specific issue of how frequently nurses in this study experienced patient death. With death used as a cause for stress, it is possible that the stress these nurses experienced was more significant or different from that of school nurses. The question may then become how stress differs, depending on the underlying stressor.

*Job satisfaction among school nurses.* Job satisfaction is related to issues of performance and continuing employment in the organization. For school nurses, this relates directly to the issue of continuity of care for the students. Maintaining a school nurse in the same setting over time can have important educational and health benefits for the students and the larger school community. For this reason, it is important to consider how the ambiguity or conflict of a work role may be related to how the work is discharged. Several studies have researched the job satisfaction levels of school nurses (Chang, Shih, & Lin, 2008; DeSisto, & DeSisto, 2004; Foley, Lee, Wilson, Cureton, & Canham, 2004; Junious et al., 2004; Tseng, 2014; Van Niekerk, 2011). The issues investigated by these researchers include support provided within the educational system (Chang et al., 2010; Junious et al., 2004; Tseng, 2014; Van Niekerk, 2011), pay and other benefits (Foley, 2004; Junious et al., 2004), and autonomy in nursing practice (Foley, 2004; Junious et al., 2004).

DeSisto and DeSisto’s (2004) research into empowerment and school nurse autonomy found a direct relationship between these two concepts. These researchers did not investigate these issues as related to job satisfaction; however, that is an area that is ripe for study. The work of these authors produced results slightly different from Chang, Shih, and Lin (2008), who took a specific and unique approach in their research of
organizational support for school nurses as correlated with job satisfaction. These researchers specifically addressed the issue of how school nurse perceptions of “psychological empowerment” (p. 428) in the workplace may lead to increased job satisfaction. The researchers define psychological empowerment in the work setting as “the psychological perceptions or attitudes of employees about their work and organizational roles” (p. 428). The study findings revealed that while empowerment is directly related to job satisfaction, psychological empowerment is not correlated with factors unrelated to work, such as marital status (p. 432). The authors make an interesting note that distinctions between the Chang et al. (2008) study conducted in China and studies conducted in western countries may have different results because of cultural differences. According to these authors, in the Chinese culture, conflict is avoided with those in a supervisory capacity.

Foley, Lee, Wilson, Cureton, and Canham’s (2004) study of 299 California school nurses revealed that autonomy in nursing practice, defined by one study participant as “the freedom in my work to make important decisions as I see fit and can count on my supervisors to back me up” (Foley et al., 2004, p. 97), is ranked highest as the most important component of job satisfaction. Although the authors placed this statement in the “autonomy” category, it also indicates the importance of supervisory support in job satisfaction of the school nurse. A similar finding regarding the value of supervisor support and job satisfaction by school nurses was reported by Junious et al. (2004). The only identified study conducted among New Jersey school nurses revealed a low level of perceived supervisor support for school nurses (Tseng, 2014). Van Nieerk’s (2011) research pointed to statements that made the school nurse feel like a more appreciated
member of the school community, including the statement that “the principal feels a school nurse is essential” (Van Niekerk, 2011, p. 67).

**Compromised job performance.** The involved and multifaceted nature of the school nurse job requires that consideration be given to how an understanding of the role by the nurse may affect job implementation. The school nurse is in a position where he or she is constantly making decisions based on involved and detailed information. This raises to the question of whether any possible confusion about the school nurse role may have an impact on the students because of the nurse’s beliefs about what is expected of him or her in the work setting.

Tubre & Collins’ (2000) meta-analysis of four studies that included nearly 12,000 sample participants yielded findings related to both role ambiguity and role conflict. On the issue of role ambiguity, the authors found that ambiguity can lead to decreases in job execution (p. 164). Regarding role conflict, these authors found that conflict did not have a relationship to job performance (p. 165). A significant limitation of this work is that the research article does not state whether healthcare professionals in non-traditional settings were included in the study. It leaves open to question whether a study of school nurses would result in the same or similar results.

Dierdorff and Rubin (2007) considered the complexity of the job requirements in their study of 203 participants. This study included RNs among the 73 different types of occupations. Among the findings is that the role ambiguity and role conflict are “significantly” (p. 616) related to how sloppy an employee may be in making decisions relating to work (p. 616). Although the study did not indicate how many RNs participated in the research, this finding is particularly concerning. The school nurse role
is a complex one, requiring sophisticated thought as the nurse applies the nursing management process. Any compromise in appropriate decision-making as a result of role conflict or role ambiguity has the potential to impact student health.

**Burnout.** In order to address the issue of burnout at work it is imperative to understand this concept. Maslach and Goldberg (1998) define burnout as “a type of prolonged response to chronic emotional and interpersonal stressors on the job” (p. 64). From this definition, the relationship not only of the school nurse to the students but also to the supervisors and with the demands placed on the nurse potentially become issues for the nurse. Burnout is a function of three components: “exhaustion, cynicism, and inefficacy” (Maslach et al., 2001, p. 397). The second theme, cynicism, addresses how the employee relates to and feels about the job. Maslach et al. (2001) note that in jobs with role conflict or role ambiguity a “moderate to high correlation with burnout” (p. 407) exists. A particular factor in the development of burnout is the guidance and control provided by supervisors, which is noted to be of greater importance “than support from coworkers” (p. 407).

Maslach (1979) previously addressed the danger of “burnout” related to work in the helping professions in the statement that some employees “tend to cope with stress by a form of distancing that not only hurts themselves but is damaging to all of us as their human clients” (p. 5). The risk to the clients in the school setting is to school students, staff, and visitors. For these patients, the danger exists that the school nurse experiencing burnout may interact with the students in a way that expresses disinterest and dismissiveness of their health concerns potentially become a danger to the students. This is because burnout can lead to “poor delivery of health and welfare services to people
who need them” (Maslach, 1979, p. 5). Beyond the individual interactions with the students is the risk to the workers’ attitudes toward the job leading to job attrition. A further risk is in limiting the clinical contact with the students, with the resultant possibility of missing indicators of a problem (Maslach, 1979). Freudenberger (1986) described the emotional and physical signs of burnout among those in the helping professions. Among the characteristics noted is a higher level of impatience than previously noted in the employee. A further indication of burnout is the inability to focus, possibly leading to a loss of control. The ultimate indication of burnout is that an employee “simply packs up and leaves” (Freudenberger, 1986, p. 248).

The research of Ozkan, Celik, and Younis (2012) supports the proposition that increasing role conflict or role ambiguity leads to increasing levels of burnout. In their study of both physicians and nurses, the researchers found that burnout is increased with higher levels of “superiors” (p. 259). In the school nurse setting, while the nurse may have only one specific school supervisor, the nurse is responsible to the nursing profession. This duality of superiors (education and nursing) may put the school nurse at increased risk for burnout.

A final issue related to burnout concerns the demographics of the nurses. According to Maslach and Jackson (1981), the more experienced participants in their study of 420 people in various helping professions, including nurses, teachers, and police officers, reported lower levels of burnout than the younger, less experienced participants. Participants in the more male dominated fields reported lower levels of burnout. The researchers speculate about whether the nature of the work, or the gender differences in the professions yield the results. Tunc and Kutanis (2009) noted similar differences in
their study of burnout, reporting that the younger, less experienced participants had higher levels of burnout, as did Wu, Zhu, Wang, Wang, and Lan (2007) in their study of 495 nurses. Observing for any demographic differences may lead to support that aligns better with the needs of the employees.

**Supervision**

Butterworth and Faugier (1992) define clinical supervision as “an exchange between practising [sic] professionals to enable the development of professional skills” (p. 12). Barber and Swansberg describe the nursing supervisory-subordinate relationship in greater detail as “an interpersonal process in which the skilled practitioner helps a less skilled or experienced practitioner to achieve professional abilities appropriate to his role, at the same time being offered counsel and support” (as cited in Butterworth, & Faugier, 1992, pp. 18-19). Marzano, Frontier, and Livingston (2011) inform the reader that “supervision should be the enhancement of teachers’ pedagogical skills, with the ultimate goal of enhancing student achievement” (Marzano, Frontier, & Livingston, 2011, p. 2). The supervisor-subordinate relationship is complex, with the work of a supervisor of nurses potentially having multiple effects on the practice of the employees, including on job satisfaction (Koivu, Saarinen, & Hyrkas, 2011; Shacklock, Brunetto, & Farr-Wharton, 2012; Simmons, 2002; Teasdale, Brocklehurst, & Thom, 2000) and skill development as a nurse (Landmark, Hansen, Bjones, & Bohler, 2003). Within each of these supervision areas multiple issues can arise that affect the work of the school nurse.

The American Association of Colleges of Nursing (AACN), the organization that represents the undergraduate and graduate schools of nursing (AACN, 2016), presents a perspective of the nurse side of these practice concerns. The “hallmarks of the
professional nursing practice environment” (AACN, 2002, p. 295), include the need for the nurse to provide care that is congruent with a philosophy of safe nursing practice, the ability for the nurse to hold authority in upper levels of administration, and the provision of continuing education that addresses the nurse’s needs (AACN, 2016). Among the issues specifically addressed by the AACN is support for a mechanism for nurses to have “meaningful input into policy development” (AACN, 2016, p. 299).

The clinical supervision of nurses is an issue that continues to evolve, even after years of research (Butterworth, Bishop, & Carson, 1996; Davey, Desousa, Robinson, & Murrells, 2006; Spence, Cantrell, Christie, & Samet, 2000; Teasdale et al., 2000). When the nursing practice domain is a non-traditional setting such as a school, with the nurse working somewhat independently, these supervisory issues take on added weight.

The role of supervisor is defined by the New Jersey Department of Education (NJDOE) “as any school officer who is charged with authority and responsibility for the continuing direction and guidance of the work of instructional personnel. This title also authorizes appointment as an assistant superintendent in charge of curriculum and/or instruction” (NJDOE, 2014, para. C). Although a minimum of 3 years of educational experience is required to obtain the supervisor endorsement, there is no requirement that a supervisor of nurses have any nursing experience (Supervisor standard certificate, n.d.). Beyond the NJDOE requirements, the manner of supervision for school nurses in New Jersey is not specifically defined. The New Jersey Administrative Code (NJAC) states that “the certified school nurse shall work under the direction of the school physician and chief school administrator” (Programs to Support Student Development, 2016, NJAC
6A:16-2.3(b)1. This statement, however, does not provide a specific mechanism for the supervision of the school nurse.

**Administrator understanding of the school nursing role.** When school nurses are supervised by educational administrators the issue arises of whether these educational administrators have the clinical knowledge to effectively supervise nurses. Research in the topic of supervision of school nurses is lacking, although an editorial piece by Henry, Roberts, Taliaferro, and Young-Jones (2007) advocated for clinical nursing supervision of school nurses for the safety of the students. Limited research exists on the extent of knowledge of school administrators about the school nurse role. Results from Green and Reffel (2009) indicate that school administrators believe that nurses spend their time differently from how the nurses report their time is divided in the school setting. Although both the administrators and the nurses believe the school nurse role is of value, the lack of understanding of what the nurses actually do from the perspective of the administrators can lead to inadequate support for the nurses. Holt, Barta, Neighbors, and Smith (as cited in Green & Reffel, 2003) determined that non-nursing administrators may not understand the focus of the school nurse role relative to what tasks can be delegated, and other issues related to the legal issues of practicing nursing. Greenhill (as cited in Green & Reffel, 1979) found that school staff did not understand the role of the school nurse. This incongruity of understanding of the full extent of the school nurse role can have a negative impact on nursing performance and student achievement, as addressed in the following section. McDaniel, Overman, Guttu, and Engelke (2013) created an evaluation tool for school nurses based on the published standards of practice for school nurses (American Nurses Association and National Association of School Nursing,
2011). This begs the question of whether and how a supervisor who is not familiar with the intricacies of clinical practice or the standards of professional practice of school nursing can provide appropriate feedback and support for the school nurses.

**Impact of the Supervisor-Subordinate Relationship**

The relationship between nurses and the nursing supervisor has been researched using multiple variables and outcomes. Among the findings is the value of a positive relationship between the nurse and the supervisor, relative to factors that have an impact on the nurse staying in the current job position. A positive relationship between nurse and superior is correlated with a higher commitment to the employer organization, resulting in a decrease in intent to leave (Brunetto et al., 2013). Brunetto et al. (2011) compared private sector to public sector nurses in their research into the nurse-supervisor relationship. Among their findings is that the relationship between subordinate and supervisor has an effect on the individual nurse’s “well-being” (Brunetto et al., 2011, p. 148). These authors also reported on the importance of the relationship between the nurse and the supervisor as related to communication and allegiance to the care setting. This is made clear in the statement, “for nurses, the quality of the supervisor-subordinate communication is important because it not only contributes to supervisory ambiguity...but also because it is significantly positively related to affective commitment” (p. 235). The authors defined affective commitment to the healthcare setting as, essentially, loyalty. This research lends support to the value of good communication with the supervisor, and decreased ambiguity regarding the nurse’s role as one way to decrease employee turnover.
More specifically regarding the value of the supervisor-nurse relationship are the results from Brunetto et al. (2013). In this study of over 700 hospital nurses working in North America, the authors reported that almost half of a nurse’s decision to leave a job is related to the relationship with the supervisor. This research addresses the critical need for supervisors and nurses to understand each other, and for supervisors to properly support the nursing staff as a way of maintaining continuity of nursing care for the school students.

Conclusion

The relationship of the school nurse to the supervisor is a complex one, having an impact on multiple aspects of the nurse’s daily work. The supervisor is in a position to have a tremendous impact on how care is delivered to the members of the school community, and how the nurse understands the role in the school setting. This relationship can have a further effect on whether the nurse even remains in the position, or seeks work in a different capacity. Understanding the supervisor-school nurse relationship in New Jersey schools can have a positive impact on providing care to students so they are in the healthiest environment and can succeed to their highest levels. Following is a discussion of how the questions raised in this literature review may best be addressed.
Mixed Methods Research: Background Information

Mixed methods (MM) research is best described as a hybrid of both qualitative and quantitative research methods. This method incorporates the most valuable aspects of quantitative and qualitative research to achieve research findings that most closely capture the way the research findings would be used in daily life (Johnson & Onwuegbuzie, 2004). MM draws on the objectively focused beliefs of quantitative researchers combined with the contextual perspectives of qualitative researchers to give meaning to the research and findings (Johnson & Onwuegbuzie, 2004).

MM research can be described by design and timing of each of the study components. Quantitative and qualitative research may occur concurrently, or consecutively. The subject matter of the study may be one determinant for the order and timing of the components of the research (Creswell & Plano Clark, 2011). Researchers may also consider the value and purpose of the study, the research questions, and the threats to accuracy and authenticity of the findings when determining the method to use (Creswell & Plano Clark, 2011). In a MM study, the risk exists that two parallel studies are being analyzed and reported. Yin (2006) instructs us on ways to prevent having two separate research studies. By embracing the combination of methods, a researcher can avoid the historical divide between qualitative and quantitative researchers (Teddlie, & Tashakkori, 2009; Yin, 2006). Bryman (2007) recommends study researchers thoroughly analyze the data of both collection methods to fully integrate the research as a MM study. Various authors have offered suggestions for how to mix both the research itself and the
findings to get the full benefit of the complementary research methods. One recommendation is to consider at what point the mixing occurs. Addressing the timing of the mixing, Bazeley (2012) identifies using the data of one component of the research to inform the complementary component. This author also identifies multiple points along the way from the collection of the data to the final analysis as options for mixing the data. Leech and Onwuegbuzie (2009) take a similar approach, teaching us that MM research can be accomplished at any point along the timeline from “collecting, analyzing, and interpreting” (Leech & Onwuegbuzie, 2009, p. 267) the different forms of data.

The study author can conceptualize the study based on the goals of the research. Among the methods are explanatory and exploratory designs. In an explanatory study the qualitative research component explains the quantitative research findings (Creswell & Plano Clark, 2011; Ivankova & Stick, 2007). In the exploratory design the study uses qualitative data collection to learn about an issue, followed by the quantitative component. After the quantitative data are collected, the findings are then generalized (Creswell & Plano Clark, 2011). Leech and Onwuegbuzie (2009) instruct that a study can be defined using three components: the timing of the collection of data types (qualitative or quantitative), the extent the data are combined, and the primacy of either type of the data collection (qualitative or quantitative). The current study can be summarized as a concurrent mixed methods study using quantitative data to summarize the extent of the findings and the qualitative results to explain the phenomenon more deeply.

**Research Design of the Current Study**

A MM research methodology is applicable to the research on NJ-CSNs to uncover information neither quantitative nor qualitative research alone could reach. The study
sought to uncover both the statistics of what is occurring with NJ-CSNs vis-à-vis supervision, and how the supervision affects their abilities to do their best work as viewed from the perspective of role theory and limited to issues of role conflict. With this foundation, quantitative methodology was determined to be the best study method for uncovering the descriptive information about the NJ-CSNs and their practice environments. The specific questions related to role conflict are addressed using an identified and validated tool for investigation into these issues by Rizzo et al. (1970; see Appendix A). However, this quantitative data does not reveal how and to what extent the supervision of the nurses is used or appreciated by the nurses, or how it affects the nursing practice. The qualitative component of the research extends the pure numbers of the quantitative findings to understand the nurses’ needs in the school health offices.

The current study on NJ-CSNs was conducted as a concurrent MM design. The data for the quantitative component was collected initially in the survey tool, followed immediately in the same survey by a qualitative piece for all participants. The survey instrument was created using the Rowan University Qualtrics program. The data were analyzed separately, but were combined when interpreting the findings (Creswell & Plano Clark, 2011).

Quantitative data. During the quantitative phase, the participants were asked to answer questions about their experiences as a NJ-CSN, including the years of practice and their practice settings. After providing informed consent information, the initial component of the questionnaire of this MM study collected data regarding the demographics of the respondent, experience as a NJ-CSN, and who evaluates the nurse (see appendix B). Supervision was not defined for the nurses. The question of who
evaluates the nurses was used as a proxy for identify the supervisor as the individual who is in the position of providing the “continuing direction and guidance of the work of the instructional personnel” (NJDOE, 2014, Certification & induction, para. C). The survey tool included questions about the professional and educational background about the individual who provides immediate supervision to the school nurse. The tool also included questions regarding the specific aspects of what and how the supervisor directs the nurse regarding practice (see Appendix B).

**Qualitative data.** During the qualitative strand the nurses addressed their perceptions of how they understand their roles as nurses in the school setting, and any role conflict issues they face. The survey tool provided an opportunity for the nurses to reply with narrative answers to open-ended questions. These responses allowed for further explanation of the quantitative responses.

**Research Questions**

The purpose of this study is to assess how the supervision provided to NJ-CSNs relates to the understanding the nurses hold and implement in their practice of the professional role. To uncover this information, the following research questions were identified:

1. How do the school nurses’ understandings of their roles affect their clinical practice?
2. How does the nursing supervisor’s professional and educational background relate, if at all, to how the nurse provides services in the school setting?

**Data Sources and Sampling Approach**

The study was limited to currently practicing NJ-CSNs. Email addresses for potential study subjects were identified using the NJDOE New Jersey School Directory (NJDOE, 2014, New Jersey School Directory). I manually reviewed each of the public
school district websites listed in the NJDOE directory for links to individual schools. Further review was made of each individual school website for a listing of a school nurse and email address. If an email address was available, that address was used in the development of an email list for potential participants. If a name of a school nurse was available but no email address provided, an email address was created using the format from the NJDOE school directory of the address for each individual district superintendent. Not every school district or school within a district provided enough information to include a school nurse in the list of potential participants. Using this manual method of developing a list of potential school nurses in each of the public school districts, a list of 1822 email addresses was created. At the time the list was developed, it was not known how many email addresses were accurate for the school nurse, or if the school nurses were certified through the NJDOE.

Participants. It was anticipated that obtaining study participants would be a challenge, but the results demonstrated otherwise, as noted in the findings in chapter 4. The challenge was in locating the school nurse within each school. Although every public school district is required to employ at least one NJ-CSN (New Jersey Administrative Code 6A:16-2.3, 2014) the exact number of currently practicing NJ-CSNs is unknown (L. Chewey, personal communication, Oct. 5, 2015). This information is not published by the New Jersey State School Nurses Association or any other organization. Anecdotally, informal discussions with NJ-CSNs have revealed a reluctance by some nurses in having employers know of their participation in a study of school nursing. This essentially hidden population of study subjects required a sampling technique that uncovered these
participants while respecting their concerns. The value of the participants’ knowledge and viewpoints form the core of the qualitative component of this study (Kelly, 2010).

Purposive sampling techniques, defined as a technique in which the researcher identifies who best qualifies for the study, provided the ideal method for obtaining study participants for this study (Abrams, 2010). The specific requirements of holding the NJDOE certification as a school nurse and current practice as a NJ-CSN formed the criteria for acceptance into the study. Snowball sampling by referrals from other school nurses was considered for the study because of the potential difficulty of identifying participants (Rossman & Rallis, 2012). Snowball sampling has been used successfully to reach participants for studies in which it is difficult to otherwise identify possible participants (Abrams, 2010; Vervaeke, Kork, Benschop, & van den Brink, 2007). In this technique, the “existing social networks within a population” (Vervaeke et al., 2007, p. 1708) are used for referrals to the study. Although the snowball sampling option was considered as a way to identify school nurses who might have been fearful of participating and to provide a sense of trust for participating in the study (Vervaeke et al., 2007), no such sampling was necessary.

**Identified Tool for Role Issues**

Rizzo et al. (1970) developed a tool, referred to as the Rizzo, House and Lirtzman (RHL) scale, to measure the extent to which role ambiguity or role conflict is present in one’s work, particularly in “complex organizations” (p. 150). To justify the use of this tool, the definition of a “complex organization” must first be explored. Rizzo et al. (1970) do not quantify or define what makes an organization complex. Their discussion of the role ambiguity and role conflict scale development refers to multiple lines of authority
within one organizational setting, various origins of power within an institution, and differing areas of functional specialists who may exert some type of rule within the system. Reynolds and Martin’s (1997) research into education reform led them to define school systems as complex organizations. Reynolds and Martin (1997) relied on Waldrop’s definition that complex organizations are comprised of “a great many independent agents and that these independent agents interact with one another in a great many ways” (as cited in Reynolds & Martin, p. 79).

The school nurse, working in the educational setting, can be considered as working in a complex setting. Schools focus on the educational needs of students, yet must also attend to the emotional, developmental, and physical necessities of the children on a daily basis. Within the school setting there are multiple specialists with backgrounds in education and various other professions. Based on the complicated nature of schools it is appropriate to use an evaluation tool created for complex systems.

The 30-item scale developed by Rizzo et al. (1970) is comprised of statements divided between items designed to assess role conflict and those to measure role ambiguity. The original tool was evenly divided with 15 items for each category (role conflict and role ambiguity); however, one item created to assess the presence of role ambiguity was inadvertently stated twice. In actuality there were only 29 different items in the original tool. The statements are designated as odd number for role conflict, and even number for role ambiguity in the original scale, with the duplicate item. Participants using the original tool responded to the 30 items on a seven-point scale. The answers indicated the extent to which the respondents have experienced the events in statements, from a low of “very false” to a high of “very true” (Rizzo et al., 1970, p. 156).
Within each of the role conflict statements there is a further sub-categorization into the following types:

- Conflicts the individual feels between work and his or her own values;
- Conflicts that arise because of inadequacies of resources of time or necessary items, or capabilities of the individual;
- Conflicts that arise because the employee must develop new skills or levels of performance activities;
- Conflicts that exist between organizational policies and rules, or between the organization and an outside interest, or issues that may indicate different evaluation standards for these different sources of authority.

Each of these role conflict categories has specific, numbered statements aligned to uncover the type of conflict the individual may be experiencing. The authors point out that role ambiguity is less easily defined. Therefore, their tool did not implement as much detail in terms of allocation of statements to role ambiguity variations. Only one specific role ambiguity issue is mentioned as aligned with the statements, all related to issues of evaluation.

This tool has been validated multiple times in various settings. Jackson and Schuler (1985) reported that the RHL scale had been used in 85% of the studies they reported on in their meta-analysis of role conflict and role ambiguity. Jackson and Schuler’s (1985) meta-analysis of over 200 studies on role conflict and ambiguity raise questions about the issues, but do not invalidate Rizzo et al.’s (1970) scale. Rather, Jackson and Schuler (1985) see value in the tool with the understanding that role conflict and role ambiguity are different concepts and must be classified as such.

Macinati and Rizzo (2016) used the RHL scale as a way to identify and define role understanding by managers in their study of issues related to budgeting in a public
health setting. While their focus was on the budget aspect of the institution, their use of the RHL tool allowed these authors to learn that the greater the understanding of the role of the public health worker the greater the commitment to the organization within their managerial roles (Macinati & Rizzo, 2016).

Van Sell, Brief, and Schuler (1981) also reported on studies into role conflict and role ambiguity. Among the studies they reviewed was that by Rizzo et al. (1970). Although these authors provide further guidance on studies of role issues in organizations, they stated that studies of the RHL scale indicate that the tool should be continued to be used to study role conflict and role ambiguity. Cummings et al. (2010) addressed the issue of leadership styles and how nurses view their level of comfort in the workplace in their review of over 50 studies into the relationship between nurses and their supervisors. Among their findings was that a work environment that provided “nursing models of care” (Cummings et al., 2010, p. 378) decreased issues of role ambiguity and role conflict. Cummings et al. (2010) included Rizzo et al.’s (1970) research in evaluating the issues of role conflict and ambiguity.

Schuler, Aldag, and Brief (1977), used 14 of the original 29 different items developed by Rizzo et al. (1970). Multiple types of employees, including nurses from a mid-western health institution were included in their study. Schuler et al. (1977) found the 14 items derived from the original 29 were appropriately validated for use in a study of role conflict and ambiguity.

**Current Study Tool**

The current study opened with an informed consent question followed by demographic questions about the nurses, their practice and their supervisors’
backgrounds (see Appendix B). Following these questions were a series of statements adapted from the RHL tool for investigating role conflict. An array of 10 school nurse items was developed for use in the study, of which seven were used to address research question 1, the nurses’ understandings of their roles (see Appendix C). The remaining three items in this series of statements uncovered their perspectives on research question two, the relationship of their supervisor’s background to their practice (see Appendix D). Each of the 10 items in these questions had a response choice of 1, defined as “very false,” 2 (somewhat false), 3 (somewhat true), or 4, defined as “very true.” While options 2 and 3 were not specifically defined in the survey, this is an acceptable manner of constructing a Likert-type of scale, as used in this survey. This allows the respondents to “intuit that the selections closer to the polar ends are more extreme” (Froman, 2014, p. 449). The specific items selected for the study were based on clinical nursing issues that may be faced in the school setting. Additional questions were included in the survey to uncover further beliefs to answer research question two, if and how their supervisor may have an impact on their nursing practice (see Appendix E).

Pilot Survey

Prior to release of the final survey, the proposed tool was piloted with seven currently practicing NJ-CSNs. This provided an opportunity for the researcher to identify ambiguities in the survey questions, and make corrections to enhance understanding of them.

Analyzing the Data

Survey audit. When all qualified survey results were made available, 28 surveys (every 20th survey for the first 540 surveys, plus the last survey) were reviewed for
accuracy of the results and alignment with the pilot surveys. This initial review lead to
the elimination of specific survey questions because of ambiguities, as will be discussed
in the findings in chapter 4.

**Quantitative strand.** Basic quantitative analysis using descriptive statistics of
the school setting, the professional background of the supervisor, and any specific clinical
situations the nurses encountered that may have been affected by the supervisor were
used. These data points were analyzed and related to the clinical school nursing
experience in terms of the educational and professional background of the supervisor and
the specific clinical issues presented in the 10 item RHL-type tool. Further data points
include the numbers of schools and students the nurses serve. Frequencies were
determined and analyzed according to the specific clinical issues in the tool. Descriptive
statistics analysis provided the most useful method of interpreting the quantitative data to
note any specific patterns between and among the variables (Teddlie & Tashakkori,
2009).

**Qualitative strand.** Narrative responses were coded over multiple cycles. The
use of these iterative cycles uncovered broad themes, then narrowed to more focused
themes in each successive code (Saldana, 2013). First cycle coding used in vivo
language to bring forth the participants’ specific perspectives (Saldana, 2013). Later
cycles employed magnitude coding to quantify the relationship between clinical issues,
and supervisory practices and backgrounds (Saldana, 2013). By using magnitude coding,
the data uncovered the frequency of issues that have had any impact on school nursing
practice, particularly as related to issues of role conflict.
Threats to Validity, Reliability, and Credibility

For research to have genuine meaning, the study author must work to assure that the findings are both accurate and reflect the data provided by the participants. Typically in quantitative research the study researcher will use different methods to check the responses (Creswell, 2014). Similarly, in qualitative investigations the researchers verify across different examiners that the information is similar (Creswell, 2014). In the present study, the study research author focused on the qualitative responses, checking the coding three times. Participants were identified for the study initially with questions about their credentials and work experience as a NJ-CSN. Because convenience sampling was used (developing the email list of potential study participants), it was hoped that survey respondents would be qualified NJ-CSNs for the study. The risk existed that an unknown number of names on the email list were not attached to a currently practicing NJ-CSN. The risk also existed that someone may have forwarded the survey link to a non-NJ-CSN for completion. In this case, the accuracy of such a response can only be determined to the extent that the participant provided information regarding NJ-CSN qualifications.

The subject matter is one that is of great concern to the study author, leading to the risk of study bias. I may be familiar to some participants as a member of the same professional organizations, teaching in a school nurse certification program, and from speaking engagements. This familiarity poses its own study bias risk. By keeping the results confidential, the bias related to prior contact with the participants has been reduced. Potential survey participants were informed of the confidential nature of the survey in the introduction and informed consent section of the survey (see Appendix B).
Ethical Considerations

Appropriate permission was obtained in the “exempt” category following the rules of the Institution Review Board (IRB) at Rowan University (see Appendix F). Permission was also given by the IRB for an email announcement to be sent prior to the Qualtrics survey link distribution. Informed consent was required for any nurse participating in the study. The IRB did not require school district permission for any nurse participating in the survey.

Quantitative considerations. Presenting the instrument in the final reporting of the study enhances accuracy and reliability for the quantitative strand (Creswell, 2014). The detailed description of the instrument is presented in this final report. The elimination of ambiguous questions, identified in the pilot survey, aided in accuracy and reliability of the findings (Creswell, 2014).

Qualitative considerations. While preparing for and conducting this study the author was cognizant of any bias that was present when designing this study. As a former practicing school nurse, I must acknowledge that I occasionally felt the directives my non-clinical supervisors gave to me risked compromising my nursing practice. This bias posed a threat to the validity of the study and was addressed in the research design as well as conclusions drawn from the findings (Creswell, 2014).

Conclusion

The research design presented in this study addressed what the nurses experience in their practice in the school setting, and how the support they receive affects their practice. The primary goal of this research was to uncover how supervision is related to best practice in nursing for the students in the care of the nurses. A MM research study
can best uncover what supervision the nurses encounter in the daily care of the students and how supervision relates to best nursing practice.
Chapter 4

Findings

Response Rate

Of the initial 1822 email addresses contacted, 58 were returned as undeliverable. This resulted in the distribution of the survey link to 1764 email addresses. Of the 1764 successful links distributed through Qualtrics, 835 potential participants clicked on the link to view the survey, although only 712 actually began the survey. Twenty individuals declined to give consent. Of the remaining 692 respondents, 28 were eliminated either because they do not hold the required certification from the NJDOE for participation in the survey, or because they were not in clinical practice as a NJ-CSN at the time of the survey. This resulted in 664 potential qualified participants. Another 107 surveys were eliminated from participation because the respondents did not continue the survey beyond the initial qualification questions. This resulted in 557 completed surveys. The distribution is summarized in Table 1. A Rowan University Qualtrics reminder email was sent to those respondents who had not yet completed the survey the same day the survey link closed. It is possible that the response rate might have been higher if the survey link was kept open beyond the day the reminder email was sent.
An unexpected source of data came in response to the announcement email sent out prior to the release of the survey. Although the number of unsolicited emails is small, seven, the content of them provides another perspective. M.D. (personal communication, November 21, 2016) commented in an email that “proper supervision is the missing link [emphasis added] among school nurses.” One email writer commented on the “good questions” in the survey (P.D., personal communication, November 22, 2016). M.A. (personal communication, November 21, 2016) stated that the information from the survey should be used to “provide support to get the NJDOE to honor us all by having that resource [School Nurse Consultant] reinstated.” Similarly, G.P. (personal communication, November 21, 2016) requested that the findings be shared with “the DOE [Department of Education], Bd of Nsg [Board of Nursing], NJSSNA [New Jersey State School Nurses Association] & NJSNA [New Jersey State Nurses Association]” since “staffing affects the ability to meet the minimum standard of care.”

A different view was added by C.S. (personal communication, November 28, 2016) that may address the response rate and content of the answers. In this writer’s
school district, “all survey's [sic] complete [sic] by school personnel have to be district board of education approved before completed [sic]. This survey was not approved for completion.” This raises the question of whether different or more honest responses might have been made if the survey had been sent to personal email addresses, or if there would have been a greater number of responses.

**Demographics**

Most of the participants (93.7%) hold the school nurse certification. Only 35 respondents hold the school nurse/non-instructional certification. Information about the number of schools the nurses work in is presented in Table 2.

<table>
<thead>
<tr>
<th>Number of schools</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>504</td>
<td>90.5%</td>
</tr>
<tr>
<td>2</td>
<td>27</td>
<td>4.8%</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>0.7%</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>0.4%</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>0.2%</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>0.2%</td>
</tr>
<tr>
<td>12</td>
<td>3</td>
<td>0.5%</td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>0.2%</td>
</tr>
<tr>
<td>Did not answer</td>
<td>14</td>
<td>2.5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>557</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

These nurses serve anywhere from 1-100 students (0.9% to over 1500 students, as noted in Table 3, below:
Table 3

*Number of Students Served by the School Nurse*

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>0.9%</td>
</tr>
<tr>
<td>296</td>
<td>53.1%</td>
</tr>
<tr>
<td>171</td>
<td>30.7%</td>
</tr>
<tr>
<td>53</td>
<td>9.5%</td>
</tr>
<tr>
<td>32</td>
<td>5.7%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>99.9%</strong> (rounding error)</td>
</tr>
</tbody>
</table>

It is impossible to discuss if these numbers hold validity for actual nurse to student ratios since the survey did not ask how many NJ-CSNs were in the office at the same time, how many nurses were in the school buildings the nurses were assigned to, or if other non-certified nurses were also present in the buildings at the same time. The question of how many students are in the school district was eliminated from the data analysis because nurses expressed confusion over whether this was for the individual school buildings to which they were assigned, or the entire district.

Nurses from all district factor groups (DFG) were represented in the survey. The DFG classifies school districts according to socioeconomic status and other demographic factors to allow for comparison of student academic success (NJDOE, 2014, District Factor Groups). The DFG ranges from A to J (NJDOE, 2014, District Factor Groups). Those districts classified closer to the start of the alphabet have a lower socioeconomic status, while those closer to the letter J have a higher level. The fewest number of nurses reported they practice in DFG J (3.6%) while the largest number of nurses reported they are in DFG I (16.0%). The true distribution may not be accurate, however, because over
one-fourth (26.6%) of the respondents did not provide an answer to this question. The distribution is shown in Table 4, below:

Table 4

District Factor Group Distribution

<table>
<thead>
<tr>
<th>DFG</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>25</td>
<td>4.5%</td>
</tr>
<tr>
<td>B</td>
<td>41</td>
<td>7.4%</td>
</tr>
<tr>
<td>CD</td>
<td>41</td>
<td>7.4%</td>
</tr>
<tr>
<td>DE</td>
<td>51</td>
<td>9.2%</td>
</tr>
<tr>
<td>FG</td>
<td>68</td>
<td>12.2%</td>
</tr>
<tr>
<td>GH</td>
<td>74</td>
<td>13.3%</td>
</tr>
<tr>
<td>I</td>
<td>89</td>
<td>16.0%</td>
</tr>
<tr>
<td>J</td>
<td>20</td>
<td>3.6%</td>
</tr>
<tr>
<td>Did not answer</td>
<td>148</td>
<td>26.6%</td>
</tr>
<tr>
<td>Total</td>
<td>557</td>
<td>100.2% (rounding error)</td>
</tr>
</tbody>
</table>

The number of buildings nurses are regularly assigned to ranges from one to 13. Over 95% of nurses cover no more than two school buildings. Of the total number of respondents, 90.5% reported being responsible for students in one building. The remaining 4.7% of nurses reported being responsible for the students in three to 13 buildings. See Table 2 for details on the numbers of buildings nurses are assigned to on a regular basis.

The nurses who responded to the survey practice in all grade levels, ranging from preschool through grade 12. Nearly one-half of the respondents, 266 nurses (47.8%), practice in either a preschool or elementary school setting, up through grade five. The nurses responsible for only middle or high school, ranging from grade six through grade
12, is 159 (28.5%). Less than one quarter of the nurses, 131 nurses (23.5%), have some combination of preschool and/or elementary school students mixed with middle school and/or high school students. The combinations included, for example, schools that are kindergarten through grade 8, preschool and high school, and several other mixes of the grade levels.

Most nurses reported they do not have a district or lead nurse. Although this position was not defined for the survey participants, no information about supervisory authority for this position was provided. The presence of a lead or head nurse is presented in Table 5, below:

Table 5

*Presence of a School District Lead or Head Nurse*

<table>
<thead>
<tr>
<th>Presence of a lead or head nurse</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>188</td>
<td>33.8%</td>
</tr>
<tr>
<td>No</td>
<td>368</td>
<td>66.1%</td>
</tr>
<tr>
<td>Did not answer</td>
<td>1</td>
<td>0.2%</td>
</tr>
<tr>
<td>Total</td>
<td>557</td>
<td>100.1% (rounding error)</td>
</tr>
</tbody>
</table>

The number of years of experience among those responding to this survey ranged from less than 1 year (16 respondents) to more than 10 years (345 respondents). The full range is listed below in Table 6:
Table 6

School Nursing Experience

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>Supervisor is an RN $n=35$</th>
<th>Supervisor is not an RN $n=514$</th>
<th>Did not Answer $n=8$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>Frequency 16</td>
<td>Frequency 85</td>
<td>Percent 3.1%</td>
</tr>
<tr>
<td>1-5 years</td>
<td>7</td>
<td>85</td>
<td>16.5%</td>
</tr>
<tr>
<td>6-10 years</td>
<td>5</td>
<td>99</td>
<td>19.3%</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>23</td>
<td>314</td>
<td>61.1%</td>
</tr>
<tr>
<td>Total Respondents</td>
<td>35</td>
<td>514</td>
<td>8</td>
</tr>
</tbody>
</table>

School Nursing Specific Questions

When asked in question 10 if another NJ-CSN is present in the school building when the assigned NJ-CSN is out of the building, 188 nurses of the 557 (33.8%) responded “yes.” When followed up with question 11, which asked if the nurses are comfortable with the nursing care provided to students while the assigned NJ-CSN is not in the school building, 162 of the 557 nurses (29.1%) reported they are not comfortable with the care provided to the students in their absence. No follow up questions were presented for why they might not have felt comfortable with the care provided while they are not in their buildings.

The nurses were asked for the title of the individual who evaluates them as a way of identifying the title of the supervisor. Of the 557 nurses, 324 (58.2%) are evaluated by the building administrator, such as the Principal or Vice Principal. The next most common supervisor title is someone from the student services department, such as “Director of Student Services,” “Supervisor of Student Support,” or “Director or Supervisor of Guidance,” for 98 (17.6%) of the nurses. The third most frequently
reported title of the supervisor is an Athletic Director or someone from the Physical Education Department. Forty-six nurses reported this kind of supervisor. Twenty-five nurses who reported having someone with a “Nursing Services” or similar title as the individual who evaluates them. Of the remaining supervisors, most come from the Superintendent or other member of the Central Administration Department (20 nurses) or the Curriculum Department (14 nurses). The final segment of responses indicated either the supervisor is from a different department, including Information Technology, did not have a title for the supervisor, or were stated he or she did not know who evaluated him or her.

The number of supervisors with both an RN background and an educational administration background is less than those with only the education preparation. Five-hundred-fourteen (92.3%) of the nurses reported their supervisor has only the educational administrator preparation. Thirty-five of the 557 respondents reported that the supervisor has both an RN and an educational administrator preparation. The remaining eight nurses did not respond to the question. When the question of the educational and professional preparation of the supervisor is juxtaposed to the title of the individual who supervises the nurses, the nurses revealed conflicting and confusing data. Of the 35 respondents who reported that their supervisor has both an RN background and preparation as an educational administrator, only 14 of these respondents reported that the supervisor holds the title of Nursing Supervisor or something similar. One of these nurses did not note the title of the individual who evaluates him or her. The remaining 20 nurses reported the supervisor is a building administrator such as Principal or Vice Principal, Director or Supervisor of Student Services or similar title, Athletic Director or Supervisor of Physical
Education, or an individual from Central Administration. While it is not impossible for a building administrator such as a principal to also be an RN, it seems unlikely that for the eight of the 35 nurses who reported the supervisor is a building administrator, that supervisor is also an RN. Put another way, it seems unlikely, though not impossible, that for these eight nurses, the supervisor is both an RN and a building administrator such as a principal. The question of who supervises these 35 nurses is also confounded by the report that 32 of them have a school district lead or head nurse. The remaining 3 of these 35 nurses reported they do not have a district lead or head nurse. Of the 522 nurses whose supervisor either does not have an RN background or who did not respond to the question, 154 (29.5%) have a lead nurse while 359 (68.7%) report they do not have a lead or head nurse. The one remaining nurse in this group did not know if the district has a lead or head nurse.

**Role Conflict Questions**

The nurses were given 10 specific statements and asked to rate them on a scale ranging from one to four. The number one represented “very false,” and the number four represented “very true.” Numbers two and three were not defined. This list of statements was used to determine if the nurses identified any specific conflict issues in their work. See Appendices C and D for the statements. The responses to the statements that address research question one are presented in Table 7. See Table 8 for the statements that address research question two. Responses to these statements address both the understandings the nurses hold in relation to their work, and whether and how the supervisor’s professional and educational background have an impact on their school nursing practice.
Table 7

Array Statements Addressing Research Question 1:
*How do the school nurses’ understandings of their roles affect their clinical practice?*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Supervisor’s Background</th>
<th>Numeric Response</th>
<th>Less than 1 Year</th>
<th>1-5 Years</th>
<th>6-10 Years</th>
<th>More than 10 Years</th>
<th>Totals</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-1 I have enough time to complete my work.</td>
<td>No RN Experience</td>
<td>1</td>
<td>2</td>
<td>9</td>
<td>16</td>
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*Note.* 1 = “Very False,” 2 = somewhat false, 3 = somewhat true, 4 = “Very true.”
Table 7 (continued)

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<th>Totals</th>
<th>Percent</th>
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<tbody>
<tr>
<td><strong>15-3</strong> I have experienced situations in which a student's nursing needs and educational requirements have been in conflict.</td>
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<td>15-4 There are times I work under education policies and/or guidelines that are incompatible with evidence-based nursing practice.</td>
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| Note. 1 = “Very False,” 2 = somewhat false, 3 = somewhat true, 4 = “Very true.” |
Table 7 (continued)

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<th>6-10 Years</th>
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<th>Totals</th>
<th>Percent</th>
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</thead>
<tbody>
<tr>
<td>15-5 I sometimes receive an assignment without the support staff to complete it.</td>
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<th>6-10 Years</th>
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<th>Totals</th>
<th>Percent</th>
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<tbody>
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<td>15-6 I have compromised on a rule or policy in order to carry out an assignment.</td>
<td>No RN</td>
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<td>15-7 I have to miss student support meetings (504, I &amp; RS, Child Study Team, or other similar support teams) because that would leave the health office without a nurse.</td>
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<th>Totals</th>
<th>Percent</th>
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<td><strong>15-8</strong> I receive incompatible requests from two or more people.</td>
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</table>

*Note.* 1 = “Very False,” 2 = somewhat false, 3 = somewhat true, 4 = “Very true.”
Table 8

*Array Statements Addressing Research Question 2*

*How does the nursing supervisor’s professional and educational background relate to how the nurse provides services in the school setting?*

<table>
<thead>
<tr>
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<th>Supervisor’s Background</th>
<th>Numeric Response</th>
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<th>1-5 Years</th>
<th>6-10 Years</th>
<th>More than 10 Years</th>
<th>Totals</th>
<th>Percent</th>
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<tbody>
<tr>
<td>15-2 My immediate supervisor directs me to complete at least part of my work in a manner that should be done differently, according to evidence based nursing practice.</td>
<td>No RN Experience (n=514)</td>
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<td>2</td>
<td>13</td>
<td>7</td>
<td>39</td>
<td>61</td>
<td>11.9%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>6</td>
<td>16</td>
<td>26</td>
<td>5.1%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No answer</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>8</td>
<td>1.6%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| | RN Experience \(n=35\) | 1 | 2 | 2 | 17 | 21 |
| | 2 | 1 | 2 | 2 | 5 |
| | 3 | 2 | 2 | 4 |
| | 4 | 2 | 1 | 2 | 5 |

| | Supervisor Background | 1 | 5 |
| | Not Given \(n=8\) | 2 | 3 |
| | 3 | 3 |
| | 4 | 4 |

*Note.* 1 = “Very False,” 2 = somewhat false, 3 = somewhat true, 4 = “Very true.”
### Table 8 (continued)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Supervisor’s Background</th>
<th>Numeric Response</th>
<th>Less than 1 Year</th>
<th>1-5 Years</th>
<th>6-10 Years</th>
<th>More than 10 Years</th>
<th>Totals</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-9 My supervisor has me asked to provide non-emergency medication to a teacher to give to a student on a class trip.</td>
<td>No RN Experience n=514</td>
<td>1</td>
<td>13</td>
<td>73</td>
<td>82</td>
<td>276</td>
<td>444</td>
<td>86.4%</td>
</tr>
<tr>
<td></td>
<td>RN Experience n=35</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>5</td>
<td>16</td>
<td>30</td>
<td>5.8%</td>
</tr>
<tr>
<td></td>
<td>Supervisor Background  n=8</td>
<td>1</td>
<td>6</td>
<td>5</td>
<td>20</td>
<td>1</td>
<td>32</td>
<td>3.7%</td>
</tr>
<tr>
<td></td>
<td>Supervisor Background  n=8</td>
<td>2</td>
<td>7</td>
<td>5</td>
<td>20</td>
<td>1</td>
<td>32</td>
<td>3.7%</td>
</tr>
<tr>
<td></td>
<td>Supervisor Background  n=8</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>Supervisor Background  n=8</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. 1 = “Very False,” 2 = somewhat false, 3 = somewhat true, 4 = “Very true.”
Table 8 (continued)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Supervisor’s Background</th>
<th>Numeric Response</th>
<th>Less than 1 Year</th>
<th>1-5 Years</th>
<th>6-10 Years</th>
<th>More than 10 Years</th>
<th>Totals</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>15-10</strong> My supervisor has asked me to disclose confidential medical information that I am not permitted to share.</td>
<td>No RN Experience $n=514$</td>
<td>1</td>
<td>12</td>
<td>65</td>
<td>67</td>
<td>232</td>
<td>376</td>
<td>73.2%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3</td>
<td>12</td>
<td>19</td>
<td>40</td>
<td>74</td>
<td>14.4%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>17</td>
<td>26</td>
<td>5.1%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>3</td>
<td>8</td>
<td>22</td>
<td>33</td>
<td>6.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No answer</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>1.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RN Experience $n=35$</td>
<td>1</td>
<td>6</td>
<td>5</td>
<td>21</td>
<td>32</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1</td>
<td></td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisor Background $n=8$</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* 1 = “Very False,” 2 = somewhat false, 3 = somewhat true, 4 = “Very true.”
The responses to the 10 statements presented in Table 7 and Table 8 point to areas of conflict for the nurses. These difficulties exist in terms of their abilities to carry out appropriate clinical nursing practice, how the nurses understand their roles as NJ-CSNs, and how their supervisors’ backgrounds have an impact on their work. Regardless of the type of supervisor the NJ-CSN has, time to complete work is a challenge, as noted in table 7, response to statement 15-1.

When considering the specifics of provision of nursing care in the school setting, nurses in all years of practice have encountered times when the academic requirements of the students and the nursing needs are in conflict, as noted in the results in table 7, statement 15-3. This combination of nursing care provided in the academic setting is the foundation of school nursing practice, as noted in the definition of school nursing, “school nursing is a specialized practice of professional nursing that advances the well-being, academic success, and life-long achievement and health of students” (ANA and NASN, 2011, p. 3). Among all participants in the survey, regardless of the educational background of the supervisor, 252 (45.6%) of the 553 who provided a response to the statement in 15-3 responded with either a 3 (somewhat true) or 4 (“very true”). Similar results were noted for other statements that focused on the clinical practice as related to the nurses’ understandings of their roles, although to different extents in terms of how many nurses reported the experiences of these statements 15-4, 15-5, 15-6, 15-7, and 15-8 as either 3 (somewhat true) or 4 (“very true”). These findings point to discrepancies between the nurses’ understandings of their roles, and how the school nursing care is provided.
The findings regarding the supervisor’s background and the provision of care point to different results when the nurses were asked to respond to the statements in Table 8. These results indicate that some supervisors did ask nurses to violate specific, concrete aspects of professional school nursing practice. These included requests to complete the work in a way that is not acceptable according to the school nurse profession, provide medication to unlicensed individuals, or break confidentiality (statements 15-2, 15-9, and 15-10). The greatest number of responses, however, for each of these statements was in the 1 (“very false”) or 2 (somewhat false) category.

**Questions to identify areas of role conflict.** The remaining five questions in the survey (questions 16, 17, 18, 19, and 20), shown in Appendix E, presented each nurse the opportunity to address concerns related to how the professional and educational background of the individual who supervises the nurse affects the nurse’s individual clinical practice. Although most nurses did not respond to these questions, of those who did, the information demonstrates how the supervisor has an impact on school nursing practice.

**Possible conflict arising from a supervisor’s directive.** The nurses were asked in question 16: “describe any situation(s) which you felt a presented a conflict between a directive from your immediate supervisor and your nursing education, practice, and/or ethics.” Among the 514 nurses who stated their supervisor does not possess a nursing background, 372 (72.4%) did not report any situation that caused a conflict; however, this leaves 140 (27.2%) nurses reporting they experienced such a conflict. The responses are summarized in Table 9.
Table 9

Conflicts Between Supervisor’s Directive and Nursing Practice

<table>
<thead>
<tr>
<th>Conflict</th>
<th>Supervisor is RN</th>
<th>Supervisor is not RN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$n=2$</td>
<td>$n=140$</td>
</tr>
<tr>
<td>Frequency</td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>Misunderstanding of CSN work</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Requested breach of confidentiality</td>
<td>16</td>
<td>11.4%</td>
</tr>
<tr>
<td>Fear of reprisal if answered</td>
<td>1</td>
<td>0.7%</td>
</tr>
<tr>
<td>Inadequate staffing</td>
<td>39</td>
<td>27.9%</td>
</tr>
<tr>
<td>Created nursing policy and</td>
<td>5</td>
<td>3.6%</td>
</tr>
<tr>
<td>procedure manual without nursing input</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creation of “Student Growth Objectives” (SGO) unrelated to nursing practice</td>
<td>1</td>
<td>0.7%</td>
</tr>
<tr>
<td>Usurped professional nursing judgement</td>
<td>1</td>
<td>68</td>
</tr>
<tr>
<td>Total Conflicts Reported</td>
<td>2</td>
<td>140</td>
</tr>
</tbody>
</table>

Of the 140 nurses (27.2%) who reported experiencing a conflict, 68 nurses (48.6% of those who reported a conflict) reported that the supervisor tried to or did usurp the professional judgment and decision-making of the school nurse, including in emergency situations. One example of this type of conflict in directives was given in the statement, “principal insisted 911 did not need to be called for student who had supposedly ingested medication after poison controls [sic] direct order to call 911” (survey respondent 549).

The next most frequent issue reported was related to the nurses’ perceptions of inadequate staffing, particularly as related to student safety. Thirty-nine nurses reported an issue that related to staffing, including the following comment:
Nurse to student ratios are always a concern. Lots of student health needs, not enough health office hands and eyes. In case of emergency on a sports field—far away from the nurses [sic] office, the nurse must respond to emergency, leaving the office unattended with multiple unstable diabetics in the school (survey respondent 29).

Among the other issues of conflict the nurses spoke about was that of properly administering medication to students in trying to care for the students in a safe manner. One nurse stated,

My supervisor believes that we should only have a nurse attend field trips when there are students with ‘scheduled meds.’ He does not understand the concept of prn [administered on an as needed basis] medications, the unpredictability of asthma, seizure disorders, etc. He is prohibiting me from implementing the plan of care for these students (survey respondent 312).

Although only one nurse made a statement about his or her fear of reprisal, the statement in the consent section assuring confidentiality did not ease this nurse’s fears, as noted in the comment, “sorry, I cannot disclose information of this nature in a survey clearly associated with my name” (survey respondent 387).

The nurses who reported his or her supervisor is an RN had different results. Two of the 35 nurses in this group reported having any kind of conflict between a supervisor’s directive and their nursing practice. Of the responses, one nurse reported that his or her professional judgement was usurped and the other that the supervisor did not understand the work of the NJ-CSN. No nurses in this group reported any fear of reprisal should his or her identity become known.
Resolution of the job conflict. The prior question about any conflict in directives was followed up with question 17: “please describe how the situation in the prior question was resolved.” One hundred seventy of the nurses who reported that the supervisor does not have an RN background provided an answer to this question. These nurses communicated that resolution of the conflict included a compromise of nursing practice (9 nurses), union or attorney involvement (9 nurses), continuing to practice as their professional standards and Nurse Practice Act (New Jersey Nurse Practice Act, 2015) require even if in conflict with the directive (15 nurses), educating the supervisor about the conflict (34 nurses), and documenting the conflict but not necessarily changing practice (5 nurses). One nurse reported leaving the position because of the conflict. Eighteen nurses reported that the resolution improved their nursing practice. For 79 nurses (46.2%), the conflict was not reported as ever resolved.

For those four nurses from the group who reported having a supervisor with a nursing background and experiencing a conflict, one nurse reported the resolution lead to improved clinical practice. The remaining three reported there was no change or resolution of the situation.

Impact of Supervisor’s Background on the Nurse’s Job Performance

Most nurses did not respond to the question 18: “please describe any situation in which your immediate supervisor’s professional and/or educational background might have influenced your job performance.” Among those whose supervisor does not have a nursing background, 334 did not answer. Fifty-five nurses (10.7%) expressed that educational background had no impact on their work. Of the remaining 125 nurses who reported that their supervisor’s educational background had an impact on their job
performance, 64 (51.2%) expressed feelings of frustration in their job. For example, one nurse stated, “being assessed by a non-nursing professional is frustrating. Evaluations are non-productive, non-supportive, and non-educational” (survey respondent 69). Another nurse provided more information with the statement, “administrators without a health background are unaware of license standards and policies. Often, we are only one person among many with health concerns and are expected to keep up with all paperwork and emergency care” (survey respondent 29). Frustration was also reported by nurses whose supervisor is an RN. Among those with a supervisor with the RN background, three of the 11 respondents reported feelings of frustration.

The next most frequent response that indicated an impact on the nurse’s work was the feeling of being respected by the supervisor. Forty-four nurses reported feelings of respect from the supervisor. One nurse stated, “I'm supervised by administrators who respect me, my practice and my professional judgement” (survey respondent 34).

The nurses who reported having a supervisor with a nursing background also indicated feeling respected by the supervisor. Four of the 13 nurses who reported being influenced in their job performance by the supervisor’s background stated they felt respected by the supervisor.

**Impact of the Supervisor’s Background on Clinical Nursing Practice**

The survey presented a related question, number 19: “have you experienced any clinical situation(s) in which you believe the educational and/or professional background of your immediate supervisor had an impact on your school nursing practice?” This question was intended to distinguish actual clinical practice from other aspects of being a school nurse, such as was expressed in the prior question. The previous question was
more general, considering any impact on their job performance. This inquiry was presented as a multiple-choice question, with either a “yes” or a “no” answer. No information in the question was given to direct the participants on whether the impact was beneficial to their practice.

The results indicate that those nurses who have a supervisor with an RN background reported more of an impact on their practice than those whose supervisor does not have an RN background. The former group of nurses, those whose supervisor also is an RN, reported that the supervisor’s background has had an impact on 13 of these 35 nurses. In the latter group, those whose supervisor is not stated to be an RN, 142 of the 514 (27.6%) nurses reported that the supervisor’s background had an impact on their practice.

A follow up open-ended question, number 20, directed the nurses to: “please describe any clinical situation(s) in which you believe the educational and/or professional background of your immediate supervisor had an impact on your school nursing practice.” Although 142 nurses in the group who said their supervisor is not an RN reported that the supervisor’s background did have an impact on their practice in answer to question 19, only 107 used the opportunity presented in this question to describe how the supervisor’s background had an impact on their practice. Of this group, the most common impact was on the health and/or safety of the students. One-third, or 36 of the 106 of the nurses who responded, gave this answer. One example of this is the nurse who was instructed to leave the building without a nurse, saying, “There has recently been a directive that would require a building nurse to leave the building unattended and accompany a grade on a field trip” (survey respondent 133). Another nurse stated, “We
have an assistant superintendent who tells the nurses not to follow the district Doctors [sic] recommendations, thereby putting everyone's license at risk” (survey respondent 158). Another nurse gave the example that,

My supervisor will sometimes tell me when to send a student home or back to class before I have had an opportunity to assess the student. She has done this when she needs me to do something else like attend a meeting or teach a class. She has also questioned my professional judgment (survey respondent 171).

Finally, one other nurse presented the specific clinical situation of the administration of medications to students in saying,

Administrators as well as the school lawyer have decided that it is ok to allow non-emergency medications on overnight field trips without a nurse to administer the meds. I am very uncomfortable with this practice, and I am being asked to sign off that these students are medically cleared to attend the trip (survey respondent 173).

The next most common type of responses to question 20, which asked about how the supervisor’s educational background impacts practice, was related to a feeling of not being supported by the supervisor. Within the group of 514 nurses who reported their supervisor does not have an RN background, 107 nurses responded to question 20. Of these 107 nurses, 32 (30%), reported feeling unsupported in their roles as school nurses. One nurse stated, “he tells me what to do with students who want to call their parents, want to go home, and feign sickness” (survey respondent 27). Another nurse pointed out
the possible consequences of such actions both in the lack of support for the nurse, and to
the health of the student community. This nurse provided the example,

    I had a kindergarten student who's [sic] eye was very red with drainage. I
called [the] mother to pick up which was fine. I had to leave the building
before mom arrived. In the meantime the Principal arrived and when mom was
there to pick up the child, the Principal told her she could go back to class and
stay at school. I did not find this out until later. I called the Principal that
evening and explained the reasons why this was not safe. She stated that
because the mother worked in the lunchroom, she did not want her to have to
miss work!! (survey respondent 256).

    The third most frequently reported impact reported for question 20, noted by 29 of
the 107 nurses responding to the question, was a positive one: a feeling of being
supported by the supervisor. One nurse spoke highly of the supervisor saying, “my
director is extremely supportive of my role as the cert [sic] school nurse” (survey
respondent 263). Another nurse gave credit to the supervisor for the interactions this
supervisor has with the nurse in the statement, “my immediate supervisor, both past and
present, has always been very supportive, respectful, and seeks out my
professional/clinical expertise whenever necessary” (survey respondent 313).

    The two remaining areas of impact noted in question 20 were a concern that a
student’s education was being compromised (six of the 107 nurses responding), and
concerns about not abiding to the regulations of the New Jersey Nurse Practice Act.
Three nurses expressed that they were concerned they had to compromise their nursing
licenses to abide by the directives of the supervisor. This was echoed in the statement
referenced earlier by the nurse who said he or she felt nursing licenses were at risk when practicing as instructed by the supervisor.

Among the nurses who reported in question 20 that the supervisor is an RN, 11 nurses provided information about the impact of the supervisor’s background on their job performance. The most commonly reported result was that these nurses felt supported in their work in the school. Nine of the 11 nurses who responded to this question gave credit to the supervisor for the support they receive. One nurse pointed to the value of the supervisor understanding the nursing role as a clinician saying, “new to this school after working 14 years at ninth grade level with 500 students [sic]. Great having a nursing supervisor--new this year. She is now supervising nurses and immediate support to all practice issues” (survey respondent 14). An even stronger statement was made by the nurse who said,

She has impacted me in a positive way. She has a good knowledge of the law and has always been a strong mediator between administration, parents, and students if there is a conflict. I have learned a lot from her (survey respondent 15).

The only other areas of impact mentioned by these nurses were a feeling of not being supported (one nurse) and a concern about the compromise to the student health and safety (one nurse). This latter situation referenced issues of staffing, with the nurse stating, “preparation of daily schedules are [sic] not modified to meet needs of students with health conditions” (survey respondent 128).
Conclusion

The interpretations of the findings and application to school nursing practice will be presented in the final chapter of this dissertation.
Chapter 5
Discussion

The ideal growth of students depends upon the appropriate use of resources available in the school system (ASCD, 2014). The Whole School, Whole Community, Whole Child (WSCC) model developed by the Association of Supervision and Curriculum Development (ASCD) and the Centers for Disease Control and Prevention (CDC) presents an opportunity for members of the school community to optimize student growth physically, academically, and emotionally (ASCD, 2014). The WSCC points out the value of student growth as a source of community capital (ASCD, 2014). Allowing the school nurse to work to the fullest scope of practice provides a reserve of energy and information to support the individual students, the school setting, and the local community.

The work of the NJ-CSN is a complex one, involving a background derived from both the nursing and education professions (New Jersey Administrative Code, 2014). The nursing and education professions have different perspectives on the meaning and use of supervision. No study has yet considered the impacts of supervision, whether from nursing or from education, on how a NJ-CSN understands the professional role he or she holds, or how such supervision may affect practice both for the nurse, and the school community. There is no reason to question that supervisors want the students to be healthy and able to achieve socially and academically. Rather, the findings indicate that supervisors do not understand the impacts their directives have on nursing practice, which in turn, affects the students.
The purpose of this MM study was to examine the relationship of the supervisors of the NJ-CSNs and the manner in which the nurses practice as a result of the supervision. The study further sought to understand specific practice issues related to school nursing within the context of the type of supervision the nurses were given. These matters were also placed within the context of how the nurses understand their roles because of the supervision. To review, the following research questions guided the study:

1. How do the school nurses’ understandings of their roles affect their clinical practice?
2. How does the nursing supervisor’s professional and educational background relate to how the nurse provides services in the school setting?

This discussion will present the study findings from the perspective of the research questions within the context of the literature presented previously. This will be followed by implications for policy and best practice for school nursing. Finally, I will make recommendations for further research.

**Effects of Nurses’ Understandings of Their Role on Clinical Practice**

The first research question asked the following: how do the school nurses’ understandings of their roles affect their clinical practice? According to Organizational Role Theory (Kahn et al., 1964), the work of the school nurse can lead to difficulties in both the personal and professional lives of the nurses. These challenges can be derived from multiple sources, including the expectations of the practice of the nurse, competing demands on the nurse, and the individual nurse’s self-imposed beliefs about his or her work. For some nurses, this may lead to confusion in the work setting, which, in turn, can increase stress for the nurse.

**Understandings of the school nurse role.** Applying the perspective of role conflict from Organizational Role Theory provides a lens through which to view the
nurses’ perceptions. The beliefs the nurses hold about their roles in the school settings can lead to practice changes, affecting how the nurse implements his or her job, and what the nurse feels about him or herself (Kahn et al., 1964). If nurses do not understand how they are to practice in their work environment, risks related to compromised care exist for the nurse and those in his or her care (Dierdorff & Rubin, 2007; Gormley & Kennerly, 2010; Kahn et al., 1964; Tarrant & Sabo, 2010; Zimmerman et al., 1996). Biddle (1986) informs us that understanding of the role is comprised of three constituents: how the nurse acts clinically, the identity the nurse has of him or herself and exhibits to others, and the place the nurse holds within the school hierarchy.

**Role conflict.** As discussed previously, an employee experiences role conflict when he or she is subject to opposing directives (Kahn et al, 1964). These instructions can either be overtly stated or implied through the practice of the organization (Biddle, 1986). For the school nurse, the instructions may originate from multiple sources, including the educational supervisor, the school district physician, the state Board of Nursing which promulgates the rules regulating nursing practice in the state, the local Board of Education which approves the policies and procedures under which the nurses work, the individual students’ medical orders from their health care providers, the parents or guardians of the students, the students themselves, professional organizations for standards of practice for nursing in general, and school nursing in particular, and generally accepted evidence-based nursing practice. Any of these authorities can contradict another stakeholder leading to conflict for the school nurse. This leads the nurse to choose between two incompatible options.
Question 15 presented participants with an array of 10 statements, asking them to rate their experiences on a scale of 1 to 4, defined as “very false” to “very true” (Appendices C and D). The statements in this series assessed for situations of conflict in school nursing practice. On the issue of whether nurses feel they have adequate time for getting their work finished, it was irrelevant whether the supervisor was reported to have a nursing background or not. The lack of adequate time for completing work was similar for all nurses, with 54.3% (302) of the 556 nurses responding with either a “3” (somewhat true) or a “4” (“very true” on the survey scale) to indicate they have enough time to do their work. The issue of conflict arises when a nurse is directed to complete his or her work in a timeframe requiring the nurse to choose what can be completely appropriately, and what either does not get done, or what may get done less than satisfactorily. This is an area that requires further exploration to determine how school nurses address the need for more time to provide their nursing care.

The largest area of conflict was in response to the question of whether nurses have noted times when a student’s academic and health needs are incompatible, asked in question 15-3. This question gets to the heart of the school nursing practice. Thirteen of the 35 nurses who have supervisors with a nursing background reported this as number “3” or “4.” Of the 510 nurses who responded to the statement and whose supervisors may not understand the nursing needs of the students, 237 (46.5%) experienced this situation. This conflict puts the nurses in the position of having to choose between meeting either the health or the academic needs of their students. Similar responses were provided to the question of whether the nurses are required to work under educational policies that contravene accepted nursing practice. Of the 35 nurses whose supervisors are also RNs,
12 nurses work under incompatible educational and nursing directives, with responses of “3” or “4.” This compares to 240 (47.1%) of the 510 nurses who responded to the statement and whose supervisor is not familiar with nursing. The dichotomous goals of the nurses and supervisors put the students’ educational and health achievements at risk, leaving the nurses unable to support the students most effectively in either area. If the nurse is not able to practice appropriately, it calls into question the very foundation of the school nursing role.

Multiple survey questions in the array for question 15 revealed similar responses for both groups of nurses: those whose supervisors are reported to have a nursing background, and those who do not. See Table 7 and Table 8 for the distribution of responses. Given the small sample size of the nurses who report having a supervisor with a nursing background, these are areas that may be best explored using a method that allows for greater discussion.

*Potential consequences for experiencing role conflict.* As noted by both Acker (2004) and Tarrant and Sabo (2010), employees who experience more role conflict are at higher risk for dissatisfaction with the work. The following section will explore this concern.

*Job satisfaction among school nurses.* For the nurses experiencing job dissatisfaction, this may be manifest in voluntarily leaving a job. Two nurses reported leaving the school employment because of the issues of conflict. The survey did not specifically ask whether a decision was made to maintain employment in the school setting and any relationship to supervision. A possible reason for remaining in the school nurse job may be related to benefits or pay from the education profession (Foley, 2004;
Junious et al., 2004); however, this issue was not addressed in this survey. In addition, nine nurses, all with a supervisor who does not have a nursing background, reported attorney and/or union involvement, raising the question of how collegial and supportive the work environment is.

*Compromised job performance.* For the nurses put into the position of choosing between incompatible directives, they are forced to choose between what the supervisor is ordering, and what accepted nursing practice requires. This is an area that presents safety, academic and privacy issues to the students, and ethical dilemmas to the nurses. The supervisors who do not have the nursing background exhibit a lack of understanding of these basic concepts in nursing practice. An example of this is noted in the area of personal health information. Registered nurses are not permitted to share confidential medical information except with other healthcare practitioners. In schools, the Family Educational Rights and Privacy Act (FERPA) guides the disclosure of health information by the nurse to, among others, educational professionals in the school (U.S. Department of Health and Human Services and the U.S. Department of Education, 2008). The supervisor who requests information about a student’s health condition, including immunizations, medications, or any other health issue, must have a “legitimate educational interest” (US Department of Education, Family Educational Rights and Privacy Act, 2015, first sub-bullet point) to be provided the information. The nurse who is requested to provide this information without explanation of an appropriate reason to do so must choose between either violating regulations, or compromising his or her work by providing the information.
Dierdorff and Rubin (2007) inform us that as the work becomes complicated, the employee facing a role conflict situation can become careless on the job. While not explicitly investigated in this study, the risk exists with resultant harm to students because of this cavalier attitude toward nursing work. It should be noted, however, that several nurses stated they would not execute their work in a manner that puts their practice at odds with accepted nursing care or the state Nurse Practice Act (New Jersey Nurse Practice Act, 2015), specifically indicating they would defy the supervisor’s directive if it would lead to such a violation.

While not explored from the perspective of understanding the challenges of school nursing practice, the number of years of experience may be considered as a proxy for better practice. Juxtaposing the years of school nursing practice with the background of the school nurse’s supervisor is of limited value in this study, however, since none of the nurses with less than 1 year of experience have a supervisor with a nursing background. While it can be presumed that this less experienced NJ-CSN would benefit from having a supervisor with a full understanding of the school nurse role and knowledge of how to best support the nurse to prevent compromised job performance, this area needs further exploration.

**Burnout.** It is also important to understand how the presence of conflict relates to the nurse feeling burnout, defined as the experience of ongoing exposure to stress at work (Maslach & Goldberg, 1998). For the nurses revealing they are experiencing role conflict in their work, this can have an impact on the relationships with their colleagues and students. School nursing is a profession in which the interactions between nurse and student take place at vulnerable times for the student, such as during response to injury or
illness (American Diabetes Association, 2011; DeSochio & Hootman, 2004; King, 2014; Kirtley, 2013; Kraft & Erikson, 2015; Puskar & Bernardo, 2007; Shannon et al., 2010; U.S. Department of Health and Human Services, 2008; U.S. Department of Health and Human Services, 2012). The risk of school nurse burnout as a result of the role conflict they experience reduces the level of safety in the care provided by the nurses. This role conflict is noted by 237 (46.4%) of the nurses, with a supervisor who is not familiar with nursing care and who responded with either a 3 or 4 to statement 15-3, which addressed whether said they work under incompatible nursing and educational policies. Although the possibility existed that a nurse could have mentioned burnout as an effect of the supervision he or she was provided, it was not specifically researched in this survey. Therefore, no conclusions can be made about burnout based on this survey.

A final area for exploration is the relationship between years of practice in any nursing specialty with response to conflicting directives. Although school nurses work specifically under nursing policies, such as the New Jersey State Nurse Practice Act, and the various federal and state laws, the basics of nursing extend across specialties. Following up on Maslach and Jackson’s (1981) observation that more experienced employees experience less rates of burnout can provide better guidance on how to support the nurses. The next section will relate the survey results to the supervision provided to the nurses.

**School Nurse Practice Implications Related to the Supervisor’s Background**

The second research question evaluated specific practice situations that the nurses potentially experienced. This question asked: how does the nursing supervisor’s
professional and educational background relate to how the nurse provides services in the school setting?

**Issues of supervision.** Of the 514 nurses who responded that their supervisor does not have an RN background, 142 (27.6%) reported experiencing a conflict between a supervisor’s directive and the standard of care for their nursing practice in response to question 19. When asked to describe a situation regarding the conflict between a directive and professional school nursing practice (question 16), of these nurses, 68 (47.9%) of those responding reported that the conflict was because of the supervisor’s extending the educational administrator boundaries into school nursing practice. For these nurses, the conflict was focused on issues directly related to clinical practice. The impact of this supervision was revealed when the question of how the directives from supervisors conflicted with accepted nursing practice were resolved (question 17). The one nurse who responded that his/her supervisor has an RN background and reported a conflict in directives by the supervisor, also stated “my practice is impacted daily by the lack of knowledge regarding the health/medical fields possessed by my immediate supervisors” (survey respondent 128). The conflicting survey responses by this participant put into question whether this nurse’s supervisor is really an RN.

For 79 (46.2%) of the nurses who answered question 17 and whose supervisor does not have an RN background, the situation was not resolved; the practice continued with the educational supervisor giving directives that conflict with the practice. Butterworth and Faugier (1992) inform us that supervision should enhance the nurse’s skills. When a conflicting clinical situation continues in a manner as always practiced, the nurse is not in a position to improve in his or her skills, nor the health of the individual
students or the community. This can apply both to the experienced school nurses, and those new in the specialty.

The issue of the supervision of school nurses can be viewed from two perspectives: that of the impact on the nurse, and the effect on the school community. This next section will focus on the impact to the students within the school community.

**Potential impact on students in the school community.** The school nursing role is complex, with significant numbers of students with complicated medical needs in the school system (U.S. Department of Health and Human Services, 2013). For these children, having a nurse who receives less than appropriate support can have an impact on their physical, social, and academic health (Balfanz & Byrnes, 2007; Puskar & Bernardo, 2007). When judged from the lens of the impact on student achievement, less than optimal supervision can negatively affect an individual student’s ability to do well in school (Gottfried, 2010). When the impact of school is linked with a nurse who would benefit from appropriate supervision, a student whose nurse is not able to provide the best care because of a need for improved supervision is at risk for reduced lifetime earnings (Balfanz & Byrnes, 2006). Viewed from this perspective, the value of effective supervision of the nurse is more clearly seen.

**Administrator understanding of the school nurse role.** Survey findings are aligned with studies that report that non-nursing supervisors may not understand what aspects of their work the nurses can legally or appropriately delegate (Holt et al., as cited in Green & Reffel, 2003), how the school nurse uses time in the school day to complete the work (Green & Reffel, 2009), or what the school nursing role encompasses.
The following findings demonstrate gaps in the understanding of the school nurse role by the supervisor.

One of the most common reasons that students are reported to be sent home from school by a nurse is because of a concern that is not generally viewed as a school health issue: pediculosis (lice). The CDC, the American Association of Pediatrics (AAP), and NASN all agree that pediculosis is not a reason to send students home, nor should nurses use their limited time to inspect entire classes of students whose peers have lice (AAP, CDC, 2015; NASNb, 2016). Thirteen school nurses – all from the group whose supervisors do not have an RN background - reported that supervisors believe otherwise, directing the nurses to exclude students for the presence of lice, either live or at the nit (egg) stage. This clinical topic was addressed in response to various questions. Nine nurses addressed this in response to question 16, which asked the nurses to describe any conflict between a supervisor’s directive and appropriate school nursing practice. One nurse addressed this in question 18, which asked the nurses to describe any event in which the supervisor’s education may have had an impact on job performance. An additional three nurses reported this in response to question 20, which asked how the supervisor’s background may have had an impact on the nurse’s school nursing practice. Each of these responses was from a different survey participant. For both the students who lose valuable class time, and their parents/guardians who must take off work to come to school to take the children home, the supervisory directive presents both an academic hardship for the students, and, potentially, a financial hardship for those parents who lose income by going to school for what is a “nuisance” (AAP, 2015, para. 1).
Nurses also reported that supervisors inserted themselves into the nursing role by not accepting valid medical documentation from parents or guardians requesting 504 accommodation plans for their children. An academic 504 plan is a document implemented in the school to provide appropriate supports for students with disabilities (U.S. Department of Education, 2015, Protecting students with disabilities). While the decision for creating a 504 plan does not rest on the school nurse, the NJ-CSN is the individual who can provide the medical support for such a plan. Ignoring the medical information provided by the nurses compromises the students’ academic achievement possibilities. The same can be said of other clinical issues related to school nursing. Students whose nurses are unable to assist them properly, and who are in need of nursing supervision, may not have optimal trust with the nurse (Curley, 1998; Dinc & Gastmans, 2013; Finn 2011). It is this trusting relationship between student and nurse that can allow the student to uncover personal and emotional issues to the nurse (DeSochio & Hootman, 2004; Kirtley, 2013; Kraft & Eriksson, 2015; Shannon et al., 2010). Without a properly supervised nurse, sensitive student information may not be revealed to the nurse.

The results from this study also specifically addresses concern of the AACN that supervision should support safe nursing practice (AACN, 2016). This raises the question of whether supervision by someone not educated in nursing is the right individual to make clinical decisions that have the potential to have an impact on meeting the medical needs of students. Supervisors overrode the nurses’ professional judgement on such clinical issues as sending a student with medical needs on a trip without a nurse, meeting student medication needs by directing a non-nurse to carry the medication and provide it to the student, and leaving the health office uncovered when directing a school nurse to
attend to a bus accident. The New Jersey Nurse Practice defines the practice of the registered nurse to include “diagnosing and treating human responses to actual or potential physical and emotional health problems” (Nurse Practice Act, NJSA45:11-23(1)b). These supervisory decisions beg the questions of whether the supervisors understand the impacts their directives have on the students’ health, and whether the supervisors’ actions can be considered practicing as an RN without proper education or licensure.

Decisions made by a supervisor can have a life-threatening impact on a student. The nurse who reported that his/her supervisor does not see a need for prohibiting a student from ingesting the food to which the student has a history of an allergy to is an example. When a student is permitted to eat the food allergen because it is available at a class party, as reported by one nurse, this places the child at risk of an anaphylactic reaction (Asthma and Allergy Foundation of America, 2017). It is up to the nurse either to follow the supervisor’s directive, or prevent a potentially life-threatening incident from occurring.

While nursing policies and procedures should be developed in consultation with the nurses (AACN, 2016), this is not always the case. Implementing policies in the school district without input from the nurses does not support best practice for the students, described in question 16. These policies relate to multiple health issues, such as medication and food allergies, and non-health issues, such as lice. As with the medication issues, creating appropriate nursing policies is an area that a supervisor without the nursing background might not be able to identify as within the context of school nursing or have the knowledge to address in creating a nursing policy.
Inappropriate or ineffective supervision also can negatively impact the larger community. The nurse serves not only individual students, but entire communities. As Rice at al. (2005) informed us, the school nurse may be the most common contact a student has with a health care provider. Supervision that does not assist the nurse to improve in his or her clinical or other skills can lead entire communities, beyond the walls of the school building, to suffer. The NASN 21st Century Framework for School Nursing Practice (NASN, 2016a) recognizes the value of school nursing within the community; yet, inappropriate supervision limits how the school nurse can support the community. The earlier example of the adults who must come to school because of a child with lice is one area of impact on the larger community. Parents may not have the financial resources to lose time at work.

The issue of immunizations is a health serious concern that several nurses addressed. Protection of the community against several serious diseases depends on “herd immunity” (U.S. Department of Health and Human Services, 2017). When the number of vaccinated individuals in a community is decreased, the protection of that community against these diseases is also reduced. In some school settings, the supervisor directed the nurses to permit students to enter school without proper immunization documentation, putting the entire community in which the school is situated at risk. This is especially serious when we consider that students who may not be eligible for immunizations because of health conditions or religious beliefs are in the school setting, exposing them to a higher risk of contracting a serious disease.

For the school nurses whose supervisors apply educational supervision to the nurse by providing feedback on classroom teaching, the nurses view this as a lost
resource for support. This is noted in the comment made by one nurse that he or she was “only evaluated based on my classroom teaching because that was all they knew about evaluating nurses” (survey respondent 125). Although McDaniel et al. (2013) have discussed the value of a school nurse evaluation tool as a way of improving the nurse’s practice, such a tool is not always used. Evaluation as a teacher is ineffective for improving the clinical practice of school nursing.

**Impact of the supervisor-school nurse relationship.** Brunetto et al. (2013) guide us that a supportive relationship with the supervisor can have multiple positive effects on the nurse personally and as a member of the larger organization. The findings from this study point to the impact the supervision can have on the individual nurse’s practice as well as his or her emotions. The extent of frustration experienced by the nurses differed depending on whether the supervisor is an RN or not.

Among the nurses whose supervisor has the nursing background, only one nurse reported frustration in response to question 18. This related specifically to the personal time that is used on the weekend addressing medical concerns for an overnight trip when no nurse is in attendance with the students. For the nurses whose supervisor does not have the nursing experience, 64 (35.5% of those responding to the question) reported feelings of frustration. These feelings of frustration raise the question of whether this may decrease faithfulness to the school setting or district, as noted by Brunetto et al. (2011). Brunetto et al. (2013) also reported on the risk of losing nurses because of a negative relationship between the nurse and the supervisor. This issue needs to be juxtaposed with the value of the trusted school nurse, known to students, as a component of their academic, emotional, and physical well-being.
In addition to feelings of frustration, several of the nurses with a non-nursing supervisor stated they felt the supervisor inserted himself or herself into the clinical role of the nurse. No nurses with a supervisor in nursing reported this kind of event. While not coded as “frustration” for the study, the question can be raised about whether this kind of overreach into nursing practice might have also led to feelings of frustration. At a minimum, these nurses noted that the supervisors’ actions had an impact on their job performance by limiting their practice.

**Implications for School Nurses and Supervisors of School Nurses**

**Policy.** As in all nursing specialties, those in the field of school nursing must abide by the professional Code of Ethics that guides nursing practice (American Nurses Association (ANA), 2015). Provision 2 of the ANA Code of Ethics requires that the nurse view the appropriate care of the patient (the student, for school nurses) as primary, above requirements of any other stakeholders in that patient’s care (ANA, 2015, p. 21). The competing goals of education and nursing challenge the NJ-CSN to remain firm in the commitment to proper nursing care for the students. From a policy standpoint, this first requires that NJ-CSNs recognize and identify the issue at hand: the need for appropriate supervision of school nurses to meet the demands of the students, staff, and visitors whom the nurses serve (Fowler, 2013). Once this policy issue is identified, the stakeholders in the school system, parents, nurses, administration, members of the Boards of Education, and community members, can move forward through the policy-making process to provide optimal health care in the school setting (Fowler, 2013).

A complicating factor in the policy-making process focuses on the recipients of the school nurse care. School nurses provide care to what is essentially a group of
individuals who do not hold the same power as the adults: the students. The nurse must abide by a school district’s policies in providing care to the students, yet the students have no voice in the creation of the policies. According to the National School Boards Association (2017), members of the school board are responsible for “developing and adopting policies” (National School Boards Association, 2017, second question). Students are silent recipients of care that is dictated by the local school district policies. For this reason, we must use a public policy perspective to evaluate how and what to implement to improve the care for the students (Anderson, 2015). Additionally, with the possibility of students not having frequent access to health care outside of school, the lens of public policy is even more essential (Rice et al., 2005). School nursing is an issue not only for individual students, but for the larger community in which the students live.

An essential component of any policy is to determine what is the desired outcome (Anderson, 2015). For the recommendations noted here, the goal is two-fold: to provide safe care to the students, and enhance their academic, physical and social achievements. This is aligned with the NASN definition of how school nurses support student growth (NASN, 2016c).

Public policy requires that, at a minimum, the school nurse be involved in the development of the school nursing program in a district. The NJ-CSN is the best individual to understand and explain the needs of the students from both the medical (nursing) and educational perspectives. If this professional is left out of the equation in developing a health program for a school, the resource of nursing care cannot be properly allocated, and can lead to larger community health issues. Among the topics to be addressed in health program discussions are the following: appropriate staffing of
Schools, preventing non-nurses from making decisions that have an impact on the provision of nursing care, including school nurses in all activities that involve student health, limiting the provision of health care to students to properly educated and licensed members of the nursing profession, and developing school board health policies with input from the NJ-CSNs. Health policies for a school must be based on current research to assure optimal care for the students. Outdated health policies that are in place solely to appease school community members have no place in current evidence-based nursing practice.

While it is best practice to recommend that every school district have an RN with school nursing experience to supervise the nurses, this is not realistic given the budget constraints of the public school system. To support best practices and address monetary concerns, districts can establish regular sessions with the nursing department members to review policies and practice. Communication should be encouraged without fear of reprisal on the part of the nurses to share their concerns for student safety and growth. At a minimum, supervisors must listen to and address concerns raised about student safety. These nursing challenges cannot be dismissed without risking student health.

Finally, supervisors must implement a system that encourages school nursing professional growth by the nurses that addresses their concerns in the district. Irrelevant evaluations and continuing education are a waste of time and money for the district administrators and nurses. Supervisors can use currently available evaluation tools, such as those described by NASN (2013).

**Practice.** Ultimately, the individual NJ-CSN is responsible for his or her nursing decisions, regardless of what a supervisor directs the nurse to do (ANA, 2015). The NJ-
CSN is obligated to assure that his or her practice is in line with current evidence based practice, regardless of any inconsistent or conflicting supervisory directives. Being restricted by the fear of job loss or other actions against the nurse is not an excuse for inappropriate practice. Therefore, the nurse should adhere to the following recommendations.

School nurses cannot rely on school personnel to implement all appropriate components for an improved school health system. School administrators and board members work with multiple educational specialists and cannot be expected to understand the needs of the NJ-CSN. It is the responsibility of the school nurse to be proactive and speak up before a concern arises, regardless of any fear related to the job. At a minimum, the NJ-CSN must respond to any conflicting directives once the issue develops by discussing the matter with the supervisor. As nurses, we are our patients’ advocates. We must always work within the legal and ethical bounds of our licenses and education. This includes having a working knowledge of the ANA (2015) Code of Ethics for nurses, as well as the Scope and Standards of Practice for School Nursing (ANA and NASN, 2011). When we bow to pressure to practice in a manner that is less than optimal or even risky, we are not putting our patients’ needs as primary. School supervisors look to us as the experts. An honest, open, respectful dialogue with the supervisor is the place to start the discussion. School nurses have a responsibility to notify their supervisors of practice concerns.

Nurses must bring documentation of any compromised practice, in addition to information about the risks of such practice, to the attention of the supervisor. School nurses should inform the educational administrator of what is best nursing practice based
on current research. This can include recommendations to update the school system nursing policies, protocols, and procedures to reflect current, evidence-based research. Nurses cannot continue implementing the same practice simply because it has always been done that way. All school nursing practice must have evidence-based research to support it.

NASN (2016a) developed the Framework for 21st Century School Nursing Practice. Use this tool to improve practice and the health of the students. Review the NASN website for resources. Specifically, look at all five pillars of the model to determine where and how to improve school nursing practice. NASN supports the work as an advocate for our students in all aspects of the model. In particular, however, is the component of “quality improvement” (NASN 2016a). If we are not constantly seeking to do the job better, and taking a leadership role in doing so (another piece of the model), we cannot say we are working to our best as NJ-CSNs. Improving in our work requires that we keep current in our knowledge base. Consider that school nursing practice extends beyond the walls of the school building, into the community. Take the leadership role and become more involved, with the supervisor’s knowledge and support, in the local community. Having this interaction in the community will provide a better understanding of the needs of the individual students and their families.

The NASN (2016a) framework also supports the role of the nurse as leader in the school setting. Challenging the supervisor in directives regarding the care of the students can be difficult, especially with fears of reprisal, as mentioned in the survey. It is imperative that the nurse work with all school leaders for the students, even if it means refusing a directive from the supervisor if it is contravention of proper nursing care.
Areas for Future Research

The current study is limited in focus to the existence of role conflict and any relationship to the school nurse’s practice. Given the multiple differences between nursing and educational specialists, including routes to practice and priorities in the school setting, and the presence of role conflict noted in this study, one can anticipate that role ambiguity also exists among school nurses. A separate study into role ambiguity and any effect on school nursing practice would be valuable to both the school nursing and educational specialties.

Several nurses noted the involvement with attorneys or union representatives because of actions they attributed to their supervisors’ directives. The need to seek help from these adversarial representatives raises the question of whether the professional background of the supervisor led to the need for these actions. These reports leave open an area for research to consider how to reduce the risk of an adversarial situation as related to school nursing practice and supervision of the school nurse.

This study further revealed other areas for further research. Given the concern about fear of losing a school nurse job if refusing a supervisor’s instruction, it would be valuable to research whether the more experienced school nurses are better able to respond to conflicting directives. This is also an important area for further exploration given the current and predicted shortage of prepared RNs (American Association of Colleges of Nursing, 2014).

Future research should include in-depth interviews with NJ-CSNs who are supervised by an administrator with an RN background, and those who do not have this background. The current study revealed areas of confusion that were uncovered by the
narrative questions about supervision. It is possible some nurses confused the role of a district “lead” or “head” nurse (a nurse without supervisory authority) with one who has the ability to supervise the nurses. Further research would clarify this confusion.

A key research population is that of the supervisors themselves. It would be valuable to investigate if they understand how their actions have the potential to impact nursing services and student health. Research should also include the question of whether the supervisors understand if they have the legal authority to implement some of their actions, such as providing medication to a student.

An ideal research setting would be to compare the impressions of school nurses in a district who have had a supervisor with a nursing background, with their experiences after the supervisory position was eliminated. It would be anticipated that nurses in that setting would be able to compare the issues of the same needs of their students both with and without the supervisor with nursing experience. This may reveal if there are areas that can be identified for future school nursing practice in districts that do not have a supervisor with a nursing background.

One other area of study is to research the curricula of the school nurse certification programs. Given the strict requirements for the route to attain school nurse certification (New Jersey Administrative Code, 2014), the programs that produce future NJ-CSNs can produce school nurses with the necessary ethical understandings for the practice. A study of instructors in these programs can uncover what information the NJ-CSN students are provided on ethical issues, and how they can work to resolve the dilemmas.
A final area of recommended research should focus on the ethics of having school nurses supervised by non-nurses, including who should be supervising the school nurses. A former New Jersey school principal informed me that the school nurse was expected to abide by her directives, regardless of what the nursing regulations stated (J.M., personal communication, November 9, 2015). The ethics of being a supervisor in a school, whether as a superintendent, building principal or other role, should guide appropriate supervisory practice. Among the published ethical educational standards is that school leaders abide by the laws of the jurisdiction, and an ethic that supports professional practice of those in the school (AASA, The School Superintendent’s Association, 2016; National Association of Secondary School Principals, 2016; Hartsig, 1966; Weaver, 2007). Putting the school nurse in the position of having to choose between abiding by professional nursing judgement and regulations of the New Jersey State Nurse Practice Act (2015), and the orders from the supervisor, raises the question of whether this practice is ethical. By expecting the nurse to obey the supervisory directives at all times, regardless of what professional practice requires, the nurse may be forced to disobey the law. This is directly contradictory to the statement that an educational leader “implements local, state, and national laws” (AASA, The School Superintendent’s Association, 2016, bullet point 4) and “obeys local, state, and federal laws” (National Association of Secondary School Principals, 2016, bullet point 4). It is, therefore, unclear why an educational leader would direct a school nurse to work outside the nursing laws under which the nurse practices.

This relates to the question of who should supervise school nurses. While these nurses are educational professionals with the foundation of their practice from an entirely
different field – nursing – this brings into question if school nurses would serve their students better if directed by specialists from nursing rather than education. Both questions, the ethics of an educational supervisor directing a nurse to disobey the law and ethics of nursing, and under what domain school nurses should be housed, need further research. In particular, the research into the first issue, the ethics of an educational supervisor giving directives to a nurse, will uncover if supervisors understand that their actions may be directing a nurse to disobey a law or professional standard of practice.

**Recommendations**

Best school nursing practice requires student health and safety be the primary goals in the school setting. While the overriding purpose of the school system is to educate the students, this must be done in the safest manner.

**Recommendations for supervisors of school nurses.** Given the evidence of role conflict experienced by the nurses in this study, the following recommendations are made for school supervisors:

1. Recognize that school nurses want to provide safe care to support the educational needs of the students.
2. Ideally, a supervisor of nurses should have RN experience.
3. Reduce the level of role conflict by recognizing the professional expertise of the NJ-CSNs.
4. Hold regular meetings with the nurses to discuss concerns of student health.
5. Allow the nurses to implement evidence-based nursing care, and support this with necessary resources, including adequate staffing.
6. Provide meaningful evaluations related to the full extent of the NJ-CSN role.
Recommendations for New Jersey Certified School Nurses. The following recommendations are made to the school nurses:

1. Read and understand the New Jersey Nurse Practice Act (2015) as well as other applicable nursing regulations.
2. Recognize that school supervisors want students to have a positive, safe educational experience.
3. Recognize that school districts have budget constraints which may lead to limitations on certain services.
4. Work within the ethical and legal limits of your license.
5. Always use evidence-based nursing practice.
6. Bring constructive ways to improve school health care to your supervisor’s attention.
7. Be open to discussions with your supervisor.

Conclusion

This study uncovered the experience of role as confusion reported by NJ-CSNs and how it affects their practice. Specific areas of concern addressed safety and educational issues for the students, as well as job satisfaction of the nurses. School nursing is a specialty combining two professions: nursing and education. Supervisors of school nurses may not be aware that some of their actions or directives are in conflict with accepted nursing practice and regulations. It is expected that both NJ-CSNs and their supervisors want students to have safe educational experiences and achieve in all areas of their lives. Recognizing that these conflicts exist, and their impact on the students and
the nurses, is a first step in improving the experience for the students, the nurses, and the larger community in which the school sits.
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Appendix A

Role Conflict and Role Ambiguity Questionnaire (Rizzo et al., 1970)

1) I have enough time to complete my work.
2) I feel certain about how much authority I have.
3) I perform tasks that are too easy or boring.
4) There are clear, planned goals and objectives for my job.
5) I have to do at least part of my work in a manner that should be done differently.
6) There is a lack of policies and guidelines to help me.
7) I am able to act the same regardless of the group I am with.
8) I am corrected or rewarded by my immediate supervisor when I don’t really expect it.
9) I work under education policies and/or guidelines that are incompatible with my nursing practice.
10) I know that I have divided my time properly.
11) I receive an assignment without the resources to complete it.
12) I know what my responsibilities are.
13) I have to buck a rule or policy in order to carry out an assignment.
14) I have to “feel my way” in performing my duties.
15) I receive assignments that are within my training and capability.
16) I feel certain how I will be evaluated.
17) I have just the right amount of work to do.
18) I know that I have divided my time properly.
19) I work with two or more professions or groups of individuals who operate quite differently.

20) I know exactly what is expected of me.

21) I receive incompatible requests from two or more people.

22) I am uncertain as to how my job is linked to the educational system for which I work.

23) I do things that are apt to be accepted by one person and not accepted by others.

24) I am told how well I am doing my job.

25) I receive an assignment without adequate resources and materials to execute it.

26) Explanation is clear of what has to be done.

27) I work on unnecessary things.

28) I have to work under vague directives or orders.

29) I perform work that suits my values.

30) I do not know if my work will be acceptable to my boss.

(adapted from Rizzo et al., 1970, p. 156)
Appendix B

Informed Consent and Demographic Study Questions

Dear Participant:

You are invited to participate in this online research survey entitled The Impact of Supervision on New Jersey Certified School Nurses. You are included in this survey because your email address was obtained through your school district listing as identified with the school nurse. This survey has been approved by the Institutional Review Board (IRB) at Rowan University.

The survey is expected to take approximately 10 minutes to complete. Your participation is voluntary. If you do not wish to participate in this survey, do not respond to this online survey. Completing this survey indicates that you are voluntarily giving consent to participate in the survey. We expect the study to last 21 days.

The purpose of this research study is to understand the impact of the school nurse's immediate supervisor on the clinical practice by the school nurse.

There are no risks or discomforts associated with this survey. There may be no direct benefit to you, however, by participating in this study, you may help us understand the issues of supervision related to school nurses. These findings can help us provide the best school nursing care to the students, families and communities we serve.

Your response will be kept confidential. We will store the data in a secure computer file and the file will destroyed once the data has been published. Any part of the research that is published as part of this study will not include your individual information. If you have any questions about the survey, you can contact me at the address provided below.
1. Yes, I consent to participating in the survey.
   No, I do not consent to participating in the survey.

2. What type of New Jersey School Nurse Certificate do you hold?
   - Standard Certificate
   - Non-instructional Certificate
   - Emergency Certificate

3. Are you presently in clinical practice as a New Jersey Certified School Nurse?
   - Yes
   - No

4. How many years you have worked as a New Jersey Certified School Nurse (NJ-CSN) in any school setting?
   - Less than 1 year
   - 1-5 years
   - 6-10 years
   - More than 10 years
5. Enter the grade(s) of students you presently serve as a NJ-CSN.
__________________ (narrative response)

************************************************************************

6. Approximately how many students do you serve in your work as a NJ-CSN?

- 1-100
- 101-500
- 501-1000
- 1001-1500
- More than 1500

************************************************************************

7. Enter the approximate total enrollment of your school system.
__________________ (narrative response)

************************************************************************

8. What is your school district factor group (DFG)? You can locate this information either by checking your school district website, asking your school principal, or checking the NJ Department of Education website by copying and pasting the following web address into a new browser window:
http://www.state.nj.us/education/finance/rda/dfg.shtml

- A
- B
- CD
- DE
- FG
9. Enter the number of schools you are regularly assigned to in a typical school week.

__________________ (narrative response)

10. Is another NJ-CSN present in each building to which you are assigned when you are not present in the school?

- Yes
- No
- I do not know.

11. If you are not in your assigned building are you comfortable with the quality of the nursing care provided to the students in your absence?

- Yes
- No

12. What is the job title of the individual who evaluates you?

__________________ (narrative response)

13. Do you have a school district lead or head nurse?
14. What is the educational background of your immediate supervisor?

- My immediate supervisor is an Educational Administrator with a Registered Nurse background.
- My immediate supervisor is an Educational Administrator with no Registered Nurse background.
Appendix C

Array Questions Addressing Research Question 1

For each of the following items, please consider your personal beliefs about each statement. Each statement is answered on a scale ranging from "very false" to "very true."

A response of "1" represents "very false." A response of "4" equates to "very true."

15-1. I have enough time to complete my work.

15-3. I have experienced situations in which a student's nursing needs and educational requirements have been in conflict.

15-4. There are times I work under education policies and/or guidelines that are incompatible with evidence-based nursing practice.

15-5. I sometimes receive an assignment without the support staff to complete it.

15-6. I have compromised on a rule or policy in order to carry out an assignment.

15-7. I have to miss student support meetings (504, I & RS, Child Study Team, or other similar support teams) because that would leave the health office without a nurse.

15-8. I receive incompatible requests from two or more people.
Appendix D

Array Questions Addressing Research Question 2

For each of the following items, please consider your personal beliefs about each statement. Each statement is answered on a scale ranging from "very false" to "very true."

A response of "1" represents "very false," a response of "4" equates to "very true."

************************************************************************

15-2. My immediate supervisor directs me to complete at least part of my work in a manner that should be done differently, according to evidence based nursing practice.

************************************************************************

15-9. My supervisor has me asked to provide non-emergency medication to a teacher to give to a student on a class trip.

************************************************************************

15-10. My supervisor has asked me to disclose confidential medical information that I am not permitted to share.

************************************************************************
Appendix E

Additional Survey Questions for Research Question 2

16. Describe any situation(s) which you felt a presented a conflict between a directive from your immediate supervisor and your nursing education, practice, and/or ethics.

____________________ (narrative response)

************************************************************************

17. Please describe how the situation in the prior question was resolved.

___________________ (narrative response)

************************************************************************

18. Please describe any situation in which your immediate supervisor’s professional and/or educational background might have influenced your job performance.

___________________ (narrative response)

************************************************************************

19. Have you experienced any clinical situation(s) in which you believe the educational and/or professional background of your immediate supervisor had an impact on your school nursing practice?

- Yes
- No

************************************************************************

20. Please describe any clinical situation(s) in which you believe the educational and/or professional background of your immediate supervisor had an impact on your school nursing practice.

___________________ (narrative response)
Appendix F
Rowan University IRB Approval

-- This is an auto-generated email. Please do not reply to this email message. 
The originating e-mail account is not monitored. 
If you have questions, please contact your local IRB office --

**DHHS Federal Wide Assurance Identifier:** FWA00007111
**IRB Chair Person:** Harriet Hartman
**IRB Director:** Sreekant Murthy
**Effective Date:** 11/14/2016

### eIRB Notice of Approval

#### STUDY PROFILE

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