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The professional socialization of graduating students in generic and two-plus-two baccalaureate completion nursing programs

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**The professional socialization of graduating students in generic and two-plus-two
baccalaureate completion nursing programs**

by

Connie Lynn Clark

A dissertation submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of
DOCTOR OF PHILOSOPHY

Major: Education (Higher Education)

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2001

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has met the dissertation requirements of Iowa State University

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ABSTRACT

Health care in the United States has experienced rapid and dramatic changes in the last decade. Changes within the health care system have resulted in major transitions within the profession of nursing. This nonexperimental, descriptive study explored the professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs as compared with the professional socialization of graduating students of generic baccalaureate programs. The difference in professional role socialization between students from the two basic RN education programs prior to BSN completion was also explored.

The study explored the relationship between professional role socialization and age, and for the baccalaureate completion students, the relationship between professional role socialization and years of employment as a RN, and professional role socialization and area of major nursing experience. The survey population was graduating students from NLN accredited baccalaureate nursing programs, both generic and two-plus-two completion, in a 15-state region. The general model of socialization developed by Hinshaw (1977) provided the theoretical basis for this study.

Autonomy, noted as a mark of professionalism, was measured by the Nursing Activity Scale (NAS) developed by Schutzenhofer (1987). No significant difference was found between the level of professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs and graduating students of generic baccalaureate programs. No significant difference was found in professional socialization between students from the two basic RN education programs prior to BSN completion. No significant

relationship was found between professional socialization and age for all the respondents, and between professional socialization and years of employment as a RN, and professional role socialization and area of major nursing experience for the baccalaureate completion students.

Although the movement toward the baccalaureate degree as entry into practice is a goal that will move nursing closer to recognition by other disciplines as a true profession, there is currently a need to provide continuing education for the many who do not have a baccalaureate degree. The creation and development of baccalaureate completion programs should be encouraged so that nurses with a diploma or an associate degree will have an avenue for furthering their education.

CHAPTER 1. INTRODUCTION

This chapter provides an introduction to the study. It is comprised of the following sections: background of the study, statement of the problem, purpose, significance of the study, operational definitions, research questions, hypotheses, assumptions, limitations, and organizational outline.

Background of the Study

Health care in the United States has experienced rapid and dramatic changes in the last decade. Governmental and private insurance reimbursement constraints, the creation of large health care networks through mergers, increasing consumers' knowledge and demands, and an aging population are only a few of the factors that have impacted all levels of provision of care as well as all health care providers. Changes within the health care system have resulted in major transitions within the profession of nursing (Atack, Comacu, Kenny, LaBelle, & Miller, 2000).

Nurses presently comprise the largest portion of the health care provider group and there is an increasing demand for new nurses (NLN, 2000). According to the National Sample Survey of Registered Nurses (NSSRN) conducted every four years by the United States Department of Health and Human Services, Division of Nursing, as of March 2000, the estimated number of licensed registered nurses (RNs) in the United States was 2,696,540 (U.S. Department of Health & Human Services, 2001). Of this number of RNs, an estimated 58.5% reported working in nursing full-time, 23.2% reported working in nursing part-time, and 18.3% reported not being employed in nursing.

Of the 81.7% RNs that were employed in nursing, 59.1% worked in hospital settings, 18.3% worked in public and community health settings, and 9.5% reported employment in ambulatory care settings including physician-based and nurse based practices and health maintenance organizations. An estimated 6.9% of employed nurses worked in nursing homes and extended care facilities and the remaining nurses in the nurse workforce were employed in nursing education, federal administrative agencies, state boards of nursing, health planning agencies, prisons/jails, or insurance companies (U.S. Department of Health & Human Services, 2001). Public and community health settings showed the largest increase in the employment of RNs.

Registered nurses come from a variety of educational backgrounds. The March 2000 survey of the distribution of the RN population revealed that 22.3% of RNs reported having a diploma, 34.3% reported having an associate degree, 32.7% reported having a baccalaureate degree, and 10.2% reported having a master's or doctoral degree as their highest nursing education level (U.S. Department of Health & Human Services, 2001).

In a 1996 survey conducted by the National League for Nursing (NLN), a total of 238,244 students were found to be enrolled in basic baccalaureate, associate, and diploma programs (National League for Nursing, 2000). In the last 20 years, there has been a shift in graduations from the diploma programs to either the associate or baccalaureate programs. In 1980, 63% of all RNs had received their basic nursing education in diploma programs. In 2000, this declined to 29.6% receiving their basic education in diploma programs. Correspondingly, in 1980, 19% of RNs reported receiving their basic education in an associate degree program; in 2000, this number rose to 40.3% (U.S. Department of Health &

Human Services, 2001). The number of RNs whose basic program was a baccalaureate program rose from 17.3% in 1980 to 40.3% in 2000.

Nursing practice is changing with more focus on independence in community based, prevention focused care settings (American Association of Colleges of Nursing, 2001). “Although 60% of all nurses continue to practice in hospitals, the number of nurses employed in ambulatory care has increased 137%, public and community health 116%, and long-term care 64% since 1980” (National League for Nursing, 2000, p. 15). Numerous trends within healthcare today such as the increasing influence of managed care, a changing focus to population-based health management, developments in information technology, and the influence of economic and political forces are providing new challenges and new opportunities for the profession of nursing (Bellack et al., 2001). It is imperative that nursing educators “produce nursing professionals who can participate as full partners in health care delivery and in shaping health policy” (American Association of Colleges of Nursing, 1999, p. 59). Nursing education must deliver an improved product that will respond to the revolution in health care (Accord, 1999).

Statement of the Problem

In all areas of education, consumers are calling for evidence of value and credibility of educational programs. Correspondingly, there is increased emphasis on outcome criteria in nursing education today (Byrd, Garza, & Nieswiadomy, 1999). Today’s nurse must demonstrate flexibility, accountability, and leadership (American Association of Colleges of Nursing, 2001). As well as development of the roles of “provider of care” and “designer/manager/coordinator of care,” nursing leaders call for the development of the role:

“member of a profession.” This involves embracing lifelong learning, incorporating professionalism into practice, and identifying with the values of the profession (American Association of Colleges of Nursing, 1998).

What is in demand for nurses to survive within the changing health care arena includes a professional role orientation, including evidence of professional values such as altruism, autonomy, human dignity, integrity, and social justice (American Association of Colleges of Nursing, 1998). For nursing to be recognized as a true profession, nurses must exhibit the self-directed responsibility and accountability that result from professional autonomy (Kerfoot, 1989). A proactive approach is required for nurses to be able to “shape change, not just respond to it. However, proactive nursing requires autonomous practitioners” (Schutzenhofer & Musser, 1994, p. 201). Nursing leaders such as Porter-O’Grady have noted that increased autonomy and responsibility are central to nursing’s quest for professionalism (Porter-O’Grady, 1992).

Professional autonomy has been cited as a mark of professional socialization (Conway, 1988; Keely, 1990; Williams & McGowan, 1995). “Both nurses and physicians possess autonomy by virtue of their being members of learned professions” (Conway, 1988, p. 130). Professional autonomy is defined as, “the practice of one’s occupation in accordance with one’s education, with members of that occupation governing, defining, and controlling their own activities in the absence of external controls” (Schutzenhofer, 1987, p. 278).

Higher education in nursing significantly impacts the development of professional autonomy.

Students take several different avenues of basic educational preparation to become a registered nurse (RN), including two-, three-, and four-year programs of study, in which an associate degree, diploma, or baccalaureate degree may be obtained. In 1965, the American

Association of Nurses called for the baccalaureate degree to be the entry level into professional practice (Warner, Ross, & Clark, 1988). Though this has not yet come about, the proposal is continually revisited and affirmed by many nursing leaders. Completion of a baccalaureate degree is often required for professional advancement. During the 1980s, the National League for Nursing joined with the American Nurses Association in recommending the baccalaureate degree for entry into practice. The NLN's present position is to support multiple points of entry into the profession (National League for Nursing, 2000).

The hallmark of a four-year baccalaureate education has long been the production of a professional nurse. Indeed, courses designed to develop aspects of professionalism in graduates are a foundational part of the baccalaureate curriculum (Logan & Franzen, 2001). Enrollment in baccalaureate education is growing. According to Carol Gilbert, Associate Director of the National League for Nursing Accrediting Commission, BSN enrollment in programs accredited by the National League for Nursing Accrediting Commission (NLNAC) increased from 30,510 in 1998-1999 to 104,539 in 1999-2000 (Gilbert, 2001). Though the number of students enrolled in baccalaureate nursing education is growing, the current shortage of nurses is critical, particularly baccalaureate prepared-registered nurses (Logan, 2001).

Numerous completion programs have been developed across the United States that allow returning RNs to enroll in part-time or full-time study to obtain their baccalaureate degree. Between 1975 and 1999, the number of diploma or associate degree graduates that returned to complete a baccalaureate degree rose from approximately 3,700 a year to more than 12,000 annually (American Association of Colleges of Nursing, 2000). In 2000, an estimated 18.6% of the RN population had completed post-RN nursing or nursing-related

degrees in addition to a basic nursing education of either a diploma or an associate degree (U.S. Department of Health & Human Services, 2001).

This return to school to accommodate evolving and changing nurse roles, often necessitates a resocialization to the professional role (Cragg, Plotnikoff, Hugo, & Casey, 2001). “Changed values and attitudes are among the desired outcomes in professional education” (Cragg et al., 2001, p. 317). Central to the issue of resocialization is whether returning baccalaureate completion students can attain the same degree of professional socialization as that expected from the generic baccalaureate graduate. As accreditors and other evaluators address outcomes of education, “professional socialization of nurses represents another type of outcome that is critical to the education process” (Nesler, Hanner, Melburg, & McGowan, 2001, p. 294). Lack of adequate socialization has been linked to negative outcomes such as attrition from the profession and decreased productivity (Nesler et al., 2001).

Purpose

The purpose of the study was to determine whether graduating students of two-plus-two baccalaureate completion nursing programs have the same professional socialization as graduating students of generic baccalaureate nursing programs. Because the number of RNs returning to school to complete their baccalaureate degree in completion programs is increasing, it was vital to know if the products of these programs display the same desired professional socialization that has been the hallmark of the generic baccalaureate programs since their inception. In particular, were the graduates of these programs prepared to function autonomously as well as interdependently within the health care team? As nursing continues

its strides towards recognition as a true profession, it is imperative that its leaders oversee the educational preparation and outcome of its protégées.

Significance of the Study

Results of the study have particular significance in influencing the instructional design and theoretical framework of curricula in baccalaureate programs. "Nursing curricular objectives are formulated and consistently predicated on a program goal of professional socialization" (Lawler, 1988, p. 32). As numbers of those entering Bachelor of Science in Nursing (BSN) completion programs increase, it is imperative that the products of those programs be prepared professionally to meet the demands of the current health care arena. In the 1996-1997 academic year, 44,735 baccalaureate degrees in nursing and 53,103 associate degrees in nursing were conferred by institutions of higher education (Digest of Educational Statistics, 1999). Many of those receiving associate degrees will return to complete their baccalaureate degree in completion programs (American Association of Colleges of Nursing, 2001).

Faculty and administrators of nursing programs, particularly those involved with curriculum design, will benefit from the results of this study. The results are also of value to employers, third-party payers, and the public as they seek to determine the unique contribution of the RN in the health care arena. Finally, the results of this study add vital information to the continuing multi-entry into practice debate within the nursing community.

Operational Definitions

The following terms are used throughout the document with meanings as given. The researcher has specified distinct definitions specific to this study.

Generic Baccalaureate Nursing Program: A basic educational pathway to RN licensure, based on a four-year stay in college that progresses in succession from the freshman to the senior year. For the purpose of this study, generic baccalaureate nursing programs were defined as those with only the basic four-year program. Baccalaureate nursing programs that also contained a baccalaureate completion program for RNs were not included in the study.

Graduating Students: Graduating students were defined as female students in their final semester of both generic baccalaureate and baccalaureate completion nursing education in National League for Nursing (NLN) accredited programs.

Professional Socialization: “A process by which a person acquires the knowledge, skills, and sense of occupational identity of a member of that profession” (Cohen, 1981, p. 14). A person’s score on the Nursing Activity Scale (NAS) (Schutzenhofer, 1987), was used as the measurement for professional socialization.

Two-Plus-Two Baccalaureate Completion Program: A program for RNs only, who want to earn a baccalaureate degree in nursing. For the purpose of this study, two-plus-two programs were defined as only those associated with basic associate degree programs and not located in university settings where a four-year baccalaureate degree might also be acquired.

Research Questions

The following research questions guided the focus of this study and were developed as a result of a comprehensive review of the literature.

1. **Is there a difference in professional socialization between graduating students of two-plus-two baccalaureate completion nursing programs and graduating students of generic baccalaureate nursing programs?**
2. **Is there a relationship between age and the level of professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs and generic baccalaureate nursing programs?**
3. **Is there a relationship between years employed as a RN and the level of professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs?**
4. **Is there a difference in the level of professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs between students whose basic nursing program was a diploma program and students whose basic nursing program was an associate program?**
5. **Is there a relationship between area of major nursing experience and the level of professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs?**

Hypotheses

Hypotheses one, four, and five are two-tailed tests and hypotheses two and three are one-tailed tests. The null and alternative hypotheses are derived from the research questions, and are listed as follows:

1. **Ho: There is no difference in professional socialization between graduating students of two-plus-two baccalaureate completion nursing programs and graduating students of generic baccalaureate nursing programs.**

Ha: There is a difference in professional socialization between graduating students of two-plus-two baccalaureate completion nursing programs and graduating students of generic baccalaureate nursing programs.

2. **Ho: There is no relationship between age and level of professional socialization of graduating students of baccalaureate nursing programs.**

Ha: There is a positive relationship between age and level of professional socialization of graduating students of baccalaureate nursing programs.

3. **Ho: There is no relationship between years employed as a RN and the level of professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs.**

Ha: There is a positive relationship between years employed as a RN and the level of professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs.

4. **Ho: There is no difference in level of professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs between students whose basic nursing program was a diploma program and students whose basic nursing program was an associate program.**

Ha: There is a difference in level of professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs between students whose

basic nursing program was a diploma program and students whose basic nursing program was an associate program.

5. Ho: There is no relationship between area of major nursing experience and the level of professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs.

Ha: There is a relationship between area of major nursing experience and the level of professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs.

Assumptions

The study was conducted based on the following assumptions:

1. Study participants' responses of perceived professional autonomy were representative of actual behaviors.
2. Study participants were of normal personality configuration and understood English well enough to complete the questionnaire.
3. Verbal and written instructions provided adequate direction and uniformity.
4. Participants completed the questionnaire completely and honestly.

Limitations

The researcher is aware of the following potential limitations to the study. The purposive sample chosen for the study may not be representative of the population. Thus, the generalizability of the findings is limited. The study measured what graduating students stated they would do in response to items on the questionnaire. No further means of obtaining verification of this data was pursued. All extraneous variables were not controlled for the

study. For example, although the relationship of years of work experience to professional socialization was determined for graduating students in two-plus-two programs, no control was made for differences in work environments.

Organizational Outline

The study is presented in five chapters. Chapter 1 includes an introduction, statement of the problem, purpose, significance of the study, operational definitions, research questions, research hypotheses, assumptions, potential limitations of the study, and organization of the study.

Chapter 2 provides a literature review. It is divided into the following sections: differing levels of nursing education, need for the baccalaureate prepared nurse, articulation within nursing education, professional socialization in nursing education, socialization theory, and research in the professional socialization process of nursing students.

Chapter 3 describes the methodology of the study. It is comprised of the following sections: research design, population and sampling, research instrument, data collection technique, and data analysis methodology.

Chapter 4 presents the results of the research. The following sections are found within it: response rate; scoring the instruments; statistical applications; demographics of subjects including student classification of respondents, gender of respondents, nursing activity scale score, age of respondents, years employed as a RN, basic program of graduating students of two-plus-two programs, and area of major nursing experience for graduating students of two-plus-two programs; and results of research questions including research question one,

research question two, research question three, research question four, and research question five.

Chapter 5 summarizes the research project and discusses results detailed in chapter four. It contains the following sections: overview, discussion, conclusions, limitations, recommendations, and implications.

CHAPTER 2. LITERATURE REVIEW

This chapter presents an overview of the literature surrounding the study. The following areas are reviewed: differing levels of nursing education, need for the baccalaureate-prepared nurse, articulation within nursing education, professional socialization in nursing education, and research in the professional socialization process of nursing students.

Differing Levels of Nursing Education

There are three main avenues individuals might take to achieve basic education to become a registered nurse: (a) diploma programs which offer a two-to-three-year, hospital-based education; (b) associate programs which are two-year programs, usually affiliated with junior and community colleges; and (c) baccalaureate programs, which typically are four-year curriculums affiliated with universities and senior colleges (National League for Nursing Center, 1997). Opportunities for placement and advancement vary with educational background, with the baccalaureate graduate having more opportunity for professional mobility and recognition (National League for Nursing, 2000).

Baccalaureate nursing education prepares graduates for employment in a variety of areas, including public health and clinical agencies. It is also the springboard for graduate education for those continuing to advanced nursing practice, teaching, administration, and consultation. Socialization into the professional role is the accepted and expected outcome of baccalaureate education (American Association of Colleges of Nursing, 2001; Thurber, 1988; Tracy, Samarel, & DeYoung, 1995). A four-year baccalaureate education provides a “liberal learning” and “global perspective” as well as “preparation in community health, patient

education, and nursing management and leadership” (American Association of Colleges of Nursing, 2001, p. 268).

The majority of generic BSN programs have a minimum of 120 credits which include a mixture of liberal arts and sciences course work in the first two years followed by the nursing major in the last two years (National League for Nursing, 2000). Despite uncertainty and changes in the health care industry, nursing programs have continued to grow. Baccalaureate programs, in particular, have grown dramatically in the last three decades (National League for Nursing, 2000).

Associate degree nursing preparation began in 1950, and is the fastest track for acquiring a nursing degree. College credit hours range from 60 to 72 hours in a four- to six-semester full-time program. Completion of some of the required science credits is often a prerequisite for entry into the program. Originally designed to prepare a “technical” nurse who would function under the direction of the baccalaureate-prepared “professional” nurse, graduates of these programs typically provide direct patient care in structured environments such as hospitals and nursing homes. This type of program is usually found in a community college or junior college setting, with a few in four-year institutions (National League for Nursing, 2000). “Most technical nursing curricula do not stress autonomy and the independent functions of nursing” (Murray & Morris, 1982, p. 311).

Full or partial acceptance of associate degree credit into a baccalaureate completion program, if the graduate chooses to continue his or her education, is determined largely by the admitting institution. Currently, the associate degree is the educational avenue with the most graduates and programs. In 1997, there were 876 associate degree programs, 523

baccalaureate programs, and 109 diploma programs in the United States (National League for Nursing, 1997).

Diploma programs are hospital-based programs ranging in length from 75 to 125 weeks. College credits are not received for nursing courses, but many diploma programs are contracting with colleges to provide general education courses for 27 to 36 academic credits. The lengthy clinical experience and apprenticeship approach of these programs is evolving to more theoretical-based programs with shorter clinical experiences. These programs, similar to the associate program, prepare the graduate for work at the bedside in acute, intermediate, long-term and ambulatory settings. The number of diploma programs started to decrease even before the movement toward higher education in nursing in the 1960s and has continued a substantial decline since then (National League for Nursing, 2000). Diploma programs do not offer a college degree, thus, transfer of credits into institutions of higher learning for those continuing their education is not automatic.

Students who have acquired a diploma or associate degree sometimes discover their career goals have changed or they are in a position that requires that they further their education. These students may enter a completion program and, following full-time or part-time study, achieve their baccalaureate degree. Completion programs differ in their articulation agreements, validating knowledge through transfer credits, challenge exams, tests of clinical skills, or performance in college courses (National League for Nursing, 2000). These programs also differ in name, some being called baccalaureate completion programs, some RN to BSN programs, some titled second-step programs, and others as the second half of the “two-plus-two” program.

In 1965, the American Nurses' Association (ANA) proposed that baccalaureate education become the level for entry into practice, with the proposed effective date of 1985 (Tappen, Weiss, & Whitehead, 2001; Warner, Ross, & Clark, 1988). Much discussion and debate ensued, no definite action was taken, and the policy was not adopted. The ANA has maintained its position on entry into practice since 1965, and in its 1995 Nursing Social Policy Statement again declared the baccalaureate degree in nursing to be the educational requirement for the registered nurse. The association has been unable to mandate this, however, due to opposition from state nurses' associations, many of whose members are graduates of associate degree programs (Jacobs, DiMattio, Bishop, & Fields, 1998).

Despite the opposition, the impetus for needed change remains. "There has been increasing pressure from consumers, employees, legislators, third-party payers, and others to upgrade the educational system for nurses to ensure the quality of nursing care and to clearly differentiate the competencies of different types of nurses" (Jacobs et al., 1998, p. 228). There is an increasing demand for the BSN nurse and a corresponding increase in baccalaureate completion programs (American Association of Colleges of Nursing, 2001).

Although it appears that at some future point nursing is headed toward the baccalaureate as entry level, it is obvious that entry into nursing practice will remain multi-leveled for the foreseeable future (Waters, 1990). The largest numbers of nurses continue to enter through associate degree programs (National League for Nursing Center, 1997). Some believe the multi-level entry into practice threatens the recognition of nursing as a profession (Tappen, Weiss, & Whitehead, 2001).

Need for the Baccalaureate-Prepared Nurse

The many faceted changes in the current health care scene call for cutting-edge professionals who will be flexible enough to adapt to the changing system (American Association of Colleges of Nursing, 2001; Bellack et al., 2001; Hegge, 1995; Jacobs et al., 1998). The baccalaureate-prepared nurse, who is able to function in community-based settings through management functions such as collaboration, cooperation, and conflict resolution in a multidisciplinary environment, is in demand. These skills that are provided in the BSN curriculum “are essential for today’s professional nurse” (American Association of Colleges of Nursing, 2001, p. 268). With the advent of managed care and extension of preventative health care services into the community, more and more nurses are working in decentralized organizations as opposed to bureaucratically structured organizations. The baccalaureate nurse is prepared to be able to function autonomously as is needed in this environment.

It is widely held that professionalism, career orientation, autonomy, intellectual ability, and to some extent self-actualization, are among the desired outcomes of baccalaureate education for nurses. These ends are considered attainable in a generic bachelor of science in nursing program. (Thurber, 1988, p. 266)

In a recent vision statement, The American Association of Colleges of Nursing (AACN) stated: “Preparation of nurses at the baccalaureate degree level is the minimum qualification to function in professional practice roles” (American Association of Colleges of Nursing, 1999, p. 60). Many nursing leaders believe baccalaureate preparation is crucial in today’s healthcare environment. Christine Kovner, Ph.D., MSN, director of nursing at New York University, said she considers a baccalaureate degree to be “essential in today’s environment of older and higher-acuity patients” (cited in McPeck, 2001a, p. 13). The

AACN projects a shortage of 400,000 baccalaureate nurses for the first decade of the 21st century (Hegge, 1995).

Autonomy of practice has been cited as a mark of professional socialization (Keely, 1990). “Autonomy is closely related to degrees of independence and therefore to professionalism” (Murray & Morris, 1982, p. 311). “Nurses require a certain amount of autonomy in the provision of their services” (Conway, 1988, p. 131). As the present pattern of a multidisciplinary approach to health care continues to increase, one of the goals for health professionals developing their role is to maintain their autonomy. This is done best by application of their specialized knowledge, by making professional judgments based on a number of key variables within the specific setting at any given time (Conway, 1988). “Autonomous nursing care is a concept about theory-based practice and accountable, authoritative decision making” (Tomey, Thomas, & Thomas, 1993, p. 81). It has been noted that: “autonomous practice happens whenever a nurse makes an independent judgment about the presence of a health problem and then provides resolution through nursing care” (Munding, 1980, p. 1).

Articulation within Nursing Education

Articulation is the process by which a nurse may move from one level of RN preparation to another, thereby receiving credentials at a higher level (National League for Nursing, 1997). Since the 1965 ANA proposal to make the baccalaureate degree entry-level for practice, baccalaureate completion programs, which allow the RN student to return and complete two or more years of education to receive a baccalaureate degree, have been established and have been growing in number across the country. Many nurses with basic

diploma and associate degrees have subsequently completed a baccalaureate degree. Between 1975 and 1999, the number of RNs from diploma or associate degree programs who had graduated from a completion program and received their baccalaureate degree rose from approximately 3,700 a year to more than 12,000 annually (American Association of Colleges of Nursing, 2000).

Completion programs that are paired with a two-year associate degree program allow students to articulate directly into the baccalaureate completion program and are termed “two-plus-two.” Usually students who are full-time students can complete a baccalaureate degree in these programs in two years. The option of part-time study is usually available, as well, allowing the student to work as a RN while they attend school part-time. Completion of the program takes more than two years with part-time status. There are many variations on the format of baccalaureate completion programs.

Some believe that articulation models, which accept credits from associate degree programs, postpone the fundamental solution to advancing nursing as a profession, which is to require the baccalaureate as minimal education for entry (Jacobs et al., 1998). Those that support a baccalaureate degree for entry into practice, propose a solution including the recommendation that by the year 2001 every associate-degree program be required to articulate with a baccalaureate-degree program in nursing in a 4-year college or university, with the associate degree earned by these students not being a nursing degree (Jacobs et al., 1998). This has not come about and it is apparent that for the present, particularly with the current nursing shortage, multi-level entry into nursing will remain (McPeck, 2001a).

Others have noted that the returning RN student who has been practicing nursing has experienced a socialization process within this employment setting that may have resulted in

a variation or even conflict of values, norms, and standards from those expected from baccalaureate graduates (Harrington, 1996). “Therefore, professional socialization of the returning RN is a crucial issue for nursing education today” (Harrington, 1996, p. 18).

Professional Socialization in Nursing Education

Professional socialization of its members during the educational preparation period is one of the hallmarks of any profession. Socialization to the professional role is “dear to the hearts of all nursing educators. Faculty engage in much dialogue about how essential it is to socialize students to the profession” (Lawler, 1988, p. 32). This socialization process plays an important part in the development of a professional self-identity (Lum, 1988).

“Professional socialization is the complex process by which a person acquires the knowledge, skills, and sense of occupational identity that are characteristic of a member of that profession” (Cohen, 1981, p. 14).

During the professional process, students learn the norms and values of the professional culture (Jacox, 1978). The socialization that occurs during the educational period is a complex process and determines the attitudes practicing nurses hold toward nursing and nursing practice (Greenawalt, 1996). It has been noted that inappropriate socialization to the nursing role during the educational process contributes to attrition from the profession (Kramer, 1974).

The professional socialization process reflects the norms and values of the professional culture. These norms and values arise from the educational experiences defined by the profession as prerequisites to joining the professional community (Cohen, 1981).

One of the identified values associated with professional socialization is autonomy (Conway, 1988). Nurses require autonomy to perform their role; in a multidisciplinary environment, nurses must define and articulate that role. "One major task facing professionals who seek to maintain their autonomy is that of applying their specialized knowledge in the interest of clients..." (Cohen, 1988, p. 131). "Nursing, like other professions, possesses its own body of skills, knowledge, values, rules, and standards which represent the normative principles of the professional culture (Thomas, 1978, p. 1). The existence of a code of ethics, in nursing, *The Code for Nurses*, is considered a hallmark of professionalism (Weis & Schank, 2000).

Nursing students are socialized into the profession of nursing during their years of interaction with faculty, professionals in the work environments where they have clinical experiences, and peers (Simpson, 1979). Students have identified the value to the professional socialization process of working in a collegial relationship with staff nurses (Atack et al., 2000).

Professional socialization within nursing has been a subject of question and controversy for many decades. In *The silent dialogue*, Olesen and Whittaker (1968) state there will be variations in professional socialization within graduates of programs despite assimilation, in general, of a central core of values emphasized by the faculty and the profession.

The professional socialization of students is a critical element of baccalaureate nursing education (Harrington, 1996). "Students experiencing the initial immersion into the profession are eager to embrace and internalize the values, traditions, knowledge, and skills that serve as cornerstones of the profession" (Ryan & Brewer, 1997, p. 20). This occurs over

time especially in interactions with faculty and during clinical practice (Atack et al., 2000; Dunn, Ehrich, Mylonas, & Hansford, 2000; Secret, Keatley, & Norwood, 1999; Taylor, Wescott, & Bartlett, 2001; Weis & Schank, 2000). A process of self-reflection and growth occurs with mentoring relationships (Ryan & Brewer, 1997). Peers have found to have a strong influence in the socialization process as well. Senior students can be actively involved in assisting the novice nurse in assuming his or her initial professional role (Broscious & Saunders, 2001).

The RN who returns to school to complete a baccalaureate degree is anticipating or experiencing a change in career pattern. A change in career pattern requires a time of resocialization, a period in which a new self identity and a new role are developed (Throwe, & Fought, 1987). This period of growth and acquisition of new attitudes, roles, and concepts is often accompanied by anxiety and tension (Throwe & Fought, 1987).

Socialization theory

Socialization is the process by which individuals learn the social roles that will facilitate their participation and performance in the society of which they are a part (Hurley-Wilson, 1988). Hinshaw (1988) notes that socialization is a process in which individuals internalize values and attitudes and acquire “skills for the enactment of appropriate behaviors” (p. 345). The acquisition of the knowledge and skills specific to an occupation as well as the internalization of a self-identity are critical aspects of the socialization period (Kramer, 1974).

Individuals move toward their chosen profession as a result of a myriad of factors. Holland (1959) notes:

...at the time of vocational choice the person is the product of the interaction of his particular heredity with a variety of cultural and personal forces including peers, parents and significant adults, his social class, American culture, and the physical environment. (p. 35)

Graduating students in generic and two-plus-two baccalaureate completion nursing programs have already been socialized in some manner by a blend of forces that has caused them to gravitate toward a service occupation. Holland (1959) purports that those who possess a self-knowledge and a developed self-evaluation will make more adequate choices in occupation. The appropriateness of the choice is a variable in the degree of professional socialization to follow.

Although there is no single theory of socialization, the process of socialization increasingly is being seen as an interactive and reciprocal process, in which the normative group and the person being socialized are mutually influenced (Hurley-Wilson, 1988). Olesen and Whittaker (1968) delineate the processes of legitimization, in which others sanction the student's claim to the role of health professional, and adjudication, the day to day controlling and negotiating of face-to-face transactions between students and faculty relative to the technical, aspects of role performance, as the processes by which students acquire their professional identity.

Adult socialization is defined as, "a process through which individuals prepare for the life roles that they will enact in their society" (Hinshaw, 1977, pp. 1-2). The movement into any role involves a process of sequential, interactive stages by which an individual develops, acquiring a self-identity that emulates other members of a social group (Hinshaw, 1977).

"The course of socialization invariably follows a sequence of entering a school, experiencing

its program, and exiting to a career” (Simpson, 1979, p. 16). “Resocialization is a process in which new roles or sets of expectations are learned” (Hinshaw, 1977, p. 2).

The general model of socialization developed by Hinshaw (1977) provided the theoretical basis for this study. The model is adapted from the work of Simpson (1967). Simpson (1979) identified professional socialization as comprised of three components: “the imparting of occupational knowledge and skills, development of occupational orientations, and forming personal relatedness to the occupation” (p. 29). The model was presented by Hinshaw “as a way of gaining a frame of reference from which to consider several empirical processes of socialization and resocialization” (Hinshaw, 1977, p. 2).

Hinshaw’s model of socialization defines three stages: “transition from anticipatory expectations of role to specific expectations of role as defined by societal group; attachment to significant others in the social system milieu/labeling incongruencies in role expectations; and internalization, adaptation or integration of role values and standards” (Hinshaw, 1977, p. 2).

During stage one, transition from anticipatory expectations of role to specific expectations of role as defined by the societal group, individuals shift their perceptions of the role from preconceived ideas to the expectations defined by individuals setting the standard for them. Individuals choose to learn the new role expectations, and therefore, are seen to take an active role in socialization or resocialization.

In stage two, individuals identify and attach themselves to significant others from the environment of their new social system. In initial socialization settings, these significant others often are faculty members. In situations of resocialization, in which RNs returning to school are also working, these significant others can also be colleagues and supervisors who

are chosen as role models. Socialization and resocialization depend upon the availability of appropriate role models, providing a challenge to both educational and work settings to identify and provide such models.

The second stage is frequently accompanied by strong emotions as individuals also begin to identify and label incongruencies between what they anticipated their role would be and what is being presented to them by significant others (Hinshaw, 1977). Confrontation with several sets of expectations, all of which may differ from what was anticipated and with each other, creates conflict within individuals. "Changes in educational socialization can create role conflict for nurses caused by role discrepancies between the nurse's ideal conception of nursing and their actual observed experience in the clinical setting" (Taylor, Westcott, & Bartlett, 2001, p. 21). Individuals resolve conflict concerning these incongruencies by interactions with appropriate role models who can demonstrate "how to integrate conflicting systems of standards and values" (Hinshaw, 1977, p. 3).

In the third stage, those involved in the socialization or resocialization process internalize the values and standards of the new role. The depth of this internalization process varies in one of three ways: *compliance*, in which the individual "acts the part" to receive positive feedback from others around him or her; *identification*, in which only certain behaviors of the social role (and not the values) are chosen selectively by the person; and *internalization*, in which the individual accepts the norms and values of the role because he/she really believes in them and has made them his/her own. These levels of opinion change may be exhibited individually or as some combination of the above (Kelman, 1961).

The socialization process brings the individual to some level of value change. As the individual encounters additional role models, resocialization will continue to occur. The

extent to which values have been internalized may determine the individual's continued display of professional values and behavior. "Professional values are standards for action that are accepted by the practitioner and/or professional group and provide a framework for evaluating beliefs and attitudes that influence behavior" (Eddy, Elfind, Weis, & Schank, 1994, p. 257). Hinshaw notes that the manner in which incongruencies are handled, either by the individual or the socializing system, is crucial to the depth of internalization of values (Hinshaw, 1977).

The socialization process encountered at the work setting may not be congruent with that experienced during the educational period. Graduates often are employed in bureaucratic organizations with standardized rules and regulations. These graduates were hired for their professional values and standards and the goal of the agency is not to change them into work-bureaucratic values. Rather, integration of the two sets of values (bureaucratic and professional) is required to resolve the conflict (Hinshaw, 1977). Benner (1985) has noted that the faculty's socialization and display of professional values is important to the neophyte nurse who enters a workplace where bureaucratic values are often at odds with professional values.

The socialization experienced by RNs in the work setting may influence the resocialization process in the BSN completion program, whose focus is adoption of professional values and behaviors. Many baccalaureate completion students are new graduates from associate or diploma programs and, as well as going on to complete a baccalaureate degree, are experiencing the work environment as RNs for the first time. They may be experiencing what Kramer (1974) describes in her postgraduate resocialization model. She describes a model in which new graduates move from stage one of *skill and*

routine mastery to the second stage of *social integration* (Kramer, 1974). In the third stage of this model, *moral outrage*, new graduates in the work environment feel anger and frustration as they identify the incongruencies between what they have learned about the professional behavior nurses ought to exhibit compared to the behavior that is actually seen in the work place. *Conflict resolution*, the fourth stage, may entail capitulating their values or their behaviors or seeing an opportunity to both listen to and influence others (Kramer, 1974).

If work environments have a strong professional orientation, the employed baccalaureate completion student may better be able to operationalize professional values and behaviors. The role set, those individuals interacting with the RN in the employment setting on a daily basis, will also influence adoption of professional values and behaviors. The extent to which these key players legitimate the nurse's use of her knowledge base and skills, will determine the continued implementation and internalization of these professional behaviors (Hinshaw, 1977).

The general pattern of intellectual and moral development of females has been theorized to be different than that of males (Baxter Magolda, 1992; Gilligan, 1982). Concern for relationships and responsibility to others have been qualities ascribed more to women than to men (Gilligan, 1982); women are seen to move through patterns of knowing differently than men, with seeking and receiving the opinion of others seen more in females (Baxter Magolda, 1992). As intellectual development and the taking of values are much a part of the socialization process, gender will no doubt be a variable in the socialization process. Therefore, for this study, the participants were limited to female graduating students from generic and two-plus-two baccalaureate completion nursing programs.

Research in the professional socialization process of nursing students

The literature records several studies in professional role socialization of nursing students over the last several decades. This study presents those noted in approximately the last 15 years with mention of some of the salient studies in earlier years.

One of the most noted studies in review of the literature is the research of Corwin (1961). Corwin used a cross-sectional design to examine the role conceptions held by students and graduates of baccalaureate degree and diploma nursing programs in the Midwest. Corwin's Nursing Role Conception Scale (Corwin, 1961) trichotomized the nursing role into commitment to the hospital bureaucracy, commitment to the nursing profession, and commitment to serve the patient. His well recognized study revealed no significant differences in professional role orientation between diploma and degree students, but a significantly higher professional role orientation of graduate degree nurses than that of graduate diploma nurses.

Whelan (1984) used the Corwin-Role Orientation Instrument (Corwin, 1961) as modified by Bevis (1973) in a study of upper division baccalaureate nursing students to determine the extent to which students developed a professional role orientation during the educational program. The convenience sample of 74 students from one program in the Northeast region of the United States, was comprised of 51 students entering the program and 23 students completing the program. In addition to Corwin's (1961) instrument, the participants completed a demographic questionnaire addressing issues such as age, gender, marital status, type of basic nursing program, years of nursing practice, current field of nursing, membership in a professional organization, and career and educational goals. Students who were about to graduate from the program were found to hold a role-orientation

that was less bureaucratic, more service oriented, and more professional than the students entering the program.

Other studies have compared students educated at the generic baccalaureate level with those in RN to BSN programs. A salient study by Lawler and Rose (1987) found that associate degree nurses (ADN) nurses who completed a BSN degree were more professional than either the ADN or generic BSN nurses.

Thurber (1988) used a convenience sample of 233 registered nurse students from eight baccalaureate programs in a metropolitan area to compare attitudes toward professional nursing behaviors in entering and exiting students enrolled in generic and second step baccalaureate completion programs. Results indicated that entering second step students were more professional than generic RN students (significant at $p < .01$), but no significant difference was found between the two exiting populations, indicating that change had been facilitated and that terminal outcomes of the two types of programs were similar (Thurber, 1988). Results of a study by Chornick (1992) suggest that "RN-to-BSN completion graduates are more likely than generic BSN graduates to continue with their education, to be certified in a specialty area, and to attend continuing education programs, i.e., behaviors often attributed to professional commitment" (p. 208).

Keely (1990) also studied the professional socialization of returning RN students, though the sample groups were somewhat different than previous studies. Keely compared the professional socialization of returning RN students in traditional baccalaureate programs, (i.e., programs in which students complete the final two years in a two-step program in a traditional university setting), with the professional socialization of returning RN students in a nontraditional program (i.e., one in which faculty go to where the student population is

instead of the student going to the university campus). Professional socialization of these groups also was compared with professional socialization of associate degree nurses using Schutzenhofer's Professional Nurses Autonomy (PNA) Scale (Schutzenhofer, 1987).

Out of 842 distributed questionnaires, 600 questionnaires from students in 12 NLN accredited programs in five Southern California counties were returned. Results demonstrated no significant difference in PNA scores of traditional and nontraditional RN students at entry into or graduation from a baccalaureate program, suggesting that there is equality between these types of programs in relation to professional socialization (Keely, 1990). Keely suggested that further study be done to understand the similarities and differences between students and graduates of traditional and nontraditional second-step programs.

Hillery (1991) compared the levels of professional role socialization of graduates of associate degree (ADN) and diploma nursing education programs with professional role socialization of registered nurses that had gone on for their baccalaureate degree in nursing. Stone's Health Care Professional Attitudes Inventory (Stone & Knopke, 1978) as modified by Lawler and Rose (1987), was administered to 1988 spring graduates of ADN, diploma, and baccalaureate nursing programs for RN students who previously had graduated from ADN and diploma nursing programs in Iowa. Ninety-nine BSN students, 53 diploma graduates, and 152 ADN graduates returned questionnaires. Demographic data were compared to professional development activities, as well, and indicated that:

Nurses with higher professional role scores were more likely to be older, BSN-RN program graduates, with high grade point averages, who practiced in nonhospital settings, and who maintained current professional values and practice standards by reading nursing journals and enrolling in informal academic programs. (Hillery, 1991, p. 150)

Periard, Bell, Knecht, and Woodman (1991) used a cross-sectional research design to assess professional attitudes among 296 RN to BSN students from NLN accredited programs in four Midwest states. Data revealed a significant increase in professional attitudes between the beginning, middle, and completion of the programs, confirming that RNs in this study advanced towards professionalism (Periard et al., 1991). Harrington (1996) also found an increase in professional socialization in a qualitative study regarding socialization into the professional role by the RN returning to earn a BSN. She concluded that, "socialization into the professional role is equally as important to the RN to BSN student as it is to the traditional student" (p. 18).

Professionalism was included in the role conceptions assessed by Eckhardt (1992), who studied differences in role conception among graduating registered nurse students from generic, RN-track, and second-step baccalaureate nursing programs. Corwin's Nursing Role Conception Scale (Corwin, 1961) was used, as well as a demographic data questionnaire to obtain quantitative data. Qualitative data analysis came from semi-structured interviews with deans, faculty, and student advisors to describe program organization and processes of organizational socialization.

Results of the study showed that though there were differences in the role conceptions of graduating RN students from differing types of programs, differences among the professional role conceptions were not statistically significant (Eckhardt, 1992). Replication of the study is suggested to assess data on a larger scope of baccalaureate students, and to look more closely at socialization tactics.

Wilkerson's (1994) study, another study investigating the professional socialization of RNs returning for a baccalaureate degree, did indicate a progressive increase in levels of

professionalism over the course of the RN to BSN program at one university. The convenience sample in the study was comprised of RNs returning to school to complete their baccalaureate degree and recent graduates of a RN to BSN program.

Greenawalt (1996) researched the professional socialization of generic baccalaureate nursing students, examining the degree of development of professional characteristics at various undergraduate academic levels and comparing these levels to those of practicing nurses. Hall's Professional Inventory (Hall, 1968), which includes the variables considered to be characteristic of members of the established professions, was administered to 394 subjects comprised of students from four academic levels and 67 graduates of the same academic program, a private, Catholic, women's college in Northeast Ohio (Greenawalt, 1996). Results of Greenawalt's (1996) study revealed no significant differences among the groups in performance on Hall's Professional Inventory (Hall, 1968). These results are in contrast with those found in other studies demonstrating growth in professionalism. Greenawalt (1996) states: "This surprising result [no significant growth in professionalism over the course of study] is not in keeping with the expected outcomes of baccalaureate nursing education that stress the necessity of professional behaviors and attitudes which are congruent with the traditional characteristics of the professional" (p. 138).

A qualitative longitudinal study was conducted by Reutter, Field, Campbell, and Day (1997) with a similar sample group to Greenawalt's sample group, 50 nursing students across all four years of the baccalaureate program in a large western Canadian university. Open-ended questionnaires were completed by 81 additional students. Data obtained through semi-structured, open-ended interviews were analyzed in regard to application of the functionalist and interactionist approaches to professional socialization.

The functionalist approach to professional socialization “views role expectations as grounded in shared values and norms that are internalized through a process of socialization” (Reutter et al., 1997, p. 149). Students are seen as relatively passive recipients of the socialization experiences and role modeling provided by faculty. The interactionist perspective views the socialization process as a more interactive process, in which students interact with the environment and create their own role behaviors (Reutter et al., 1997). The findings of this study indicated that both approaches are used in student learning with functionalist learning predominating in the first year of a four-year program and interactionist learning predominating in the second and third years.

Summary

This chapter has presented a review of the literature in several areas. Differing levels of nursing education have been explained, the need for the baccalaureate nurse has been supported, articulation within nursing education has been defined, professional socialization in nursing education was explored, the theoretical basis of the study was developed in a discussion of socialization theory, and an overview of research in the professional socialization process of nursing students has been given.

The review of previous research in the area of professional socialization has revealed inconsistencies in the outcomes for both generic baccalaureate and baccalaureate completion nursing students. The necessity of the socialization process for nurses and for resocialization for those not socialized into a professional orientation has been noted. With the number of baccalaureate completion programs continuing to grow (American Association of Colleges of Nursing, 2001), it is vital that the nursing community, accreditation bodies, third-party

payers, and the public be assured that graduates of these programs have the professional socialization necessary to function autonomously as well as interdependently within the health care team.

CHAPTER 3. METHODOLOGY

This chapter presents the methodology of the study. It is comprised of the following sections: research design, population and sampling, research instrument, data collection technique, and data analysis methodology.

Research Design

The study followed a nonexperimental, descriptive design. It examined the differences in professional role socialization between graduating students of generic baccalaureate and two-plus-two baccalaureate completion nursing programs. It also examined the difference in professional role socialization between students from the two basic RN education programs prior to graduation from a baccalaureate completion program.

This study was also correlational. “Correlational design is concerned with assessing relationships between two or more phenomena” (McMillan & Schumacher, 1997, p. 37). The study explored the relationship between professional role socialization and age, and for the baccalaureate completion students, the relationship between professional role socialization and years of employment as a RN and professional role socialization and area of major nursing experience.

Population and Sample

The target population with which the study was concerned was graduating students from NLN accredited baccalaureate nursing programs, both generic and two-plus-two, in the United States. Overall, graduates of generic baccalaureate programs are usually younger than graduates of two-plus-two programs, as they usually enter baccalaureate education

immediately following high school. Associate degree programs hold more appeal for more mature students who have families or who cannot commit to full-time study. Associate programs usually cost less than programs found in senior colleges and universities (National League for Nursing, 2000). In addition, those who enter two-plus-two programs are often returning to school after some years of employment, due to a change in goals or a position that demands additional educational preparation.

The survey population was graduating students from NLN accredited baccalaureate nursing programs, both generic and two-plus-two, in a 15-state region. The East, West, South, and North Central states were the primary area of survey, with a few states (e.g., Pennsylvania, Virginia, West Virginia) in the Middle and South Atlantic region, also surveyed to obtain a larger sample size.

A nonprobability, purposeful sampling technique was used. It is noted that this sampling technique is a threat to the external validity of the design and therefore the findings are limited to the characteristics of the subjects in the sample. From the official NLN publication listing RN educational programs in all states for the year 2000, all two-plus-two completion and a comparable number of generic baccalaureate programs in a 16-state region were identified. (North Dakota was eliminated after it was identified that a BSN is required for initial RN licensure in that state.)

Only programs that had both an Associate Degree program and a BSN completion program were chosen for the two-plus-two programs. Completion programs within generic baccalaureate programs were not part of the sample group. In the same manner, only generic baccalaureate programs that did not have a completion program within them were chosen for the sample group of generic programs. This was done to provide control for the major

question of this research, “is there a difference in professional socialization between graduating students of two-plus-two baccalaureate completion nursing programs and graduating students of generic baccalaureate nursing programs”?

Eighteen two-plus-two programs and 41 generic baccalaureate programs in the sample area were identified from the NLN publication. On March 21-23, 2001, all programs were contacted by telephone by the researcher and agreement to administer the questionnaire to the subjects was requested from the program director, administrative secretary, or a faculty member at each institution. In many instances a message was left by voice mail with a toll-free return number given. As the number of generic BSN programs was more than the number of two-plus-two programs in the sample region, a random number table was used to determine which of the generic programs in the 15-state region to contact first.

In calling the programs, it was identified that many of the programs that appeared to be purely generic programs in the NLN publication, also contained a completion program. Many programs are including BSN completion programs within their already established programs not only to answer the market needs of returning students, but also, to address the nursing shortage across the United States, particularly for nurses with advanced education (McPeck, 2001a). One director in Kansas informed the researcher that generic BSN programs in that state are being mandated by the legislature to include a completion program. Because so many of the programs were found to contain completion programs, all 41 of the programs identified in the NLN publication were called to find a comparable sample size of purely generic programs.

Many programs returned the researcher’s call; others were called again by the researcher. All programs contacted that were found to qualify as purely two-plus-two and

purely generic and had graduating students, agreed to participate in the research. Two of the generic BSN programs were in their infancy and did not have graduating students. One program requested that the questionnaire and human subjects form be sent to their institution for review; upon receiving these, they agreed to participate as well. The final sample number of sixteen two-plus-two programs was found in 11 of the 15 states. The sample of 10 generic BSN programs was found in nine of the 15 states, with an overlap in five states, Minnesota, Indiana, Ohio, Pennsylvania, and Kansas.

Standards for protection of human subjects were implemented. Permission to proceed with the study was received from the Institutional Review Board at Iowa State University in mid-March of 2001 (Appendix A).

Research Instrument

The research instrument used for this study was the Nursing Activity Scale (NAS) (Appendix B), a measure of professional nursing autonomy, originally developed by Schutzenhofer (1987). Schutzenhofer has recommended continued use of the tool in determining the value of baccalaureate education in the professional socialization of returning diploma and associate degree nursing students (Schutzenhofer, 1987). Autonomy has been identified as an essential aspect of professionalism. Permission to use the measurement tool was obtained from the developer (Appendix C).

The NAS, originally named the Professional Nursing Autonomy Scale (PNAS), was developed in a series of stages. The tool began as a 12-item instrument. Twenty-nine items describing situations in which a nurse must act with a certain degree of autonomy were taken from the nursing literature and interaction with deans, unit directors, and clinical specialists.

These items were rated by a panel of doctorally-prepared nurse educators who ranked them as low, medium, or high in display of professional autonomy. Inter-rater reliability was .80 on selected items. Four items then were chosen for each level of professional autonomy, resulting in the original 12-item scale (Schutzenhofer, 1987). The scale was tested on two groups of registered nurses: RNs in a BSN completion program and a random sample of employed RNs in a metropolitan area of a midwestern state.

In the second stage of development, the tool was expanded to 30 items to improve internal reliability (Schutzenhofer, 1987). Some items were changed and additional items were obtained through discussion with doctorally-prepared nurse educators; items were again classified as exhibiting low, medium, or high professional autonomy. Ten items from each level were chosen, with inter-rater reliability being .80 or greater.

This thirty-item scale was mailed to a random sample of 500 female RNs in a midwestern state. One hundred and nineteen usable questionnaires were returned. These served as a panel of nurse experts who were asked how autonomous, on a scale from 1 to 5, a nurse had to be to implement the activity described in the item (Schutzenhofer, 1987). Cronbach's alpha was used as a measure of internal consistency and an alpha value of .92 was obtained. Analysis of responses resulted in the revision of the five-point scale, back to the original three-point, high, medium, and low scale. Re-analysis of the data using the three-point scale, resulted in a Cronbach's alpha value of .91.

Content validity was determined by use of nursing experts and current literature. A test-retest approach was used to obtain reliability data from two groups, 58 RN-to-BSN students were tested at a four-week interval, and 36 members of a district nurses' association

were tested at a six-week interval. Reliability data revealed r values of .79 and .68, respectively (Schutzenhofer, 1987).

The NAS describes situations in which a nurse must display some degree of professional nursing autonomy. Items in the NAS focus on broad areas such as professional development, patient advocacy, nurse-physician relationships, and research (Kelly-Schutzenhofer, 1997). Those completing the instrument are asked to respond to each of the 30 items according to how likely they would be, as a nurse, to carry out the action in each item. They are instructed to respond to each item even if they have not encountered such a situation before. Items include: "Refuse to administer a contraindicated drug despite the physician's insistence that the drug be given" and "Carry out patient care procedures utilizing my professional judgment to meet the individual patient's needs even when this means deviating from the 'cookbook' description in the hospital procedure manual." Using a four-point Likert-type scale, respondents indicate whether it is: (1) "Very unlikely of me to act in this manner;" (2) "Unlikely of me to act in this manner;" (3) "Likely of me to act in this manner;" or (4) "Very likely of me to act in this manner." Some researchers believe it is important to include the neutral choice in a true Likert scale in order to allow the respondent this possibility if that is the way he actually feels. Others, however, note that omitting the undecided choice has merit in instances where respondents might cluster around the middle choice (McMillan & Schumacher, 1997).

The author of the NAS has noted that most respondents can complete the instrument in 5 to 10 minutes, so it is easily administered (Kelly-Schutzenhofer, 1997). George (1997) also noted that the NAS is easy to administer.

Items on the NAS are weighted; a weight of 1 indicates a low level of autonomy, and a weight of 3 reflects a high level. The respondent's score on each item is multiplied by the weight of the item. These adjusted scores are totaled; scores can range from 60 to 240. Scores ranging from 60 to 120 indicate a lower level of professional autonomy, scores ranging from 121 to 180 indicate a mid level of professional autonomy, and scores ranging from 181 to 240 indicate a higher level of professional autonomy. The NAS has an additional optional five unscored items that serve as measures of internal consistency. As the internal consistency of the tool had been verified, these were not included in the present study.

The NAS has been used in numerous research studies. The developer of the tool, Schutzenhofer (1987), used the NAS in a longitudinal study of the effects of BSN education on the professional autonomy of returning RN students. She suggested replication of the study "to validate the assumed value of BSN education in relation to the professionalization of diploma and associate degree graduates" (Schutzenhofer, 1987, p. 282).

Halcom (1987) used the NAS in a random sample of 84 RNs and found that baccalaureate and master's prepared nurses were associated with higher levels of autonomy. The perception of autonomy in hospital-employed and public health nurses was studied by Alexander (1988) using items from the NAS and the nursing attitude scale developed by Pankratz and Pankratz (1974). Public health nurses perceived themselves as more autonomous than hospital-employed nurses; baccalaureate prepared nurses perceived themselves as more autonomous than did nurses without a bachelor's degree (Alexander, 1988).

Lemons (1988) used the NAS to study the relationship between years of experience and autonomy and level of education and autonomy. In a study of 33 female nurses, a

significant correlation was found between higher levels of education and autonomy, but no correlation was found between years of experience and autonomy (Lemons, 1988).

Perception of professional autonomy was measured with the NAS in a stratified random sample of 1,200 nurses from one large medical center (Martin et al., 1991). A high level of professional autonomy was associated with membership in professional organizations, older age, higher positions, and higher education.

The professional autonomy of employed registered nurses was measured in 200 randomly chosen nurses in 15 randomly selected counties in the state of Indiana (Marriner-Tomey, Thomas, & Thomas, 1993). Although no significant statistical relationship was found between autonomy and any demographic or employment variables, trends identified that the longer a nurse worked at an institution, the less autonomous the nurse felt. Further trends identified a positive correlation between age, education, years of experience, satisfaction, and feelings of autonomy (Marriner-Tomey, Thomas, & Thomas, 1993).

Schutzenhofer and Musser (1994) used the NAS to examine relationships between certain demographic characteristics and professional nursing autonomy. Surveys were mailed to a random sample of 2,000 nurses in four states with usable responses received from 542 RNs. Significant relationships were found among autonomy and level of nursing education, functional role, clinical setting, clinical specialty, membership in professional organizations, and gender stereotyped roles (Schutzenhofer & Musser, 1994).

Williams and McGowan (1995) used the NAS to determine attitudes toward professional autonomy in participants of a professional development program. No difference in attitude toward professional autonomy was found between nurses who had completed a 2-year undergraduate nursing course designed to allow registered nurses to convert a diploma

obtained through a hospital-based training course to a bachelor's degree and nurses who had completed only a hospital-based training course. Years of working experience also had no correlation with level of autonomy. Higher professional autonomy attitudes were found in those who completed the development program than in the control group who did not complete the course (Williams & McGowan, 1995).

Pariseau (1995) used the NAS to compare attitudes about professional autonomy between baccalaureate and associate degree nursing students. The hypothesis that students graduating from a baccalaureate degree program would have higher scores for professional autonomy on the NAS than students graduating from an associate degree program was not supported.

In a study concerning nurses' perceived autonomy in a shared governance setting, George (1997) gave the NAS to a convenience sample of 200 staff registered nurses. In this study, "it was concluded that variables such as age, educational preparation, clinical ladder level, length of time on current nursing unit, years of registered nurse experience, employment status, and level of participation in the shared governance program had little or no impact on nurses' perceptions of autonomy" (George, 1997, p. 19).

Data Collection

Data were collected through the administration of the NAS (Schutzenhofer, 1987) to graduating students at two-plus-two baccalaureate completion and generic baccalaureate programs in the study sample. Demographic data were obtained from each subject with the addition of questions concerning age and gender (Appendix D). In addition, years of RN work experience, area of major nursing experience, and type of basic pre-baccalaureate

educational program was asked of the two-plus-two baccalaureate completion students. Questionnaires were coded to indicate from what type of program the respondent was graduating.

Deans or division chairs of the sample nursing programs, as noted in the official NLN publication of programs of nursing (National League for Nursing, 2000), were contacted by the researcher and asked if they would participate in the proposed research. A letter summarizing the focus of the research was read or paraphrased to them over the telephone (Appendix E). They were asked if they or their chosen representative would administer the questionnaire to students in their final semester of education in the baccalaureate program at their institution. Upon agreement, they were asked how many questionnaires they needed for their graduating students to complete.

Questionnaires were mailed to all participating programs on March 26, 28, or 31, 2001. Written directions for the dean or division chair were mailed with the questionnaires, along with a thank you for their participation and a review of the purpose and significance of the study (Appendix F). Deans or division chairs were asked that they, or their designee, read the enclosed instructions to each sample group of graduating students prior to distributing the questionnaire. This increased validity by reducing experimenter effects. Blank white envelopes were included with the questionnaires to be distributed to each student.

An explanation of the study was contained in the cover letter that accompanied each questionnaire (Appendix G). The cover letter made it clear that participation was voluntary and that completion of the survey implied the student's informed consent. The letter identified that previous respondents to the survey found it required approximately five to 10 minutes to complete.

A pilot study was conducted prior to preparing the cover letter. Thirteen students in a two-plus-two baccalaureate completion program were asked by a faculty member if they would be willing to be a part of a pilot study by completing a questionnaire. Upon agreement, they were asked to read the cover letter and complete the questionnaire. No questions were asked by the pilot study students concerning items on the questionnaire or demographic page. Students were asked to write the time it took them to complete the NAS and demographic questionnaire. Six of the 13 students wrote their time down. This time ranged from 3 to 9 minutes, with an average time of 5.5 minutes.

The cover letter directed students to place their completed questionnaire in the blank envelope provided and to seal the envelope before returning it to the survey administrator to ensure their anonymity. The survey administrator was directed to place all the sealed envelopes in a provided postage-paid, return large envelope. The students were thanked through the cover letter and their participation was noted as adding to the body of knowledge in nursing concerning professional socialization. All data were collected between late March and early June of 2001 and received through return mail between early April and early June. Limitation of data collection to this short period provided a measure of control for the effect of history on the internal validity of the study.

Programs that had not returned questionnaires within a few weeks of receiving them were called between April 14 and May 3, 2001 to encourage administration of the questionnaires and to answer any questions concerning their administration.

Data Analysis

The number of questionnaires returned by each program compared to the requested number was recorded by the researcher as groups of questionnaires were received in the mail. The questionnaires were scored by the researcher during the month of June 2001. The response to each item was multiplied by the weight of the item as directed by the instrument's creator. These weighted responses were added to obtain a final score for the instrument. Both the weighing and the adding of the responses were done twice to confirm accuracy.

Data were entered into the Statistical Package for the Social Sciences (SPSS) (George & Mallery, 2001) software program and analyzed using descriptive and inferential statistics. Frequency tables were used to identify demographic distributions. Mean scores on the NAS for graduating students from two-plus-two baccalaureate completion programs and from generic baccalaureate programs were identified and described. Distribution and skewness of the data, as well as any outliers were noted.

Independent T-tests were used to compare mean scores of professional autonomy between groups as noted in hypotheses one and four. Subject gender was controlled to reduce threat to internal validity. Pearson's correlation coefficient r was used to determine the strength and direction of the relationship between professional autonomy scores and age, and for graduating students of baccalaureate completion programs, between professional autonomy scores and years of work experience as a RN, and between professional autonomy scores and major area of nursing experience.

Levine's test for homogeneity of variance was done to determine if the required assumptions for parametric tests held or if a nonparametric test was needed. The researcher is

aware that all assumptions were not true as the study design did not include random sampling. However, data showed a normal distribution without excessive skewness. In analysis of test results, care was taken to avoid a type one error in which the null hypotheses are erroneously rejected and a type two error in which the null hypotheses are erroneously not rejected.

CHAPTER 4. RESULTS

This chapter presents the results obtained from data analysis. It is organized in the following manner: the response rate of the programs is presented along with the actual number of questionnaires returned; the manner in which the instruments were scored is discussed; the statistical applications used are identified; and the demographics of subjects including student classification, gender, score on the Nursing Activity Scale (NAS), age, and for graduating students of two-plus-two baccalaureate programs, the type of basic program, years employed as a RN, and area of major work experience are presented. The results of each research question are then given.

Response Rate

The prepaid, self-addressed envelopes containing the completed questionnaires were returned from the programs of nursing between early April and early June, 2001. Fourteen of the sixteen two-plus-two baccalaureate completion programs returned questionnaires, and nine of the ten generic baccalaureate programs returned questionnaires, for a total program response rate of 88.46% (Table 1).

The programs that did not return questionnaires were called by the researcher. One program stated that they had received the questionnaires, sent them out to the students, but had not received any back. The protocol followed by the program was not what had been discussed by the program and the researcher and not what was noted in the letter accompanying the questionnaires. The second program called noted that there had been a misunderstanding and the questionnaires had not been given. With further discussion, it was

Table 1. Comparison of returned questionnaires from generic and two-plus-two completion baccalaureate programs versus programs agreeing to participate in the study

Program	Programs agreeing to participate	Programs returning questionnaires	Percentage of return
Two-plus-two	16	14	87.50
Generic	10	9	90.00
Total	26	23	88.46

determined that the program had administered the NAS to their graduating students at an earlier date as part of an internal study they were conducting to determine the validity of another tool measuring professionalism. The faculty member spoken to noted that their program had been focusing on assessing and developing professionalism in their program for over four years. The results of the NAS as administered by that program were offered to the researcher, but without the accompanying demographic data and cover letter, it was determined that the control would be compromised.

The final program that did not return questionnaires was called several times with no response after the initial agreement to participate. Messages were left with the secretary and the director, with a toll-free return number given. The number of questionnaires returned from each program, as compared to the number requested by the program, was recorded as questionnaires were returned. Table 2 shows the results of these returns. The total number of returned questionnaires was 299.

The programs that had more than two questionnaires missing when returned were called by the researcher to determine the reason(s) for the decreased return rate. The reasons given included students not being in class when the questionnaires were given out, students choosing not to complete it because it was the end of the year and they were struggling to

Table 2. Comparison of number of questionnaires returned from two-plus-two completion baccalaureate programs and generic baccalaureate programs versus the number of requested questionnaires from these programs

Two-plus-two programs		Generic programs	
Requested	Returned	Requested	Returned
7	6	23	16
9	9	14	12
5	4	14	4
14	0	20	0
19	9	22	22
25	14	18	12
14	7	16	16
11	10	56	54
17	9	24	15
15	5	41	37
12	11	Total = 248	Total = 188
18	13		Return rate = 75.81%
8	6		
9	7		
4	1		
21	0		
Total = 208	Total = 111		
	Return rate = 53.37%		
Total for both programs = 299 returned out of 456 = 65.57%*			

***Note: This response rate includes the three programs that did not return any questionnaires**

complete the year, students missing from class due to musical and athletic events off campus, and students being given the instrument individually instead of in a group.

One director noted that the Human Subjects committee at their program does not permit surveys to be given during class time because it is felt to infringe on students' rights. Questionnaires may be given at the end of class. Their program had been "sent a number of surveys recently, and students, many of who are employed and have children, feel overloaded, and leave if given the opportunity."

Another director noted that the questionnaire was given to students as an option. It was presented as an opportunity to participate in research. All were given an equal opportunity and some chose not to participate.

Scoring the Instruments

Each respondent's Nursing Activity Scale (NAS) was scored by the researcher. Each item on the scale has been given a weight of 1, 2, or 3 by the tool's author, with a weight of 1 indicating a low level of autonomy and a weight of 3 reflecting a high level (Kelly-Schutzenhofer, 1997). Each answer to the 30 items on the scale was multiplied by the weight given that item. These adjusted scores were then totaled to obtain the individual's final score on the NAS. Total scores can range from 60 to 240, with 60 to 120 indicating a lower level of professional autonomy, 121 to 180 indicating a mid level of professional autonomy, and 181 to 240 indicating a higher level of professional autonomy.

Statistical Applications

Statistics were computed using the software, Statistical Package for the Social Sciences (SPSS) (George & Mallery, 2001). A database was created with the following variables for each of the 299 respondents: NAS score, type of program (two-plus-two or generic baccalaureate), gender, and age (exact age was entered). Additional variables entered for the two-plus-two baccalaureate completion graduating students were: basic nursing program (diploma or associate degree), years employed as a registered nurse (exact years employed were recorded), and major nursing experience (hospital, community health, long term care, school nursing, occupational/industrial nursing, physician's office/clinic, or other). Descriptive statistics were used to describe the data set (Tables 3 – 8).

Inferential statistics were applied to the data. An independent t test comparing the mean score on the NAS for the two types of programs was conducted to answer research question one, which asked: Is there a difference in professional socialization between graduating students of two-plus-two baccalaureate completion nursing programs and graduating students of generic baccalaureate nursing programs?

Pearson's product-moment correlation coefficient, r , was applied to the data to determine the answer to research question two: Is there a relationship between age and the level of professional socialization in graduating students of two-plus-two baccalaureate completion nursing programs and generic baccalaureate nursing programs? Analysis of covariance was undertaken to analyze the three variables of age, program, and NAS score.

Pearson's product-moment correlation coefficient, r , was applied to the data to determine the answer to research question three: Is there a relationship between years employed as a RN and the level of professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs? Linear regression was used to predict NAS score from years of employment.

An independent t test comparing mean scores on the NAS of diploma and associate program graduates was conducted to address research question four: Is there a difference in level of professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs between students whose basic nursing program was a diploma program and students whose basic nursing program was an associate program?

Analysis of variance (ANOVA) was to be conducted on the data related to main nursing experience for hypothesis five: Is there is a relationship between area of major nursing experience and the level of professional socialization of graduating students of two-

plus-two baccalaureate completion nursing programs? Frequencies revealed that some of the categories of work experience had only one respondent (Table 9), so a decision was made to group the experience data into those whose major experience had been in the hospital and those whose major experience was outside the hospital, to have more legitimate numbers of observations for the categories in each variable. An independent *t* test was then undertaken with these two groups.

Demographics of the Subjects

Student classification

On the demographic question page (Appendix D) that accompanied each NAS, students were asked to indicate their classification, either BSN or RN-BSN. It was apparent that some students were confused about this, as some chose one and then crossed their answer out to choose the other option. In addition, some students chose the wrong classification. This was known by the researcher because each questionnaire was coded as to type of program, so the correct classification was able to be entered into data analysis for each respondent. The problem of students' confusion concerning their classification did not become apparent in the pilot test of the questionnaire. It did not threaten the validity of the study, as the classification of the student was known before sending out the questionnaires. However, it highlights the confusion present even within nursing education as to the type of degree being obtained. Table 3 gives the number of respondents from each type of program.

Table 3. Frequency, percent, valid percent, and cumulative percent of the two-plus-two baccalaureate completion and generic baccalaureate program respondents based on classification

Program	Frequency	Percent	Valid percent	Cumulative percent
Two-plus-two	111	37.1	37.1	37.1
Generic	188	62.9	62.9	100.0
Missing	0	0	0	
Total	299	100.0	100.0	

Gender

Students were asked to indicate their gender on the demographic data page. Surveys completed by males were not included in the data analysis due to theorized differing ways of knowing and intellectual and ethical development between the sexes (Baxter Magolda, 1992; Gilligan, 1982). More control was achieved in the study by limiting the analysis to female graduating students. Table 4 gives the data concerning gender.

Out of a total return of 299 questionnaires, four lacked gender identification and 22 were males. Limiting the subject group to female graduating students resulted in a data set of 273 respondents. The responses of these female graduating students were entered into data analysis to address the research questions.

Table 4. Descriptive statistics of the respondents as an entire sample group based on gender

Gender	Frequency	Percent	Valid percent	Cumulative percent
Female	273	91.3	92.5	92.5
Male	22	7.4	7.5	100.0
Total	295	98.7	100.0	
Missing	4	1.3		
Total	299	100.0		

Nursing activity scale

All 299 respondents completed the NAS. Scores ranged from 79, indicating a lower level of professional autonomy, to 240, indicating a higher level of professional autonomy. The NAS scores from the entire sample set are presented in Table 5.

The mean score of all respondents (192.3629) falls within the range for higher level of professional autonomy (181 to 240). The mode score (178.00) falls within the range for mid level of professional autonomy (121 to 180). The distribution demonstrated a negative skewness of $-.410$.

Table 5. Descriptive statistics of the score on the Nursing Activity Scale (NAS) for the entire sample set based on score (N=299)

Statistic	Value
Mean	192.3629
Median	192.0000
Mode	178.00*
Std. Deviation	20.8250
Skewness	$-.410$
Kurtosis	1.788
Range	161.00
Minimum	79.00
Maximum	240.00
Missing	0

*Multiple modes exist; the smallest value is shown.

Age

The participants were asked to give their exact age on the demographic data page (Appendix D). The majority of respondents (62.9%) were graduating students from generic programs (Table 3). As most of these students enter college immediately following high

school and complete the BSN program in four years, it seems appropriate that the mean age of all the respondents was close to 22 years of age (26.5842) and the mode was 22.00 (Table 6).

Graduates of two-plus-two baccalaureate completion programs are usually older than generic baccalaureate students. Many have worked as a RN a number of years after completing their basic RN program. This allowed for more variability within the age category. The ages of all respondents ranged from 20 to 55 years of age. Table 6 presents information on the age of the respondents.

Table 6. Descriptive statistics of all of the research participants based on age (N=291)

Statistic	Value
Mean	26.5842
Median	22.0000
Mode	22.00
Std. Deviation	8.4516
Range	35.00
Minimum	20.00
Maximum	55.00
Missing	8

Years employed as a RN

As students graduating from generic programs would not yet be licensed, only two-plus-two baccalaureate completion graduating students were asked to give years of RN work experience on the demographic data page. As mentioned above, some students seemed confused concerning their student classification. Therefore, if two-plus-two baccalaureate completion graduating students chose BSN for their classification instead of RN-BSN, the

questionnaire did not direct them to complete the last four questions that included the question about years of work experience (Appendix D). Six respondents did not complete this question. Table 7 presents the data on years employed as a RN for two-plus-two graduates.

Table 7. Descriptive statistics of two-plus-two baccalaureate completion graduates based on years employed as a RN (N=105)

Statistic	Value
Mean	7.6928
Median	3.0000
Mode	2.00
Std. Deviation	8.7914
Range	33.00
Minimum	0.00
Maximum	33.00
Missing	6

Basic program of graduating students of two-plus-two baccalaureate completion programs

The graduating students of the two-plus-two baccalaureate completion programs were asked to indicate whether a diploma or an associate degree program was their basic program. If the respondent was confused about student classification, he or she did not complete the question that followed concerning type of basic program (Appendix D). There were seven missing entries for this variable.

The percentage of students whose basic program was an associate degree program was far larger than the percentage of students whose basic program was a diploma program. This was to be expected as two-plus-two baccalaureate completion programs are designed to

allow students to begin their nursing education in that program, obtain an associate degree, and go on to complete their BSN degree. Also, associate degree programs have the highest number of nursing students among the various avenues of nursing education; diploma programs have greatly decreased in number since the 1960s (National League for Nursing, 2000). Table 8 presents the frequencies and percentages of the two basic programs of graduating students from two-plus-two baccalaureate completion programs.

Table 8. Frequency, percent, valid percent, and cumulative percent of basic nursing program attended by graduating students of two-plus-two baccalaureate completion programs

Program	Frequency	Percent	Valid percent	Cumulative percent
Diploma	18	16.2	17.3	17.3
Associate degree	86	77.5	82.7	100.0
Total	104	93.7	100.0	
Missing	7	6.3		
Total	111	100.0		

Area of major nursing experience

The demographic data page of the survey (Appendix D) directed respondents, if they had worked as a RN, to select one of seven categories of work experience. The categories were: hospital, community health (public health, visiting nurse, home health agency, etc.), long-term care, school nursing, occupational health/industrial nursing, physician's office/clinic, and other (specify).

Seven of the respondents did not complete the question, either by choice or due to confusion concerning their student classification. Eight of the two-plus-two baccalaureate completion graduating students had no RN experience so did not complete the question.

This left a total of 96 respondents who indicated the area of their major nursing experience.

The area of nursing experience that received the majority response of the 96 respondents was the hospital (68.93%).

Eleven respondents listed two or more areas of experience despite being directed to select one, so another category was entered in data analysis: "Experience in more than one area." Ten of the eleven respondents who listed two or more areas of experience included "Hospital" in the areas worked. Three respondents chose the category "Other." The places of experience they listed were psychiatric care, dialysis, and the emergency room. Table 9 gives the data on major nursing experience for the two-plus-two baccalaureate completion graduating students.

Table 9. Frequency, percent, valid percent, and cumulative percent of area of major nursing experience for graduating students of two-plus-two baccalaureate completion programs

	Frequency	Percent	Valid percent	Cumulative percent
Hospital	71	68.93	73.96	73.96
Community Health	4	3.88	4.17	78.13
Long Term Care	3	2.91	3.13	81.25
School Nursing	1	0.97	1.04	82.29
Occupational Health/Industrial	1	0.97	1.04	83.33
Physician's Office/Clinic	2	1.94	2.08	85.42
Other	3	2.91	3.13	88.54
Experience in more than one area	11	10.68	11.46	100.00
Total	96	93.20	100.00	
Missing System	7	6.79		
Total	103	100.00		
No experience	8			
Total	111			

Research Questions

Five research questions were addressed in the study. The results are given as follows.

Research Question 1: Is there a difference in professional socialization between graduating students of two-plus-two baccalaureate completion nursing programs and graduating students of generic baccalaureate nursing programs?

This question was the main focus of the study. As the numbers of BSN completion programs proliferate across the United States (American Association of Colleges of Nursing, 2001), the opportunity for students to obtain a nursing education in a technical program, and at a later time, if desired, complete baccalaureate education, is increasing. This condition will enable the present system of multiple avenues of entry into nursing practice to remain for the foreseeable future. The question of the study was whether graduates of associate and diploma programs, who have been socialized into a technical role (National League for Nursing, 2000), make the transition to a professional role orientation in baccalaureate completion programs.

The mean score on the Nursing Activity Scale (NAS) of graduating students of two-plus-two baccalaureate completion programs was compared to the mean score on the NAS of graduating students of generic baccalaureate programs by computation of an independent *t*-test. The responses of male students were not included in the analysis. Tables 10 – 13 indicate the results of the *t*-tests.

Table 10. Mean, standard deviation, and standard error mean of the score on the NAS for graduating students from two-plus-two completion and generic baccalaureate programs

Type of program	N	Mean	Std. Deviation	Std. Error Mean
Two-plus-two	95	192.895	22.278	2.286
Generic	178	192.688	19.965	1.496

Table 11. Levene's test for equality of variances for the score on the NAS

Score		F	Sig.
NAS	(Equal variances assumed)	5.636	.018

Table 12. T-test for equality of mean score on the NAS

Score		t	df	Sig. (2-tailed)	Mean diff.
NAS	(Equal variances assumed)	.078	271	.938	.207
	(Equal variances not assumed)	.076	174.796	.940	.207

Table 13. T-test for equality of means (confidence interval of the difference)

Score		Std. Error diff.	95% Confidence Interval of the diff.	
			Lower	Upper
NAS	(Equal variances assumed)	2.642	-4.996	5.409
	(Equal variances not assumed)	2.732	-5.185	5.598

The independent *t*-test showed no statistical difference between group means on the NAS scores ($t=.076$, $df=174.796$, $p > .05$). The critical value of the *t* distribution for a two-tailed test at 175 degrees of freedom and .05 significance level is 1.960. The *t* value of .076 did not exceed 1.960. Therefore, the null hypothesis was not rejected. The research hypothesis that there is a difference in professional socialization between graduating students of two-plus-two baccalaureate completion nursing programs and graduating students of generic baccalaureate nursing programs was not supported.

The actual difference in group means of NAS scores was very slight at .207. There was more variability within the two-plus-two graduates' NAS scores shown by the standard deviation of 22.278 compared to the standard deviation of the generic students' NAS scores of 19.965 (Table 10). Levene's test for equality of variances resulted in an F value of 5.636

which is quite high and significant at $p=.018$ (Table 11). As this value is less than the significance value set a priori ($p=.05$) the assumption of homogeneity of variance was not met (Hinkle et al., 1998). There was only a 1.8% chance of wrongly assuming unequal variances.

The p value for the t -test was not significant, at .940, when equal variances were not assumed (Table 12). The fact that zero falls within the confidence interval (Table 13) confirms the lack of significance; the null hypothesis that there was zero difference in professional socialization between graduating students of two-plus-two baccalaureate completion nursing programs and graduating students of generic baccalaureate nursing programs could not be rejected.

Research Question 2: Is there a relationship between age and the level of professional socialization in graduating students of two-plus-two baccalaureate completion nursing programs and generic baccalaureate nursing programs?

The Pearson product-moment correlation coefficient, r , was computed to answer this question. The ages of all female respondents were correlated with their NAS scores. The conditions required for this statistical test, paired observations for the same set of individuals and variables measured on an interval or ratio scale, were met (Hinkle et al., 1998). Table 14 and 15 give the statistics for this correlation.

The Pearson r correlation between age and NAS score was found to be .10. This indicated little if any, positive correlation. Thus, as age increased, the NAS score increased, albeit at a very low level of correlation. The coefficient of determination was .01, indicating that 1% of the variance in NAS scores could be associated with the variance in age (Hinkle et al., 1998). This correlation was not significant ($p=.102$).

Table 14. Descriptive statistics for age and NAS score for graduating students from two-plus-two baccalaureate completion and generic baccalaureate programs

	Mean	Std. Deviation	N
Age	26.322	8.340	270
Score on the NAS	192.760	20.758	273

Table 15. Correlation of age and score on the NAS for all respondents

		Age	Score on the NAS
Age	Pearson correlation	1.00	.100
	Sig. (2-tailed)		.102
	N	270	270
Score on the NAS	Pearson correlation	.100	1.000
	Sig. (2-tailed)	.102	
	N	270	273

The Pearson r correlation was also determined between age and NAS score for each type of program separately. Tables 16 and 17 give the descriptive statistics and the correlation between age and NAS score for graduating students from two-plus-two baccalaureate completion programs.

The correlation between age and score on the NAS for the graduating students from two-plus-two baccalaureate completion programs was slightly higher than the correlation found when all the respondents were combined, but only a minimal positive correlation ($r=.164$) was found. This was not significant ($p=.116$). There were two missing values for age among respondents from the two-plus-two baccalaureate completion programs.

Table 16. Descriptive statistics for graduating students from two-plus-two baccalaureate completion programs

	Mean	Std. Deviation	N
Age	33.376	10.184	93
Score of the NAS	192.895	22.278	95

Table 17. Correlation of age and NAS score for graduating students from two-plus-two baccalaureate completion programs

		Age	Score on the NAS
Age	Pearson correlation	1.000	.164
	Sig. (2-tailed)		.116
	N	93	93
Score on the NAS	Pearson correlation	.164	1.000
	Sig. (2-tailed)	.116	
	N	93	95

Tables 18 and 19 give the descriptive statistics and correlation between age and score on the NAS for graduating students from the generic baccalaureate programs. The correlation between age and NAS score for the graduating students from generic baccalaureate programs ($r=.077$) was lower than the correlation between age and NAS score for the graduating students from the two-plus-two baccalaureate completion programs ($r=.164$) or the combined programs ($r=.100$). This indicated a little, if any, positive correlation. It was not a significant correlation ($p=.309$). There was one missing value for respondents from the generic baccalaureate programs.

Table 18. Descriptive statistics for age and score on the NAS for graduating students from generic baccalaureate programs

	Mean	Std. Deviation	N
Age	22.616	3.462	177
Score on the NAS	192.688	19.965	178

$\alpha=.05$

Table 19. Correlation of age and score on the NAS for graduating students from generic baccalaureate programs

		Age	Score on the NAS
Age	Pearson correlation	1.000	.077
	Sig. (2-tailed)		.309
	N	177	177
Score on the NAS	Pearson correlation	.077	1.000
	Sig. (2-tailed)	.309	
	N	177	178

Analysis of covariance was performed to analyze the three variables of age, program, and NAS score, with NAS as the dependent variable. When program was controlled, age approached significance as a predictor ($F=3.874$, $p=.050$) (Tables 20 and 21).

The observed power (0.402) indicated that there was a 40.2% chance of detecting differences in NAS score due to age of respondents. The R squared value of .014 indicated that approximately 1.4% of the variance in NAS score could be explained by age. This was shown by the Eta Squared value of .014 as well. The adjusted R squared value of .007, a

Table 20. Tests of between-subjects effects: age, program, and NAS score

Source	Type III Sum of Squares	df	Mean Squares	F	Sig.	Eta Squared
Corrected Model	1666.881*	2	833.441	1.948	.145	.014
Intercept	464737.149	1	464737.149	1086.020	.000	.803
AGE	1657.972	1	1657.972	3.874	.050	.014
PROGRAM	513.249	1	513.249	1.199	.274	.004
Error	114256.457	267	427.927			
Total	10133627.250	270				
Corrected total	115923.338	269				

*R squared = .014 (adjusted R squared = .007); $\alpha = .05$

Table 21. Tests of between-subjects effects: observed power

Source	Noncent. parameter	Observed power*
Corrected model	3.895	.402
Intercept	1086.020	1.000
AGE	3.874	.501
PROGRAM	1.199	.194
Error		
Total		
Corrected total		

*Computed using $\alpha = .05$

more conservative estimate of the percentage of variance in the NAS score that can be attributed to age differences, was 0.7%. This small percentage supported the approaching significance of the F value for age. The parameter estimates also supported this. The presence of zero between the upper and lower bounds of the 95% confidence intervals for the t value indicated lack of significance (Table 22).

Table 22. Parameter estimates for the dependent variable: NAS score

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	183.958	4.605	39.951	.000	174.892	193.024
AGE	.377	.192	1.968	.050	-1.019E-04	.755
[PROGRAM=1.00]	-3.677	3.357	-1.095	.274	-10.287	2.933
[PROGRAM=2.00]	0*					

*R squared = .014 (adjusted R squared = .007); $\alpha = .05$

Research Question 3: Research question three asked: Is there a relationship between years employed as a RN and the level of professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs?

The Pearson product-moment correlation coefficient was computed to answer this question. The years employed as a RN for all female graduating students from two-plus-two baccalaureate completion programs were correlated with their NAS scores. As with research question two, the conditions required for this statistical test, paired observations for the same set of individuals and variables measured on an interval or ratio scale, were met (Hinkle et al., 1998). Tables 23 and 24 give the descriptive statistics and correlation for years employed as a RN and score on the NAS for graduating students from two-plus-two baccalaureate completion programs.

Table 23. Mean and standard deviation for the NAS score and years employed as a RN for graduating students from two-plus-two baccalaureate completion programs

	Mean	Std. Deviation	N
Score on the NAS	192.7601	20.7582	273
Years employed as a RN for graduating students from two-plus-two baccalaureate completion programs	7.5950	8.8776	92

Table 24. Correlation of NAS score and years employed as a RN for graduating students from two-plus-two baccalaureate completion programs

		NAS score	Years employed as a RN for graduating students from two-plus-two baccalaureate completion programs
NAS score	Pearson correlation	1.000	.124
	Sig. (2-tailed)		.237
	N	273	92
Years employed as a RN for graduating students from two-plus-two baccalaureate programs	Pearson correlation	.124	1.000
	Sig. (2-tailed)	.237	
	N	92	92

$\alpha=.05$

There were 108 respondents from the two-plus-two baccalaureate completion programs. Thirteen of these were males. Data analysis was limited to female respondents, who numbered 95. Three of these did not answer the question related to years employed, resulting in a final usable sample of 92.

The value of Pearson's r was .124, indicating little, if any, positive correlation. This may be interpreted that the score on the NAS rose slightly with increase in years of employment. This correlation was not significant ($p=.237$).

Linear regression was estimated following the correlation to predict scores on the NAS for graduating students from two-plus-two baccalaureate completion programs from years of employment (Table 25). The b value of 0.313 indicated that, on average, for every additional year of employment an additional 0.313 points were earned on the NAS. This is a negligible amount; in essence, the results on the NAS were not affected by years of employment. The linear regression results supported the Pearson correlation finding of no significant relationship between years of employment as a RN and score on the NAS for graduating students from two-plus-two baccalaureate completion programs.

Table 25. Coefficients for linear regression: Predicting NAS scores from years of employment for graduating students from two-plus-two baccalaureate completion programs

Model		Unstandardized coefficients		Standardized coefficients	t	Sig.
		b	Std. Error	Beta		
1	(Constant)	189.978	3.068		61.918	.000
	Years employed as an RN	.313	.263	.124	1.190	.237

Note: Dependent variable = Score on the Nursing Activity Scale
 $\alpha=.05$

The survivor effect also should be mentioned. This variable is measuring individuals who have stayed in the profession. Registered nurses who were no longer working and not in the completion program were not measured.

Research Question 4: Research question four asked: Is there a difference in level of professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs between students whose basic nursing program was a diploma program and students whose basic nursing program was an associate program?

An independent *t*-test was conducted to compare mean score on the NAS of female graduating students from two-plus-two baccalaureate completion programs whose basic program was a diploma program with mean score on the NAS of female graduating students from two-plus-two baccalaureate completion programs whose basic program was an associate degree program. Tables 26 – 29 indicate the results of the *t*-test.

The number of diploma graduates was approximately one third the number of associate degree graduates. Of the 95 female graduating students from two-plus-two baccalaureate completion programs in the sample, 91 completed the demographic question concerning the basic nursing program. More variability was found in the scores of the associate degree graduates, as shown by the standard deviation of 22.982 compared to the standard deviation of 20.287 for the diploma graduates (Table 26).

Table 26. Mean, standard deviation, and standard error mean for the NAS score for graduating students from two-plus-two baccalaureate completion programs whose basic program was diploma and graduating students from two-plus-two baccalaureate completion programs whose basic program was associate degree

	Basic Nursing program for two-plus-two	N	Mean	Std. Dev.	Std. Error Mean
NAS score	Diploma	15	191.400	20.287	5.238
	Associate	76	192.684	22.982	2.636

Levene's test of equality of variances indicated that equal variances could be assumed. Levene's test resulted in an F value of 0.825 which was significant at $p=0.366$ (Table 27). As this significance value is more than the significance value set a priori ($p=.05$) the assumption of homogeneity of variance was met (Hinkle et al., 1998). At 75 and 14 degrees of freedom for $p=.05$, the critical value of F is approximately 2.20. The observed value of $F=.825$ does not exceed this. Therefore, the assumption of homogeneity of variance was tenable. There was 36.6% chance of wrongly assuming unequal variances.

Table 27. Levene's test for equality of variances: NAS score for graduating students from two-plus-two baccalaureate completion programs whose basic program was diploma and graduating students from two-plus-two baccalaureate completion programs whose basic program was associate degree

	F	Sig.
NAS score (Equal variances assumed)	0.825	0.366
(Equal variances not assumed)		

$\alpha=.05$

The difference in mean NAS scores between graduates of diploma programs and graduates of associate degree programs was 1.2842 (Table 28). The independent t -test showed no statistical difference between group means on the NAS ($t= -.201$, $df =89$, $p=.841$). The critical value of the t distribution for a two-tailed test at 89 degrees of freedom and .05 significance level is approximately 1.98. The t value of $-.201$ did not exceed 1.98. Therefore, the null hypothesis was not rejected. The research hypothesis that there is a difference in level of professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs between students whose basic nursing program was a diploma program and students whose basic nursing program was an associate program was not supported.

Table 28. T-test for equality of means: NAS score for graduating students from two-plus-two baccalaureate completion programs whose basic program was diploma and graduating students from two-plus-two baccalaureate completion programs whose basic program was associate degree

		<i>t</i>	df	Sig. (2-tailed)	Mean diff.
NAS score	(Equal variances assumed)	-.201	89	.841	-1.2842
	(Equal variances not assumed)	-.219	21.730	.829	-1.2842

$\alpha=.05$

The *p* value for the *t*-test was non-significant at 0.841 when equal variances were assumed (Table 28). The fact that zero fell within the confidence interval (Table 29) confirms the lack of significance; the null hypothesis that there is no difference in level of professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs between students whose basic nursing program was a diploma program and students whose basic nursing program was an associate program could not be rejected.

Table 29. T-test for equality of means: 95% confidence interval of the difference for graduating students from two-plus-two baccalaureate completion programs whose basic program was diploma and graduating students from two-plus-two baccalaureate completion programs whose basic program was associate degree

		Std. Error difference	95% Confidence Interval of the difference	
			Lower	Upper
NAS score	(Equal variances assumed)	6.3794	-13.960	11.3914
	(Equal variances not assumed)	5.8639	-13.454	10.8856

$\alpha=.05$

Research Question 5: Is there a relationship between area of major nursing experience and the level of professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs?

The researcher intended to use analysis of variance (ANOVA) to analyze the data related to major nursing experience. However, frequencies revealed that some of the

categories of work experience (i.e., school nursing and occupational health/industrial nursing) had only one respondent (Table 9), and others (i.e., physician's office/clinic and long-term care) had only two or three respondents (Table 9). Due to the low numbers in most categories, it was decided to group the area of major nursing experience data into those whose major experience had been in the hospital and those whose major experience had been outside the hospital to have more legitimate numbers for each variable. An independent *t* test was then completed with these two groups. There were 11 respondents who chose more than one area of major nursing experience. Ten of these 11 included hospital experience. Therefore, female respondents of these 10 were included with those whose major experience had been in the hospital.

Fifteen of the two-plus-two respondents did not complete the question of area of major nursing experience. Eight of these correctly left the question blank as they had indicated on the preceding question that they did not have any RN work experience. The other seven either chose not to complete the question, mistakenly avoided it because of choosing the wrong student classification as discussed above, or were males.

The remaining data set of female graduating students from two-plus-two baccalaureate completion programs numbered 83. Those whose major nursing experience was hospital nursing, or included hospital nursing, numbered 69. Combining respondents who chose community health, long-term care, school nursing, occupational health/industrial nursing, physician's office/clinic, and other, resulted in a sample group of 14 for those female respondents whose major nursing experience was outside the hospital. Three respondents chose "Other," and specified psychiatric care, dialysis, and ER as areas of major

nursing experience. The sample size did not allow correlation of NAS score with multiple major nursing experience areas.

An independent *t*-test was completed comparing mean NAS score for those female graduating students from two-plus-two baccalaureate completion programs whose major area of nursing experience was hospital and those female graduating students from two-plus-two baccalaureate completion programs whose major area of nursing experience was not hospital. The results of this *t*-test are presented in Tables 30 – 33.

Table 30. Mean, standard deviation, and standard error mean for area of major nursing experience for graduating students from two-plus-two baccalaureate completion programs

	Major Area	N	Mean	Std. Deviation	Std. Error mean
NAS score	Non-hospital	14	195.643	20.597	5.505
	Hospital	69	191.899	22.836	2.749

The difference in mean scores between those whose area of major nursing experience was hospital nursing and those whose area of major nursing experience was non-hospital sites was 3.756, with more variability evident within the group whose area of major nursing experience was hospital nursing (Table 30). Those whose area of major nursing experience was non-hospital sites had the higher mean score.

Levene's test of equality of variances indicated that equal variances could be assumed. Levene's test resulted in an *F* value of 0.413 which yielded a significance level of $p=0.522$ (Table 31). As this significance value is more than the significance value set a priori ($p=.05$), the assumption of homogeneity of variance was met (Hinkle et al., 1998). At 68 and 13 degrees of freedom for $p=.05$, the critical value of *F* is approximately 2.30. The

Table 31. Levene's test for equality of variances: Area of major nursing experience for graduating students from two-plus-two baccalaureate completion programs

		F	Sig.
NAS score	(Equal variances assumed)	.413	.522
	(Equal variances not assumed)		

$\alpha=.05$

observed value of $F=0.413$ does not exceed this. Therefore, the assumption of homogeneity of variance was tenable. There was a 52.2% chance of wrongly assuming unequal variances.

The t -value of 0.568 with equal variances assumed was not significant ($p=.572$) (Table 32). There was no significant difference in means between those female graduating students from two-plus-two baccalaureate completion programs whose area of major nursing experience was hospital nursing and those whose area of major experience was non-hospital nursing.

Table 32. T-test for equality of means: Area of major nursing experience for graduating students from two-plus-two baccalaureate completion programs

		t	df	Sig. (2-tailed)	Mean diff.
NAS score	Equal variances assumed	.568	81	.572	3.7443
	Equal variances not assumed	.609	20.054	.550	3.7443

$\alpha=.05$

The lack of significant difference in mean scores is supported by the confidence interval (Table 33). Zero is contained within the interval indicating zero difference in mean scores. The null hypothesis that there is no relationship between area of major nursing experience and the level of professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs could not be rejected.

Table 33. T-test for equality of means: 95% confidence interval of the difference for area of major nursing experience

		Std. Error difference	95% Confidence Interval of the difference	
			Lower	Upper
NAS score	(Equal variances assumed)	6.593	-9.373	16.862
	(Equal variances not assumed)	6.153	-9.089	16.577

$\alpha=.05$

Summary of Hypothesis Testing

Five hypotheses were tested and all five were retained.

Hypothesis 1 (retained): There was no significant difference in professional socialization between graduating students of two-plus-two baccalaureate completion nursing programs and graduating students of generic baccalaureate nursing programs.

Hypothesis 2 (retained): There was no significant relationship between age and level of professional socialization of graduating students of baccalaureate nursing programs.

Hypothesis 3 (retained): There was no significant relationship between years employed as a RN and level of professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs.

Hypothesis 4 (retained): There was no significant difference in level of professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs between students whose basic nursing program was a diploma program and students whose basic nursing program was an associate program.

Hypothesis 5 (retained): There was no significant relationship between area of major nursing experience and the level of professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs.

Summary

This chapter presented the results obtained from analysis of the data. The response rate of the programs was presented along with the actual number of questionnaires returned. The manner in which the instruments were scored was discussed. Statistical applications used were identified and the demographics of subjects including student classification, gender, score on the Nursing Activity Scale, age, and for graduating students of two-plus-two baccalaureate programs, the type of basic program, years employed as a RN, and area of major work experience were presented. The results of each research question were given along with discussion of statistical application. This was followed by a summary of the hypothesis testing.

CHAPTER 5. CONCLUSIONS

Overview

This chapter will summarize the research project and discuss the results detailed in Chapter 4. Conclusions, limitations, recommendations, and implications based upon these results will be presented. The format will follow that used in Chapter 4, with a discussion of each hypothesis.

In a nonexperimental, descriptive study, the professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs was compared with the professional socialization of graduating students of generic baccalaureate programs. The difference in professional role socialization between students from the two basic RN education programs prior to BSN completion was also explored.

In addition, the study explored the relationship between professional role socialization and age, and for the baccalaureate completion students, the relationship between professional role socialization and years of employment as a RN, and professional role socialization and area of major nursing experience. The survey population was graduating students from NLN accredited baccalaureate nursing programs, both generic and two-plus-two completion, in a 15-state region.

The general model of socialization developed by Hinshaw (1977) provided the theoretical basis for this study. As the general pattern of intellectual and ethical development of females has been theorized to be different than that of males (Baxter Magolda, 1992; Gilligan, 1982), the study was limited to female participants to provide a measure of control for the study.

Autonomy, noted as a mark of professionalism, was measured by the Nursing Activity Scale (NAS) developed by Schutzenhofer (1987). The 30-item NAS has a Likert-type scale and describes situations such as professional development, patient advocacy, nurse-physician relationships, and research in which a nurse must display some degree of professional nursing autonomy.

Data collection was in the spring of 2001, from the end of March until early June. The NAS was administered to graduating students at each participating institution by a faculty or administrative member following written instruction from the researcher. Individual results were anonymous and data were reported only in the aggregate.

Data analysis used the Statistical Package for the Social Sciences (SPSS) (George & Mallery, 2001). Descriptive statistics (measures of central tendency, standard deviations, percentages, and sums) were used to describe the data set. Inferential statistics used were independent *t*-tests, Pearson's Product-moment correlation, linear regression, and analysis of covariance (ANCOVA).

An independent *t*-test was used to determine the difference between professional socialization (dependent variable) of generic baccalaureate graduating nursing students and two-plus-two baccalaureate completion graduating students (independent variables). An independent *t*-test was also used to determine the difference in professional socialization (dependent variable) of two-plus-two baccalaureate completion students whose basic program was a diploma program (independent variable) and professional socialization of those whose basic program was an associate program (independent variable).

Pearson's product moment correlation was used to determine the correlation between professional socialization (dependent variable) and age (independent variable) and for the

baccalaureate completion students, correlation between professional socialization (dependent variable) and years of employment (independent variable), and between professional socialization (dependent variable) and area of major experience (independent variable).

Analysis of covariance was performed to analyze the three variables of age, program, and NAS score.

Discussion

Research Question 1: Is there a difference in professional socialization between graduating students of two-plus-two baccalaureate completion nursing programs and graduating students of generic baccalaureate nursing programs?

Research Question 1 was the main focus of the study. The independent *t*-test computed on the mean scores from the generic baccalaureate nursing students and the two-plus-two baccalaureate completion nursing students showed no statistical difference between group means on the NAS ($t = .076$, $df = 174.796$, $p > .05$). The research hypothesis that there is a difference in professional socialization between graduating students of two-plus-two baccalaureate completion nursing programs and graduating students of generic baccalaureate nursing programs was not supported. Therefore, the null hypothesis was not rejected and it may be stated that the results of this study showed there is no difference in professional socialization between graduating students of two-plus-two baccalaureate completion nursing programs and graduating students of generic baccalaureate nursing programs.

The acceptance of this null hypothesis supports the value of baccalaureate completion education. In light of nursing's goal to be recognized as a profession, nursing's professional organization, the American Nurses Association (ANA), for decades has promoted baccalaureate education. This has been particularly evident since the inception of the 1965

proposal to make baccalaureate education entry-level into practice. The American Association of Colleges of Nursing (AACN), in its most recent position statement has reiterated its recognition of “the Bachelor of Science degree in nursing as the minimum educational requirement for professional nursing practice” (American Association of Colleges of Nursing, 2001, p. 267). Earlier studies (Hillery, 1991; Corwin, 1961) have shown that baccalaureate graduates have higher professional role socialization than graduates of associate degree or diploma programs.

Though the nurse prepared at the baccalaureate level has been found to be the professional nurse, the continual need for more nurses and the strength of particularly the associate degree programs and nurses’ associations has not allowed for baccalaureate education as entry-level into practice to become reality. However, the proliferation of baccalaureate completion programs across the country has evidenced the drive for advancing nursing education and providing a professional product to the public (American Association of Colleges of Nursing, 2001). Many hospitals are recognizing and utilizing the advanced skills of the baccalaureate nurse, identifying the expanded ability to educate and coordinate care of the client. The ability of the BSN nurse to collaborate with multiple members of the health team, obtain needed resources from hospital departments, and educate family members, while supervising unlicensed assistive personnel, is noted and rewarded (American Association of Colleges of Nursing, 2001). The Nursing Advisory Council on Nurse Education and Practice, an advisory body to the federal Division of Nursing, has strongly encouraged that by 2010, two thirds of the basic RN workforce hold a baccalaureate or higher degree in nursing (National Advisory Council on Nurse Education and Practice, 1996). Only 40% of the basic RN workforce presently hold a baccalaureate degree or higher;

the encouragement from employers and advisory boards will continue to drive up the numbers (American Association of Colleges of Nursing, 2001).

This study has demonstrated that registered nurses prepared at the associate or diploma level, which have a predominantly technical focus, upon exiting a baccalaureate completion program, have a professional socialization not significantly different than students graduating from generic baccalaureate programs, programs whose focus is the production of a professional nurse. The earlier study noted by Periard et al. (1991) found progressive advancement in professionalism as students moved through BSN completion programs in four Midwest states. The present study identifies that the end product is not significantly different than the product of generic baccalaureate programs.

The difference in mean scores on the NAS for these two groups was so small as to be almost miniscule (.207). Both groups' mean score (192.895 for the two-plus-two graduating students and 192.688 for the generic graduating students) (Table 10) fell within the higher range for professional autonomy (181 to 240), though closer to the division between mid levels and higher levels of professional autonomy than toward the upper end of the higher range of professional autonomy. It appears that one of the major goals of these generic baccalaureate and baccalaureate completion programs has been met: the production of a professionally oriented nurse.

This outcome is more expected for the generic graduates as they are typically traditional college age students, socialized from "day one" toward a professional role and educated within a four-year collegiate atmosphere that promotes a professional socialization. The goal of the two-plus-two completion programs is a resocialization of students from a technical focus to a professional focus. Hinshaw's (1977) model of socialization and

resocialization, presented as the theoretical basis for this study, is supported by the results of this study. Generic baccalaureate graduating students have been socialized through a process of sequential stages, including interaction with faculty, peers, and clinical role models to a professional role orientation. In the same way, baccalaureate completion students, through interaction with faculty, peers, and leadership role models, and purposeful orientation to the professional role through curricular content, have been resocialized into a professional role orientation. "Resocialization is a process in which new roles or sets of expectations are learned" (Hinshaw, 1977, p. 2). In baccalaureate completion programs, this includes increased emphasis on aspects of a profession such as adherence to a code of ethics, use of research to find knowledge, and self-governance.

The results of this study identify that the subjects have reached the final stage of Hinshaw's (1977) model and have *internalized* the values and norms of the role because they believe in them and have made them their own. The research instrument, the NAS (Kelly-Schutzenhofer, 1987), asked participants to indicate how likely they would be, as a nurse, to carry out the stated action. Actions belie beliefs. In providing directions to the participants, a certain response was not identified as more desirable than others, no reward was given to participants for high scores, nor were faculty allowed to view students' responses. Thus, these responses appear to have come from within the belief systems of the individuals and are taken as what the graduate would actually do in this situation.

"Unlearning" or "relearning" can be more difficult than beginning with a blank slate and thus the challenge for the completion programs is greater. Added to this is the impact of multiple work experiences and occupational cultures encountered by these students in their employment experiences. This influence of the "real world" may have so ingrained them that

change is difficult or almost impossible, particularly if they have been employed within a centralized, bureaucratic organization, at which they have not been included in decision making. The typical bureaucracies of a hospital may have a different impact than the more autonomous community nursing positions from which some two-plus-two completion students come. The challenge of availability of professional role models for baccalaureate and baccalaureate completion students is an ever-present issue for faculty. The effect of major area of work experience, as well as the variable of age, will be discussed in future sections.

Despite the intervening variables of the two-plus-two graduates, the study found no significant difference in professional socialization between these graduating students and the generic baccalaureate students. The empirical processes of socialization and resocialization as defined by Hinshaw (1977) are evidenced at generic levels of nursing education, and within returning students who encounter concepts that move them from a technical role to a professional role. The three stages of transition from anticipatory expectations of role to specific expectations of role, attachment to significant others in the social system, and internalization, adaptation or integration of role values and standards (Hinshaw, 1977) occur in both types of programs to bring about change.

With the nursing shortage today, the need for nursing education programs to produce graduates in a shorter period of time, is seen as crucial (McPeck, 2001a). Administrators and managers are clambering for new graduates to fill the ranks. Add to this the desire of many nurses to complete an education within two years and be in the workforce bringing home a paycheck. A two-year associate degree education is often more affordable and workable for the married student with children.

For these reasons, the establishment of baccalaureate education as entry-level is not yet in sight and the numbers of those entering the profession through the associate degree continues to grow. However, the numbers of students returning to complete a baccalaureate degree either immediately following graduation or a few to several years later is also rapidly growing (American Association of Colleges of Nursing, 2001). Additional education is desirable in the production of professional leaders in the field. Studies such as the present one that indicate a professional outcome essentially identical to that of generic baccalaureate graduates support the basis of baccalaureate completion programs.

The results of this study differ somewhat from earlier studies by Lawler and Rose (1987), and Chornick (1992), which found that associate degree nurses who completed their baccalaureate education were more professional than generic BSN nurses. It has similar results to Eckhardt's (1992) study that used Corwin's (1961) Nursing Role Conception Scale to measure role conception and found that differences among the professional role conceptions of graduating students from generic, RN-track, and second-step baccalaureate nursing programs were not statistically significant.

Research Question 2: Is there a relationship between age and the level of professional socialization in graduating students of two-plus-two baccalaureate completion nursing programs and generic baccalaureate nursing programs?

The hypothesis was directional, stating: "There is a positive relationship between age and level of professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs." The literature, as noted below, appears to be supportive of a positive relationship between professional socialization and age. The Pearson product-moment correlation coefficient r was computed to correlate the ages of respondents to their NAS scores.

Traditionally, the majority of students in generic baccalaureate programs enter a four-year program immediately following high school and graduate four years later, at about 22 years of age. The majority of respondents in this study were graduating students from generic programs, 62.9% (Table 3). The mode for age of respondents was 22.00 (Table 6), supportive of the traditional age of generic students.

Graduating students from two-plus-two baccalaureate completion programs are usually older than graduating students from generic baccalaureate programs. Many have worked as a RN a number of years after completing their basic RN program. Many are students who are married and have children and have chosen to return to school to further their education. The mean age of graduating students from two-plus-two baccalaureate completion programs in the present study was 33.376 (Table 16). The mean age of graduating students from generic baccalaureate programs was 22.616 (Table 18).

The desire for two-plus-two students to return to school to complete a baccalaureate degree may be driven by self-motivation or the desire for higher earning power. Many, however, return due to the necessity of a higher degree for the position they now fill or a mandate by administration to obtain their BSN if they are going to have opportunity for advancement. Students in an associate program that is connected to a baccalaureate completion program often go directly on for their BSN degree, with the added opportunity of RN employment during their education. Thus, the variability of age is broader for graduating students from two-plus-two completion programs, indicated in this study by the larger standard deviation of age of graduating students of two-plus-two programs, 10.184, compared to a standard deviation of 3.462 for graduating students from generic baccalaureate programs (Tables 16 and 18).

In this study all of the respondents from both types of programs were placed together to correlate age with score on the NAS. The range of age for the sample group was 35 years, with a minimum of 20 years and a maximum of 55 years.

The Pearson product-moment correlation showed a slight positive correlation ($r = .100$) between age and score on the NAS that was not statistically significant ($p = .102$). When the correlation of age and NAS score was determined for each type of program separately, a minimal, positive correlation was found. According to the results of this study, there was no significant correlation of age with professional socialization.

When analysis of covariance was used to analyze the three variables of age, program, and NAS score, with NAS as the dependent variable and program controlled, age approached significance as a predictor ($F = 3.874, p = .050$) (Tables 20 and 21). This was noted as non-significant when the adjusted R squared of .007 was computed, indicating that only 0.7% of the variance in NAS score can be attributed to age differences.

Age was included in the variables of this study for several reasons. Those individuals who are older are usually students that have had more experience with life in general and with the health care arena in particular. It can be argued that this exposure would make them wiser, more autonomous, and more professional simply due to a confidence that comes with years of experience. On the other hand, it can be argued that the older student is more set in his or her ways and, if a RN already, has often encountered a bureaucratic work environment that has stifled autonomy and independent decision making. Though resocialization can occur during the baccalaureate completion program, as this study implies, it may not be an easy process. Relearning values can be more difficult than acquiring values for the first time.

The studies of former researchers have addressed the issue of age and its effect on professional socialization. Hillery (1991) found that “nurses with higher professional role scores were more likely to be older” (p. 150). Martin et al. (1991), in a sample of 1,200 nurses from one large medical center, found that a high level of professional autonomy was associated with older age, and Marriner, Tomey, Thomas and Thomas (1993) found a positive correlation between age and feelings of autonomy. Conversely, George (1997) found that age “had little or no impact on nurses’ perceptions of autonomy” (p. 19).

The fact that in the present study, age of respondents showed no significant correlation with score on the NAS provides additional internal validity for the study. Though the range and variability of age within the two-plus-two programs is more than in the generic baccalaureate programs, this does not appear to be a confounding factor when comparing scores on the NAS between the programs.

This is a positive result for faculty and administrators of both generic and completion baccalaureate programs. The hallmark of the baccalaureate programs has always been the production of the professional nurse (NLN, 2000). The production of the professional nurse, in this study, was not shown to be related to the age of the student. No significant correlation was found between age of the student and professional socialization, even though the range of age of the sample was 35 years.

Hinshaw’s model of socialization and resocialization (1977) does not appear to be thwarted by age. Students of all ages are able to pass through the stages of anticipatory expectations of role; attachment to significant others; and internalization, adaptation, or integration of role values and standards. The expectations and incongruencies experienced

by students of differing ages may vary, but the results of this study indicate that age has no significant correlation with ability to be socialized or resocialized into a professional role.

Research Question 3: Is there a relationship between years employed as a RN and the level of professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs?

Only graduating students from two-plus-two baccalaureate completion programs were included in this question as they are licensed RNs and could have been employed as such. The demographic data indicated that the mean number of years employed by the two-plus-two baccalaureate completion students was 7.595 (Table 23). The standard deviation for years employed was 8.878, indicating a large variance in this area (Table 23).

The hypothesis for this research question was directional, stating: “There is a positive relationship between years employed as a RN and the level of professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs”. The literature is inconclusive on the effects of employment on professional socialization. However, many health care environments, in the current era of managed care, are seeing a need to allow and encourage decision making at the point of service. Shared governance, a form of management that uses the knowledge and expertise of each staff member in day to day operations, has become a model in many settings. “One of the desired outcomes in developing shared governance systems in nursing is the empowerment of registered professional nurses to exercise control over clinical decision making, enhancing professional autonomy, along with other aspects of professional practice” (Kelly-Schutzenhofer, 1997, p. 29). Graduating students from two-plus-two baccalaureate completion programs who were employed in organizations using a shared governance system of management, would be expected to exhibit higher professional autonomy scores on the NAS.

On the other hand, some health care organizational structures are highly bureaucratic and stifling to independent and individualized decision making. If the graduating students from two-plus-two baccalaureate completion programs were employed as nurses in centralized bureaucracies, their ability to exercise professional autonomy would be limited.

Another consideration is the age of the RN. If the graduating student continued on in her education immediately following completion of a basic associate degree program, she may have worked a minimum of two years as a RN. She may still be experiencing aspects of reality shock (Kramer, 1974) and not yet be secure enough in her own skills and knowledge to exercise the professional autonomy she would like to demonstrate.

Those that have been in employment for many years may have begun work when autonomy was not encouraged and may have continued in that mode. Role models of professionalism within clinical settings may be difficult to find and therefore, more years of employment could actually be a detriment to professional autonomy. Conversely, more time in a role means more experience. Experience breeds confidence in one's own abilities. The experienced nurse is often the one who can make an independent decision and the one who demonstrates the patient advocacy so necessary within the managed health care systems of today (Tappen et al., 2001).

The survivor effect should also be noted here. Those students graduating from the completion programs surveyed are nurses that have chosen to advance their education. They have chosen to stay in the profession of nursing, applying new knowledge to current or anticipated positions. This implies a self-selection and an attitude of professional socialization in itself and lends credence to expecting a positive relationship with years employed as a RN and score on the NAS.

The Pearson product-moment correlation r for this research question was .124, showing little, if any, positive correlation between score on the NAS and years of employment. Score on the NAS rose slightly with increase in years of employment. However, the correlation was not significant ($p = .237$).

Linear regression, computed to predict score on the NAS from years of employment, indicated a b value of 0.313 (Table 25). This may be interpreted that for every additional year of employment, an additional 0.313 more points on the NAS was noted. This is a negligible amount; in essence the results on the NAS were not affected by years of employment.

As stated above, previous research has yielded inconclusive results concerning the effect of years of employment on professional socialization. Though Whelan (1984) did not correlate years of employment with professional role orientation, 36% of the entering RN students in her sample group had four to ten or more years of nursing practice. Students graduating from this baccalaureate completion program were found to “hold a role-orientation which is less bureaucratic, more professional and more service oriented than their entering counterparts” (Whelan, 1984, p. 151). Though the positive effect of the years of work experience for these graduates cannot be stated conclusively, the years of work experience did not appear to have a negative effect on professional socialization.

The results of several studies that employed the NAS in determining levels of professional autonomy as it relates to years of RN experience reveal inconsistencies. Lemons (1988), in a study conducted to determine the relationship between years of experience as a RN and autonomy and level of education and autonomy, found a significant correlation between higher levels of education and autonomy, but no correlation between years of experience and autonomy. Conversely, Marriner et al. (1993) found a positive correlation

between years of experience and feelings of autonomy. Interestingly, their study also found that the longer a nurse worked at an institution, the less autonomous the nurse felt.

Williams and McGowan's (1995) study that used the NAS to determine attitudes toward professional autonomy in participants of a professional development program, found no correlation between years of working experience and level of autonomy. George (1997), who gave the NAS to a convenience sample of 200 staff registered nurses in a study concerning nurses' perceived autonomy in a shared governance setting, concluded that years of registered nurse experience has little or no impact on nurses' perceptions of autonomy.

The results of the present study appear to be consistent with much of the literature that indicates no correlation between years of RN experience and professional socialization. This result should encourage educators as it implies that a baccalaureate education, which has been shown to produce a professionally-oriented nurse (Corwin, 1961; Hillery, 1991; Whelan, 1984; Wilkerson, 1994), has a greater influence on the professional attitudes of the RN than does number of years of RN working experience. The theory of resocialization (Hinshaw, 1977) is supported by this result, and, as years of RN work experience did not have a significant correlation with score on the NAS, the internal validity for the main question of this study - Is there a difference in professional socialization between graduating students of two-plus-two baccalaureate completion nursing programs and graduating students of generic baccalaureate nursing programs? - is increased.

Research Question 4: Is there a difference in level of professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs between students whose basic nursing program was a diploma program and students whose basic nursing program was an associate program?

An independent *t*-test comparing mean scores on the NAS of female graduating students from two-plus-two baccalaureate completion programs whose basic program was a diploma program with mean score on the NAS of female graduating students from two-plus-two baccalaureate completion programs whose basic program was an associate degree program indicated no significant difference between group means on the NAS ($t = -.201$, $df = 89$, $p = .841$) (Table 22) . Therefore, the null hypothesis was not rejected and the research hypothesis that there is a difference in level of professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs between students whose basic nursing program was a diploma program and students whose basic nursing program was an associate program could not be supported.

This research hypothesis was nondirectional. It was not hypothesized that graduating students whose basic program was an associate degree program would show more professionalism than graduating students whose basic program was a diploma program, or vice versa.

As the number of diploma programs is decreasing across the United States (National League for Nursing, 2000), it was more likely that there would be more students from associate degree programs than there were students from diploma programs. The descriptive statistics supported this as the number of students from diploma programs was 15 and the number of students from associate programs was 76 (Table 26). The likelihood of having more students whose basic program was an associate program than having students whose basic program was a diploma program was also due to the fact that many students complete an associate degree at an institution and go directly into the baccalaureate completion program at that institution. The two-plus-two programs chosen for this study were those that

had a basic associate degree program and an accompanying baccalaureate completion program. These programs also admit students with a diploma degree and provide various methods of articulation into the baccalaureate completion program.

The mean score on the NAS was slightly higher for students whose basic program was an associate degree (192.684) than for students whose basic program was a diploma program (191.400) (Table 26). There was more variability within the associate graduates' NAS score as evidenced by a standard deviation of 22.982 as opposed to 20.287 for those whose basic program was a diploma program (Table 26).

Graduating students whose basic program was a diploma program were more likely to be older than graduating students whose basic program was an associate degree program. Age, however, as shown by research question two, did not have a significant effect on the NAS score of the study participants.

As diploma programs have historically been hospital-based programs in which college credits are not given for nursing courses and associate degree programs provide college credits usually within a community or junior college setting (National League for Nursing, 2000), it might be assumed that associate degree nurses would be more professional. Both types of programs, however, focus on preparation of the technical nurse who is able to function at the bedside in acute, intermediate, and long-term care settings.

The literature did not focus on the differences in professional socialization for baccalaureate completion students whose basic program was a diploma program as opposed to baccalaureate completion students whose basic program was an associate degree program. Earlier studies (Corwin, 1961; Hillery, 1991; Lawler & Rose, 1987) have shown a significant difference in professional role orientation between graduates of both diploma programs and

graduates of associate degree programs and graduates of baccalaureate programs. The type of basic program a baccalaureate completion student comes from is evidently not an issue as graduates of both types of programs enter a resocialization process (Hinshaw, 1977) focused on development of a professional nurse.

The fact that the number of diploma programs continues to decline (National League for Nursing, 2000) also does not make this question a driving issue. The majority of registered nurses enter the profession through associate degree programs (National League for Nursing, 1997). Innovative and flexible programs are being developed to address the needs of these returning students (McPeck, 2001b) and the possibility of successful resocialization of this group into a professional role orientation has been shown by the results of research question one.

Research Question 5: Is there a relationship between area of major nursing experience and the level of professional socialization of graduating students of two-plus-two baccalaureate completion nursing programs?

The hypothesis was nondirectional; the literature is inconclusive concerning the effect of area of major nursing experience on level of professional socialization. Socialization theory highlights the influence of peers and clinical role models in the processes of socialization and resocialization (Hinshaw, 1977). The ability of organizational structure, in particular decentralized democracies versus centralized bureaucracies, to empower nurses for independent clinical decision-making is identified in nursing leadership/management texts (Tappen et al., 2001). Shared governance, a management system that makes use of the professional decision making skills of the nurse, has been shown to encourage professional autonomy (Kelly-Schutzenhofer, 1997).

Hospitals, by nature of their function, are often centralized bureaucratic organizations (Tappen et al., 2001). Areas of nursing outside of hospitals are frequently more decentralized, allowing nurses to use independent decision-making and self-management (e.g., community health, school nursing).

The research literature is inconclusive in defining the effects of area of nursing experience on professional socialization. Hillery (1991) found higher professional role scores in nurses who practiced in non-hospital settings. Alexander (1988) found that public health nurses perceived themselves as more autonomous than hospital-employed nurses; Martin et al. (1991) found that a high level of professional autonomy was associated with higher positions within a large medical center. Marriner et al., (1993), although finding no statistically significant relationships between autonomy and any demographic or employment variable, found a trend that the longer a nurse worked at an institution, the less autonomous the nurse felt. Schutzenhofer and Musser (1994) found statistically significant relationships between autonomy and clinical setting and between autonomy and clinical specialty.

Almost 69% (68.932) of those who answered the question of area of major nursing experience, gave hospital as their major area. The remaining sample subjects were spread across the other six categories (Table 9). The small number of graduating students in each category did not lend itself to an ANOVA as had been planned. When all those whose area of major nursing experience was outside the hospital were included together as a group under "not hospital", an independent t test to determine if there was a difference between those whose area of major nursing experience was "hospital" and those whose area of major nursing was "not hospital," was completed.

Though the graduating two-plus-two students whose area of major nursing experience was “not hospital,” showed a higher mean score than those whose area of major nursing experience was “hospital,” the difference between the mean scores was not statistically significant. No relationship was found between score on the NAS and area of major nursing experience.

This result adds support to the resocialization theory as presented in the literature review (Hinshaw, 1977). In the present study, students who had received their basic RN education from programs preparing technically oriented nurses and were now about to graduate from baccalaureate completion programs, showed no statistically significant difference on NAS scores from those students graduating from generic baccalaureate programs, programs whose hallmark is the production of the professional nurse. The effect of the baccalaureate completion educational program seemed to be a stronger influence on these graduating students than the individual work environments from which they came. Though the RN student who has been practicing nursing has experienced a socialization process within her work setting that may have resulted in a variation or conflict of values, norms, and standards from those expected from baccalaureate graduates (Harrington, 1996), the professional socialization experienced during the baccalaureate completion educational program appears to have been stronger.

Conclusions

The results of this study directly impact the outcomes of nursing education. The hallmark of a baccalaureate education in nursing is the development of a professional nurse, who is able to function autonomously as well as interdependently in the interest of clients.

Two types of baccalaureate programs were the focus of the study, generic baccalaureate nursing programs and two-plus-two baccalaureate completion nursing programs. No difference was found between the level of professional socialization of the products of these two types of programs.

The current nursing shortage and the aging of the United States population are factors increasing the need for nurses (McPeck, 2001a), particularly baccalaureate level nurses who are prepared to act as equal players on the health care team (American Association of Colleges of Nursing, 2001). Though the ANA continues its mandate for the baccalaureate degree to be the basic education for entry into nursing practice, multiple-entry points will continue to be a reality in the nursing profession for the foreseeable future. However, many of those graduating from diploma and associate programs will return to the education arena immediately or within a few years to complete a baccalaureate degree (American Association of Colleges of Nursing).

This study has demonstrated that these returning students can be resocialized from a technical role orientation to a professional role orientation. The mean score for participants from both generic and baccalaureate completion programs fell within the range for higher level of professional autonomy, indicating that the professional socialization process of the educational experience had been successful.

This study showed no statistically significant relationship between age and the level of professional socialization of graduating students when students from both generic and two-plus-two completion baccalaureate programs were combined and when they were examined separately. Students who enter and complete baccalaureate education immediately

following high school showed no greater professional socialization than those students returning to complete their baccalaureate education at a later time in their lives.

Some of the baccalaureate completion students were age 22 at the time of graduation from the two-plus-two programs because they had continued into a completion program immediately following completion of an associate degree; others were older (the mean age of the two-plus-two graduating students was seven years more than the mean age of the generic graduating students) (Tables 14 and 16). The range of age for both programs combined was 35 years, with a standard deviation of 8.452, indicating a great degree of variability in age. And yet, no significant difference in NAS score was found related to age. The ANCOVA completed to analyze the three variables of age, program, and NAS score, with the NAS score as the dependent variable, suggested only approaching significance in prediction of NAS score from age.

One might conclude that people of all ages can learn and change. Though the process of resocialization and change from an earlier mindset is difficult, it is possible. Students are neither hindered nor helped by their age in the professional socialization process.

The number of years of employment for graduating two-plus-two baccalaureate completion students did not significantly relate to their level of professional socialization. Though a concern may be, that over time, a strongly bureaucratic environment might stifle the growth and professional development of an individual, even one who has returned to school to complete a baccalaureate degree, this did not prove to be true. The majority of graduating two-plus-two baccalaureate completion students who worked, did work in a hospital setting which is often bureaucratic. And yet, overall this group of students demonstrated a high rate of professional socialization.

The results of this study also found that there was no statistically significant difference in professional socialization between those graduating two-plus-two baccalaureate completion students whose basic program was a diploma program and those graduating two-plus-two baccalaureate completion students whose basic program was an associate degree program. Though the mean score for those from an associate degree program was 1.2842 points higher than the mean score of those from a diploma program (Table 28), this difference in mean scores was not statistically significant.

Finally, this study concluded that there was no statistically significant difference in level of professional socialization between those whose major nursing experience was within the hospital and those whose major experience was outside the hospital. One might think that those employed mainly within the hospital environment would demonstrate a professional socialization less than those in non-hospital settings that are innately more decentralized and that encourage and require autonomous decision-making of the nurse. This did not prove to be true.

Limitations

There is a threat to the external validity of the study due to several of its characteristics (McMillan & Schumacher, 1997). Application of the research results is limited to those graduating students from similar programs in the study sample. Generic programs that do not have a completion program within them and two-plus-two completion programs associated with associate degree programs were the types of programs used in this study. Conclusions should not be applied to programs different than these.

In addition, the demographic characteristics of the sample were not controlled. Though gender was controlled, and age was not found to be statistically significant in relation to NAS score, no attempt was made to determine socioeconomic status, race, ethnicity, or family history of subjects. These characteristics could impact the outcome of professional autonomy scores.

The scope of the study may also be a threat to external validity. The study was limited to programs as operationally defined above in a 15-state region. A nation-wide study with random sampling is recommended to provide stronger external validity to the study. Though the researcher began with use of random sampling within a geographical area, the limitation of number of available programs necessitated the contact of all programs in that area. A nation-wide study could provide data on regional trends, trends that could markedly differ from one end of the country to the other.

Generalization of the results is also limited due to the operational definition of the dependent variable, professional socialization, defined here by score on the NAS as a measure of professional autonomy. Autonomy has been identified as a significant indicator of professionalism, however, all characteristics of professionalism are not addressed by the research tool.

There are some threats to the internal validity of the study as well (McMillan & Schumacher, 1997). Though the short data collection period of the study (late March to early June of 2001) controlled the effect of history to a degree, the researcher could not be aware of events occurring at the programs of nursing that may have affected the results. Indeed, the less than 100% return rate from some of the programs was attributed to external events occurring at those locations, such as music, athletic, and end-of-year events.

In addition, though subjects were asked to respond as they would act in the proposed situations, subject effects may have occurred in the collection of the data. By merely being a part of a study, respondents may have altered what their true response would be in such situations. The researcher was not present during completion of the questionnaires, so experimenter effects should not be an issue. However, having the questionnaire administered by their professor or program chair, might have caused respondents to answer differently than they otherwise would have. The fact that individual questionnaires were sealed in envelopes prior to collection by the administrators of the questionnaire lends some control to this issue.

Finally, the self-selection effect may be seen as a limitation to the study. Students who choose to return to complete a baccalaureate degree have already demonstrated initiative to advance their education by being enrolled in a completion program. Therefore, it might be said that completion students evidence a level of professionalism even before they experience the resocialization that the baccalaureate completion program provides. The influence of peers, managers, and mentors, who encourage the student's return to complete a baccalaureate degree, will also be a factor in the resocialization process. These effects must be considered in the analysis of results of the study.

Recommendations

Though the movement toward the baccalaureate degree as entry into practice is a goal that will move nursing closer to recognition by other disciplines as a true profession, there is currently a need to provide continuing education for the many who do not have a baccalaureate degree. The creation and development of baccalaureate completion programs

should be encouraged so that nurses with a diploma or an associate degree will have an avenue for furthering their education.

Curricula should continue to focus on a professional role orientation for the baccalaureate nurse, and faculty should be purposeful in role modeling and teaching aspects of the professional role. Curricular strands in baccalaureate education should include professionalism, and teaching methodologies and learning experiences should be chosen with this outcome in mind. Programs that prepare nursing faculty should focus on the stages of the socialization process as it relates to professional development and include methods of professional development as a part of learned teaching strategies.

More research is recommended in the area of professional socialization. As the subjects of this study were not measured upon entry into their respective programs, information related to change in professional orientation over the course of the program is not available. Comparison of change over a generic baccalaureate program with change over a baccalaureate completion program would provide valuable information. Though previous studies have shown greater professional socialization in baccalaureate students than in associate or diploma graduates, having longitudinal information from the starting and end points of a cohort of students would be valuable in understanding the acquisition of professional values and standards. Scores on the NAS as a pretest would be a valuable addition.

Age should not be a matter of concern in admission standards for both generic and completion programs. Recruitment by educators from baccalaureate completion programs should be offered equally to all ages. Neither should years of work experience nor area of major nursing experience be a consideration in entrance into a two-plus-two baccalaureate

completion program. Recruitment officers from completion programs should visit all employment sites, not only those associated with more autonomous practice.

Although the articulation plan for diploma students into a two-plus-two program may be different from the articulation plan for associate degree students, the students should not be discouraged or disallowed to attend completion programs. The acquired professional role orientation can be applied to the rich clinical experience demonstrated by graduates of diploma programs.

Gender was controlled in this study, and age was not found to be statistically significant in relation to NAS score. It is recommended that this study be repeated with the inclusion of other demographic characteristics such as race, socioeconomic status, and ethnicity. Knowledge of the effects of race and ethnicity on the professional socialization process is particularly imperative as both the clientele and workforce in health care become more diverse. The nursing experience of family members could also be a significant factor in level of professional socialization, and could be included in a demographic questionnaire.

Although major area of nursing experience was asked on the demographic questionnaire, nursing position was not. In continued review of the literature, it was noted that nursing position could significantly impact perception of professional autonomy with those in administrative positions having greater perception of power and authority, aspects of professional autonomy. Actual workplace organizational structure and its relationship to professional socialization could also be assessed. The effects on professional autonomy of bureaucratic organizations versus decentralized organizations have been noted previously in this discussion.

With the advent and subsequent explosion of distance education in the educational arena, nursing education has entered a new era. Many baccalaureate completion programs have developed web-based courses for their entire curricula, others have a majority of the coursework available on-line. Without the physical presence and impact of the faculty role model in real time, face-to-face interaction, the resocialization from technical role to professional role for the baccalaureate completion students may be limited. Lia-Hoagberg et al. (1999) note that a major concern in all forms of distance education, including interactive television, is the lack of faculty-student interaction and the subsequent possibility of compromised professional socialization. Recent studies have shown that professional socialization is possible through distance education (Cragg et al., 2001; Lia-Hoagberg et al., 1999; Nesler et al., 2001). “Students who opt for distance nursing programs graduate with socialization outcomes that are at least comparable to those of students who attend traditional programs” (Nesler et al., 2001, p. 293). Continued research in the effect on professional socialization of this educational vehicle is necessary as it continues to evolve.

In addition to distance education, the profession is witnessing innovations in nursing curricula that provide “fast track” and “accelerated” programs to both generic and baccalaureate completion students, including, but not limited to, those with degrees in other disciplines (McPeck, 2001b). Growth in the development of such programs is an effort to supply nurses for the current nursing shortage and will be a test to the professional socialization process. Future research concerning the professional socialization of products of these programs is imperative.

Implications

Implications resulting from this study are multifaceted. The positive outcome of a high level of professional socialization as measured by the NAS (Schutzenhofer, 1987) for graduating students from both generic baccalaureate and two-plus-two baccalaureate completion nursing programs, demonstrates to accrediting bodies that these programs are producing the professional product they claim to be producing. This should continue to be a focus of baccalaureate nursing education.

The evidence of professional socialization impacts retention in the profession, a crucial element in the current nursing shortage. It has been noted that inappropriate socialization results in attrition from the profession (Kramer, 1974). Graduating students from both generic and two-plus-two baccalaureate completion programs in this study evidenced a mean score on the NAS that indicated a high level of professional socialization. This level of socialization will promote their satisfaction with the profession of nursing and will increase their desire to remain in their chosen profession.

An implication to faculty provided by the study is that curricular models currently in place to promote professional development appear to be effective. The socialization and resocialization processes are effective in producing a product of choice. Faculty should continue to be purposeful in modeling professional behavior and including didactic content on professionalism in curricular plans.

An additional implication is the inherent worth of baccalaureate completion education. Those nurses that continue to enter practice with less than a baccalaureate degree can acquire a professional socialization with return at a later time to complete their education.

In this present nursing shortage, health care administrators, nursing education administrators, and faculty are looking for faster and varied ways to produce more nurses. For the foreseeable future, nurses will continue to be educated in diploma and particularly, associate degree programs, as well as generic baccalaureate programs. Those nurses that acquire a diploma or associate degree will be able to return at a later time and develop a professional orientation not unlike that of a generic baccalaureate graduate. Though nursing leaders continue to call for the baccalaureate degree to be entry level, educational diversity will continue for the immediate future. The implication of the possibility of resocialization from this study brings hope for the continued advancement of the profession of nursing. Professional nursing organizations such as the American Nurses Association and the American Association of Colleges of Nursing, though moving the profession towards the baccalaureate degree as entry-into-practice, must see the value of baccalaureate completion education for the thousands of nurses that will continue to pursue it each year.

The implications for career and guidance counselors are that both generic baccalaureate programs and basic programs such as associate degree and diploma programs should be considered in the recommendations and information given to junior high and high school students who are contemplating a career. This will enable all aspects of the type of program (i.e., length of time, cost, etc.) to be considered and the best route for the individual to be chosen. The possibility of returning to complete a baccalaureate degree for those who choose a diploma or associate degree should be emphasized.

The results of the study imply that age should not be a limiting factor in admission into baccalaureate completion programs. The applicant's employment setting within the health care arena or years of work experience, also, should not be limiting factors in

acceptance of the student for completion education. To expand the number of baccalaureate prepared nurses in the workforce, recruitment efforts for RN students should be broad and far reaching with the realization that nurses from all areas of employment indicated a high level of professional socialization upon graduation from baccalaureate completion programs.

The continued growth in numbers of baccalaureate prepared nurses, whether generic or baccalaureate completion graduates, implies an overall growth in professionalism within nursing. An implication to third-party payers is that nurses provide a unique and valued service, worthy of recognition and appropriate compensation. Graduates of not only generic baccalaureate nursing programs, but also graduates of baccalaureate completion nursing programs will continue to support these as recognition of their profession.

Members of the public are often confused by the varied and multiple avenues of nursing education by which students become nurses, and are unaware of the differentiation in preparation and ability in the products of these programs. The public should be informed that graduates of both generic baccalaureate and baccalaureate completion nursing programs can participate as full partners in health care, providing comprehensive and knowledgeable care through accountable, authoritative decision making. This will add to the growing respect and trust in the leadership and advocacy of baccalaureate graduates from both generic baccalaureate and baccalaureate completion nursing programs.

APPENDIX A: HUMAN SUBJECTS APPROVAL

Iowa State University Human Subjects Review Form

EXPEDITED <input checked="" type="checkbox"/>	OFFICE USE ONLY FULL COMMITTEE	ID# 01-463
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PI Name Connie Lynn Clark Title Graduate Student

Checklist for Attachments

The following are attached (please check):

13. Letter or written statement to subjects indicating clearly:

- a) the purpose of the research
- b) the use of any identifier codes (names, #'s), how they will be used, and when they will be removed (see item 18)
- c) an estimate of time needed for participation in the research
- d) if applicable, the location of the research activity
- e) how you will ensure confidentiality
- f) in a longitudinal study, when and how you will contact subjects later
- g) that participation is voluntary; nonparticipation will not affect evaluations of the subject

14. A copy of the consent form (if applicable)

15. Letter of approval for research from cooperating organizations or institutions (if applicable)

16. Data-gathering instruments

17. Anticipated dates for contact with subjects:

First contact	Last contact
<u>April 2001</u>	<u>June 2001</u>
Month/Day/Year	Month/Day/Year

18. If applicable: anticipated date that identifiers will be removed from completed survey instruments and/or audio or visual tapes will be erased:

Month/Day/Year

19. Signature of Departmental Executive Officer _____ Date _____ Department or Administrative Unit _____

James L. Johnson 3/27/01 ELPS

20. Initial action by the Institutional Review Board (IRB):

Project approved _____ Pending Further Review _____ Project not approved _____

No action required _____

21. Follow-up action by the IRB:

Project approved Project not approved _____ Project not resubmitted _____

Patricia M. Keith
Name of IRB Chairperson

3-29-01
Approval Date

DM Keith
Signature of IRB Chairperson

APPENDIX B: NURSING ACTIVITY SCALE

Code # _____

The following items describe situations in which a nurse must take some action that requires the exercise of some degree of professional nursing judgment. You are asked to respond to each item according to how likely you would be to carry out the action in each item. Please respond to each item even if you have not encountered such a situation before. Use the following scale in responding to the items.

- 1 = Very unlikely of me to act in this manner
 2 = Unlikely of me to act in this manner
 3 = Likely of me to act in this manner
 4 = Very likely of me to act in this manner

Circle the number after each situation that most accurately describes how you would act as a nurse. There are no right or wrong answers, just different ways of responding to a situation. Please do not add qualifying statements to the items to justify your answer. Answer the items as stated.

1.	Develop a career plan for myself and regularly review it for achievement of steps in the plan.	1	2	3	4	
2.	Consider entry into independent nursing practice with the appropriate education and experience.	1	2	3	4	
3.	Voice opposition to any medical order to discharge a patient without an opportunity for nursing follow-up if the teaching plan for the patient is not completed.	1	2	3	4	
4.	Initiate nursing research to investigate a recurrent clinical nursing problem.	1	2	3	4	
5.	Refuse to administer a contraindicated drug despite the physician's insistence that the drug be given.	1	2	3	4	
6.	Consult with the patient's physician if the patient is not responding to the treatment plan.	1	2	3	4	
7.	Depend upon the profession of nursing and not on physicians for the ultimate determination of what I do as a nurse.	1	2	3	4	
8.	Evaluate the hospitalized patient's need for home nursing care and determine the need for such a referral without waiting for a physician's order.	1	2	3	4	
9.	Propose changes in my job description to my supervisor in order to develop the position further.	1	2	3	4	
10.	Answer the patient's questions about a new medication or change in medication before administering drug, whether or not this has been done previously by the physician.	1	2	3	4	
11.	Institute nursing rounds on the patient unit.	1	2	3	4	
12.	Withhold a medicine that is contraindicated for a patient despite pressure from nursing peers to carry out the medical order.	1	2	3	4	
13.	Consult with other nurses when a patient is not responding to the plan of nursing care.	1	2	3	4	
14.	Routinely implement innovations in patient care identified in the current nursing literature.	1	2	3	4	
15.	Initiate a request for a psychiatric consult with the patient's physician if my assessment of the patient indicated such a need.	1	2	3	4	

Code # _____

16.	Promote innovative nursing activities, like follow-up phone calls to recently discharged patients, to evaluate the effectiveness of patient teaching.	1	2	3	4	
17.	Assess the patient's level of understanding concerning a diagnostic procedure and its risks before consulting with the patient's physician if a patient has questions about the risks of the procedure.	1	2	3	4	
18.	Assume complete responsibility for my own professional actions without expecting to be protected by the physician or hospital in the case of a malpractice suit.	1	2	3	4	
19.	Develop effective communication channels in my employing institution for nurses' input regarding the policies that affect patient care.	1	2	3	4	
20.	Develop and refine assessment tools appropriate to my area of clinical practice.	1	2	3	4	
21.	Record in the chart the data from my physical assessment of the patient to use in planning and implementing nursing care.	1	2	3	4	
22.	Initiate discharge planning concerning the nursing care of the patient, even in the absence of discharge planning by the physician.	1	2	3	4	
23.	Report a physician who harasses me to the appropriate manager or administrator.	1	2	3	4	
24.	Offer input to administrators concerning the design of a new nursing unit or the purchase of new equipment to be used by nurses.	1	2	3	4	
25.	Complete a psychosocial assessment on each patient and use this data in formulating nursing care.	1	2	3	4	
26.	Adapt assessment tools from other disciplines to use in my clinical practice.	1	2	3	4	
27.	Carry out patient care procedures utilizing my professional judgment to meet the individual patient's needs even when this means deviating from the "cookbook" description in the hospital procedure manual.	1	2	3	4	
28.	Decline a temporary reassignment to a specialty unit when I lack the education and experience to carry out the demands of the assignment.	1	2	3	4	
29.	Initiate referrals to social service and dietary at the patient's request even in the absence of a physician's order.	1	2	3	4	
30.	Write nursing orders to increase the frequency of vital signs of a patient whose condition is deteriorating even in the absence of a medical order to increase the frequency of such monitoring.	1	2	3	4	

**APPENDIX C: PERMISSION LETTER FROM THE AUTHOR TO USE THE
RESEARCH QUESTIONNAIRE**

**Karen Kelly, EdD, RN, CNAA
305 Schwarz Meadow Court, O'Fallon, IL 62269-6707 USA
phone: 618-624-3468; fax: 618-624-2116
e-mail-kkellys@aol.com**

Dear Colleague:

This packet includes the Nursing Activity Scale, a measure of professional nursing autonomy, and additional NAS information, including the scoring instructions. Information about the original study is reported in both the book chapter and the *Journal of Professional Nursing* article cited in the information packet. You may make as many copies of the scale as you wish. If you use the scale in your study, you must agree to send me a summary of the outcomes and you also will inform me of any publications or papers that result from such studies. The instrument's title was changed several years ago, from the Nursing Autonomy Scale, in an effort to reduce respondent bias.

I have included a list of my publications on autonomy. You will also find a partial list of those who have reported completed studies using the NAS.

Please don't hesitate to contact me if you have any further questions once you've looked over the NAS. I look forward to hearing from you in the future. Please contact me by email if this is convenient for you.

Sincerely,

**Karen Kelly, EdD, RN, CNAA
(formerly Karen Kelly Schutzenhofer)
e-mail: kkellys@aol.com**

enclosures

APPENDIX D: DEMOGRAPHIC DATA QUESTIONNAIRE

Directions: Please circle the appropriate choice for each item below or complete the blank as requested. Thank you.

1. Gender:
 - a. Female
 - b. Male
2. Age: _____
3. Student classification:
 - a. BSN
 - b. RN-BSN

IF YOU CIRCLED "B" IN NUMBER 3, PLEASE COMPLETE THE NEXT FOUR QUESTIONS:

4. Basic nursing program:
 - a. Diploma program
 - b. Associate degree program
5. Have you been employed as a RN?
 - a. Yes
 - b. No
6. Years of RN work experience: _____
7. Major nursing experience (select c/ne):
 - a. Hospital
 - b. Community Health (public health, visiting nurse, home health agency, etc.)
 - c. Long Term Care
 - d. School Nursing
 - e. Occupational Health / Industrial Nursing
 - f. Physician's Office / Clinic
 - g. Other (specify) _____

**APPENDIX E: LETTER VERBALIZED TO DEANS REQUESTING
PARTICIPATION IN THE STUDY**

Dear Dean (or Chair of Nursing Division):

I am a doctoral student in the Higher Education department at Iowa State University and an associate professor of nursing at Mercy College of Health Sciences, in Des Moines, Iowa, a two-plus-two associate and baccalaureate completion nursing program. I am writing to ask for your assistance with my doctoral research.

The purpose of my doctoral dissertation is to determine whether graduating students of two-plus-two baccalaureate completion nursing programs have the same professional socialization as graduating students of generic baccalaureate nursing programs.

I am calling to ask if you would allow students in their final semester of education at your institution to complete my research questionnaire. The questionnaire was created by Dr. Karen Kelley, has been widely used in nursing research related to professional development in nurses and nursing students, and takes approximately five to 10 minutes to complete.

Further, I am asking if you or your designate would be willing to administer the tool using written instructions that I will mail with the tool. Because my target population is graduating students, I wish to survey the 2001 spring graduates. Participation by individual students is voluntary and all participants and programs will remain anonymous.

I will be glad to send you a summary of the results of the study if you desire. Thank you for your time and effort in contributing to this research study.

Sincerely,

Connie Clark, M.S.N., R.N.

APPENDIX F: LETTER TO DEANS WITH ACCOMPANYING QUESTIONNAIRES

Dear Dean (or Division Chair) of the Nursing Program:

Thank you so much for your willingness to assist me with my doctoral research. As I stated per our telephone visit, I am a doctoral student in the Higher Education department at Iowa State University and an associate professor of nursing at Mercy College of Health Sciences, in Des Moines, Iowa, a two-plus-two associate and baccalaureate completion nursing program.

The purpose of my doctoral dissertation is to determine whether graduating students of two-plus-two baccalaureate completion nursing programs have the same professional socialization as graduating students of generic baccalaureate nursing programs.

Understanding the professional socialization process that occurs during the educational process for both BSN and RN-BSN students has relevance for theory and practice. Results may impact both curriculum frameworks and instructional design.

As requested per telephone, please administer the enclosed questionnaire to a group of students in their final semester of education at your institution. The questionnaire was pilot tested with baccalaureate nursing students and was found to take approximately five to 10 minutes to complete.

Read the enclosed written instructions to the group of students prior to distributing the questionnaire. Please do not add any further instructions. To maintain anonymity, students are directed to place their completed questionnaire in an unmarked envelope upon completion. An addressed envelope for return mailing of all questionnaires is included.

I will be glad to send you a summary of the results of the study if you so desire. Please indicate your desire below and include this letter with the return mailing. Again, thank you for your time and effort in contributing to this research study.

Sincerely,

Connie Clark, M.S.N., R.N.

I would like to receive a summary of the results of this study.

_____ Yes; Address: _____

_____ No

APPENDIX G: COVER LETTER ACCOMPANYING THE QUESTIONNAIRES

Dear Nursing Student:

I am conducting a study to examine attitudes among graduating nursing students related to the nurse's role. The study is being done as part of the requirements for my doctoral degree at Iowa State University, Ames, Iowa. Information from the study may guide curriculum development and instructional design in the area of professional development at both generic baccalaureate and baccalaureate completion nursing programs.

Would you please assist me by completing the attached anonymous questionnaire which takes about 10 minutes? Please do not put your name on the questionnaire or identify yourself in any way. Your responses will be analyzed within a group of responses, no attempt will be made to identify individual respondents.

Completion of the survey will imply your informed consent. Please put your completed survey in the provided blank envelope and seal the envelope before returning it to the survey administrator to ensure your anonymity. Thank you very much for your assistance with this study! Your opinions are very important.

Sincerely,

**Connie Clark, M.S.N., R.N.
PhD student, Iowa State University
Ames, Iowa**

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