To the Graduate Council:

I am submitting herewith a dissertation written by Marjorie Sczekan entitled "Occupational Socialization: A Case of Nursing Students." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Sociology.

D. Michael Betz, Major Professor

We have read this dissertation
and recommend its acceptance:

Accepted for the Council:

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# OCCUPATIONAL SOCIALIZATION: A CASE OF NURSING STUDENTS

A Dissertation

Presented for the

Doctor of Philosophy

Degree

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Marjorie Sczekan

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ABSTRACT

This study was concerned with identifying changes among students during stages of progressive socialization to an occupational role. It was hypothesized that the educational program served as a major socializing influence, thus with progression in the program it was expected that students would take on attitudes and self-conceptions characteristic of occupational members.

Data were obtained through a cross-sectional survey of 539 nursing students enrolled in a university based baccalaureate program during the Spring of 1975. Information was secured by means of a self-administered questionnaire requesting demographic, social and attitudinal information.

The following nine variables were defined and measured through a ranking and weighting scheme: time investment, academic investment, financial investment, academic competence, sense of clinical competence, social support, service orientation, stability of occupational choice and endorsement of the Nursing Code, a two-item variable. Relationships were measured by means of Goodman and Kruskall's Gamma and Kendall's tau c; the .05 level was used to determine statistical significance of obtained relationships.

A number of statistically significant associations between variables were obtained in both positive and negative directions. Particularly informative were the relationships where great differences existed between male and female nursing students. More noteworthy findings are listed below.

For females, significant relationships were found between subjects':

1. A sense of clinical competence and progression in the program
   progression in the program
   academic competence
2. Service orientation and
   length of time holding a decision to be a nurse
   perception of social support for the career choice
3. Stability of choice for the nursing major and
   progression in the program
   service orientation
   sense of clinical competence
4. Acceptance of responsibility for clinical judgments and practice and
   academic competence
   sense of clinical competence
5. Approval of continuing education in nursing (after graduation and
   progression in the program
   service orientation

For males, significant relationships were found between subjects':

1. Sense of clinical competence and
   service orientation—a negative association
2. Social support and
   progression in the program—a negative association

3. Stability of occupational choice and

   length of time holding the career decision—a negative association

   social support

4. Approval of continuing education in nursing (after graduation) and

   sense of clinical competence

This project reveals the complexity and over-lapping nature of relationships between variables and the difficulty of measuring abstract attitudinal concepts.

A specific objective, accomplished in part was development of an instrument to measure internalization of occupational values.

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# CHAPTER I

# OCCUPATIONAL PREPARATION: A SOCIALIZATION PROCESS

## Introduction

Socialization has been defined as "the process by which people selectively acquire the values and attitudes, the interests, skills and knowledge—in short, the culture—current in the groups to which they are, or seek to become a member. It refers to the learning of social roles" (Merton et al. 1957:287). The socialization process has become a central and continuing area of study for sociologists. Historically, attention was directed primarily to the learning, adaptations and changes made by children. According to Brim and Wheeler (1966:3) "A half century of important research on socialization of the child has described the development of children's personalities and social behavior. There has been much less work, almost none in comparison, on socialization at later stages of the life cycle." Research in the specialized area of occupation socialization is a relatively recent development. As stated by Pavalko (1971:82), "During the past two decades, a noticeable shift in emphasis has occurred in sociological work in the area of socialization to a focus on adult socialization. Here the emphasis is on the learning of relatively specific adult roles, often within an organizational context."

The focus of the present study is the process of adult socialization into a specific occupational role, that of nursing. Marked changes now

characterize contemporary nursing. The first of these is the change in numbers of recruits to the field. According to the American Nurses Association, there were approximately 402,000 practicing nurses in the year 1950. An estimate made in the early 70's predicted there would be 787,000 actively practicing registered nurses by 1975; a number expected to increase to 867,000 by 1980 (HEW publication number-NIH 72-134, November 1971). Continued acceleration is expected in this growth pattern for as Krause (1971:125) states, "the health occupations are one of the largest and fastest growing groups in the entire society and as such must receive extended attention." A second and more obvious change is the increase in numbers of male recruits to what has traditionally been an exclusively female occupation. In 1961, the percent of males enrolled in nursing programs was less than 1; by 1975 males accounted for 8 percent of total enrollees (Rudov et al. 1976:11, Johnson 1976:572). Finally, there is a distinct change in the functions and responsibilities and, more important, in the value system endorsed by nurses (Davis & Olesen, 1964, Judge, 1975). The dynamic nature of this occupational field makes the study of socialization in nursing particularly relevant.

> In sum, by virtue of the many paradoxes it presents, nursing offers the social researcher a fertile ground to test, sharpen, and enrich the growing body of propositions and insights that have accumulated in recent years in the area of inquiry broadly designated as the sociology of work. (Davis, 1966:XI)

## Statement of the Problem

The present research was designed to examine the process by which students acquire the knowledge, skills, attitudes, values and culture of professional nursing, that is, are socialized to an occupational role. It was believed that a profile of changes in students would be shown through examining relationships between the research variables at various stages in the education program.

## Objectives

The major objectives of the study were:

1. To explore and substantiate the developmental nature of the process of occupational socialization.
2. To identify progressive changes in value systems and conceptions of occupational competence characterizing students at stated intervals during their educational program.
3. To identify those factors which were associated with, or that contributed to the demonstrated changes.
4. To contribute information regarding occupational socialization processes.

# CHAPTER II

## LITERATURE REVIEW

Socialization during childhood provides the individual with general knowledge, skills and motivations for social behavior considered acceptable and appropriate in a given society. To insure at least some measure of conformity to this standard, the process is accomplished in a manner encouraging internalization of the values and attitudes underlying and endorsing these norms. Since childhood socialization takes place during the primary phases of the individual's life, it occurs within a relatively closed social environment, through frequent interaction with significant others (Brim & Wheeler, 1966:8). Socialization in later life is somewhat different because of previous socialization. The adaptation to, and performance of, new roles such as that of the handicapped person (following a crippling illness), or the preparation for an occupational career are accomplished in a less individually specific environment, through interaction with a broad scope of individuals, within the framework of secondary group relationships, and often in a situation presenting conflicts with previously learned behaviors or established values. As stated by Pavalko (1971:83),

> Adult socialization must be approached with a recognition that the process frequently involves, in addition to the learning of new roles and norms, the unlearning [emphasis in original] or relinquishing of old norms and roles, the extension of old ones, and the possibility of holding conflicting norms and occupying conflicting roles.

Merton differentiates between two influential forces in the socialization process: anticipatory socialization and reference groups. Regarding anticipatory socialization Merton wrote:

> The function of anticipatory socialization is the acquisition of values and orientations found in statuses and groups in which one is not yet engaged but which one is likely to enter. It serves to prepare the individual for future statuses in his status sequence.
>
> For the individual who adopts the values of the group to which he aspires but does not belong, this orientation may serve the twin functions of aiding his rise into that group and of easing his adjustment after he becomes a part of it. (1968:438, 439, 319)

In this context, the desire to be a "registered nurse" motivates the individual to enroll in the appropriate educational program which is a requirement for admission to the occupational group. During the educational process, the student actively seeks to acquire the skills, knowledge, and attributes of the graduate nurse, a role which he or she seeks to adopt.

The second perspective relates to reference group theory and includes the "significant others" theme. Quoting again from Merton (1968:228):

> Reference groups are, in principle . . . any of the groups of which one is a member, and these are comparatively few, as well as groups of which one is not a member, and these [groups] can become points of reference for shaping one's attitudes, evaluation, and behavior.

Utilizing this framework, it is expected that the student will view and identify with occupational group members particularly in the area of visible behaviors and expected attitudes and values. It is believed that "nursing instructors" will serve as effective and compelling models in that they are in frequent, visible contact with students in the

classroom and the clinical setting, serving as role models for subjects. An additional dimension is related to the gate keeper function the instructor holds in relation to the student. Since the student is graded for his/her performance, the instructors' evaluation may determine whether or not the individual continues in the educational program and acquires the necessary credits for graduation or, conversely, receives a failing grade and is therefore, ineligible for membership in the occupational group. Peers make up a segment of subjects' comparative reference groups. Students discuss their educational and role performance with classmates; often with a comparative and competitive perspective. Shared assignments and requirements provide a common framework for evaluation of self and others in performance terms. Woelfel and Haller discuss this process under the term "self-reflexive activity" which is defined as ". . . those elements of phenomenal reality which ego may use as a basis to judge his own relationship to the object of the attitude under study" (1971:79). It is suggested that this performance comparison act contributes significantly to the students' self image and role identification in terms of occupational identity.

Finally, patients, as recipients of students' clinical activities comprise a significant component of subjects' reference groups through reinforcement of students' developing occupational identity.

Referant others will be taken to refer to those persons who the subject takes into consideration in terms of their attitudes and evaluations of the subject, and who therefore have considerable influence on the individual's attitudes and behaviors. Two categories of persons

could be considered in this context, that is, individuals holding valued positions in the students' social framework, and patients and instructors who by virtue of their position, hold a significant place in regards to the students' career goals.

The role of the school as a socializing agency is well recognized. "Schools and universities are familiar examples of what might be called developmental (emphasis in original) socialization systems, where the formal purpose is the training, education, or more generally the further socialization of the individuals passing through (Brim and Wheeler, 1966:68)." Learning experiences in elementary and secondary schools are centered around a common core of information and skills seen necessary by the society. The act of enrolling in college implies an orientation to occupational preparation. As Rossi states:

> The undergraduate college is the entry point into the top layers of our occupational structure . . . entering freshmen come to college with a wide variety of occupational goals that fall within the broad group of upper strata occupations . . . the curriculum provides opportunities to see what different occupations are all about, and, the student's performance provides him with the conception of his aptitudes and abilities. (1965:v)

In the college situation, the learning experiences to which the student is exposed depend to a considerable degree on the academic major which the individual selects. Choice of a particular major is generally based on previous deliberation and evaluation by the student.[1]

---

[1] In a study of 4 groups of postgraduate students (Bucher et al., 1969) it was found that subjects entered the programs with definite—widely divergent role expectations, attitudes and values regarding their anticipated professional field. Furthermore, these expectations served as socializing factors contributing to and influencing the extent to which the subjects identified with their chosen occupation.

Davis' research (1965) reflects the importance of this tentative career orientation of students. In a study he found that 92 percent of the seniors surveyed stated they had established a career preference prior to, or by the time they were freshmen in college. Further analysis of the data revealed significant correlations between selected characteristics such as sex, academic ability and occupational values and the subject's selection of a particular academic field. Davis summarized by stating:

> The entering freshman, although his specific choice is unstable and his knowledge of what specific careers involve is hazy, is already oriented to the general type of occupation that is his future destination . . . . The findings . . . support the idea that the freshman brings with him a tentative career choice that has been affected by his previous environment, sex role, intellectual ability, and [assuming some constancy over the four years] occupational values. (1956: 10, 13)

Research with nursing students reflects the influence of individual values in occupational choice. In a study involving 384 freshmen nursing students the subjects were asked to list factors which had influenced them to select a nursing career. The majority of students stated they were attracted to nursing because they "liked people," they wished to provide service and, for a few, they felt a religious calling (Taylor & Richter, 1969). Similar findings were reported by Simpson (1967), Gunter (1969), and Sczekan & Betz (1973). If, as indicated above, the student enters college with a tentatively (or in some cases, clearly) defined career goal—in the case of this research, nursing—it is expected that, with progression in the program, the student will experience increased exposure to and reinforcement of the occupational choice and of the values characterizing the particular field of work.

> While the function of occupational socialization is to change persons—to instill in them skills, knowledge, attitudes, values peculiar to their future occupation and work group—each occupation may have a readily distinguishable if not entirely unique idea of what its future members ought to be moving toward and what the end product of the training process ought to look, think and feel like. (Pavalko, 1971:93)

Evidence that the service orientation is endorsed by the nursing profession is found in the organizational code. The initial statement begins with the words: "The nurse provides service with respect . . ." American Nurses Association 1976).

One of the earliest studies of occupational socialization in an educational institution was initiated in 1952, with the findings presented in the book The Student-Physician by Merton and others. In discussing medical education it states:

> Most conspicuous in the process of medical learning is, of course, the acquisition of a considerable store of knowledge and skills which to some extent occurs even among the least of these students. Beyond this, it is useful to think of the processes or role acquisition in two broad classes: direct learning through didactic teaching of one kind or another, and indirect learning in which attitudes, values, and behavior patterns are acquired as by-projects of contact with instructors and peers, with patients, and with members of the health team . . . . We have provisionally assumed that in the course of their social interaction with others in the school, of exchanging experiences and ideas with peers, and of observing and evaluating the behavior of their instructors . . . students acquire the values which will be basic to their professional way of life . . . . The ways in which these students are shaped . . . constitute a major part of the process of socialization. (1957: 41, 42)

Instructor's influence on student learning, other than the material specified in course outlines has been widely endorsed but less well documented. A study conducted by Davis and Olesen was

designed to identify and evaluate attitudinal changes among nursing students. In a report of preliminary findings they state:

> In summary, it may be said that whereas nursing faculty does exert a significant influence on the images and self-values that students come to hold in relation to nursing, such influence is far from uniform. As with all forms of social influence, the assimilation of faculty viewpoints and standards is in large part a function of the students' own values, cognitions, and prior experiences. (1964:13)

The preceding study supports the position that value orientations held prior to enrollment in the nursing program have a significant and lasting effect on subsequent attitudes and values held by students.

Preparation for a career in nursing is acquired through enrollment in, and completion of an accredited educational program—similar in many respects to the process described by Merton. Admission to nursing practice is achieved through successful writing of state licensing examinations based on nursing knowledge.

The organizing framework which structures learning experiences for the potential nurse is the formal curriculum, a relatively standardized body of material specified by state and national accrediting bodies. The curriculum identifies the academic courses which the student is required to complete—hopefully providing the potential nurse with the knowledge and skills believed essential for professional practice. In addition to formal classroom experiences, nursing students singly and in groups are scheduled for clinical practice—providing (under instructor's supervision and/or direction) direct patient care. These experiences which increase in frequency, duration, and degree of complexity contribute to the student's task and skill proficiency in the

occupational role and more significantly to occupational identification and self-labeling as a "nurse." Merton et al. (1957) observed the reinforcing (for occupational identity) effect of clinical practice on medical students. Actual performance—in a student role—of medical tasks encouraged identification as a "beginning physician."

> It is vis-a-vis patients, more than with any other status in their role set that medical students even as early as the end of their first year of training tend to see themselves as physicians.
>
> As students move through medical school, they of course tend to develop an image of themselves as doctors rather than as merely students, especially in their clinical years when they have substantial contact with patients. (Merton et al. 1957:183, 196)

Through progressive mastery of technical skills, completion of academic requirements and continued interaction in the clinical setting with peers, teachers and patients the student is involved in an on-going socialization process. In this manner, the potential nurse acquires the knowledge, skills, and behaviors of the occupational practitioner. What is less readily defined and/or evaluated is whether or not attitudes and values seen essential for practice are also acquired in the educational process. The formal statement of these more abstract characteristics seen as essential for practitioners is found in the occupational code. Grieder & Romine (1965) discuss the importance of the "code" as follows:

> One of the distinguishing characteristics of professions is their emphases on observance of a code of ethics for the governance of practitioners . . . the degree to which a code is enforced by the profession itself . . . is important in generating and retaining public confidence and status, and in fostering self-respect of the members themselves. (p. 522)

Pavalko elaborates on the function(s) of a code where he observes:

> In general, codes of ethics tend to be found in work at the professional end of the continuum . . . . These ethical codes may be written or unwritten and may cover a wide range of work relationships including practitioner-client and practitioner-public relations, relations among practitioners, and relations between the practitioner and members of other work groups . . . The function of codes of ethics is to attempt to assure clients and the public that only the highest level of performance is being rendered and will be tolerated [by the work group]. Codes of ethics also serve to reinforce the "service ideal" by emphasizing that the practitioner's primary concern is the client's welfare. (1971:25, 26)

Although each nursing education program selects the focus, sequence and manner for presenting curricular material, a common professional standard "The Code for Nurses" (revised 1976—American Nurses Association) specifies the standards of performance and ethical principles to be demonstrated in nursing practice. In the formal statement, occupational values are reflected either in explicit terms or by implication. Thus the code serves as another potentially socializing influence, documenting and reinforcing the occupational attitudes and beliefs underlying educational programs.

The following literature review will be limited to selected research concerning occupational socialization, and to the process as it occurs in the field of nursing.

In a study by Simpson (1967) it was suggested that socialization to a nursing career occurred in three successive stages. On admission to nursing school, students were seen as service/patient oriented. Early in the program, in response to learning activities and instructors' expectations, they became more task oriented. As more time was spent in

the hospital, subjects became other-oriented—taking as significant persons—doctors and staff nurses with whom they were associated in the clinical area. In the third stage, students had acquired the knowledge, skills and values of the nursing profession; they were now seen as occupation oriented, having internalized (in part) the attitudes, commitments and occupational framework of the professional organization.

## Research Framework

The framework for this research is similar to Simpson's, however, occupational socialization is examined more as a continuous and reciprocal process rather than as a three-stage sequence. In the following pages literature will be cited and hypotheses will be developed to predict the following kinds of relationships. A service orientation is hypothesized to be an initial factor which motivates many students to choose the nursing major (Gunter, 1969, Morris, 1971, Lande, 1966) thus, as suggested by Simpson (1967) subjects are expected to enter the program with a service orientation. Furthermore, the longer the time period during which the subject has planned to enroll in nursing, the more exposed he/she will be to occupational characteristics and values and predictably, the greater will be the importance (to the individual) of the service orientation. Progression in the program is accompanied by increased investment in academic credits and financial resources. As students complete portions of the educational requirements, they are expected to acquire competence in performing tasks associated with the theoretical component of the curriculum. It is predicted,

however, that the emphasis of contemporary nursing is directed toward patient-centered care thus the task/skill segment while still present, does not achieve the significance accorded it in earlier days. Students are evaluated for progress and/or continuance in the program in terms of academic performance; therefore, it is obvious they will be concerned with demonstrating at least minimally acceptable competence in course work. Individuals who are seen as significant to the student (in terms of subject's occupational choice) are also concerned with the student's progress, particularly if they are providing some or all of the financial support. These persons supporting the student's career choice could also be expected to endorse values on which the choice is based and thus act to reinforce the service orientation which is characteristic of the occupation of nursing.

Course work in the nursing major has both a theoretical and a clinical component, with advanced level courses providing more complex and independent clinical experience. As students move through the program, the frequency and extent of patient contact increases, thereby enabling subjects to identify and evaluate themselves in occupational terms. Kuhn addresses the significance of this aspect of self-identity in a study examining groups having distinctive membership characteristics. Regarding "interiorized self-definitions" demonstrated by nursing students he states:

> . . . one of the most significant findings is that the importance of the professional role increases steadily with each year in professional school . . . for example . . . while only a third of those [students] near the end of their freshman year of nurse's training identity themselves as nurses . . . more than seven in ten do so by the end of their junior year. (1960:51)

The foregoing factors are seen to be interrelated and cumulative leading to the following five outcomes:

1. Increased sense of clinical competence.
2. Increased service orientation.
3. Increased sense of support from others.
4. Stability of choice of the nursing major.
5. Internalization of the occupation code.

The process by which these outcomes are produced and the factors contributing to this development provide the framework and the research variables for this study.

## Sense of Clinical Competence

Educational programs in nursing vary from institution to institution, however, for any school to be established and admit students, it must have approval by the appropriate board of the state in which it is based. Since board approval and accreditation of the nursing program are also essential to assure students admission to the licensing examination on completion of the program and, in recognition of the rate of regional and national mobility of nurses the states have developed a common standard of expectations, or criteria which must be met by any nursing program. These criteria specify that students must have appropriate clinical experience and must demonstrate competence in practice as well as in the theoretical component of the nursing curriculum. Quoting from the Rules and Regulations of the Tennessee Board of Nursing (TCA: 63-736[c]) Revision of November 1973, it is stated:

> Nursing RN 81 Curriculum Content
> The following content areas should be common to all schools:
> (c) Nursing, with content from the major areas: . . . care of adults and children, . . . with clinical laboratory experiences planned as an integral part of the curriculum. [emphasis added] (p. 17)

and

> (c) Students must observe effective clinical practice and must have an opportunity to practice it. (p. 19)

In conjunction with the above statements, it has been documented earlier in this paper that the majority of students enrolling in nursing education programs state they wish to "help people," or wish to "work with people," thus it is expected that the clinical experience will provide satisfaction (to varying degrees) of this personal and occupational value. The subjects in Simpson's study (1956) reflected this attitude: ". . . students were eager to assume full care of patients as rapidly as possible. They wanted to understand the patient's needs and minister to them as completely as their skill would permit (p. 197)." As students progress in nursing programs they are scheduled for greater amounts of clinical experience, in more demanding areas and in situations where they must make decisions about patient care—generally with decreasing amounts of supervision and/or guidance by instructors. Thus, it is expected that students will begin to see themselves in the role of "a practicing nurse," with greater independence and will experience a sense of competence and accomplishment both theoretical and clinical in their chosen field.

Academic Investment

A factor contributing to occupational identity is the amount of specialized training required or, in the area of educational preparation

the amount of course work completed in a given major. Rosenberg (1957) defines this principle in terms of "involvement" and/or "investment." In a study of occupations rated as stable or changeable, he found that all of the careers in the least changeable group were characterized by specialized training requirements. Regarding the aspirants to the stable occupations he states, ". . . as they begin to take courses in their fields, even if these be pre-medical or pre-law courses, they develop a certain involvement in the problems and content of the field which tends to anchor their choices" (1957:65). As more course credits are accumulated, the student is less willing to renounce his original choice of career and start over in a new field.

> The cumulation of specialized courses not only enhances involvement, but produces an investment in time and energy which the individual may be reluctant to discard . . . . There is so much technical specialization which is not transferable to other fields that the sense of waste involved in leaving a technical field is likely to be very strong; hence, technical specialization may serve as a valuable early predictor of ultimate crystallization of choice. (Rosenberg, 1957:65-66)

In the academic area, the nursing curriculum is rather specifically defined, and is characterized by course requirements unique to the major, and to a large degree nontransferable to another field. Furthermore, the theoretical portion of most nursing courses is offered in conjunction with clinical practice. In a study of students in professional careers Bucher et al. (1969) found that subjects in each of the four study groups emphasized the significance of clinical experience as an important factor in learning their new role. In nursing programs, the more advanced the course, the more complex the clinical experience and often, the greater the number of hours spent in the clinical area. With

completion of each course, the student not only receives a return on his/her investment in terms of credit hours, but more significantly, experiences a sense of accomplishment through increased learning and utilization of acquired "nursing skills" thereby reinforcing occupational identity as a "nurse." As a result of progression (demonstrated by completion of academic credits) it is hypothesized: there will be a positive association between academic investment and a sense of clinical competence.

Academic Competence

Academic performance is believed to exert considerable influence on students' perception of their clinical competence. Becker, Geer and Hughes (1968) discuss the significant of academic ability under the concept of "The Grade Point Average Perspective." Regarding grades, they write:

> Grades are the major institutionalized valuable of the college campus. The players in the drama of college life—students, faculty, administration and parents—all define grades as valuable, even though they may disagree about their value relative to other things . . . . Like money in the larger society, one must have adequate grades if one is to acquire many of the good things of the campus community, such as positions of influence and honor for one's self and one's living group . . . grades come to be a measure of personal worth, both to others and to one's self, just as money does in the larger society. (p. 55)

Caplow (1954) sees academic accomplishment as a means not only of achieving status and/or prestige but also as a tool for educators to use in distinguishing between those groups or individuals who may not be "suitable" for a given occupation. He considers this function under the framework of "Formal Education."

> The principal device for the limitations of occupational choice is the educational system. It does this in two ways: first, by forcing the student who embarks upon a long course of training to renounce other careers which also require extensive training; second, by excluding from training and eventually from the occupations themselves [emphasis added] those students who lack either the intellectual qualities [such as intelligence, docility, aptitude] or the social characteristics [such as ethnic background, wealth, appropriate conduct, previous education] which happen to be required. (p. 216)

Since continuance in the educational program is contingent upon achievement of a specified grade point average (Bailey et al., 1974:28) it is expected that students who are oriented to a career in professional nursing will be concerned with performing well academically. Furthermore, since performance in the clinical setting is based on and reflects understanding of theoretical material; a student who shows competence in the classroom is expected to perform equally well in the clinical area. In this context the following hypothesis is suggested: there will be a positive association between subjects' cumulative grade point average, and a "sense of clinical competence."

## Service Orientation

Rosenberg (1968:250, 251) identifies individual interest, abilities and values as being among the factors which contribute to the choice of a specific occupation. As stated above, a basic factor on which the choice of a given occupation is made is the subject's value orientation. Dressel (1968:485) defines values as ". . . the basis, considerations, or points of view, conscious or unconscious which are involved in or which appear to underlie a person's choices and actions." The value orientation includes the individually held standards and aspirations

and, in addition, the rewards and characteristics or practice typical of the occupation. Rosenberg (1957:6) states:

> An occupational choice is not a value, but it is made on the basis of values . . . . When an individual chooses an occupation, he thinks there is something "good" about it, and this conception of the "good" is part of an internalized mental structure which establishes priorities regarding what he wants out of life . . . . It is therefore indispensible to an adequate understanding of the occupational decision process to consider what people want or consider good or desirable, for these are the essential criteria by which choices are made.

The significance of a service orientation for occupations classified as professional is substantiated by Greenwood (1966:36-37, 51).

> At the heart of the career concept is a certain attitude for work which is peculiarly professional. A career is essentially a calling, a life devoted to "good works." Professional work is never viewed solely as a means to an end; it is the end itself. Curing the ill, educating the young, advancing science are values in themselves. The professional performs his services primarily for the psychic satisfactions and secondarily for the monetary compensations. Self seeking motives feature minimally in the choice of a profession; of maximum importance is affinity for the work. It is this devotion to the work itself which imparts to professional activity the service orientation and element of disinterestedness.

This service orientation is one of the basic values on which the practice of nursing rests. For example, quoting from The International Council of Nurses in its formal statement of professional ethics, ". . . service to mankind is the primary function of nurses and the reason for the existence of the nursing profession." Mary Innis, in discussing nursing education, writes:

> Whether formally codified or not the ethical principles of service are part of the professional norms and values transmitted to the nurse by example and precept during her early professional years, thus becoming part of the standard by which she measures her own performance and that of her

> colleagues. What the ethic of service is for the profession as a whole, a sense of altruism is for the individual. (1970:58, 59)

The fact that the opportunity for service underlies the choice of nursing as a career by many girls has been demonstrated in occupational research. Simpson (1956:238) in an early study of nursing students found the desire for service to be a basic value underlying the occupational choice. She states "the students had initially become committed to nursing because they saw it as an opportunity to perform personal services for suffering individuals . . . ." Studies by Whiteaker (1962) and Gunter (1969) support the belief that the opportunity to help others is a basic reason for individuals choosing a nursing career. As an alternate viewpoint to the "altruistic" explanation for choice of a nursing career, an individual may choose an occupation on the basis of its ability to yield a high degree of social approval. This study was primarily concerned with the service dimension, therefore, the alternative orientations will not be explored.

## Academic Investment

Generally speaking, values which are seen as characteristic of a given occupation are expected both to attract potential members who hold similar value orientations, and to reinforce or increase their desire for membership in the occupational group. The concept of academic investment and its role in contributing to subjects' sense of occupational ability was discussed earlier. It follows then that as students complete courses in nursing they will be further exposed to underlying occupational values and their own value system will be reinforced. In this context, it is

hypothesized there will be a positive association between academic investment and ranking a "service orientation" as important.

Clinical Competence

With progression in the curriculum, participation in the clinical area increases, thus reemphasizing significance of the service component. The "sense of clinical competence" factor as discussed above is expected to provide the student with a feeling of accomplishment and/or satisfaction, thereby reinforcing the service orientation. It is therefore hypothesized, there will be a positive association between "a sense of clinical competence" and support of the "service orientation" of a nursing career.

Time Investment

Considerable discussion has been centered on the identification and significance of the specific period in time at which an individual makes an occupational choice.

Super et al., (1957:42) maintain that the development of vocational choice is, an ongoing, continuous, and generally irreversible process. They hold that by the time the adolescent enrolls in high school, his academic program becomes increasingly vocationally oriented.

Regarding early career choice, Caplow says:

> In general, the earlier a choice must be made, the less equitable will be the eventual distribution of function and the less connection will there be between the individual's own interests and the occupational role chosen for him . . . . In some cases, of course, the fixation of occupational interest occurs early and the child pursues a steady course into maturity without ever altering his goals . . . But for the vast majority, the serious choice of an occupation is made in adolescence. (1954:217-218)

Davis (1965:33) appears to agree with Caplow for he states (in discussing the college student) ". . . in many cases he goes to college precisely to implement a specific vocational choice rather than to choose a vocation . . . our guess is that the last two years of high school are the most strategic period of all for vocational choice . . . ." A contrasting viewpoint is presented by Katz & Martin (1962), who surveyed a group of nursing students over a four year time span. In regards to time of career choice and stability of that choice, they found that of the subjects who reported making adefinite career choice before age 15, 80 percent completed the program as compared with only a 47 percent completion by subjects who made an occupational decision at or after age 16. More recently Fox and others substantiate this trend by finding that 25 percent of a group of nursing students had selected nursing before they were 10 years of age, and over 60 percent of the group had made their decision before the age of 16 (Fox & Kelley, ed. 1967:165-175).

Bernadine Morris, a columnist for the New York Times, describes a career-day program offered by a local hospital for the purpose of acquainting high school girls with the nature of a career in nursing and with the variety of jobs available in the field. When those girls already planning to enroll in nursing were asked at what time they had initially selected nursing as a career, the majority said they had wanted to be a nurse for as long as they could remember (1971:7).

Temporally speaking, the students who made a preliminary choice in childhood would fall into a pattern, making—what some call a fantasy career selection. Slocum (1966:200, 203) describes the characteristics of this stage as: play-acting at a role, frequent change of "job

preference," and decision formation based on insufficient knowledge regarding the characteristics of the selected occupation. However, Slocum also recognizes the significance of early decision where he states:

> The growing importance of early crystallization of preference for one occupation rather than another by an adolescent stems from the increasingly long and intensive preparation required for entry into the elite occupations. (1966:207)

Frequently, individuals who select a career oriented college major after enrolling in college do so as a result of having little or no prior knowledge of work opportunities in a given field. Other "late choosers" may elect a specific preparatory program through the process of elimination or as a result of exclusion from earlier defined goals.

The individual who because of career goal uncertainty, has not enrolled in a prescribed sequence of prerequisite courses may be delayed or denied admission into a professional school. Even the courses taken in high school may be critical for subsequent pursuit of a given career. For instance, the individual who selects a nursing major after enrolling in college, may be excluded from (or delayed in entering) the program as a result of lacking prerequisite high school science courses. Thus, for aspirants to the professions, early career selection appears to have critical significance. In addition to assuring completion of necessary preliminary courses, it seems possible that early selection of a future career would encourage identification with and internalization of occupational values. In view of the significance of the "service" characteristic as a recruiting influence for "nursing" it is hypothesized: there will be a positive association between the length of time of holding the career choice and ranking service characteristic as important.

Social Support

In any area of decision making activity an individual is affected by the expectations of others. When behavior involves choosing between a number of alternative actions, the individual seeks endorsement from others regarding the correctness or acceptability of his choice. Manis (1955) considers this activity to be one of the factors involved in the individual's formation of a self concept. He writes:

> Most beliefs or opinions are acquired or learned in the course of interactions between people. This form of social influence or social learning is most marked in areas where direct and independent empirical investigation is most difficult . . . the things an individual sees and believes about the external world are largely dependent upon the opinions of others. In general, an individual feels that a belief is "proper" or "valid" to the extent that it commands confirmation [or agreement] from others.
>
> In "checking" and "correcting" his beliefs, an individual relies more upon some people than others. These people may be regarded as his reference individuals, and it is against the yardstick of their opinions that he measures the validity of his own beliefs. In particular, most people "check" their beliefs by comparing them with the opinions of their friends. (1955:362)

In the area of occupational selection, the subject is particularly prone to seek sevidence of the approval of others for his chosen course of action. Slocum (1966:194, 195) refers to this situation as follows: "High occupational aspirations cannot be realistically sustained over a period of time without recognition and encouragement." He states further:

> Self-appraisal includes evaluation of the actual or presumed approval of other people who are important to the person making the decision . . . . To put it another way, the decision-maker imagines how it would appear to him and to his parents, to his girl friend, or to others who are important to him [emphasis added] if he were a policeman or a professor, or a prize fighter, or something else. (p. 207)

> Research indicates that most high school and college students recognize that their personal relationships with other people have played an important part in helping them make their occupational plans . . . . Parents headed the list of those exercising helpful influence, with teachers in second place, close friends their own age in third place, and vocational counselors fourth [emphasis added]. (p. 215)

The importance of social reinforcement in the area of occupational choice was identified by Peters in an early study (1941:428-430). In surveying high school seniors, Peters found that the four most influential factors contributing to vocational choice were the attitudes of parents, friends, professional acquaintances, and other relatives. He concludes his study with the words, ". . . the home is the greatest single agency for the determination of a vocation for the young people of our country" (p. 430).

Although there is some difference of opinion regarding the identity and relative importance of the individual(s) who will be significant to the student in validating a career choice, the overall significance of social support is recognized. The sources reviewed indicate that: (1) some persons are "more influential" than others for an individual, and (2) in the area of occupational choice, parent(s) appear to be "the most influential person(s)" for the subject making a career choice.

To summarize, the choice of a career is made on the basis of perceived "fit" with the subjects' value framework and with consideration of the attitudes of significant person(s) regarding this choice. In this context it seems probable that those persons endorsing a specific occupation would also positively regard factors seen as underlying characteristics and/or values of that occupation. Therefore, in regard to a nursing career the persons seen as significant may communicate to the subject their endorsement of the service orientation charactertizing

nursing practice. As a result of these viewpoints expressed by persons important to the student, the student's valuing of the service characteristic of nursing may be increased. A positive association is hypothesized between support of career choice by significant others and identification of the service orientation as an important value of the occupation of nursing.

## Social Support

The variables time investment and academic investment were discussed on pages 22 and 23. Relationships are proposed between these two variables and social support. Specifically the following two hyptheses are offered:

1. There will be a positive association between the length of time a subject has held the choice of a nursing career and approval of that choice by support persons and,
2. There will be a positive association between academic investment in the nursing major and support by significant persons for the subjects' career choice.

## Stability of Occupational Choice

Stability of occupational choice refers to the perseverance/constancy (or conversely to the lack) of commitment to complete the educational program which prepares an individual for occupational membership. As stated earlier some individuals enter college with little or no conception of career goals. However, the majority of students have identified, at least tentatively future occupational plans. A question raised in this

study was the identification of changes, both positive and negative in the subjects' plans to complete the nursing major. An additional objective was to identify attitudes and experiences which were associated with either an increased desire to complete the program or alternately, a willingness to change to another academic field. Variables have been discussed in terms of their contribution to subjects' occupational identity and value framework. Processes which provide or increase students' sense of clinical competence, service orientation and social support are also believed to be effective in strengthening subjects' desire for occupational membership. Consequently, the following hypotheses are offered:

1. Academic investment will be positively associated with stability of occupational choice.
2. Academic competence will be positively associated with stability of occupational choice.
3. Sense of clinical competence will be positively associated with stability of occupational choice.
4. Time investment will be positively associated with stability of occupational choice.
5. Service orientation will be positively associated with stability of occupational choice.
6. Social support will be positively associated with stability of occupational choice.

In addition to expenditure of time and effort in preparing for occupational membership, completion of the required educational program

is accompanied by considerable monetary costs. This factor is presented as an additional variable.

Financial Investment

A common problem facing the student entering an academic program is the actual cost in monetary expense as well as the loss of funds which could have been earned had the individual immediately entered the job market. Altman considers this monetary loss to be a significant item in the overall cost of an education. He states:

> Even more important in absolute amount is . . . the opportunity costs of undertaking training. By definition, the opportunity costs of training are the earnings foregone by undertaking the training and therefore not working. The opportunity costs . . . depend upon the length of the training program and the potential earning capacity of the student. (1971:52)

Costs for an educational program vary according to the length of the program, the type of educational institution (private vs. public), the classification of the student (resident vs. out of state), special requirements of the academic major, (as technical equipment, special insurance, etc.) and, of course, factors such as expenses for housing and personal maintenance. Naturally, the problem of financial cost is not of equal concern for all students. However, it is believed that even the more financially affluent individual will be concerned with obtaining a reasonable return for the costs of the educational program. Thus as funds expended in an academic program increase, the student is also expected to have accumulated comparable benefits or assets in academic credits or completed requirements. At the present time

numerous scholarships, federal grants, educational loans, and needy student funds are available. In addition work-study programs make educational goals available to financially disadvantaged students. The one general requirement is that the obligation incurred be satisfied by meeting predetermined standards. The options for meeting these obligations may include spending a specified period of time in federal employment, repaying a portion of borrowed money over a delayed time period. Generally speaking eligibility for all funding programs requires maintaining a satisfactory academic record. Thus should the individual change career goals or fail to progress, he/she becomes liable occupationally and/or financially for monies received. Private sources of support include the individual's own resources, support of family, part-time work, and/or financial aid by spouse. Regardless of the source of income, it is obvious that students and their "support persons" will be concerned with obtaining satisfactory returns from the educational program as students move toward their career goal. Furthermore, as the financing involves greater personal sacrifice, a greater commitment to the educational/occupational goal would also be expected. In this context, the following hypothesis is made: There will be a positive association between the extent of financial obligation incurred in completing the required educational program and stability of occupational choice.

## Endorsement of Nursing Code

In nursing education, considerable attention is given to the development by students of a sense of personal responsibility for the

quality and scope of their future occupational practice. Throughout the nursing program, instructors are concerned that students will internalize and reflect values and standards of practice identified by the American Nurses Association as essential attributes of practicing nurses. A specific example of these standards is stated as follows:

> The nurse maintains individual competence in nursing practice, recognizing and accepting responsibility for individual actions and judgments. (from the "Code for Nurses," Item 3, Appendix A)

Elements incorporated in the standards are emphasized in publications by the professional organization. Benoliel & Berthold discuss the concept of "human rights" in a paper focused on research in nursing. Regarding personal responsibility they state:

> Knowledge about the changing scope of nursing responsibility and the emerging ethical issues affecting all practitioners in health care today is a necessary requirement for professional nursing practice in which accountability for the protection of human rights of consumers is accepted . . . . With respect to human rights, legal accountability focuses upon evidence that the professional practitioner . . . has not failed his/her responsibility . . . . (1975:11)

As students progress in the program, more time is spent in the health care agencies, providing nursing care and less time is scheduled in classroom activities. As a result of increased experience students are exposed to situations revealing both high standard and substandard nursing practice and, in some cases, violations of ethical values by health care practitioners. In view of the idealistic and high-quality orientation of new recruits to the career it is expected that students will be concerned with meeting occupational expectations and therefore will actively endorse standards as expressed in the nursing code.

The public has become more informed regarding health practice and is insistent regarding its right to receive competent care. Students as well as professionals in health care fields are being held accountable for the quality of care rendered: care that is based on specialized knowledge and appropriate judgments. With increasing frequency, practitioners are being challenged in and out of court for real or imagined negligence. Students in nursing programs are urged (and in some schools, required) to carry liability insurance as protection from charges claiming that inadequate care was provided, or that nursing judgment was in error. In light of this emphasis, it is believed that as students progress in the program, they will demonstrate increasing endorsement of the formal standards specified in the nursing code; standards phrased in terms reflecting the expectation that graduates will be responsible in practice, and accountable for individual and peer actions in the clinical setting. It is believed that variables contributing to occupational identity and stability of occupational choice will operate in a similar manner to produce in students, acceptance and support of the "nursing code." Based on the above discussion, it is hypothesized that there will be a positive association between Endorsement of the nursing code and

1. Academic investment
2. Sense of clinical competence
3. Service orientation, and
4. Social support

In summary, the educational program is considered to be a critical socializing experience for potential members of the nursing occupation. As students progress in their studies, it is anticipated that they will demonstrate increasing identification with occupational values and attitudes. Additionally, with increased investment of time, course work and finances in the educational program, students are expected to display increased stability of occupational choice, endorsement of the occupational code and a sense of clinical competence. These developments will be reflected in increased social support by significant others. It is also expected that students who perform above average academically (as measured by grade point average) will view themselves as above average clinically, will be more stable in their occupational choice, and will endorse to a greater extent the occupational code.

This study deals primarily with females, however, comparable data from males will be presented as indicated. The terms as they will be used in the study are defined on pages 35 and 36. Research hypotheses are as follows:

## Research Hypotheses

### Sense of Clinical Competence

A positive association is individually hypothesized between the following two predictor variables and a sense of clinical competence:

1. Academic investment
2. Academic competence

Sense of clinical competence

Service Orientation

A positive association is individually hypothesized between the following four predictor variables and

3. Academic investment
4. A sense of clinical competence
5. Time investment
6. Social support

Service Orientation

Social Support

A positive association is individually hypothesized between the following two predictor variables and

7. Time investment
8. Academic investment

Social Support

Stability of Occupational Choice

A positive association is individually hypothesized between the following seven predictor variables and stability of occupational choice:

9. Academic investment
10. Academic competence
11. Sense of clinical competence
12. Time investment
13. Service orientation
14. Social support
15. Financial investment

Stability of occupational choice

Endorsement of Nursing Code

A positive association is individually hypothesized between the following four predictor variables and endorsement of Nursing Code Item A

16. Academic investment
17. Sense of clinical competence
18. Service orientation
19. Social support

Nursing Code Item A

A positive association is individually hypothesized between the following four predictor variables and endorsement of Nursing Code Item B

20. Academic investment
21. Sense of clinical competence
22. Service orientation
23. Social support

Nursing Code Item B

## Definition of Terms

Significant Others: For the purposes of this paper, significant others will be used in a limited sense to refer to those individuals who the respondent considers in evaluating his/her occupation-related activities.

Role Model: An individual whose performance as a nurse the subject sees as being appropriate and/or correct for the nursing occupation.

Time Investment: The length of time (chronological) over which the individual has held the decision to "be a nurse."

Academic Investment: Level in terms of progression in the nursing major. For purposes of this project, students will be classified according to placement in the clinical portion of the curriculum.

Financial Investment: The amount of funds (relatively speaking) which the individual provides, is personally committed for, qualifies for, through maintaining required level of academic performance, must repay through service following graduation, or receives from family, friends, or other sources in meeting expenses of the educational program.

Academic Competence: The level of academic performance as indicated by cumulative grade point average, computed on the basis of a 3-point scale.

Sense of Clinical Competence: Self-rated statement of subject's ability, as compared with peers, to provide nursing care in the clinical area.

Service Orientation: Subjective ranking of the importance of helping people as the reason for choosing a career in nursing.

Social Support: Student's perception of a favorable attitude held by specified significant others regarding the students' occupational choice.

Stability of Occupational Choice: Student's subjective evaluation of willingness to change to another academic major.

Endorsement of Nursing Code: Projected response (to hypothetical situation) which reflects appropriate or inappropriate behavior according to standards approved by the Nursing Code. Item A—accepts responsibility for using individual judgements as a guide in providing nursing care.

Item B—maintains occupational competence through voluntarily participating in ongoing educational programs.

Internalization of Occupational Standards: The adopting and incorporating into one's own value system certain attitudes and beliefs regarding occupational norms and subsequently using these standards to guide one's occupational behavior.

# CHAPTER III

# METHODOLOGY

## Introduction

This research was concerned with identifying and analyzing developmental aspects of the process by which occupational socialization occurs. In proposing a developmental interpretation it was necessary to obtain data from individuals enrolled in progressive stages of the educational program which qualified the subjects for occupational membership.

## Study Population

The population for this study included all students enrolled in the undergraduate nursing major at the University of Alabama, Birmingham, during winter term, 1975. Students frequently withdraw from school for one or more terms and then reenter, therefore, it is difficult to determine the exact number of students enrolled at a given time. The estimated enrollment in nursing during the term when the data were obtained was 700 students. Information was obtained from 539 of these individuals. The respondents included 496 females and 43 males, yielding a research population 92 percent female and 8 percent male. While the number of males in the sample is small it is equal to the percent of male nurses currently enrolled in nursing programs (Johnson, 1976),

therefore it is believed that the data provided is representative of male subjects in nursing.

Progress in an academic program is measured (in part) by number of college credits completed. Table I shows a frequency distribution of subjects according to academic credits, clinical classification, and sex. The majority of nursing students are admitted by transfer from other educational institutions, therefore more students are found in upper levels of the nursing major than in the freshman class.

## Data Collection

### Research Instrument

The data gathering instrument consisted of a self-administered questionnaire. Subjects were provided with a standard computer scoring sheet on which to record their responses. This approach facilitated machine processing and analysis of data. The questionnaire was a revised and amplified form of an instrument developed for, and successfully used, in an earlier research project. (Sczekan and Betz, 1973). Subjects were asked to respond to questions yielding three types of information: (1) demographic characteristics of each respondent, (2) attitudes and values specific for the individual as related to the occupation of nursing, and (3) behavioral response to nursing situations.

### Administration Technique

Questionnaires were distributed to all students—either in the classroom or by mail. To assure comparable instructions for all groups, a face letter explaining the purpose of the study and requesting

TABLE I

Research Sample by Credit Hours, Clinical Classification and Sex (N = 535)*

| Clinical Classification | Credit Hours | Females Number | Females Percent | Males Number | Males Percent | Total | Percent |
|---|---|---|---|---|---|---|---|
| Advanced | 151 and over | 28 | 5.7 | 11 | 25.6 | 39 | 7.3 |
| Clinical | 136 - 150 | 28 | 5.7 | 5 | 11.6 | 33 | 6.2 |
| | 119 - 135 | 92 | 18.7 | 7 | 16.3 | 99 | 18.5 |
| | 102 - 118 | 87 | 17.7 | 3 | 7.0 | 90 | 16.8 |
| Intermediate | 85 - 101 | 88 | 17.9 | 6 | 13.9 | 94 | 17.5 |
| Clinical | 68 - 84 | 80 | 16.3 | 4 | 9.3 | 84 | 15.7 |
| Beginning Clinical | 51 - 67 | 50 | 10.2 | 4 | 9.3 | 54 | 10.1 |
| Preclinical | 34 - 50 | 11 | 2.2 | 1 | 2.3 | 12 | 2.2 |
| | 17 - 33 | 20 | 4.1 | 0 | 0.0 | 20 | 3.7 |
| | 16 or less | 8 | 1.6 | 2 | 4.6 | 10 | 1.8 |
| | Total | 492 | 100.0 | 43 | 100.0 | 535 | 100.0 |

*Four subjects did not answer this question.

subject participation was attached to the questionnaire. (See Appendix B) Students who had progressed sequentially to the stage of enrollment in nursing courses (approximately 500) were administered the questionnaire in the classroom; where 486 usable returns were obtained; a response rate of 97 percent. For those students not currently enrolled in nursing courses, a revised face letter containing appropriate information and directions was attached to the questionnaire and mailed with a self-addressed stamped envelope. Of the 200 mailed questionnaires, 53 were completed and returned—a response rate of 26.5 percent. While this response rate is low, there is no reason to believe it to be a biased sample of students new to the program and therefore they will be used as representative of subjects in the preclinical portion of the nursing major. The total number making up the data yielding sample equaled 539, a number representing 77 percent of the estimated total population.

## Measurement of Variables

A technique consisting of assigning ranked values to research data underlies the statistical approach utilized in this study. The rationale for this decision was based on recognition that the type of information elicited by the questionnaire could not be treated as interval data. An ordinal scheme provided the most useful framework for organizing, quantifying and analyzing the findings. On this basis the obtained data were classified and evaluated in the following manner.

Time Investment

Data for the time investment variable were secured from answers to the question: "When did you first decide on a career in nursing?" Responses were classified in nominal categories on a chronological continuum according to approximate time of occupational choice; (the options provided were developed from information provided by a different group of students during a pretest of questionnaire items). Alternative responses included: During childhood, In junior high (prior to the 10th grade), In senior high (grades 10 to 12), Following high school but prior to entering college, and On or after enrolling in college. Ranks were assigned the categories as follows:

| Rank | Time of Occupational Choice |
|---|---|
| 5 | During Childhood |
| 4 | Junior high (prior to 10th grade) |
| 3 | Senior high (grades 10 to 12) |
| 2 | After high school but prior to college |
| 1 | On or after college entry |

The theoretical range for this variable extended from a high of five to a low of one.

Academic Investment

Information regarding the academic investment variable was secured through replies to question 4 which indicated the hours of academic credit completed. Since this project was concerned with identifying attitude changes occuring in conjunction with progression in the nursing curriculum, and particularly in response to clinical experience,

categories were established on the basis of numbers of completed credit hours which corresponded (roughly) with levels of clinical practice. Utilizing this classification it was possible to compare responses of "beginning students" with those of subjects at progressively more advanced stages in the curriculum. Responses were labeled and ranked as follows:

| Rank | Category | Academic credits |
|---|---|---|
| 4 | Advanced clinical | 102 and over |
| 3 | Intermediate clinical | 68 to 101 credits |
| 2 | Beginning clinical | 51 to 67 credits |
| 1 | Preclinical | 0 to 50 credits |

Theoretical range extended from a high of 4 to a low of 1. Two problems were encountered in quantifying this variable. The first was that many students had transferred from other institutions and were uncertain of their total hours. The second issue and of much greater concern was the fact that an undetermined number of students (presumeably small) had previously completed all or part of another academic major, thus, although they ranked (by academic credits) in the advanced clinical category, they were at a less advanced level of the nursing curriculum. Since this problem had not been foreseen, it was impossible to separate and reclassify these subjects. A mechanism would have to be included to deal with this problem in future studies with nurses.

Academic Competence

Values for the academic competence variable were based on subjects' statements of academic performance as reflected by their cumulative

grade point average. The institution in which this study was conducted computes grades on a point scale with three as the highest possible score. To provide categories discriminating between levels of academic performance ranks were assigned on the basis of a .5 range for each grouping. The categories and assigned ranks were as follows:

| Rank | Category (based on reported GPA) |
|---|---|
| 5 | 2.6 to 3.0 |
| 4 | 2.1 to 2.5 |
| 3 | 1.6 to 2.0 |
| 2 | 1.1 to 1.5 |
| 1 | 0.6 to 1.0 |

Subjects conceivably could give a distorted response to this item since the data were anonomyous but information was assumed to be accurate. The theoretical range for this variable extends from a high of five to a low of one.

Some research variables were more difficult than others to assign ranks such as those involving more perceptual self-ratings. These include the students' "sense of clinical competence", social support system and service orientation. Since items of this type could not be assigned an interval value, the decision was made to use a ranking procedure. On this basis the obtained data were classified and evaluated in the following manner

Sense of Clinical Competence

Ratings for the clinical competence variable were obtained from the following question: "In your opinion, how does your clinical performance

compare with others in your class?". The competitive framework for evaluating one's academic performance in comparison with peers is common among college students. Becker et al. (1968) discussed the significance of the grade point perspective and student's self-evaluation in the area of academic ability. This same viewpoint characterizes subjects' evaluation of their clinical ability. Cooley's theory of the "looking-glass self" reflects the manner in which aspects of an individual's self-identify are derived (in part) from ego's assessment of others' evaluation of the individual; an assessment which may become true as a result of the individual's perception. In this context, subjective rankings of the subjects' ability were accepted as valid indicators of the students' clinical ability, and on this basis categories were set up and ranked as follows:

| Rank | Category (self-rated comparative performance) |
|---|---|
| 5 | Much higher than others |
| 4 | Somewhat higher than others |
| 3 | About the same as others |
| 2 | Somewhat lower than others |
| 1 | Much lower than others |

The theoretical range for this variable extended from a high of five to a low of one.

Financial Investment

Data for the financial investment variable were obtained from responses to the question: "What is the major source of financial support for your educational program?". Categories were developed to reflect a

range from total self-support by the student to financing by a nonspecified other. As with the time investment variable, categories and ranks were set up on the basis of information from a pretest survey with agreement on ranking by students and practicing nurses. Individuals involved in the pretest stated that expenditure of personal funds was, for them, the most costly means of financing their educational program. Support by spouse was rated as second most costly since it involved the sharing of time and effort. Loans were considered third most expensive in as much as repayment was required for all or part of this money. Scholarships were ranked fourth in sacrifice due to the fact that qualification for, and continued support by these funds required a maintenance of a specified (and generally above average) level of academic performance. The lowest rank was assigned parents and/or others. Study participants expressed the belief that financial support by parents was an expected and appropriate obligation and therefore they (respondents) did not perceive this support as costly or sacrificial on their part.

In this study choices for the financial investment variable included the following options: self, spouse, loan, scholarship and loans, and parents and others. Ranks assigned in accordance with the above rationale were set up and labeled as follows:

| Rank | Category |
|---|---|
| 5 | Self |
| 4 | Spouse |
| 3 | Loan |
| 2 | Scholarship and loan (combined) |
| 1 | Parents and others |

Initially there were separate categories for the items scholarship and other; however, since there were relatively few responses in either of these categories these items were combined with the listing believed most comparable. Possible scores for this variable extended from a high of five to a low of one.

Social Support

In considering the social support variable, it was believed that most students considered the attitudes of several significant (to the subject) persons in making and maintaining a career choice. In an attitude survey by Woelfel and Haller (1971:79) they found that research subjects had an average of "13.5 significant others" who influenced to some degree the subjects' decisions. To minimize the complexity involved in identifying and measuring the impact of social influence, the number of support persons was limited to three. In this context it was assumed that students could identify and rank in order of importance three persons whose attitudes were considered when the students made an occupational choice. Following this approach, the variable was introduced with the question, "Regarding your career choice, the favorable opinion of which three persons are you most concerned with maintaining?" Students were then asked to identify the opinion considered most important, second in importance, and third in importance. These data are presented in Table II, indicating that research subjects were able to identify and rank by level of importance those individuals whose opinions were important to them in their career choice. Three additional questions asked the students to specify for each of the

TABLE II

Percentage Distribution of Individuals Whose Opinion Regarding Subjects' Career Choice Is Valued

| | Sex of Respondents | | | | | |
|---|---|---|---|---|---|---|
| | Males | | | Females | | |
| Identity Significant Persons | Most Important | 2nd in Importance | 3rd in Importance | Most Important | 2nd in Importance | 3rd in Importance |
| Mother | 6.8 | 25.0 | 11.4 | 32.2 | 36.0 | 14.0 |
| Father | 13.6 | 18.2 | 9.1 | 17.4 | 31.8 | 14.8 |
| Self | 11.4 | 4.5 | 4.5 | 12.1 | 2.6 | 2.4 |
| Spouse | 20.5 | 9.1 | 6.8 | 11.7 | 4.3 | 3.0 |
| Instructor | 9.1 | 15.9 | 13.6 | 7.5 | 6.1 | 11.3 |
| Friend | 13.6 | 9.1 | 31.8 | 5.9 | 6.9 | 21.1 |
| Other | 6.8 | 2.3 | 0.0 | 4.7 | 2.2 | 7.7 |
| Nurse Acquaintances | 9.1 | 4.5 | 13.6 | 3.0 | 2.6 | 7.7 |
| Nursing/Classmate | 9.1 | 11.4 | 6.8 | 2.9 | 6.3 | 16.0 |
| Fiance | 0.0 | 0.0 | 2.3 | 2.6 | 1.2 | 2.0 |
| | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

previously ranked persons, what that individuals' attitude was regarding the subjects' choice of a nursing career. Available alternatives for classifying the "support person's" approval included five categories ranging from strongly approve (scored five), Approve (score four), Neutral (score three), Slightly disapprove (score two), and Strongly disapprove (score one).

The values awarded for each support persons' attitude (as indicated by the students' rating) were added giving a combined social support score. A factor analysis was then run to determine the percent of variance of the total score that was derived from the score of each support individual. Sixty-seven percent of the support score variance was accounted for by the person whose opinion was ranked most important. The individual's opinion ranked second, explained 19 percent of the variance with the remaining 14 percent accounted for by the opinion of the third ranked person. These weights were used to multiply the ranked value (i.e. Strongly approve = 5. × .67 opinion most important) according to the response of the indicated individuals. The computed scores for the three ranked opinions were summed giving a composite score for the variable, Social support. The possible numerical value for this item extended from a high of 5 if all three persons highly approved the career choice to a low of 1 if all three persons highly disapproved of the student's career choice. If the question was unanswered, the subject was not included in this analysis. Since distinguishing between five levels of social support is difficult to theoretically justify, the responses were grouped into three degrees of social support according to the following rationale. The maximum possible score of 5 was ranked

highest. The midpoint of the remaining scores was used to determine a breaking point with ranks of 2 and 1 assigned these groups. Use of three ranks was considered appropriate in as much as scores were based on opinions of three significant persons.

The summed scores were grouped and ranked as follows:

| Rank | Category and numerical value | |
|---|---|---|
| 3 | High support | 5.0 |
| 2 | Moderate support | Mid point to 4.95 |
| 1 | Low support | 1.0 to midpoint -.5 |

Possible scores for this variable extended from a high of three to a low of one.

Service Orientation

Information regarding evaluative characteristics underlying reasons for choosing the nursing major was obtained from responses to five questions. Subjects were instructed to specify in order of importance to the student, the five factors most significant in the choice of a nursing career. A list of ten separate characteristics was provided; these items were also derived from students' responses in the pretest situation. Optional responses included: financial benefits, chance to work independently, chance to help people, job security, respected occupation, work with people rather than things, personal satisfaction, use of special skills, associate with people with similar interests, and work independently. All of the options are believed available in the nursing occupation however, only one, "chance to help people" appears to be clearly service oriented. As indicated in the literature review,

the desire to be of service is the reason given by the majority of nursing students as a major reason for choosing a nursing career. It is assumed however, that student viewpoints may change in response to rewarding (or conversely, unpleasant) clinical experiences. Therefore, student responses ranking significant characteristics of nursing could be expected to reflect a change in response to subjects' attitudes and or programs in the program. Responses of students in the preclinical portion of the program will be taken as indicative of level of service orientation of entering students; variances from these levels may be seen as characteristic of students at progressively advanced stages in the program. Since there were five items to be ranked according to importance to the subjects, measurement of this variable was determined as follows: a score of 5 was given if the response "chance to help others" was ranked most important, 4 if ranked second in importance with this format continued down to a score of 0 if the item was not selected at all. Ranks and categories are as follows:

| Rank | Response category-service option |
|---|---|
| 5 | Most important factor |
| 4 | Factor second in importance |
| 3 | Factor third in importance |
| 2 | Factor fourth in importance |
| 1 | Factor fifth in importance |
| 0 | Factor not ranked as important |

Range for this variable extended from a high of five to a low of zero.

Stability of Occupational Choice

Data for the variable, stability of occupational choice were obtained from subjects' responses to the question: "How willing would you be to change your major?" Optional answers were developed to indicate students' opinions regarding completing the program or consideration of an alternate academic major. Responses and assigned ranks were as follows:

| Rank | Response (regarding occupational change) |
|---|---|
| 5 | Would not consider |
| 4 | Disinterested |
| 3 | Neutral |
| 2 | Would consider |
| 1 | Very willing |

Theoretical range for this variable extended from a high of five to a low of one.

Endorsement of Nursing Code

Endorsement of code was set up as a compound variable. Information was secured from 2 questions each of which required a subjective decision specifying the students' interpretation of the appropriate behavior in a hypothetical nursing situation. Situations were developed to require judgments reflecting values expressed and/or endorsed in the Nursing Code.

Item A

This item referred to the student's sense of individual responsibility for personal judgments regarding clinical nursing actions. The question read: "A medication is ordered in an amount which you are convinced is excessive for a patient. You would: (5) report your

concerns and refuse to give the medication, (4) report your concerns to the doctor and follow his orders, (3) give the medication as ordered, (2) check the dosage with the charge nurse and follow her recommendations, (1) refuse to give the medication. Selection of these items was based on suggestions from a mixed group of nurse practitioners and educators. These individuals were requested to independently rank the responses according to levels of responsibility demonstrated in selecting each answer. There was 90 percent agreement on the values assigned. In listing the optional responses on the research questionnaire, the order of items was changed to avoid indicating a specific or appropriate answer. Ranks and associated responses were as follows:

| Rank | Response |
|---|---|
| 5 | report your concerns and refuse to give the medication |
| 4 | report your concerns to the doctor and follow his orders |
| 3 | check the dosage with the charge nurse and follow her recommendations |
| 2 | refuse to give the medication |
| 1 | give the medication as ordered |

Range for this item extended from a high of five to a low of one.

Item B

The second factor under Endorsement of Nursing Code asked subjects to rank in order of importance the reasons for which they would enroll for additional education in nursing. Item content was based on the statement in the Code for Nurses which reads: "The nurse participates in the effort to . . . upgrade standards of nursing practice and

education." (American Nurses Association, 1976). The question was qualified to include any type of additional learning, (i.e. inservice, special programs, etc.), so that subjects would not feel this item referred only to formal graduate education. Optional responses included: personal interests/goals, complex nature of nursing practice, a requirement of the employing agency, a recommendation of the American Nurses Association, and other. Write in responses included: increased pay, job security, chance to specialize, desire to teach, keep up with nursing and, give more competent care. Alternative answers were evaluated and ranked according to benefits to be derived and identity of the subject benefiting from the added learning. The reason for rating responses according to beneficiary of the increased education was that returning to school to "receive increased pay was viewed as more self-rewarding and less supportive of the occupational code than was the response, to "keep up with nursing." Items were grouped (where underlying motive was similar) and scored as follows:

| Rank | Response item |
|---|---|
| 5 | give more competent care |
| 4 | complex nature of nursing practice and/or keep up with nursing |
| 3 | recommended by American Nurses Association |
| 2 | personal interest/goals, specialize, and/or teach |
| 1 | requirement of employing agency, increased pay, or job security |

Since subjects were instructed to rank in order of importance, the five reasons for which they would continue their education in nursing,

responses were weighted by the level of importance they were assigned. For example, the score for the item listed as most important was multiplied by 5 since it was rated as the most important of the five reasons for continuing education. Numerical weights were assigned in descending order according to the level of importance the subject gave the item (i.e. 4 for reason second in importance, 3 for reason third in importance, etc.). Computed scores were then summed with an overall total extending from a high of 49 to a low of 5 (if only one reason were given). To provide a ranking framework comparable with the other variables in the study, values were grouped into five categories, each with a spread in scores of 10. Assigned ranks and numerical scores are as follows:

| Rank | Numerical score |
|---|---|
| 5 | 40 to 49 |
| 4 | 30 to 39 |
| 3 | 20 to 29 |
| 2 | 10 to 19 |
| 1 | 0 to 9 |

The range for Item B of the Nursing Code variable extended from a high of five to a low of one.

## Statistical Techniques

Three statistical procedures were used in analyzing data and determining significance of findings.

Factor analysis was used to determine the percent of total variance accounted for by the three separate scores making up the

social support variable. The identified values were then used to compute weighted scores for the attitudes of each identified support individual.

Goodman's and Kruskal's Gamma was used to measure the level of association between explanatory and outcome variables. Selection of this method was based on the following characteristics: appropriateness for use with ordinal data, provision of a substitute formula for use with data containing a large number of tied scores, potential for revealing either positive or negative associations, suitability for use with samples which have not been randomly drawn and appropriateness for use when cells contain small frequencies. The following formula is given for computing Gamma.

$$\gamma = \frac{\Sigma fa - \Sigma fi}{\Sigma fa + \Sigma fi}$$

"where fa = the frequency of agreements, and fi = the frequency of inversions."

For further clarification consult Champion, (1970:219-224).

Kendall's tau c was also used both because of its suitability for use with ranked data in measuring correlations but additionally for its usefulness in determining levels of significance. The formula including a correction for ties is as follows:

$$\tau = \sqrt{\tfrac{1}{2}N(N-1) - T_X}\ \sqrt{\tfrac{1}{2}N(N-1) - T_Y}$$

$T_X = \frac{1}{2}\, t(t-1)$, t being the number of tied observations in each group of ties on the X variable

$T_Y = \frac{1}{2}\, t(t-1)$, t being the number of tied observations in each group of ties on the Y variable" (Siegel, 1956:216-218).

A factor underlying the use of both statistical measures is based on comments by Nie et al. (1975). According to these authors, the use of

tau is more appropriate ". . . when a fairly large number of cases were classified into a relatively small number of categories. . ." (pp. 228, 289). Generally speaking, the association value given by tau is lower than that of gamma, thus tau appears to be a more conservative measure. Where evaluation of statistical difference is indicated, the .05 level of probability will be utilized.

# CHAPTER IV

## DATA ANALYSIS

This study was concerned with identifying changes indicating progressive socialization to an occupational role. It was hypothesized that the educational program served as a major socializing influence, thus, with progression in the program it was expected that students would demonstrate change indicating the "taking on" of characteristics representative of occupational members.

Nine factors or research variables were examined in this study; these items included both explanatory and outcome variables. One of the more important explanatory variables was academic investment. Other factors used in the explanatory framework were time investment, financial investment and academic competence. The outcome variables included sense of clinical competence, service orientation, social support, stability of occupational choice and endorsement of the Nursing Code (a compound item made up of two separate factors). The results of the twenty-three predictions and research findings follow; unless otherwise indicated findings refer to females only. Total percentages in tables have been rounded to 100.

### Sense of Clinical Competence

A positive association was predicted between students' sense of clinical competence and the two variables, academic investment and

academic competence. (Preclini al subjects were excluded from these analyses since they had not yet been in the clinical area.)

Hypothesis 1

A positive relationship predicted between sense of clinical competence and academic investment was supported: ($\tau$ = .148) Table III. Tau c a more conservative statistic provided some support for the hypothesis also ($\tau$ c = .057, $p < .054$).

Hypothesis 2

In this hypothesis, a positive relationship was expected between academic competence and a sense of clinical competence. The prediction was supported by these data, as shown in Table IV, where the associations were $\gamma$ = .158 and $\tau$ c = .067, $p < .02$.

## Service Orientation

A positive association was predicted between the variable, service orientation and four explanatory variables: academic investment, sense of clinical competence, time investment and social support. It should be noted that the holding of a service orientation is a characteristic which serves as a major recruiting factor for students entering the nursing program. In reviewing the data, it was found that 49 percent of the beginning female students stated that "the chance to help others" (the service characteristic) was, for them, the most important advantage of a career in nursing.

For subjects at a more advanced level in the curriculum the service orientation appears to be an important attribute contributing to their

TABLE III

Sense of Clinical Competence by Academic Investment (N = 421)*
Females

| Sense of Clinical Competence | Academic Investment by Stage in Nursing Major: Advanced Clinical | Intermediate Clinical | Beginning Clinical | Total | Percent |
|---|---|---|---|---|---|
| Much higher than others | 4 (1.7) | 3 (1.9) | 0 (0.0) | 7 | 1.7 |
| Somewhat higher than others | 79 (33.8) | 42 (27.1) | 7 (21.9) | 131 | 30.4 |
| About the same as others | 145 (62.0) | 106 (68.4) | 25 (78.1) | 284 | 65.6 |
| Somewhat lower than others | 6 (2.6) | 3 (1.9) | 0 (0.0) | 9 | 2.1 |
| Much lower than others | 0 (0.0) | 1 (0.6) | 0 (0.0) | 1 | 0.2 |
| Total | 234 | 155 | 32 | 421 | 100.0 |
| Percent | (100.0) | (100.0) | (100.0) | | |

*Subjects in the preclinical stage were excluded.

$\gamma = .148$

$\tau c = .057$, $p < .054$

TABLE IV

Sense of Clinical Competence by Academic Competence (N = 407)*
Females

| Sense of Clinical Competence | Academic Competence According to Grade Point Average | | | | | | |
|---|---|---|---|---|---|---|---|
| | 2.6-3.0 | 2.1-2.5 | 1.5-2.0 | 1.1-1.5 | 0.5-1.0 | Total | Percent |
| Some higher than others | 1 (3.3) | 2 (1.8) | 4 (2.7) | 0 (0.0) | 0 (0.0) | 0 | (1.7) |
| Some higher than others | 11 (36.7) | 28 (33.6) | 46 (31.1) | 27 (24.3) | 1 (20.0) | 126 | (30.3) |
| About the same as others | 16 (53.3) | 71 (62.8) | 97 (65.5) | 80 (72.1) | 4 (80.0) | 274 | (65.9) |
| Somewhat lower than others | 2 (6.7) | 1 (0.9) | 1 (0.7) | 4 (3.6) | 0 (0.0) | 8 | (1.9) |
| Much lower than others | 0 | 1 | 0 | 0 | 0 | 1 | (0.2) |
| Total | 30 | 113 | 148 | 111 | 5 | 416 | (100.0) |
| Percent | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | | |

*N = 407 Preclinical students not included
14 other subjects did not respond to both questions

$\gamma = .158$

$\tau c = .067$, $\underline{p} < .02$

retention in the nursing major. In order to identify changes occurring with progression in the clinical portion of the program, the hypotheses relating academic investment to service orientation will not utilize data from preclinical subjects because they are felt to reflect what students bring into the program more than how the program affects them. Data from subjects at the more advanced stages in the nursing major are examined to see if changes occur within the program.

Hypothesis 3

The predicted association between service orientation and academic investment was not found, ($\gamma$ = .056) as shown in Table V.

Hypothesis 4

No association between the variables service orientation and a sense of clinical competence, ($\gamma$ = .061) was found for females as shown in Table VI.

Hypothesis 5

Data from female subjects revealed a low positive association between the variables service orientation and time investment, $\gamma$ = .227, Tau c, (a more conservative statistic) $\tau$ = .157, $p < .001$ as shown in Table VII.

Hypothesis 6

A low positive association was found between the variables service orientation and social support, $\gamma$ = .188, $\tau$ c = .121, $p < .0007$, as shown in Table VIII.

TABLE V

Service Orientation by Sense of Clinical Competence (N = 457)
Females

| Service Characteristic | Academic Investment by Stage in Nursing Major: Advanced Clinical | Intermediate Clinical | Beginning Clinical | Total | Percent |
|---|---|---|---|---|---|
| Most important factor | 109 (46.0) | 68 (40.2) | 24 (47.1) | 201 | 44.0 |
| Factor second in imp. | 44 (18.6) | 30 (17.8) | 6 (11.8) | 80 | 17.5 |
| Factor third in imp. | 24 (10.1) | 24 (14.2) | 7 (13.7) | 55 | 12.0 |
| Factor fourth in imp. | 19 (8.0) | 15 (8.9) | 4 (7.8) | 38 | 8.3 |
| Factor fifth in imp. | 9 (3.8) | 8 (4.7) | 1 (2.0) | 18 | 3.9 |
| Factor not ranked as important | 32 (13.5) | 24 (14.2) | 9 (17.6) | 65 | 14.2 |
| Total | 237 | 169 | 51 | 457 | 100.0 |
| Percent | (100.0) | (100.0) | (100.0) | | |

$\gamma = .056$

$\tau c = .036, p < .056$

TABLE VI

Service Orientation by Sense of Clinical Competence (N = 431)
Females

| Service Characteristic | Clinical Competence as Compared with Peers: much higher than others | some higher than others | about same as others | some lower than others | much lower than | Total | % |
|---|---|---|---|---|---|---|---|
| Most important factor | 2 (28.6) | 58 (44.3) | 125 (44.0) | 4 (55.6) | 1 (100.0) | 190 | 44.2 |
| Factor second in imp. | 1 (14.3) | 23 (17.6) | 53 (18.7) | 1 (11.1) | 0 (0.0) | 78 | 18.1 |
| Factor third in imp. | 2 (28.6) | 11 (8.4) | 37 (13.0) | 1 (11.1) | 0 (0.0) | 51 | 11.8 |
| Factor fourth in imp. | 0 (0.0) | 11 (8.4) | 22 (7.7) | 0 (0.0) | 0 (0.0) | 33 | 7.6 |
| Factor fifth in imp. | 0 (0.0) | 7 (5.3) | 11 (3.9) | 0 (0.0) | 0 (0.0) | 18 | 4.2 |
| Factor not ranked as important | 2 (28.6) | 21 (16.0) | 36 (12.7) | 2 (22.2) | 0 (0.0) | 61 | 14.1 |
| Total | 7 | 131 | 284 | 8 | 1 | 431 | 100.0 |
| Percent | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | | |

$\gamma = -.061$

$\tau c = -.026$, $p < .20$

TABLE VII

Service Orientation by Time Investment (N = 494)*
Females

| Service Characteristic | Time Investment of Occupational Choice: Childhood | Junior High | Senior High | Before College | On/After Coll. Ent. | Total | Percent |
|---|---|---|---|---|---|---|---|
| Service most important | 64 (60.4) | 28 (50.0) | 63 (42.3) | 9 (42.3) | 55 (36.9) | 219 | 44.3 |
| Service second in imp. | 20 (18.9) | 7 (12.5) | 32 (21.5) | 9 (26.5) | 20 (13.4) | 88 | 17.8 |
| Service third in imp. | 6 (5.7) | 6 (10.7) | 19 (12.8) | 5 (14.7) | 25 (16.8) | 61 | 12.3 |
| Service fourth in imp. | 7 (6.6) | 6 (10.7) | 10 (6.7) | 2 (5.9) | 14 (9.4) | 39 | 7.9 |
| Service fifth in imp. | 1 (0.9) | 2 (3.6) | 7 (4.7) | 2 (5.9) | 7 (4.7) | 19 | 3.8 |
| Service not ranked as important | 8 (7.5) | 7 (12.5) | 18 (12.1) | 7 (20.6) | 28 (18.8) | 68 | 13.8 |
| Total | 106 | 56 | 149 | 34 | 149 | 494 | 100.0 |
| Percent | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | | |

*Two subjects did not respond to both questions.

$\gamma = .227$

$\tau c = .157$, $\underline{p} < .0001$

TABLE VIII

Service Orientation by Social Support (N = 487)*
Females

| Service Characteristic | Social Support: High Support | Moderate Support | Low Support | Total | Percent |
|---|---|---|---|---|---|
| Service most important | 139 (49.5) | 44 (43.1) | 34 (32.7) | 217 | 44.6 |
| Service second in imp. | 50 (17.8) | 18 (17.6) | 18 (17.3) | 86 | 17.7 |
| Service third in imp. | 30 (10.7) | 13 (12.7) | 16 (15.4) | 59 | 12.1 |
| Service fourth in imp. | 21 (7.5) | 9 (8.8) | 10 (9.6) | 40 | 8.2 |
| Service fifth in imp. | 8 (2.8) | 3 (2.9) | 6 (5.8) | 17 | 3.5 |
| Service not ranked | 33 (11.7) | 15 (14.7) | 20 (19.2) | 68 | 14.0 |
| Total | 281 | 102 | 104 | 487 | 100.0 |
| Percent | (100.0) | (100.0) | (100.0) | | |

*Nine individuals did not respond to this item.

$\gamma = .188$

$\tau c = .121$, $p < .0007$

## Social Support

A positive association was predicted between the social support variable and the explanatory variables, time investment and academic investment.

### Hypothesis 7

A positive relationship, $\gamma = .105$ was found between social support and time investment as predicted. (Table IX)

### Hypothesis 8

Although there was a positive association between the social support and academic investment variables, it was not statistically significant, $\gamma = .115$, ($\tau c = .057$, $p < .05$). See Table X.

## Stability of Occupational Choice

Positive associations were predicted (Hypotheses 9 - 15) between the dependent variable stability of occupational choice and the following seven explanatory variables: academic investment, academic competence, sense of clinical competence, time investment, service orientation, social support, and financial investment.

### Hypothesis 9

A positive relationship between stability of occupational choice and academic investment was demonstrated, $\gamma = .181$, $\tau c = .105$, $p < .0011$ as presented in Table XI.

TABLE IX

Social Support by Time Investment (N = 485)*
Females

| Social Support | Time of Career Choice: Childhood | Junior High | Senior High | Before College | On/After Coll. Ent. | Total | Percent |
|---|---|---|---|---|---|---|---|
| High Support | 63 (60.6) | 37 (67.3) | 86 (58.5) | 16 (48.5) | 79 (54.1) | 281 | 57.9 |
| Moderate Support | 22 (21.2) | 7 (12.7) | 37 (25.2) | 6 (18.2) | 30 (20.5) | 102 | 21.0 |
| Low Support | 19 (18.3) | 11 (20.0) | 24 (16.3) | 11 (33.3) | 37 (25.3) | 102 | 21.0 |
| Total | 104 | 55 | 147 | 33 | 146 | 485 | 100.0 |
| Percent | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | | |

*Nine subjects did not answer both items.

$\gamma = .105$

$\tau c = .06$, $\underline{p} < .03$

TABLE X

Social Support by Academic Investment (N = 457)
Females

| | Academic Investment by Stage in Nursing Major | | | | |
|---|---|---|---|---|---|
| Social Support | Advanced Clinical | Intermediate Clinical | Beginning Clinical | Total | Percent |
| High Support | 148 | 101 | 25 | 274 | 60.0 |
| | (62.4) | (59.8) | (49.0) | | |
| Moderate Support | 47 | 37 | 11 | 95 | 20.8 |
| | (19.8) | (21.9) | (21.6) | | |
| Low Support | 42 | 31 | 15 | 88 | 19.3 |
| | (17.7) | (18.3) | (29.4) | | |
| Total | 237 | 169 | 51 | 457 | 100.0 |
| Percent | (100.0) | (100.0) | (100.0) | | |

$\gamma = .115$

$\tau c = .057$, $\underline{p} < .06$

TABLE XI

Stability of Occupational Choice by Academic Investment (N = 494)
Females

| Attitude Regarding Career Change | Advanced Clinical | Intermediate Clinical | Beginning Clinical | Pre-Clinical | Total | Percent |
|---|---|---|---|---|---|---|
| Would not consider | 124 | 72 | 19 | 15 | 230 | 46.6 |
| | (52.5) | (42.9) | (37.3) | (38.5) | | |
| Disinterested | 67 | 45 | 14 | 13 | 139 | 28.1 |
| | (28.4) | (26.8) | (27.5) | (33.3) | | |
| Neutral | 15 | 15 | 8 | 3 | 41 | 8.3 |
| | (6.4) | (8.9) | (15.7) | (7.7) | | |
| Would consider | 28 | 34 | 9 | 7 | 78 | 15.8 |
| | (11.9) | (20.2) | (17.6) | (17.9) | | |
| Very willing | 2 | 2 | 1 | 1 | 6 | 1.2 |
| | (0.8) | (1.2) | (2.0) | (2.6) | | |
| Total | 236 | 168 | 51 | 39 | 494 | 100.0 |
| Percent | (100.0) | (100.0) | (100.0) | (100.0) | | |

$\gamma = 0.181$

$\tau c = .105$, $p < .0011$

Hypothesis 10

A positive association was predicted between the variables academic competence and stability of occupational choice. A relationship between the items was not found for females, $\gamma = .05$, as shown in Table XII.

Hypothesis 11

The predicted positive association between subjects' stability of occupational choice and their sense of clinical competence was demonstrated, $\gamma = .196$, $\tau c = .076$, $p < .0068$. The findings are presented in Table XIII.

Hypothesis 12

Data for female subjects revealed a positive relationship between stability of occupational choice and time investment, $\gamma = .141$, $\tau c = .089$, significant at the .004 level as shown in Table XIV.

Hypothesis 13

It was proposed that the holding of a service orientation would be positively associated with stability of occupational choice. Data from females supported this prediction, $\gamma = .186$, $\tau c = .116$, $p < .0002$; see Table XV.

Hypothesis 14

It was hypothesized that a positive association would be found between the variables social support and stability of occupational choice. Data for females were in agreement with this prediction, $\gamma = .137$, $\tau c = .081$, a finding significant at the .01 level. See Table XVI.

TABLE XII

Stability of Occupational Choice by Academic Competence (N = 473)*
Females

| Attitude Regarding Career Change | Academic Competence According to Grade Point Average | | | | | | |
|---|---|---|---|---|---|---|---|
| | 2.6-3.0 | 2.1-2.5 | 1.6-2.0 | 1.1-1.5 | 0.6-1.0 | Total | Percent |
| Would not consider | 16 (43.2) | 65 (50.0) | 87 (51.5) | 49 (38.9) | 3 (7.3) | 220 | 46.5 |
| Unwilling to change | 13 (35.1) | 29 (22.3) | 42 (24.9) | 47 (37.3) | 4 (36.4) | 135 | 28.5 |
| Neutral | 1 (2.7) | 9 (6.9) | 20 (11.8) | 9 (7.1) | 0 (0.0) | 39 | 8.2 |
| Would consider | 7 (18.9) | 24 (18.5) | 18 (10.7) | 21 (16.7) | 3 (27.3) | 73 | 15.4 |
| Very willing to change | 0 (0.0) | 3 (2.3) | 2 (1.2) | 0 (0.0) | 1 (9.1) | 6 | 1.3 |
| Total | 37 | 130 | 169 | 126 | 11 | 473 | 100.0 |
| Percent | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | | |

*Twenty-three subjects did not answer both items.

$\gamma = .055$

$\tau c = .033$, $p < .16$

TABLE XIII

Stability of Occupational Choice by Sense of Clinical Competence (N = 430)*
Females

| Attitude Regarding Career Change | Clinical Competence as Compared with Peers: Much Higher | Somewhat Higher | About Same | Some Lower | Much Lower | Total | Percent |
|---|---|---|---|---|---|---|---|
| Would not consider | 5 (71.4) | 80 (56.2) | 130 (45.9) | 1 (11.1) | 1 (100.0) | 210 | 48.8 |
| Disinterested in change | 1 (14.3) | 30 (23.1) | 80 (28.3) | 4 (44.4) | 0 (0.0) | 115 | 26.7 |
| Neutral | 1 (14.3) | 8 (6.2) | 26 (9.2) | 0 (0.0) | 0 (0.0) | 35 | 8.1 |
| Would consider | 0 (0.0) | 16 (12.3) | 46 (16.3) | 4 (44.4) | 0 (0.0) | 66 | 15.3 |
| Very willing to change | 0 (0.0) | 3 (2.3) | 1 (0.4) | 0 (0.0) | 0 (0.0) | 4 | 0.9 |
| Total | 7 | 130 | 283 | 9 | 1 | 430 | 100.0 |
| Percent | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | | |

*Preclinical subjects not included.

$\gamma = .196$

$\tau c = .076$, $\underline{p} < .0068$

TABLE XIV

Stability of Occupational Choice by Time Investment (N = 492)*
Females

| Attitude Regarding Career Change | Time of Career Choice: Childhood | Junior High | Senior High | Before College | On/After College | Total | Percent |
|---|---|---|---|---|---|---|---|
| Would not consider | 57 (54.3) | 32 (57.1) | 64 (43.0) | 15 (44.1) | 61 (41.2) | 229 | 46.5 |
| Disinterested in change | 26 (24.8) | 13 (23.2) | 50 (33.6) | 7 (20.6) | 42 (28.4) | 138 | 28.0 |
| Neutral | 8 (7.6) | 4 (7.1) | 11 (7.4) | 4 (11.8) | 14 (9.5) | 41 | 8.3 |
| Would consider | 13 (12.4) | 6 (10.7) | 23 (15.4) | 8 (23.5) | 28 (18.9) | 78 | 15.9 |
| Very willing to change | 1 (1.0) | 1 (1.8) | 1 (0.7) | 0 (0.0) | 3 (2.0) | 6 | 1.2 |
| Total | 105 | 56 | 149 | 34 | 148 | 492 | 100.0 |
| Percent | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | | |

*Four subjects did not respond to both items.

$\gamma = .141$

$\tau c = .089$, $\underline{p} < .004$

TABLE XV

Stability of Occupational Choice by Service Orientation (N = 494)*
Females

| Attitude Regarding Career Change | Serv. Most Imp. | Serv. 2nd Imp. | Serv. 3rd Imp. | Serv. 4th Imp. | Serv. 5th Imp. | Serv. Not Ranked | Total | Percent |
|---|---|---|---|---|---|---|---|---|
| Would not consider | 117 | 47 | 20 | 16 | 4 | 26 | 230 | 46.6 |
| | (53.2) | (54.0) | (33.3) | (40.0) | (31.1) | (38.2) | | |
| Disinterested in change | 54 | 24 | 22 | 12 | 4 | 23 | 139 | 28.1 |
| | (24.5) | (27.6) | (36.7) | (30.0) | (21.1) | (33.8) | | |
| Neutral | 21 | 6 | 4 | 2 | 2 | 6 | 41 | 8.3 |
| | (9.5) | (6.9) | (6.7) | (5.0) | (10.5) | (8.8) | | |
| Would consider | 28 | 10 | 13 | 6 | 8 | 13 | 78 | 15.8 |
| | (12.7) | (11.5) | (21.7) | (15.0) | (42.1) | (19.1) | | |
| Very willing | 0 | 0 | 1 | 4 | 1 | 0 | 6 | 1.2 |
| | (0.0) | (0.0) | (1.7) | (10.0) | (5.3) | (0.0) | | |
| Total | 220 | 87 | 60 | 40 | 19 | 68 | 494 | 100.0 |
| Percent | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | | |

*Two respondents did not answer both items.

$\gamma = 0.186$

$\tau c = .116$, $p < .0002$

TABLE XVI

Stability of Occupational Choice by Social Support (N = 486)*
Females

| Attitude Regarding Career Change | Social Support: High Support | Moderate Support | Low Support | Total | Percent |
|---|---|---|---|---|---|
| Would not change | 140 (49.8) | 40 (39.2) | 45 (43.7) | 225 | 46.3 |
| Disinterested in change | 81 (28.8) | 31 (30.4) | 26 (25.2) | 138 | 28.4 |
| Neutral | 19 (6.8) | 12 (11.8) | 9 (8.7) | 40 | 8.3 |
| Would consider | 40 (14.2) | 17 (16.7) | 20 (19.4) | 77 | 15.8 |
| Very willing | 1 (0.4) | 2 (2.0) | 3 (2.9) | 6 | 1.2 |
| Total | 281 | 102 | 103 | 486 | 100.0 |
| Percent | (100.0) | (100.0) | (100.0) | | |

*Ten subjects did not answer both items.

$\gamma = .137$

$\tau c = .081$, $p < .01$

Hypothesis 15

The proposed association between financial investment and stability of occupational choice was not found. Data from females revealed a low positive relationship, $\gamma = .089$ (as shown in Table XVII).

## Endorsement of the Nursing Code

Positive associations were predicted (Hypotheses 16 to 23) between a two part item dealing with subjects' support of the occupational code and the four following explanatory variables: academic investment, sense of clinical competence, service orientation and social support.

Item A was designed to evaluate progressive development of the individuals' willingness to act in terms of their theoretical and clinical knowledge in providing patient care. However, an additional aspect of this variable was the dimension requiring subjects to demonstrate personal responsibility for their clinical judgments by choosing a specific nursing action in a situation where they disagreed with a physician's order. The various response categories were designed to indicate progressive levels of self-responsibility, a type of occupational "risk-taking" activity. In this context, it was expected that, with progression in the program, students would increasingly endorse successively more responsible actions. The underlying purpose of this item was to explore evidence of increased internalization of the occupational code—behavior believed essential for guiding behavior of nursing practitioners.

TABLE XVII

Stability of Occupational Choice by Financial Investment (N = 467)*
Females

| Attitude Regarding Career Change | Source Educational Funding: Self | Spouse | Loan | Scholarship & Loan | Parents & Other | Total | Percent |
|---|---|---|---|---|---|---|---|
| Would not consider | 17 (44.7) | 15 (53.6) | 60 (52.2) | 12 (40.0) | 114 (44.5) | 218 | 46.7 |
| Disinterested | 13 (34.2) | 9 (32.1) | 30 (26.1) | 9 (30.0) | 72 (28.1) | 133 | 28.5 |
| Neutral | 3 (7.9) | 1 (3.6) | 8 (7.0) | 3 (10.0) | 25 (9.8) | 40 | 8.6 |
| Would consider | 5 (13.2) | 3 (10.7) | 16 (13.9) | 6 (20.0) | 40 (15.6) | 70 | 15.0 |
| Very willing | 0 (0.0) | 0 (0.0) | 1 (0.9) | 0 (0.0) | 5 (2.0) | 6 | 1.3 |
| Total | 38 | 28 | 115 | 30 | 256 | 467 | 100.0 |
| Percent | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | | |

*Twenty-nine subjects did not respond to both items.

$\gamma = .089$

$\tau c = .046$, $\underline{p} < .05$

Hypothesis 16

The positive relationship predicted between academic investment and Code endorsement, Item A was supported, $\gamma = 319$, $\tau c = .180$, significant at the .001 level; see Table XVIII.

Hypothesis 17

It was predicted that the individuals' conception of their own competence in clinical practice would be positively associated with increased responsibility for making nursing decisions in the patient care area. Data strongly supported this hypothesis, $\gamma = .40$, $\tau c = .151$, $p < .001$ as presented in Table XIX.

Hypothesis 18

A positive association was predicted between the holding of a service orientation and occupational responsibility. These data did not support the hypothesis ($\gamma = -.028$) as shown in Table XX.

Hypothesis 19

It was predicted that perceived support of subjects' occupational choice by "significant others" would be positively associated with the variable based on individual responsibility. This hypothesis was not supported by data, $\gamma = .023$. See Table XXI.

Item B of the Code endorsement measured the subjects' attitudes regarding obtaining additional nursing education. This item was based on the Occupation's belief that knowledge and skills in the health-care areas must be constantly up-dated in order to provide the public with adequate health service. Furthermore the "Code" states that occupational

TABLE XVIII

Code Endorsement, Item A by Academic Investment (N = 493)*
Females

| Responsibility for Clinical Action | Academic Investment: Advanced Clinical | Intermediate Clinical | Beginning Clinical | Pre-Clinical | Total | Percent |
|---|---|---|---|---|---|---|
| Highly endorse | 115 | 55 | 15 | 6 | 191 | 38.7 |
| | (48.5) | (33.1) | (29.4) | (15.4) | | |
| Moderate accept | 92 | 72 | 21 | 19 | 204 | 41.4 |
| | (38.8) | (43.4) | (41.2) | (48.7) | | |
| Minimally accept | 24 | 35 | 12 | 13 | 84 | 17.0 |
| | (10.1) | (21.1) | (23.5) | (33.3) | | |
| Acknowledge | 6 | 4 | 2 | 0 | 12 | 2.4 |
| | (2.5) | (2.4) | (3.9) | (0.0) | | |
| Deny | 0 | 0 | 1 | 1 | 2 | 0.4 |
| | (0.0) | (0.0) | (2.0) | (2.6) | | |
| Total | 237 | 166 | 51 | 39 | 493 | 100.0 |
| Percent | (100.0) | (100.0) | (100.0) | (100.0) | | |

*Three individuals did not respond to both items.

$\gamma = .319$

$\tau c = .180$, $p < .001$

TABLE XIX

Code Endorsement, Item A by Sense of Clinical Competence (N = 430)*
Females

| | Clinical Competence as Compared with Peers | | | | | | |
|---|---|---|---|---|---|---|---|
| Responsibility for Clinical Action | Much Higher Than Peers | Some Higher | About Same | Some Lower | Much Lower | Total | Percent |
| Highly endorse | 3 | 75 | 102 | 2 | 1 | 183 | 42.6 |
| | (42.9) | (58.1) | (35.9) | (22.2) | (100.0) | | |
| Moderate accept | 3 | 46 | 121 | 2 | 0 | 172 | 40.0 |
| | (42.9) | (35.7) | (42.6) | (22.2) | (0.0) | | |
| Minimally accept | 0 | 7 | 52 | 4 | 0 | 63 | 14.7 |
| | (0.0) | (5.4) | (18.3) | (44.4) | (0.0) | | |
| Acknowledge | 1 | 0 | 9 | 1 | 0 | 11 | 2.6 |
| | (14.3) | (0.0) | (3.2) | (11.1) | (0.0) | | |
| Deny | 0 | 1 | 0 | 0 | 0 | 1 | 0.2 |
| | (0.0) | (0.8) | (0.0) | (0.0) | (0.0) | | |
| Total | 7 | 129 | 284 | 9 | 1 | 430 | 100.0 |
| Percent | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | | |

*Preclinical subjects not included.

$\gamma = .40$

$\tau c = .151$, $p < .0001$

TABLE XX

Code Endorsement, Item A by Service Orientation (N = 493)*
Females

| Attitude Regarding Career Change | Importance of Service Characteristic: Serv. Most Imp. | Serv. 2nd Imp. | Serv. 3rd Imp. | Serv. 4th Imp. | Serv. 5th Imp. | Serv. Not Ranked | Total | Percent |
|---|---|---|---|---|---|---|---|---|
| Would not consider | 89 (40.8) | 28 (32.2) | 22 (36.1) | 17 (42.5) | 10 (52.6) | 25 (36.8) | 191 | 38.7 |
| Disinterested | 80 (36.7) | 39 (44.8) | 30 (49.2) | 17 (42.5) | 8 (42.1) | 30 (44.1) | 204 | 41.4 |
| Neutral | 41 (18.8) | 17 (19.5) | 9 (14.8) | 6 (15.0) | 1 (5.3) | 10 (14.7) | 84 | 17.0 |
| Would consider | 7 (3.2) | 3 (3.4) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 2 (2.9) | 12 | 2.4 |
| Very willing | 1 (0.5) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1 (1.5) | 2 | 0.4 |
| Total | 218 | 87 | 61 | 40 | 19 | 68 | 493 | 100.0 |
| Percent | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | | |

*Three subjects did not respond to both items.

$\gamma = -.028$

$\tau c = -.016$, $\underline{p} < .30$

TABLE XXI

Code Endorsement, Item A by Social Support (N = 484)
Females

| | Social Support for Career Choice | | | | |
|---|---|---|---|---|---|
| Responsibility for Clinical Action | High Support | Moderate Support | Low Support | Total | Percent |
| Highly endorse | 105 (37.6) | 39 (38.6) | 45 (43.3) | 189 | 39.0 |
| Moderate accept | 127 (45.5) | 41 (40.6) | 32 (30.8) | 200 | 41.3 |
| Minimally accept | 43 (15.4) | 18 (17.8) | 20 (19.2) | 81 | 16.7 |
| Acknowledge | 4 (1.4) | 3 (3.0) | 5 (4.8) | 12 | 2.5 |
| Deny | 0 (0.0) | 0 (0.0) | 2 (1.9) | 2 | 0.4 |
| Total | 279 | 101 | 104 | 484 | 100.0 |
| Percent | (100.0) | (100.0) | (100.0) | | |

$\gamma = .023$

$\tau c = .013$, $\underline{p} < .359$

members are individually responsible for gaining this continuing education. Positive relationships were predicted (Hypotheses 20 to 23) between the Code endorsement of Item B and the explanatory variables academic investment, sense of clinical competence, service orientation and social support. Results will be examined in terms of the above explanation.

Hypothesis 20

It was predicted that with progression in the curriculum, subjects would demonstrate an increased endorsement of the benefits of continuing (in some manner) their occupational education in order to give more adequate nursing care. Data from female subjects supported this hypothesis, $\gamma = .184$, $\tau c = .093$, a finding significant at the .0025 level. See Table XXII.

Hypothesis 21

It was predicted that a high subjective rating of an individual's clinical competence (as compared with peers) would be positively associated with increased approval of the value of continued occupational education. Data from females did not support this hypothesis, $\gamma = .013$, as presented in Table XIII.

Hypothesis 22

A positive association was predicted between the holding of a "service orientation" and approval of continued occupational education. Findings for female respondents supported this hypothesis, $\gamma = .149$, $\tau c = .081$, $p < .006$. See Table XXIV.

TABLE XXII

Code Endorsement, Item B by Academic Investment (N = 496)
Females

| Reason: Continuing Education | Academic Investment: Advanced Clinical | Intermediate Clinical | Beginning Clinical | Pre-Clinical | Total | Percent |
|---|---|---|---|---|---|---|
| Benefit client | 24 | 9 | 1 | 3 | 37 | 7.5 |
| | (10.1) | (5.4) | (2.0) | (7.7) | | |
| Maintain job ability | 116 | 74 | 20 | 18 | 228 | 46.0 |
| | (48.7) | (44.0) | (39.2) | (46.2) | | |
| Prepare for specialized role | 94 | 78 | 26 | 16 | 214 | 43.1 |
| | (39.5) | (46.4) | (51.0) | (41.0) | | |
| Organizational norm | 4 | 7 | 4 | 0 | 15 | 3.0 |
| | (1.7) | (4.2) | (7.8) | (0.0) | | |
| Personal benefit | 0 | 0 | 0 | 2 | 2 | 0.4 |
| Total | 238 | 168 | 51 | 39 | 496 | 100.0 |
| Percent | (100.0) | (100.0) | (100.0) | (100.0) | | |

$\gamma = .184$

$\tau c = .093$, $\underline{p} < .0025$

TABLE XXIII

Code Endorsement, Item B by Sense of Clinical Competence (N = 432)
Females

| Reason: Continuing Education | Clinical Competence as Compared with Peers: Much Higher Than Others | Some Higher Than Others | About Same As Others | Some Lower Than Others | Much Lower Than Others | Total | Percent |
|---|---|---|---|---|---|---|---|
| Benefit client | 1 | 12 | 17 | 2 | 0 | 32 | 7.4 |
| | (14.3) | (9.2) | (6.0) | (22.2) | (0.0) | | |
| Maintain job ability | 3 | 59 | 131 | 5 | 1 | 199 | 46.1 |
| | (42.9) | (45.0) | (46.1) | (55.6) | (100.0) | | |
| Prepare for specialized role | 3 | 56 | 125 | 2 | 0 | 186 | 43.1 |
| | (42.9) | (42.7) | (44.0) | (22.2) | (0.0) | | |
| Organizational norm | 0 | 4 | 11 | 0 | 0 | 15 | 3.5 |
| | (0.0) | (3.1) | (3.9) | (0.0) | (0.0) | | |
| Personal benefit | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| | (0.0) | (0.0) | (0.0) | (0.0) | (0.0) | | |
| Total | 7 | 131 | 284 | 9 | 1 | 432 | 100.0 |
| Percent | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | | |

$\gamma = .013$

$\tau c = .005$, $\underline{p} < .437$

TABLE XXIV

Code Endorsement, Item B by Service Orientation (N = 496)
Females

| Reason: Continuing Education | Importance of Service Characteristic: Serv. Most Imp. | Serv. 2nd Imp. | Serv. 3rd Imp. | Serv. 4th Imp. | Serv. 5th Imp. | Serv. Not Ranked | Total | Percent |
|---|---|---|---|---|---|---|---|---|
| Benefit client | 4 | 3 | 1 | 0 | 2 | 37 | 7.5 | |
| | (12.3) | (4.5) | (4.9) | (2.5) | (0.0) | (2.9) | | |
| Maintain job ability | 44 | 25 | 17 | 10 | 34 | 228 | 46.0 | |
| | (44.5) | (50.0) | (41.0) | (42.5) | (52.6) | (50.0) | | |
| Prepare for specialized role | 34 | 30 | 20 | 8 | 28 | 214 | 43.1 | |
| | (42.7) | (38.6) | (49.2) | (50.0) | (42.1) | (41.2) | | |
| Organizational norm | 1 | 4 | 3 | 2 | 1 | 4 | 15 | 3.0 |
| | (0.5) | (4.5) | (4.9) | (5.0) | (5.3) | (5.9) | | |
| Personal benefit | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 0.4 |
| | (0.0) | (2.3) | (0.0) | (0.0) | (0.0) | (0.0) | | |
| Total | 220 | 88 | 61 | 40 | 19 | 68 | 496 | 100.0 |
| Percent | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | | |

$\gamma = .149$

$\tau c = .081$, $\underline{p} < .006$

Hypothesis 23

It was predicted that a positive association would be found between subjects' reporting of social support for their career choice and the approval for continuing nursing education. An association was not demonstrated by data from female subjects, $\gamma = -.003$, as shown in Table XXV.

## Interpretation

Each of the hypotheses will be discussed briefly to draw some substantive and theoretical conclusions from the statistical results reported above. For several hypotheses, data from males will be used to provide a theoretical and substantive point of contrast in the socialization process.

### Clinical Competence

Hypothesis 1 was supported with students more advanced in the nursing curriculum expressing greater competence in their clinical practice. As students progress in the program (academic investment) they are scheduled for increasing amounts of clinical experience. Through these activities, students gain competence in necessary skills and also are likely to experience positive feedback from patients regarding their clinical ability. Additionally, upper level students are given more responsible and independent clinical assignments, thus receiving evidence of their instructors' (as significant persons), confidence in their ability, thereby reinforcing the students' sense of clinical competence. In this same context it may also be that

TABLE XXV

Code Endorsement, Item B by Social Support (N = 487)*
Females

| Reason: Continuing Education | Social Support: High Support | Moderate Support | Low Support | Total | Percent |
|---|---|---|---|---|---|
| Benefit client | 21 (7.5) | 8 (7.8) | 8 (7.7) | 37 | 7.6 |
| Maintain job ability | 126 (44.8) | 52 (51.0) | 45 (43.3) | 223 | 45.8 |
| Prepare for specialized role | 126 (44.8) | 39 (38.2) | 45 (43.3) | 210 | 43.1 |
| Organizational norm | 6 (2.1) | 3 (2.9) | 6 (5.8) | 15 | 3.1 |
| Personal benefit | 2 (0.7) | 0 (0.0) | 0 (0.0) | 2 | 0.4 |
| Total | 281 | 102 | 104 | 487 | 100.0 |
| Percent | (100.0) | (100.0) | (100.0) | | |

*Nine subjects did not answer both items.

$\gamma = -.003$

$\tau c = -.001$, $\underline{p} < .48$

achievement of advanced standing in the educational program contributes to the students' perception of increased ability in the clinical area.

Hypothesis 2 also found statistical support. It would appear that higher grades in the theoretical portion of the curriculum lead to increased ability in the clinical area. Knowledge gained in the classroom combined with evidence of high academic performance apparently contributes to the students' assessment of their clinical practice as being more competent. An interesting finding revealed by the data showed that higher levels of academic performance were not found in a disproportionate amount among the more advanced students. Therefore, advancement in the program is not necessarily accompanied by higher levels of academic performance.

Service Orientation

Hypothesis 3 was not supported; progression in the educational program is not necessarily accompanied by an increase in the service orientation of students. An examination of the data in Table V, p. 63, reveals an interesting pattern worthy of further discussion. The importance of the service orientation is not stable over time. It is curvilinear. For the beginning clinical group, 47.1 percent indicated service as most important; a smaller proportion of subjects in the intermediate stage of the program, i.e. 40.2 percent of the students, endorse service as most important and finally, 46.0 percent of subjects in the advanced clinical stage indicated the service characteristic as being most important. These percentages show a curvilinear pattern in the ranking of service as most important with a slight dip shown during

the intermediate program stage. Ranking by subjects of service as the second most important characteristic in nursing shows a different pattern. Approximately 12 percent of beginning clinical students, 17.8 percent of intermediate level subjects, and 18.6 percent of students in the advanced clinical stage rank service as second highest in importance. For this ranking, there is a progressive increase in the percent of subjects who rate the service dimension at this level. Overall, it appears that the percent of nursing students who rank service as a relatively important characteristic is semi-stable during the beginning and intermediate clinical stages of the program and then increases in the advanced or final portion of the curriculum. In contrast, the nonservice oriented category becomes smaller during the advanced level of the program. It is recognized that these data are cross sectional rather than longitudinal, therefore the progressive decrease in the proportion of students reporting low service orientation may reflect subjects becoming more service oriented as they progress, or it may reflect a higher drop out rate for students disinterested in the service aspect of nursing.

Hypothesis 4 was not supported either; a sense of clinical competence was not related to service orientation. This occupational value appears to be a more fixed component of females attitude framework and thus does not vary by clinical experiences. A remarkably different pattern between these variables was shown for male students. The association was in an inverse direction, ($\gamma$ = -.45) see Table A-1, Appendix C. According to the data, males rank themselves as more capable clinically than their classmates (primarily females). However, of this group of males, 38.5

percent of the total males were classified as nonservice oriented; 15.4 percent rated service as low in importance for the nursing career. From these figures, it appears that values other than service factors attract males to nursing.

Hypothesis 5 was supported; nurses who had chosen nursing at a younger age were also the more service oriented. The majority of female subjects indicated they made their career choice during their childhood or adolescent years. During this time they would be living at home where it is likely parents would encourage and/or reinforce the traditional female role of nurturing and caring type behavior. Therefore, this finding supports the earlier literature reviewed.

A very different pattern exists with these data on male nursing students. They make the choice to go into nursing much later and on the basis of different motivating value orientations. None of the males chose nursing during childhood, and only 4.6 percent of the male subjects made a decision for nursing during the high school period. The most obvious difference between sex groups on this variable is the number who chose the nursing major on or after college entry. For females, 31.9 percent decided to enroll in the nursing major on or after enrolling in college as compared with 83.7 percent of the males who made a similar decision. Since early decisions are made during the time when the individual is living at home, it is likely this choice is made with the support and (probably) the encouragement of family members. A positive function of career decision made prior to, or during high school years is the opportunity afforded for gaining career information and advice from vocational counselors. This process provides an

additional source of information and possible reinforcement of occupational choice. The selection of an occupational goal is made (in part) on the basis of values the individual holds (Rosenberg, 1957). Traditional roles for females are nurturant, expressive and caring activities, (Mussen, 1968). In this context, the association between the time investment variable and the reinforcing of the service orientation item is seen to be mutually supportive. For males, different behaviors are approved. Appropriate sex behavior for the young boy is seen to be aggressive, self-directed, and technique-thing oriented rather than service and/or caring centered (Parsons and Bales, 1955). Consequently, it is unlikely the male would be aware of nursing as a potential career during his early school years. If he were to consider such a career, it is quite possible family pressures would influence him to alter his occupational choice, since nursing as an occupational option for males is not yet well accepted (Rudov et al., 1976). Based on the foregoing rationale, an inverse relationship could be expected (and was obtained) between the variables service orientation and time investment for males.

Hypothesis 6 was supported. Students who experienced the most social support for their occupational decision were those who had the higher service orientation. The values (nurturing, etc.) underlying the practice of nursing are compatible with those attitudes and values seen as traditionally appropriate for females. Those females who choose nursing are likely to choose it for many of these reasons which also gain confirmation and social support from others. As early as 1915 Isabel Stewart indicated that the traditional virtues of the nurse included obedience, courage, patience, discretion and a spirit of self-sacrifice

or service. (Stewart, 1916). In recent years there is a move toward equalitarian career options and a decrease in stereotyped attitudes toward the female role. However, at the time period when the subjects in the present study were participants in early family socialization patterns, the newer views were just gaining acceptance, thus it is believed that, for these students, their parents, and a considerable number of social support persons endorsed the traditional roles and behaviors for the adult female. Consequently, the positive association found for these variables seems logical in view of subjects receiving high social support for participation in an occupation characterized by a value framework acceptable to support persons.

Tables XXVI and XXVII provide a breakdown of job characteristics as ranked in order of importance by subjects of each sex. From these data it appears that more materialistic and/or nonservice centered values motivate males to select the nursing occupation. Marked differences in the ordering as well as in the choice of characteristics are noted. For instance, 18.6 percent of the males rated job security of most importance compared with 9.67 percent of females. A second category, materialistic in nature, was labeled "Financial Benefit." Approximately 12 percent of the males in contrast to 2.2 percent of females rated this factor first in importance. When these two categories, (primarily economical in nature) are combined it is found that 30.2 percent of the males as compared with 11.8 percent of females view this feature of nursing as the most important factor. In the "Service" category, 23.3 percent males vs. 44.5 percent females saw this as most important; that is, almost twice as large a percent of the women were motivated by this attribute.

TABLE XXVI

Ranked Significance of Selected Occupational Characteristics by Female Nursing Students (Rank One Most Important) N = 496*

| Career Characteristics | Ranked Order of Importance (by # of choices and percent) 1 | 2 | 3 | 4 | 5 | Total Choices | Percent |
|---|---|---|---|---|---|---|---|
| Respected Occupation | 10<br>2.01 | 17<br>3.44 | 29<br>5.87 | 40<br>8.09 | 59<br>11.94 | 155 | 6.28 |
| Personal Satisfaction | 134<br>27.0 | 144<br>29.14 | 67<br>13.56 | 49<br>9.91 | 29<br>5.87 | 423 | 17.09 |
| Good Preparation-Adult Life | 17<br>3.4 | 29<br>5.87 | 68<br>13.76 | 66<br>13.36 | 53<br>6.68 | 233 | 9.44 |
| Job Security | 48<br>9.67 | 55<br>11.13 | 62<br>12.55 | 74<br>14.97 | 81<br>16.39 | 320 | 12.96 |
| Opportunity to Use Special Skills | 10<br>2.01 | 30<br>6.07 | 48<br>9.71 | 65<br>13.15 | 54<br>10.93 | 207 | 8.38 |
| Chance to Help People | 22<br>44.5 | 88<br>17.81 | 61<br>12.34 | 40<br>8.09 | 18<br>3.64 | 428 | 17.30 |
| Financial Benefit | 11<br>2.21 | 23<br>4.65 | 34<br>6.88 | 44<br>8.90 | 55<br>11.13 | 167 | 6.76 |
| Work with People (rather than things) | 40<br>8.00 | 99<br>20.04 | 85<br>17.20 | 57<br>11.53 | 48<br>9.71 | 329 | 13.33 |
| Work Independently | 3<br>0.60 | 5<br>1.01 | 29<br>5.87 | 38<br>7.69 | 52<br>10.52 | 127 | 5.14 |
| Associate with People Holding Similar Interests | 2<br>0.40 | 2<br>0.40 | 11<br>2.22 | 21<br>4.25 | 45<br>9.10 | 81 | 3.28 |
| TOTAL | **496<br>100.0 | 494<br>100.0 | 494<br>100.0 | 494<br>100.0 | 494<br>100.0 | 2,472 | 99.96 |

*All but 2 subjects rank ordered all five career characteristics.

**Two subjects listed only the most important career characteristics.

Table XXVII

Ranked Significance of Selected Occupational Characteristics by Male Nursing Students (Rank One Most Important) N = 43*

| Career Characteristics | Ranked Order of Importance (by # of choices and percent) 1 | 2 | 3 | 4 | 5 | Total** | Percent |
|---|---|---|---|---|---|---|---|
| Respected Occupation | 2<br>4.65 | 2<br>4.65 | 3<br>6.97 | 3<br>6.97 | 3<br>6.97 | 13 | 6.04 |
| Personal Satisfaction | 10<br>23.25 | 9<br>20.93 | 5<br>11.62 | 7<br>16.27 | 4<br>9.30 | 35 | 16.27 |
| Good Preparation-Adult Life | 1<br>2.32 | 3<br>6.97 | 1<br>2.32 | 2<br>4.65 | 3<br>6.97 | 10 | 5.0 |
| Job Security | 8<br>18.60 | 12<br>27.9 | 5<br>11.62 | 7<br>16.27 | 3<br>6.97 | 35 | 16.27 |
| Opportunity to Use Special Skills | 3<br>6.97 | 3<br>6.97 | 7<br>16.27 | 3<br>6.97 | 7<br>16.24 | 23 | 10.45 |
| Chance to Help People | 10<br>23.25 | 2<br>4.65 | 7<br>16.27 | 4<br>9.30 | 5<br>11.62 | 28 | 13.02 |
| Financial Benefit | 5<br>11.6 | 6<br>13.95 | 4<br>9.30 | 6<br>13.95 | 4<br>9.30 | 25 | 11.62 |
| Work with People (rather than things) | 4<br>9.30 | 1<br>2.32 | 6<br>13.95 | 7<br>16.27 | 3<br>6.97 | 21 | 9.54 |
| Work Independently | 0<br>0.0 | 5<br>11.62 | 4<br>9.30 | 1<br>2.32 | 9<br>20.93 | 19 | 8.63 |
| Associate with People Holding Similar Interests | 0<br>0.0 | 0<br>0.0 | 1<br>2.32 | 3<br>6.97 | 2<br>4.65 | 6 | 2.72 |
| TOTAL | 43<br>100.0 | 43<br>100.0 | 43<br>100.0 | 43<br>100.0 | 43<br>100.0 | 215** | 99.95 |

*All subjects rank ordered all five career characteristics.

**Total choices for all five categories.

A third area of difference was the item "Opportunity to use special skills," a technical type of competence. The percent of males that ranked this aspect most important was nearly 7 percent as compared with only 2.0 percent of the females. The groups were relatively equal in ranking the category "Work with People": 9.3 percent males vs. 8.1 percent females. However, when choices in all ranks for this item were considered 13.3 percent of the females selected working with people as one of the five important job characteristics compared with 9.5 percent of the males. A final quality, "Respected Occupation" was ranked as most important for 4.65 percent of the males compared with 2.0 percent of the females.

In summary, for males the most important characteristic of the nursing career appeared to be materialistic in nature (an instrumental quality). A contrasting orientation characterizes the females since nearly half (44.5 percent) of the group selected "The chance to help people" as the most important quality of the nursing career.

Social Support

Hypothesis 7 was supported. Students who had chosen nursing at a younger age were those who experienced the most social support. The expectation that subjects' support of their career choice (as expressed by persons significant to them) would increase or at least remain steady seems reasonable. This would appear to be particularly true in the case of female subjects who made an early decision for the nursing career. In as much as these early decisions would be made while at hone, it is expected that the occupational choice would be made in agreement with

parents' values, (see earlier discussion). Furthermore, support persons would be expected to approve both the choice of the career (as socially acceptable for females) and the intent of the individual to adhere to this choice.

Data from male subjects reveal a distinctly different pattern for the association on these variables. Of the 43 male subjects, only 4.6 percent made their career choice prior to, or during high school. Nearly 12 percent decided on nursing in the period between high school and college while the remaining 83.7 percent chose nursing on or after college entry. A high but inverse relationship exists between the two variables Table A-2, Appendix C. The difference in the time of career choice for the two sexes suggests that underlying values or motivations leading to the choice are distinctly different for these groups. Taylor and Richter (1969) report that high school males see nursing as a female, nurturant occupation and thus not appropriate for males. Similar findings were reported by Vaz (1968). In regard to this "late decision" for nursing it appears the choice is made within the context of an adult evaluation of advantages available in the career. If this is in fact true, the late decision could have a stabilizing effect on career choice for males.

Hypothesis 8 was not supported in these data. Social support from others was not higher for students further advanced in the program. Again it should be mentioned that the information in this study is based on a cross sectional survey rather than a longitudinal study. However, the values obtained and the direction of the relationships are believed to be representative of student characteristics at various stages in the

nursing program. Forty-nine percent of the subjects in the beginning clinical level reflect maximum social support. This quantity is increased in the intermediate stage where approximately 60 percent of the students indicate maximum support, and finally, in the advanced clinical portion of the program, 62.4 percent of the students perceive their social support to be of the highest rated level. As students advance in the program, a lower proportion report low social support. It is possible that support persons increase their approval of the students as the subjects move toward program completion. An alternate explanation could be that students who do not receive adequate approval by significant persons tend to withdraw from the nursing major.

The social support pattern for males is directly opposite to the females as shown in Table A-3, Appendix C. For the maximum social support rank, 75 percent of the subjects in the beginning stage of the program rate their support as high. In the intermediate stage, the percent receiving high support drops to 50 percent with a further decrease in the advanced stage to 23.1 percent of the subjects who state they are highly supported socially. For the lowest rank on the social support variable, there were no students in the beginning stage rating their support as low. Forty percent of the students in the intermediate phase of the program indicated low support, a value which increased slightly to equal 42.3 percent of the advanced level subjects who rated their support as low.

In comparing support patterns for students in the preclinical portion of the nursing major, 59.5 percent of the females indicated a maximum level of support. According to the data listed above, this value

decreased to the extent that 49 percent of the beginning clinical students ranked their support as high. Following this drop in percent, there is a progressive increase in students receiving maximum support as they are at successively more advanced levels of the program. None of the males in the preclinical stage indicated high support, in fact, 66.7 percent of the students in this stage indicated low social support. The percent of males receiving maximum support was highest in the beginning clinical stage. This proportion decreases until the final clinical level where the largest category of subjects (46.2 percent) rate their support as low. On the basis of these data, females reflect consistently higher support of their choice of the nursing major than do males, and the discrepency in support scores widens as students of both sexes progress through the program. Although tables are not included, data from the respondents did reflect a change in the identity of support persons for individuals at various stages in the program. Consequently further research is needed to determine the implications of a changing support system for nursing students of each sex.

## Stability of Occupational Choice

Hypothesis 9 was supported by the data. The relationship found between progression in the nursing program, i.e. academic investment, and commitment to complete the nursing major appears realistic. Since a large number of females (69 percent) indicated they decided for the career prior to college enrollment, this decision could be expected to vary in response to a number of factors occurring after college entry. College students often experience academic difficulty, financial

limitations, altered vocational interests, change in marital status and/or miscellaneous pressures from family or other situations. In view of these possibilities the support of this hypothesis is significant when viewing the educational program as a major socializing influence for recruits to the occupational field.

Hypothesis 10 was not supported, indicating that a high level of academic performance does not noticeably influence the student to complete the program. Relative to the field of nursing there appears to be some disagreement among students regarding the level of intellectual ability needed to be successful. In a study of high school girls, Rinehart, (1968:50) found that although the subjects believed nursing to be a demanding career, they did not picture it as being particularly difficult, academically. A similar finding was reported by Davis and Olesen in their study of "first year" nursing students in a baccalaureate program. They refer to this factor in the following words:

> . . . a recurrent theme encountered by the authors in their field work with students: the frequent complaint of many that their nursing courses did not measure up in intellectual and theoretical content with what they had received in academic college subjects before coming to the School of Nursing. (1964:12)

If in fact this attitude is characteristic of nursing students, it is possible that the high academic performers may feel they are not being sufficiently challenged by their educational program and thus begin to consider alternate academic fields.

Hypothesis 11 was supported, indicating that a positive subjective evaluation of one's clinical ability contributes to the individual's commitment to complete the educational program. Females appear to vary

in their determination to "stay with" the nursing major in relation to their own evaluation of their clinical performance. Earlier data reflected entering subjects' high service orientation; therefore, this finding is compatible with this value framework. The decision to continue in nursing could reasonably be related to the individual's perception of competence in the direct care situation and conversely, feelings of clinical inadequacy would lead to withdrawal from the program.

Hypothesis 12, which proposed a positive relationship between a commitment to complete the nursing major and the length of time the individual had held this career choice, was supported for female students. Increased time investment implies an earlier career decision. Furthermore, early decisions (a characteristic of the females) are made during the time the subject is living at home, and is therefore subject to parental influence. Literature cited earlier indicated parents as the most influential persons in the area of student's career choice; therefore this finding is in agreement with the literature.

A uniquely different pattern is reflected by males. The majority, 83.7 percent, indicate they made their career choice on or after college entry. In view of this time element, it appears the males' decision is made in a relatively adult framework with consideration of more accurate appraisals of career characteristics and opportunities. The following comparison reflects the time of career choice for members of each sex.

| Period of Choice | Males | Females |
|---|---|---|
| Childhood | 0.0 | 21.34 |
| Junior high school | 2.32 | 11.38 |
| Senior high school | 2.32 | 30.2 |
| Post high school/ Pre college | 11.62 | 6.89 |
| On/after college entry | 83.74 | 20.2 |

In view of these research findings, hypotheses associating time investment with stability of career choice are supported for both sexes but apparently on the basis of different orientations. Further study is indicated regarding these various motives and their significance in terms of subsequent career performance of potential recruits to the nursing occupation.

Hypothesis 13 proposing a relationship between subjects' service orientation and the stability of occupational choice was supported. Earlier discussion of the service variable indicated that endorsement of the service factor was characteristic of females, therefore, these findings are consistent with previously reported data.

Hypothesis 14 was supported. The majority of subjects listed parents as their support persons. Since literature indicates parents as highly influential persons for subjects making a career decision (Slocum, 1966) it is expected that stability of a subject's decision to complete the program would be associated with high support by those persons originally endorsing the career choice.

Hypothesis 15 predicting a relationship between commitment to complete the educational program and the personal economic sacrifice was

not supported. Approximately 55 percent of these subjects indicate they are supported by parents (a category ranked low in student sacrifice in this research). In view of this finding, the subjects may be relatively unaware of, or unaffected by financial considerations, in terms of their decision to complete the program. An additional possibility is that once students commit themselves to a career, they accept the potential costs of the preparatory educational program; financial considerations, while important, may not noticeably influence their decision to continue in school.

Endorsement of the Nursing Code: Clinical Responsibility

Hypothesis 16 was supported; students further in the program were more willing to make independent decisions and act in accordance (in this context) with the Nursing Code. This increased acceptance of individual responsibility in the clinical area however may be due to something other than socializing influences of the educational program. Students who were less committed to these values may be the ones who drop out of nursing early, leaving only the more responsible subjects to progress to the decision making level of responsibility scheduled later in the program. Further research could be sensitive to this possibility.

Hypothesis 17 found support in these data. Those individuals who felt more clinically competent (as compared with peers) were also more willing to make decisions which implied an element of risk (i.e. questioning a doctor's order). The gaining of experience and competence added to the additional theoretical knowledge may encourage students in

developing self-confidence and subsequently the ability to exercise independent judgement.

Hypothesis 18 was not supported. Being more service oriented was not related to willingness to make independent decisions and act in accordance with individual judgments as advocated in the Nursing Code. It may be that high endorsement of the service characteristic of nursing is a relatively fixed framework, and therefore is not involved in day to day decisions involving types of nursing decisions. An alternate explanation may be that holding of a high service orientation (a traditional occupational value) is not compatible with refusing to follow a doctor's order (also a traditional norm for nursing).

Hypothesis 19 was not supported by these date either. Social support for one's occupational choice was not associated with willingness to make independent decisions in the clinical area. It would be important in understanding this finding to determine the identity of subjects' support individuals. If, in fact, they are parents and/or individuals who hold the traditional views of the nursing occupation, (i.e. being somewhat subservient, and dependent on the medical profession for decisions) then the above relationship might be expected. However, in the context of the educational program serving as a socializing process, motivating individuals to endorse expected occupational behaviors, the absence of an association could have implications for the occupation in terms of emphasizing to students (and indirectly to supportive persons) the contemporary norms of the occupation.

Endorsement of the Nursing Code:
Updating Competencies

Hypothesis 20 was supported; students further in the program were more concerned with providing better care (through updating their occupational knowledge). Since many students are "tired of school" and, at the time of approaching graduation, disinterested in further schooling, the supporting data for this hypothesis suggests an acceptance of occupational norms by students and, in this sense gives evidence of an effective socializing experience.

Hypothesis 21 was not supported. The individual's sense of clinical competence (as compared with peers) was not associated with concern for continued occupational education. The lack of association shown for female subjects could be a function of their plan to marry and therefore not enter the job market. In this situation, additional education would not be seen as desirable.

In contrast to data from females, findings for male subjects highly supported this hypothesis as shown in Table A-4, Appendix C. The variable Code Item B focuses on the reasons for seeking additional education in nursing and in this context, it is significant that the male group (who, as a whole, view themselves as more competent clinically) also endorse the value of additional education. An underlying reason for this response might be related to the fact that advanced nursing education (especially on the graduate level) provides a socially approved route to higher status and prestige in a nursing career. Furthermore, positions in teaching and administration (which consistently pay better) generally require the graduate degree; at the same time, these roles are less

directly associated with nurturing, direct patient contact positions. In this case, the additional education and the lessening of direct care, (service type) activity would be seen as an advantage by males and a disadvantage by females.

Hypothesis 22 predicting a positive relationship between holding a "service orientation" and approving the value of continued occupational education was supported. Since the formal goal of the continued education is improved nursing practice, this positive finding is an expected outcome for this group who, with a service framework would be expected to seek to improve the care rendered by participating in continued learning experiences.

Hypothesis 23 suggesting that support of the career choice would be associated with the occupational value of continuing education in nursing was not supported. In view of the lengthy and demanding (in terms of class and clinical experience) nature of the nursing program, it is possible that support persons feel the educational experience has been sufficient to equip the subject adequately for occupational practice; therefore additional education (and expense) is seen as an unnecessary and possibly unwelcome occupational goal.

# CHAPTER V

## SUMMARY

This research was concerned with the process of occupational socialization of students enrolled in a university-based preparatory program. It was theorized that as in childhood, adult socialization is a continuous and sequential process. The outcomes vary as a result of factors specific to the individual and in response to external influences and experiences. As expressed in socialization literature, the process includes the acquisition of a specific culture i.e. its knowledge, skills, values and patterns of action. In addition, the extent of willingness (or reluctance) the individual holds toward the experience, the intensity of the socializing experience and the relationship and/or impact of the socializing agents have a significant effect on the outcome of the process.

In the context of this research, the educational curriculum was seen as providing in a sequential manner, the framework and the experiences which structured socialization to the occupational role of a future practicing nurse.

The orientation implied in the concept of anticipatory socialization motivates students to enroll in the educational program required for occupational membership. Additionally, individuals significant to the students in terms of their relationship, (i.e. parent, friend, financial provider, peer, instructor, role model and patient) were believed to serve in a reference or evaluative framework to either support and

encourage the subject in taking on the occupational culture, or conversely, to discourage the individual from proceeding toward the specific career goal. It was believed that cumulative educational, occupational and social experiences if positive would result in the student's identification as an occupational member, the result being relatively effective socialization to the role of "nurse."

Data were secured through responses to a self-administered questionnaire. Usable returns were obtained from 539 students enrolled in all stages of the curriculum, preclinical through advanced clinical level.

The variables which were considered as dependent or outcome factors were: approval of the service characteristic of nursing, sense of competence in the clinical area, support by persons regarding career choice were considered significant, commitment to complete the educational program and a two part item reflecting internalization of the occupational code. Since findings were considerably different for members of each sex, these groups were examined separately. Males were discussed only when data differed from relationships found for females.

## Sense of Clinical Competence

An association was found between each of the following two explanatory variables, academic investment (ranked in terms of subjects' position in the curriculum) and academic competence (according to subjective report of grade point avarage), and the outcome variable, "sense of clinical competence." These findings were expected since continued participation in the clinical area is conditional to

satisfactory progress in the theoretical portion of the curriculum. With progression in the program, the students acquire course credits (academic investment). For the purposes of this paper, academic investment was classified in terms of four curriculum stages; preclinical, beginning, intermediate and advanced clinical level. During the preclinical stage of the program, students are enrolled in general education courses only, thus they do not have an opportunity for clinical practice. With progression (contingent on maintaining satisfactory course grades) students are scheduled for successively increasing amounts of clinical experience. The academic setting provides the knowledge and skills making up a part of the occupational culture which the student acquires during the socialization process. Application of this knowledge takes place in the clinical setting thus providing an opportunity for "trying out" the role of a practicing nurse. During this activity the situation exists for receiving support of the occupational identity through patient-student relationships. In this manner, self-identification in occupational terms is encouraged. Thus, successive completion of program requirements accompanied by satisfactory academic performance contributes to the students' perception (subjectively rated) of competence in the clinical area.

## Service Orientation

A service orientation is a basic value on which the nursing career is based. As cited earlier, Mary Innis stated " . . . principles of service are part of the professional norms and values transmitted to the nurse . . ." (1970:58,59). In agreement with earlier studies

(Gunter, 1969; Simpson, 1956), the majority of females in this project were highly concerned with the service aspect of nursing. This career characteristic was chosen as the most important attribute of the occupation by a clear majority of students. In addition, a high percent of these subjects stated they decided to "take nursing" during their childhood and early high school years.

In sharp contrast to the females' pattern, data for male students indicate the majority enrolled in the nursing major are nonservice oriented; instead they are concerned with more materialistic qualities such as job security and financial benefits. Another notable difference is the time period at which males made this occupational choice. Rather than reflecting early career decisions, more than 83 percent of this group indicate they chose the nursing major on or after entry into college. In this context, it appears that choice of the nursing major by males is made with notably different motivations and values which, though unexplored in this study could have significant implications for subsequent occupational practice. The above factors underlie the findings that the time investment factor was positively associated with the holding of a service orientation for females, but that no relationship between these factors was found for males.

A primary factor in the choice given career is the values held by the individual regarding characteristics of that occupation (Rosenberg, 1957). In this context, an early decision to take nursing (a factor, characteristic of females) implies that this decision is made while the subjects are living with, and supported by parents. It is probable they had a part in this decision. The nurturing, caring framework is

seen as appropriate behavior for females, therefore, parents would be expected to endorse this occupational choice. From this rationale, a positive relationship was expected (and found) between the subjects' perception of a high level of social support and the students' approval of the service characteristic of nursing. Academic investment, the progressive completion of courses in the curriculum, was expected to be another explanatory variable. It was believed that as students progressed, experiencing increased patient contact and gaining additional theoretical and clinical skill, they would increase their approval of the service value. This prediction was not supported. Since students enter the program with a high regard for the service characteristic it appears that progression in itself is not related to an increase or decrease in subjects' approval of the service factor. The expectation that an increased sense of clinical ability would be associated with a high service orientation was not supported. The data indicated that the majority of females who entered the program had a high commitment to the service dimension of the nursing career. It appears that engaging in clinical experience is rewarding in itself since it allows students the opportunity to "help others." This explanation suggests that use of a comparative framework (with peers) in evaluating their performance is not emphasized by students; therefore, the service orientation would not necessarily be associated with a subjective ranking of the individuals' ability (again as compared with classmates in the clinical situation.

## Social Support

Since, for females, the majority indicate an early choice of the nursing career, it was expected (and found) that parents were listed as the support persons for the majority of students. Slocum (1966) stated that parents were the most important group influencing career choice thus this finding is in keeping with earlier research. If in fact parents were instrumental in choice of the occupation, it follows that subjects who are influenced in that choice by a specific group of people will also experience these individuals' support of this decision. Data in this study indicated that the majority of females report high social support for their career choice. As indicated in the data, females enter the program with high social support for their career choice. Although there is a slight increase in the percent of students with high support in the advanced stage of the curriculum, the amount of change is not significant. It should be reemphasized that these data are based on a cross-sectional survey rather than in a longitudinal framework. Because of this factor, the findings may be related to attrition or transfer into the program rather than being a characteristic of students as they progress in the nursing major. The prediction of a positive association between academic investment and social support was not supported by these data.

## Stability of Occupational Choice

Commitment to complete the educational program was treated as a major outcome variable in this study. It was felt that the more time

(credits, finances, personal values, etc.) an individual invested in a particular goal such as an occupational career, the less willing they would be to forego this investment in favor of an alternate goal. It was noted that female subjects make early decisions for the nursing major; thus they (as a group) had invested considerable time in planning to enter the educational program necessary to become a nurse. Within this framework, the holding of a decision for a particular course of action for an extended period of time would encourage the individual to maintain that choice rather than experience a sense of uncertainty and/or loss of support by socially significant persons who endorsed the students' career decision. Since the choice of a particular career is made on the basis of individual values, the holding of a "service" orientation was expected to be a stabilizing influence for completion of the nursing major. Courses in the nursing major, especially in the more advanced stages of the program, are relatively nontransferable to other careers. Thus, the prediction was made that academic investment would be positively associated with the decision to complete the major. Following enrollment in the educational program, specific experiences occur which may affect the students' continuance toward occupational membership. Criteria for continuing in nursing specify the level of academic performance required for progress through the curriculum. It was expected that academic competence, or a high level of intellectual performance, would be associated with the subjects' decision to continue in the program. Findings <u>did not</u> support this expectation. In an earlier study (Sczekan and Betz, 1972) it was found that high academic performance in the preclinical portion of the curriculum was inversely

related to stability of career choice. In the case of the above research it was suggested that circumstances unique to these students (i.e. absence of contact with nursing faculty) were responsible for the finding. However, the absence of supportive data in the present study indicate that levels of academic performance (as long as acceptable) do not noticeably relate to stability of occupational choice. Therefore, the prediction of a positive association between academic performance and plans to complete the major was not found. A significant relationship was found between the students' evaluation of their clinical ability and their stability of career choice. Since the clinical experience item was considered to be an important factor in the socializing framework, this finding, in terms of stabilizing career choice, is significant. Financial investment, the level of cost, or sacrifice to the individual was examined as one explanatory factor of the students' decision to complete or conversely to withdraw from the nursing major. No support was found for this relationship. Students who select the nursing major (and many other health related careers) have been in the unique position of having numerous sources of funding for their educational programs. In this context, viewing financial expense as having significant implications for stabilizing career choice did not provide significant information.

In summary, positive associations were found between each of five explanatory variables and the outcome variable, stability of occupational choice. These five factors were, academic investment, time investment, service orientation, sense of clinical competence and social support.

Predicted associations between two other variables, academic competence and financial investment and the outcome variable of stability of career choice were not supported.

## Endorsement of Nursing Code, Items A and B

The prediction that with academic progress subjects would increasingly endorse aspects of the Nursing Code was supported. The two Code items referred to the students' willingness to make clinical decisions, to accept responsibility for those actions, and to seek additional education necessary to maintain nursing skills. It was expected that as subjects progressed in the program, clinical experiences reinforcing occupational goals would promote self-direction compatible with organizational values (as stated in the Code). Data for students who rated their clinical ability as high (in comparison with peers) demonstrated a willingness to make independent clinical judgments (Code Item A) but this same group did not indicate approval of the need for continuing their occupational education after graduation. It is possible a number of these subjects are planning marriage and therefore do not intend to enter the working force. In this context this finding could be realistic. A second possibility is that subjects are "tired of school" and therefore are unwilling to consider continued education at this point in time. When examining data from subjects indicating a high service orientation, a stated willingness to act independently (a potentially risk-taking activity) in a hypothetical situation was not found. These subjects did endorse the need for continued education as a means to providing more adequate patient care. Data from subjects

indicating high social support did not indicate high endorsement of either item based on the occupational Code. Since high rankings on these two items reflect more independent and self-directed (and possibly risk-taking) actions, it is possible that students who reflect high levels of support are encouraged to follow the more traditional nursing roles and therefore, a relationship for these items is not found. It would be worth while to identify the support systems for these subjects to determine whether or not they are individuals in the health care field or whether they are "lay persons" with limited exposure to contemporary nursing education.

Data from males indicated distinct differences from female subjects on the following items:

1. Time Investment—83 percent of males made the career decision on entry to college.
2. Sense of clinical competence—the majority ranked themselves as above average when compared with classmates.
3. Service Orientation—subjects either omitted the item as a value for nursing or ranked it very low.
4. Social Support—the largest percent ranked support as low and spouse was listed most often as support person.
5. Code Item B (continued education)—the values endorsed for continuing education were materialistic rather than service oriented.

In relating these findings to the socialization framework, anticipatory socialization possibly resulting from holding a specific value orientation characterizes females who enter the nursing program.

They reflect the influence of previously developed social support systems generally consisting of families as a primary group. For the majority of students it is through interaction with these individuals in social support systems that the occupational choice is made.

After admission to the educational program, which provides the structure for the occupational socialization process, more intense socialization occurs. Through participation in the formal curriculum, social interaction with peers, faculty and friends, and in response to identified occupational standards students begin to take on the characteristics of the nursing culture. Students are motivated to conform to the norms through the sanctions of grades, special assignments, applied restrictions, social recognition and formal and informal instruction from faculty. Classmates, instructors, patients, nurses, and the formal nursing organization all serve with varying intensity as reference groups. One of the most significant factors in the occupational socialization process is the internalization of the norms and values of the occupation.

The above statements reflect in a loosely formulated manner a socialization framework which assists nursing students in taking on the occupational culture.

It was a specific purpose of this research to use the two variables identified as Nursing Code, Items A and B in a trial situation to determine if the "value internalization" dimension could be explored in a survey approach. It is believed that with further refinement of the items and the addition of other factors, this significant component of the occupational socialization process can be analyzed.

## Limitations

In the author's opinion, major limitations of this research lie in the area of methodological problems.

The questionnaire needs refinement to permit more effective measurement of variables.

Measures should be incorporated to assure validity of the instrument.

Additional items should be included to evaluate "Internalization of the Code."

Statistical techniques providing computation of multiple correlations should be utilized.

It would be desirable to use a modified path analysis technique to identify causal relationships.

## Recommendations

Based on the findings revealed in this study it is recommended that this project be repeated utilizing a longitudinal approach. This format would permit examination of progressive occupational socialization with the same subjects over time.

Characteristics of subjects who leave the program could be identified and factors which contributed to their decision could then be explored. Conversely, an in-depth and on going evaluation could be made of subjects completing the program, and of their changing identity resulting from the socialization process. Within this context, it would be useful to examine the process by which the occupational culture

begins to take precedence over preexisting social patterns. Subsequently compromises made with the ever present student subculture could be identified.

Of particular relevance is exploration of the time, contributing factors and the extent to which students demonstrate internalization of values contained in the occupational code.

In conclusion, the following statement seems appropriate. "Knowledge, after all, is not disembodied spirit. It is expressed in the activities of men." (Freidsen, 1963:28)

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# APPENDICES

# APPENDIX A

## CODE FOR NURSES: AMERICAN NURSES ASSOCIATION

CODE FOR NURSES: American Nurses Association

1. The nurse provides services with respect for human dignity and the uniqueness of the client unrestricted by considerations of social or economic status, personal attributes or the nature of health problems.

2. The nurse safeguards the client's right to privacy by judiciously protecting information of a confidential nature.

3. The nurse acts to safeguard the client and the public when health care and safety are affected by the incompetent, unethical, or illegal practice of any person.

4. The nurse assumes responsibility and accountability for individual nursing judgments and actions.

5. The nurse maintains competence in nursing.

6. The nurse exercises informed judgment and uses individual competence and qualifications as criteria in seeking consultation, accepting responsibilities, and delegating nursing activities to others.

7. The nurse participates in activities that contribute to ongoing development of the profession's body of knowledge.

8. The nurse participates in the profession's efforts to implement and improve standards of nursing.

9. The nurse participates in the profession's efforts to establish and maintain conditions of employment conducive to high quality nursing care.

10. The nurse participates in the profession's effort to protect the public from misinformation and misrepresentation and to maintain the integrity of nursing.

11. The nurse collaborates with members of the health professions and other citizens in promoting community and national efforts to meet the health needs of the public.

Revised 1976, American Nurses Association

# APPENDIX B

## COVER LETTER AND QUESTIONNAIRE

THE UNIVERSITY OF TENNESSEE DEPARTMENT OF SOCIOLOGY
1115 Volunteer Boulevard / Knoxville, Tennessee 37916 / Telephone 974-2153

March 10, 1975

Dear Nursing Student:

We are seeking information concerning selected attitudes and beliefs of nursing students at various stages in their educational program. Through analysis of these data we hope to identify a pattern of changing viewpoints and motivations experienced by students, and of the way in which these changes occur. The information you provide will contribute to an understanding of occupational preparation.

This research is being conducted by Professors Michael Betz, Department of Sociology, University of Tennessee, and Marjorie Szekan, Division of Nursing, Dalton Junior College. Your faculty have given their consent and support to the study. The information gained will be useful to teachers in schools of nursing as they plan student learning experiences.

The questionnaire is anonymous and confidential; no one in your school will ever see your response. Please answer each question honestly and completely, according to the instructions.

Thank you for your time and interest. Your willingness to participate in the study is greatly appreciated.

Sincerely yours,

Marjorie Szekan

Marjorie Szekany Chairman
Division of Nursing
Dalton Junior College
Dalton, Georgia 30720

To facilitate analysis of this information, responses are to be entered on the attached computer scoring sheet. Please use No. 2 pencils and darken the bar which corresponds to your answer. You may write on the questionnaire when your reply includes a completion statement. Since your answers are anonymous, omit the selection which calls for identification.

1. Age at last birthday:
   (1) 17 (2) 18 (3) 19 (4) 20 (5) 21 (6) 22 (7) 23-25 (8) 26-30 (9) 31-35 (10) 36 and over

2. Sex: (1) male (2) female

3. Martial status: (1) single (2) married (3) widowed (4) divorced (5) separated

4. Hours of academic credit completed:
   (1) 16 or less
   (2) 17-33
   (3) 34-50
   (4) 51-67
   (5) 68-84
   (6) 85-101
   (7) 102-118
   (8) 119-135
   (9) 136-150
   (10) 151 and over

5. Is UAB the only nursing program in which you have been enrolled? (1) yes (2) no

6a. If answer to No. 5 is yes, mark response 10 to question No. 6 and continue.

6b. If answer to No. 5 is no, in which type program were you enrolled?

   (1) LPN/LVN
   (2) Diploma
   (3) Associate Degree
   (4) Baccalaureate Degree

7a. If answer to No. 5 is yes, mark response 10 to question No. 7 and continue.

7b. Approximately how much of the program (question 6b) did you complete?

   (1) 25 percent
   (2) 50 percent
   (3) 75 percent
   (4) over 75 percent/all

8. What is the major source of financial support for your education program?

   (1) spouse
   (2) self
   (3) parents
   (4) loan
   (5) other (please describe) _____

9. What is your cumulative college grade point average?

   (1) .6-1.0
   (2) 1.1-1.5
   (3) 1.6-2.0
   (4) 2.1-2.5
   (5) 2.6-3.0
   (6) 3.1-3.5
   (7) 3.6-4.0

10. What is your cumulative grade point average in your nursing courses? Use the same catagories as above.

11. When did you first decide on a career in nursing? (Choose one best answer).
   (1) during childhood
   (2) in junior high (prior to the 10th grade)
   (3) in senior high (grades 10-12)
   (4) following high school, but prior to entering college
   (5) on or after enrollment in college

12. Have you seriously considered changing to another major or dropping out of school since enrolling in nursing at UAB?
(1) yes (2) no

Regarding your career choice, the favorable opinion of which three persons are you most concerned with maintaining? (Select from the listed catagories).

13. Opinion most important:
14. Opinion second in importance:
15. Opinion third in importance:

(1) non-nursing friend
(2) class-mate in nursing
(3) mother
(4) father
(5) spouse
(6) nurse acquaintenance
(7) instructor
(8) other (please identify)_____

For the above indicated three persons, rank their feeling about your choice of a career in nursing. (Use the following scale):

16. Individual's opinion most important:
17. Individual's opinion second in importance:
18. Individual's opinion third in importance:

(1) strongly approve
(2) mildly approve
(3) neutral
(4) mildly disapprove
(5) strongly disapprove

19. How willing would you be to change your major?
(1) very willing
(2) would consider
(3) neutral
(4) dis-interested
(5) would not consider

20. How many nurses did you know prior to enrolling at UAB?
(1) none
(2) one
(3) two
(4) three or more

21. Did any of the individuals listed in No. 21 seriously influence your decision to be a nurse?
(1) yes (2) no

22. Who was the one person most influential in your decision to be a nurse?
(1) friend
(2) parent
(3) teacher
(4) brother/sister
(5) other _____

Indicate according to three indicated levels of importance to you the following characteristics of a career in nursing. (Use provided scale: 1 - highly important; 2 - neutral; 3 - unimportant).

23. good preparation for adult life (self/family)
24. work with people rather than with things
25. job security
26. association with individuals having similar interests
27. financial benefit
28. chance to help people
29. personal satisfaction
30. respected occupation
31. work independently (minimum supervision)
32. opportunity to use special knowledge/skills)
33. other (please identify)_____

Rank in order of importance the five factors most significant to you in your choice of a nursing career.

34. Most significant factor
35. Factor second in significance
36. Factor third in significance
37. Factor fourth in significance
38. Factor fifth in significance

(1) respected occupation
(2) personal satisfaction
(3) good preparation for adult life
(4) job security
(5) opportunity to use special skills
(6) chance to help people
(7) financial benefit
(8) work with people rather than things
(9) work independently (min. supervision)
(10) associate with people having similar interests

39. What do you plan to do following graduation (major portion of time)?

(1) work in nursing
(2) enroll full-time in school--non-nursing field
(3) enroll for additional education in nursing (any type)
(4) work part-time in nursing while continuing nursing education
(5) other (please identify)_____

40. Which of the following areas would be your first preference for work?

(1) general staff position
(2) speciality area (coronary care, intensive care, etc.)
(3) doctor's office
(4) community health
(5) other (please describe)_____

Rank in order of importance the five following reasons for which you would enroll for additional nursing education: (including in-service, continuing education, special prograns, graduate education, etc.)

41. Most important reason
42. Reason second in importance
43. Reason third in importance
44. Reason fourth in importance
45. Reason fifth in importance

(1) personal interest/goals
(2) requirement of employing agency
(3) recommended by American Nurses Assoc.
(4) complex nature of nursing practice
(5) other (please describe)_____

46. In view of health conditions today, is a graduate nurse morally obligated to spend some time in active professional practice?

(1) no
(2) yes
(3) conditional

47. What is the minimum time period a nurse should work? (If answer to No. 46 is no, mark response No. 10 and continue to No. 48).

(1) one year
(2) more than one year but less than 5 years
(3) for the length of time she received financial assistance
(4) until family/personal factors conflict with work

Rank the following seven factors in order of their importance for nursing practice.

48. Most important factor
49. Factor second in importance
50. Factor third in importance
51. Factor fourth in importance
52. Factor fifth in importance
53. Factor sixth in importance
54. Factor seventh in importance

(1) organizational/planning skills
(2) empathy with patients
(3) knowledge (theoretical)
(4) leadership ability
(5) skill in nursing procedures
(6) sense of responsibility
(7) other (please describe)_____
_____

55. Who do you feel is primarily responsible for the nursing care given a patient?
(1) staff nurse
(2) doctor
(3) charge or head nurse
(4) practical/vocational nurse

56. Regarding professional nursing, do you think nurses should be licensed as independent practitioners?
(1) yes (2) no

57. If above answer is yes, who should define nature, extent, and limitations of practice? (If answer to No. 56 is no, mark response No. 10 and continue to No. 58).
(1) individual nurse
(2) State Board of Nursing
(3) medical personnel
(4) American Nurses Association
(5) other (please describe)
_____
_____

58. Who should be legally responsible for the nurse practitioner's activity?
(1) the nurse only
(2) the nurse and the state licensing board, jointly
(3) the nurse and the physician prescribing care
(4) the physician
(5) other (please identify) _____

59. If a nurse cares for a patient to the best of her knowledge yet the patient becomes worse, due to some aspect of the nursing care, who is primarily liable?
(1) the nurse because she provided the care
(2) the physician in charge of the patient
(3) the hospital or agency by whom the nurse in employed
(4) no one, since there is no guarantee that patients will improve

60. Do you believe nurses should be legally exempt from law suit while they are working?
(1) yes (2) no

61. To your knowledge, have any of your classmates submitted an incident report?
(1) no (2) yes

62. If above answer is yes, of how many reports are you aware? (If answer to No. 61 is no, mark response No. 10 and continue to No. 63).
(1) one
(2) two
(3) three
(4) four or more

63. Have you submitted an incident report? (1) yes (2) no

64. Do you personally know a nurse who has been sued for a work-related incident?
(1) yes (2) no

65. If you knew a class-mate had been drinking before going to the clinical area, which of the following would you do?
(1) suggest he/she report off ill
(2) report the student to the instructor
(3) stay near-by to help him/her with the clinical assignment
(4) continue with your work and let the instructor handle the case

66. If you knew another nurse gave a wrong medication without reporting, it would you feel responsible to report it?
(1) no (2) yes

67. A medication is ordered in an amount which you are convinced is excessive for a patient. You would:
(1) refuse to give the medication
(2) check the dosage with the charge nurse and follow her recommendation
(3) give the medication as ordered
(4) report your concerns to the doctor and follow his order
(5) report your concerns and refuse to give the medication

68. Do instructors expect relatively equal clinical performance from all students in the same course?
(1) yes (2) no

69. If above answer is no, what is the main reason instructors expect different performance? (If answer to No. 68 is yes, mark response No. 10 and continue to No. 70).
(1) student attitude
(2) age of student
(3) student's academic performance
(4) previous experience with student
(5) rapport, interpersonal reactions with student
(6) other (please identify) _____

_____

70. What do you feel is the appropriate way for a nurse to deal with sub-standard working conditions?
(1) work individually toward resolution of the problem
(2) report the situation to the district nurses association
(3) resign and look for a new job
(4) work with a union representative in forming a local bargaining unit for nurses

71. A physician has ordered that life-maintaining equipment be discontinued on a patient that is totally non-responsive (flat EEG), would you be willing to do this?
(1) no (2) yes (3) undecided

72. In your opinion, how does your clinical performance compare with others in your class?
(1) much higher than others
(2) somewhat higher than others
(3) about the same as others
(4) somewhat lower than others
(5) much lower than others

73. Is your instructor's rating of your clinical performance in agreement with yours?

(1) no (2) yes

74. It is your evening off and you have purchased a ticket to a long awaited program. At 2:00 p.m. the supervisor calls and tells you the relief nurse is ill and asks if you will work in her place. You would:

(1) state you have made other plans and cannot work
(2) cancel your social appointment and report to work
(3) offer to work the night shift if the night nurse will come and work the evening schedule
(4) state you cannot work but will try to find someone who will work
(5) state you are ill and cannot work

75. While caring for a critically ill patient, he confides in you that he has been misusing federal money. You would:

(1) refer the matter to his doctor
(2) suggest he discuss the matter later when he feels better
(3) change the subject since you might feel responsible to report the information
(4) listen attentively and report later to the proper authority
(5) listen attentively and then drop the matter

Before returning this material we suggest you look over the answer sheet to be sure you have responded to each item.

Thank you for your cooperation.

# APPENDIX C

# TABLES

TABLE A-1

Service Orientation by Sense of Clinical Competence Male Subjects (N = 39)

| Service Characteristic | Much higher than others | Some higher than others | About the same as others | Some lower than others | Total | Percent |
|---|---|---|---|---|---|---|
| Most important factor | 0 (0.0) | 4 (20.0) | 5 (38.5) | 0 (0.0) | 9 | 23.1 |
| Factor second in imp. | 0 (0.0) | 2 (10.0) | 0 (0.0) | 0 (0.0) | 2 | 5.1 |
| Factor third in imp. | 0 (0.0) | 4 (20.0) | 3 (23.1) | 0 (0.0) | 7 | 17.9 |
| Factor fourth in imp. | 0 (0.0) | 2 (10.0) | 1 (7.7) | 1 (10.0) | 4 | 10.3 |
| Factor fifth in imp. | 0 (0.0) | 1 (5.0) | 1 (7.7) | 0 (0.0) | 2 | 5.1 |
| Factor not ranked as important | 5 (100.0) | 7 (35.0) | 3 (23.1) | 0 (0.0) | 15 | 38.5 |
| Total | 5 | 20 | 13 | 1 | 39 | 100.0 |
| Percent | (100.0) | (100.0) | (100.0) | (100.0) | | |

$\gamma = -.45$

$\tau c = -.28$, $\underline{p} < .01$

TABLE A-2

Social Support by Time Investment
Males (N = 43)

| Social Support | Childhood | Junior High | Senior High | Before College | On/After Coll. Ent. | Total | Percent |
|---|---|---|---|---|---|---|---|
| High Support | 0 (0.0) | 0 (0.0) | 1 (100.0) | 3 (60.0) | 9 (25.0) | 13 | 30.2 |
| High Support | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1 (20.0) | 11 (30.6) | 12 | 27.9 |
| Low Support | 0 (0.0) | 1 (100.0) | 0 (0.0) | 1 (20.0) | 16 (44.4) | 18 | 41.9 |
| Total | 0 | 1 | 1 | 5 | 36 | 43 | 100.0 |
| Percent | (0.0) | (100.0) | (100.0) | (100.0) | (100.0) | | |

$\gamma = -.40$

$\tau c = -.116$, $\underline{p} < .1$

TABLE A-3

Social Support by Academic Investment
Male Subjects (N = 40)

| | Academic Investment by Stage in Nursing Major | | | | |
|---|---|---|---|---|---|
| Social Support | Advanced Clinical | Intermediate Clinical | Beginning Clinical | Total | Percent |
| High Support | 6 (23.1) | 5 (50.0) | 3 (75.0) | 14 | 35.0 |
| Moderate Support | 9 (34.6) | 1 (10.0) | 1 (25.0) | 11 | 27.5 |
| Low Support | 11 (42.3) | 4 (40.0) | 0 (0.0) | 15 | 37.5 |
| Total | 26 | 10 | 4 | 40 | 100.0 |
| Percent | (100.0) | (100.0) | (100.0) | | |

$\gamma = -.405$

$\tau c = -.217$, $\underline{p} < .04$

TABLE A-4

Code Endorsement, Item B* by Sense of Clinical Competence (N = 39)**

| | Clinical Competence as Compared with Peers | | | | | | |
|---|---|---|---|---|---|---|---|
| Responsibility for Clinical Action | Much higher | Some higher | About same | Some lower | Much lower | Total | Percent |
| Highly endorse | 1 (20.0) | 1 (5.0) | 1 (7.7) | 0 (0.0) | 0 (0.0) | 3 | 7.7 |
| Moderate accept | 2 (40.0) | 7 (35.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 9 | 23.1 |
| Minimally accept | 2 (40.0) | 11 (55.0) | 10 (76.9) | 1 (100.0) | 0 (0.0) | 24 | 61.5 |
| Acknowledge | 0 (0.0) | 1 (5.0) | 2 (15.4) | 0 (0.0) | 0 (0.0) | 3 | 7.7 |
| Deny | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | | |
| Total | 5 | 20 | 13 | 1 | 0 | 39 | 100.0 |
| Percent | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | | |

*Item B Reason for continued education in nursing.

**Preclinical subjects were not included in analysis.

$\gamma = .598$

$\tau c = .282$, $p < .006$

# VITA

Marjorie Davenport Sczekan was born in Mountain View, California. She attended schools in southern California, receiving a diploma in nursing from the White Memorial Hospital in Los Angeles.

In 1965, under the sponsorship of a Nurse Traineeship from the United States Department of Health, Education and Welfare she enrolled at the University of Colorado. There in 1967, she was awarded both the degrees Bachelor of Science in Nursing and Master of Science.

Ms. Sczekan enrolled as a graduate student in the Department of Sociology, the University of Tennessee, Knoxville in 1968. While at the University she served as a graduate assistant in the Department of Sociology. In addition she was awarded a special Pre-doctoral Nurse Research Grant by the Division of Nursing, United States Department of Health, Education and Welfare.

She received the Master of Arts in Sociology in 1971 and the Doctor of Philosophy in 1976.

Ms. Sczekan has both clinical and teaching experience in Nursing. Prior to her present position of Director, Department of Nursing, The University of Tennessee at Chattanooga, she served as chairman of an associate degree nursing program at Dalton Junior College in Dalton, Georgia.

Her family consists of her husband Frank and three sons, Michael, Steven and Bernie.