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FACTORS INFLUENCING NURSES' PREFERENCE FOR AN
EXTERNAL DEGREE IN A GRADUATE NURSING
HEALTH SERVICES ADMINISTRATION PROGRAM

by

Lillian Margaret Miller Simms

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
(Education)
in The University of Michigan
1977

Doctoral Committee:

Assistant Professor Janet Lawrence, Chairman
Associate Professor Lawrence Berlin
Associate Professor Leonard Heller
Professor Barbara Horn

DEDICATION

Dedicated to my husband Richard and our three sons, Richard Jr., Fred and Andy. Completion of this study would not have been possible without their love, encouragement and understanding.

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CHAPTER I: INTRODUCTION

The Problem

Various investigators have identified the need among nurses for continuing professional education beyond the Bachelor's Degree (Vorhauer, 1976; Chater, 1975). In order to meet this growing demand, The University of Michigan is designing programs that provide potential students with alternative modes of study for a formal degree. The School of Nursing for example is creating a modified external Master's degree program in Nursing Health Services Administration (NHSA).

The reasons why professionals choose to continue their education in non-credit continuing education programs have been studied (Schrader, 1976). Differences between students who elect to study on campus as full-time students and those who prefer extramural education have been postulated. The Commission on Non-Traditional Study (1973) suggests that changing life patterns, work schedules, financial situations, family responsibilities and personal goals contribute to the need for flexible time and space programs. There has been no systematic research however, regarding those factors which affect professional nurses' decision to continue their

formal education in external degree programs. Consequently there is little knowledge as to what extent accessibility, instructional methodology, or professional concerns play a part in the decision.

This research was directed towards the discovery of a grounded theory of external degree preference among nurses seeking graduate education. Two major questions guided the study: what factors contribute to the perceived need for graduate education in nursing health service administration? What factors impact on the preference for the modified external degree program?

Definition of Terms

Several key definitions are used throughout this study.

External Degree:

A credential awarded to an individual on the basis of successful completion of a program which is not centered on traditional patterns of residential or university study.

Influencing Factors:

Stimuli that actively contribute to an interest in external degree study; these may facilitate or inhibit students' enrollment in an external NNSA program.

**Modified Nursing Health Services Administration
(NHSA) External Degree program:**

External delivery of the first thirty credits
in the Nursing Health Services Administration
Master's Degree program at The University
of Michigan.

Nontraditional Study:

A set of academic credit learning experiences
free of time and space limitations organized
so that the student may acquire new skills
depending on his individual interests and
needs.

Nursing Health Service Administrator:

The senior staff member who has the ultimate
authority and responsibility for the quality
of nursing care in a health service delivery
agency.

Off-Campus Courses:

Regular credit courses in the Nursing Health
Services Administration program which are
offered at various locations around the state
or on an independent study basis.

Rationale and Purpose

The need for graduate programs in nursing is

well documented. Lysaught (1973) reports steady growth in graduate programs and numbers of students since 1958. However, the total number of nurses prepared at the graduate level falls far below the needs in any of the specialized areas. Only 3.2% of the 778,470 employed nurses in this country have earned master's degrees (See Table 1). As major members of the health team, nurses are the only ones who are predominantly prepared at less than a master's level.

A master's program that synthesizes clinical nursing knowledge with management theory and skills is one way to prepare capable nursing service administrators for today's complex health care systems (Blair, 1976). Knowledge in the area of nursing practice and research is essential if one is to interpret to other health professionals and the community the role of nursing in the total health care system. The nurse administrator must understand systems theory, organizational and administrative theory, social sciences and scientific management (Arndt and Huckabay, 1975).

Increasingly nurses are asked to assume leadership roles in a variety of health care agencies. Of the 30,000 nurses employed in top level administrative positions, 79% are functioning in three major settings: hospitals (47%), nursing homes (23%) and public health agencies (9%) (Facts, 1976). Although the master's

Table 1
Highest Educational Preparation of All Registered Nurses, by Activity Status, 1972

Activity Status	Highest Educational Preparation											
	Less than baccalaureate						Baccalaureate					
	Diploma			Associate degree			Basic not reported			Baccalaureate in other field		
	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
All Nurses.	1,127,657	801,780	48,918	9,811	133,085	21,854	21,527	11,248	1,539	74,895		
Total employed	778,470	580,846	41,095	4,916	94,287	17,188	17,260	7,625	1,106	14,147		
Employed full-time. . .	505,201	364,063	30,851	2,875	67,301	12,156	14,227	5,961	870	6,897		
Employed part-time (regular basis) . . .	159,609	131,562	6,100	839	15,069	2,514	1,112	506	75	1,832		
Employed part-time (irregular basis) . .	78,591	60,952	2,807	754	7,920	1,541	861	536	68	3,152		
Employed full or part-time not reported.	35,069	24,269	1,337	448	3,997	977	1,060	622	93	2,266		
Not employed.	316,611	215,452	7,583	4,704	37,992	7,492	4,171	3,552	428	35,237		
Employment status not reported.	32,576	5,482	240	191	806	174	96	71	5	25,511		

SOURCE: American Nurses' Association, Statistics Department; special tabulation from 1972 inventory of registered nurses.
From Facts about nursing 74-75, Kansas City: American Nurses' Association, 1976, p. 4.

degree is the recognized minimum credential for nurses employed in top administrative positions, only 32% are prepared at the graduate level in nursing administration (Erickson, 1975).

There is a projected national need for 132,000 graduate educated nurses by 1980 (See Table 2 and Figure 1). In Michigan, the issue of insufficient numbers of nurses with the advanced preparation needed for leadership positions in education, administration research and clinical practice has been investigated by Vorhauer (1976). The study clearly supports the need for both increases in graduate nursing programs and nurses with at least the master's degree.

The question arises as to whether residential, campus-based programs can meet the educational needs of employed nurses. Significant changes in the planning of graduate programs are being proposed by students and educators alike. In order for nurses to gain the necessary knowledge and skills in a quality educational program, nontraditional opportunities for study may well have to be created. Although some attempts have been made to provide flexibility in nursing programs, the fact remains that there are still grossly inadequate opportunities for graduate nursing education (Chater, 1975).

Large areas of Michigan are without institutions

Table 2
Estimated Number of Employed Registered Nurses, by Educational Preparation, Selected Years 1964-1974, and Projected Need 1980

	Diploma		Associated Degree		Baccalaureate		Master's or Above	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
TOTAL								
1980 need . . .	1,100,000	66.0	(¹)	(¹)	308,000	28.0	132,000	12.0
1974.	857,000	75.5	51,600	6.0	130,400	15.2	28,000	3.3
1973.	815,000	77.0	43,200	5.3	118,200	14.5	26,100	3.2
1972.	780,000	78.6	35,200	4.5	107,200	13.8	24,200	3.1
1971.	750,000	80.4	27,800	3.7	96,600	12.9	22,500	3.0
1970.	722,000	82.2	21,400	3.0	87,000	12.0	20,300	2.8
1969.	694,800	83.6	17,000	2.4	78,400	11.3	18,700	2.7
1968.	667,000	84.9	12,000	1.8	72,000	10.8	17,000	2.5
1967.	643,000	85.3	10,000	1.6	68,200	10.6	16,100	2.5
1966.	621,000	85.8	8,000	1.3	64,500	10.4	15,300	2.5
1964.	582,000	88.8	(¹)	(¹)	52,100	8.9	13,300	2.3

¹ For 1980 and 1964 nurses with associate degrees as their highest educational preparation are included with diploma.

² Estimates revised 1974.

SOURCES: U.S. Department of Health, Education, and Welfare, Public Health Service, Division of Nursing, Source Book of Nursing Personnel, DHEW Publication No. (HRA) 75-43, Revised 1974, page 69; Interagency Conference on Nursing Statistics for total estimates 1964-1974.

From Facts about nursing 74-75, Kansas City: American Nurses' Association, 1976, p. 3.

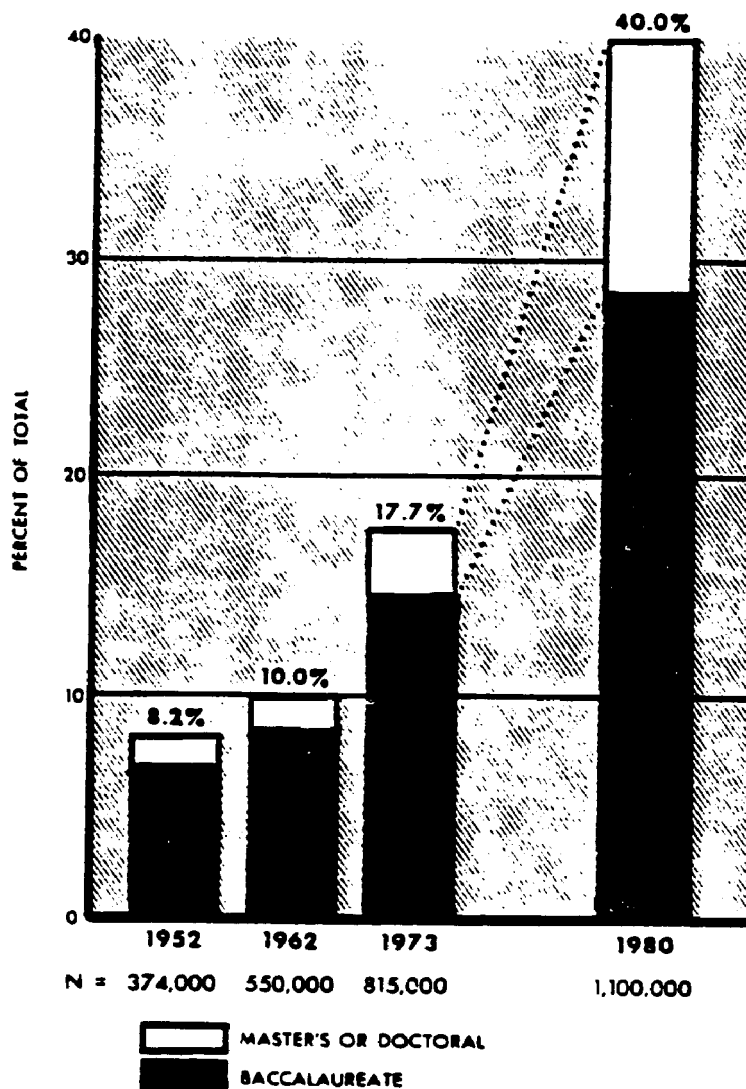


FIGURE 1. The Proportion of Registered Nurses with Baccalaureate or Higher Degrees 1952-1973 and Projected Need 1980.

SOURCE: Book on Nurse Personnel, DHEW, Publication # (HRA) 75-43, Bethesda, Maryland 20014.

From "Nursing Education in Michigan" by D. V. Vorhauer. Unpublished manuscript, Michigan Department of Education, 1976, p. 54.

which offer appropriate study. The three universities with graduate programs in nursing are located in the southeastern part of the lower peninsula. The University of Michigan alone offers a specialization in Nursing Health Services Administration. Wayne State does, however, offer a subspecialization within Nursing Administration.

The current NHSA program is a four semester (60 credit hour) joint Master's program between the University of Michigan's School of Public Health and the School of Nursing. Its purpose is to prepare graduates at the Master's level for leadership roles in current and emerging health agencies. Early in the development of the program in 1974, it was recognized that nurses are among the increasingly diversified student groups which are seeking formal degree programs in a nontraditional manner. As a result, a modified external degree format is being created which will better meet the needs of students seeking a flexible time and space program. This model anticipates external delivery of approximately half of the required 60 Master's credit hours. Selected courses will be revised to allow self-instruction and the flexible time/space planning of lectures and seminars will be implemented. The other courses in the modified program will continue to be offered on-campus since some

residential experience is considered essential in a quality graduate degree program.

The proposed external portion of the program has instigated much interest out-state. Many requests have been received as to admission requirements and the date by which external courses will be offered. This suggests the possibility that a large number of students will seek admission to the program within the next five years.

However, the effective planning and implementation of a program to meet the needs of students requires more data than an expressed need on the part of some potential students. A demographic profile of students interested in off-campus study is required in order to forecast both the current and future programming needs. Insights regarding the preferred learning environments will also be useful to those who are responsible for designing the external mode of delivery. The present research therefore was an effort to identify and analyze those factors influencing nurses' preference for an external degree in a graduate nursing health services administration program.

Assumptions and Limitations

For the purpose of this study, the following assumptions were made:

(1) The current program in Nursing Health Services Administration (NHSA) is an example of an established on-campus graduate program at The University of Michigan.

(2) The NHSA curriculum is designed to prepare graduates at the master's level for leadership roles in current and emerging health care systems.

(3) Faculty in the NHSA program consider it feasible to deliver the first year of the curriculum (30 credits) externally and the remaining 30 credits on-campus.

(4) Individualized self-paced study materials are the planned formats for external courses.

(5) Admission requirements for applicants in the modified external degree program are the same as those for the on-campus program.

This study was limited to the Nursing Health Services Administration graduate program at The University of Michigan and to nurses residing in the state of Michigan who currently hold nursing service administration positions or who plan to achieve such a position. It did not attempt to survey either non-nurse administrators in health care agencies or students with other career goals.

CHAPTER II: RELATED LITERATURE

A literature search revealed that changes are occurring in the traditional as well as external degree programs. It is increasingly difficult to distinguish external degree programs from flexible arrangements regarding credit, place and time in non-traditional innovations. Furthermore, few studies have been carried out specifically in the area of nontraditional nursing graduate programs. Therefore, the literature review covers a variety of related areas: nontraditional study, the external degree, undergraduate external degree programs in nursing and selected nursing studies.

Nontraditional Study

Hartnett (1972, p. 14) has defined non-traditional study as a set of learning experiences free of time and space limitations organized so that the student may acquire new skills or attainments extending his personal, intellectual, esthetic or vocational development. "Nontraditional study" also implies a vast array of educational programs and learning experiences that do not take place under the auspices and supervision of some formally

recognized postsecondary institution.

Historically American higher education has been designed for traditional students - the young, single, unemployed males who can devote full time and attention to going to college for four years. These students are not, however, the majority of the learning force in the United States. Cross and Jones (1972) report that the number of people engaged in formal organized learning activities outside the recognized traditional educational system exceeds the number in preschool, elementary, secondary and higher education combined. Chickering (1974) estimates a potential nontraditional learning force nearing 80 million people. The new adult students come from a variety of educational backgrounds, represent both sexes, and recognize no age limit. There is also a trend toward part-time matriculation. In 1972 for the first time in American history, approximately half of all students in higher education participated on a part-time basis (Pitchell, 1974).

Watson (1974) argues that traditional institutions serve only a minority of adults and are restricted to subject matter which does not meet the needs of most learners because it is tied to classrooms and campuses and neglects broader community resources. Traditional educators are addicted to

teaching procedures such as lectures and fail to make use of valuable new technical facilities. They are elite and do not fully measure the wide ranges of competence in humans. On the other hand, nontraditional study involves a large measure of self-direction by students and programs have flexibility in time and space. Life experiences are deemed worthy of academic credit and educational needs and possible programs for a variety of students are considered.

Hartnett (1972) identifies three classes of people who are most handicapped by traditional programs: creative people, mobile people, and mothers of small children. Many creative students find on-campus experiences confining and deadly in routine. They desire greater flexibility in both time and space and wish to decide their own learning style and pace of learning. Mobile people, i.e. military personnel, have great difficulty fulfilling degree requirements as they move around the country. Course requirements vary from one institution to another and transfer of credits may not be easy. Many women with family responsibilities would like to continue their formal education but find numerous constraints in traditional programs.

Chickering (1974) documents the differences between the two kinds of students - resident students

and commuters - and provides support for the inclusion of some residential experiences in all educational programs. He concludes that resident students are the "haves", those who are generally more able and affluent. Commuters are the "have nots", those who have economic constraints which prevent them from being resident students. Chickering's work however sheds little light on the older employed student who prefers to maintain employment in a desired position while attending college.

The extent of unmet educational needs is perhaps best reflected in market surveys which attempt to measure interest among adults for graduate programs. Houle (1974) indicates the data are far from being conclusive. However, the interest in credit toward degree instruction has been documented by the Commission on Non-Traditional Study (1973), a California higher education survey, and a national survey of undergraduates. This study indicates that a large number of persons still have unmet educational needs.

The External Degree

At the present time the external degree is usually regarded as an educational alternative for people who are not currently enrolled in post-secondary institutions -- largely adults (Cross, 1973). An external degree according to Houle (1974) is one

awarded to an individual on the basis of some program (devised either by himself or by an educational institution) which is not centered on traditional patterns of residential or university study. This is the simplest definition. Eisley (1976) defines external graduate degree programs as quality graduate degree programs prepared for qualified students and offered near or in the student's own place of work or residence.

Valley (1972) offers a taxonomy of external degree models:

(1) Administrative-facilitative - This is simplest degree program set up to meet needs of adults residing in the community where the degree granting institution is located; the primary alteration is the flexible scheduling of traditional courses.

(2) Modes-of-Learning - The emphasis of this approach is on learning and teaching that seeks to adjust to the capacities, circumstances and interests of various clientele; there is no fixed curriculum or time for awarding the degree.

(3) Examination - This arrangement awards academic credits and degrees on the basis of performance on examinations; institution or agency may not itself offer all the credit instruction.

(4) Validation - This model evaluates student's total learning experiences from various sources in terms of the institution's conception of a degree; procedure varies with institution but follows accepted standards.

(5) Credits - An institution or agency awards credits and degrees for which standards for quality of student programming are set by the institution. There is no American model.

(6) Complex-systems - A combination of or a variation in pattern of various simpler models comprises this model so as to meet the needs of a different clientele.

Eisley and Coppard (1976) provide the following description for external degrees. At the present time external graduate programs are offered primarily in professional areas where positions are well defined, potential students can be identified easily and the masters is the terminal degree. Thus programs in education, business, engineering and health sciences are most frequently seen. Programs in the arts, humanities and academic social sciences are rare.

For the most part existing external graduate programs have confined their innovations to changes in schedule and in the location of courses so that the off-campus offerings match the on-campus ones. Nova

University's national external programs and the Ph.D. programs of the Union Graduate School are exceptions.

External degrees are often criticized because they are thought to be less rigorous. The unwillingness of regular faculty members to teach nontraditional classes may be one reason for this bias. Eisley and Coppard (1976) cite increased teaching load, lack of supportive services and need to change life styles in order to teach at flexible times and places as major concerns for faculty. Bailey (1972) suggests four other sources for this concern for quality are: (1) the academic shoddiness of some programs, (2) non-acceptance of off-campus credits in quality institutions, (3) fiscal problems, and (4) failure of the projected technological miracles that were considered critical to the implementation of off-campus study.

Out of this comes the realization that the external degree is relatively unexplored by educators. Gould (1972) urges that development of the external degree continue. The possible benefits are multiple including: (1) flexibility in format, (2) diversification of programs and structures and styles of learning, (3) support of lifetime learning, (4) collaboration between academic institutions (pp. 184-185). Study of external models may well then make a major contribution to change in internal models.

Undergraduate External Degree Program in Nursing

Opportunities to complete the baccalaureate degree via an extended or external degree approach are being offered and models for those approaches are being tested in a number of settings. Attention seems to be directed however towards course content and structure of programs and little attention is paid to students and their educational needs. Pearson (1973) for example presents a structure for an extended degree program at the baccalaureate level. Collecting and analyzing data relative to needs of registered nurses for baccalaureate degree programs was mentioned as an important step in the whole process but the decision seems to have been made prior to any data collection, that self-instructional packages would be used.

At the State University of New York at Stony Brook, Fields (1976) developed a flexible educational model for working registered nurses. In this program students were permitted to identify their own learning experiences within the framework of their full-time positions. The program enabled this group of nurses to meet a major portion of the degree requirements through independent study and self-pacing. Again converting the existing curriculum to self-instructional packages was the methodology used.

Nyquist (1973) focused attention on the

concept of awarding degree credit on the basis of one's knowledge rather than how or where one has learned. At the time he was involved with the Associate Degree program in Nursing and his work at the University of the State of New York led to the development of the external baccalaureate degree. The importance of Nyquist's study is that he stressed a blend between university internal and external programs and suggested that nontraditional educational opportunities, i.e. self-study materials, be extended to on-campus students.

Lechlitner (1974) conducted a telephone survey of 50 nurses randomly identified from the list of 456 registered nurses in the Grand Traverse County of Michigan. The study revealed that more than half of the respondents would be interested in enrolling in courses offered in their community. Distance from college and family constraints were cited by respondents as significant factors related to preference for community-based courses.

Lenburg (1976) interviewed directors and employers, regarding their opinions of external degree graduates. All of them reported overall performance to be average or better than average in comparison with other associate degree graduates. Lenburg's study is important in that students represented a wide range

of backgrounds.

Of the 1,800 individuals enrolled as of September, 1975, the age range was 18-70 with an average of 36 years; 17% were men (three times the national average for Associate Degree Nursing programs); approximately 60% were L.P.N.s; 7% were R.N.s seeking an academic degree; 11% were aides and orderlies; and the rest reflected a variety of work experiences. Seventy percent were employed full time. Approximately 26% of the candidates lived in forty-five states other than New York. (Lenburg, 1976, p. 427).

Selected Nursing Studies

The selected nursing studies reviewed in this section provided additional insights into the understanding of factors influencing nurses who are seeking educational programs. Clearly, the results were not definitive but assisted the researcher in developing the initial questions utilized in the interview schedule.

A survey of needs and resources for educational programs for registered nurses in the state of Michigan by Sattig, Horn and Guy (1972) was an exploratory study initiated to seek information concerning needs of nurses related to non-credit continuing education. The sample population in the study consisted of 1,139 nurses (775 R.N.s and 364 L.P.N.s). The questionnaire

data indicated that low motivation toward participation in continuing professional education by licensed nurses is affected by factors such as sex, marital status, family responsibilities, employment status, type of basic educational program, type of position in nursing, policies of the employer, and availability and cost of programs.

Erickson (1975) surveyed forty-six educational units offering graduate study in nursing administration. Information was sought regarding the hours and distribution of nursing and other administration courses for students majoring and minoring in administration. The study shows a steady decline of the percentage of masters students enrolled in the functional area of administration. Respondents suggest many factors are related to changing enrollment patterns for nursing administration study: emphasis on clinical nursing, younger students, increased numbers of part-time students, position requirements, economics and changing undergraduate curriculums.

The research of Chase (1975) posed the question: What are the perceived learning needs held by selected hospital nursing service administrators for their own continuing education based on the ANA Standards for Nursing Services? Data were obtained by a precoded, self-administered mailed questionnaire which included

thirty-six learning need items inferred from the ANA Standard for Nursing Services. The categories of learning needs included responsibility and authority; research, trends, personnel policies, budget, utilization of staff nurses and evaluation of achievement of nursing service objectives.

Educational preparation appeared to have the greatest influence on perception of learning needs. Those with higher degrees perceived less need for most learning items. The data also suggest that nursing service administrators should be prepared at the master's or higher degree level in order to have the necessary knowledge and skills which are described in the American Nurses Association Standards for Nursing Services.

Chase also found that educational preparation was associated with hospital size as measured by bed capacity. Masters or higher degree respondents were more likely to be employed in medium (200-399) and large (400-1,000+) hospitals as opposed to small hospitals (100-199). She suggests that serious attention should be given to determining the educational level of nursing service administrators in small hospitals since they comprise the largest number of hospitals in the United States.

Cooperative Graduate Education in Nursing

(COGEN) is a five year project involving twelve western universities which was established to broaden opportunities for graduate education, to provide more flexible modes of study and to use more effectively the available resources facilities and faculties. (Chater, 1975). The major objectives are to develop and implement innnovative programs in nursing and to improve existing graduate programs.

Why do graduate programs need improvement and innovation? Lenburg and Yearworth (1975) address this question in relation to the nurse with a non-nursing baccalaureate degree. Many master's programs in nursing do not admit nurses with non-nursing baccalaureates or if they do, many set up roadblocks in progression. This especially affects the diploma or associate degree nurse who has not had access to a baccalaureate in nursing program. The result is that hundreds, even thousands, of able nurses are being denied admission to further education in traditional graduate nursing programs. The lack of flexible programs which admit nontraditional nurses may well contribute to the preference for external programs.

In summary, there have been no attempts to systematically isolate those factors contributing to a preference for external degree study among nurses seeking a graduate degree in Nursing Health Services

Administration. It is apparent that nurses are part of the increasingly large group of nontraditional students. It is also apparent that there is a critical shortage of nurses prepared at the graduate level to fill administrative as well as research and clinical positions.

Although the literature suggests that accessibility, instructional and professional factors may have some influence on students, there is a dearth of information on which hypotheses can be based. Therefore, the researcher has gone beyond a literature review to identify the critical variables associated with external degree study among nurses.

CHAPTER III: RESEARCH METHODOLOGY

The Constant Comparison Method in Grounded Theory

The constant comparative method, an inductive method of discovering grounded theory as elaborated by Glaser and Strauss (1967), was used as the major research procedure in this study. The grounded theory approach differs from other research methodologies in that it emphasizes the postulation of observation and/or practice based intuitive relationships between variables which can then be tested empirically. The grounded theory approach was utilized in this study because the dearth of writing about the topic precluded the generation of hypotheses on the basis of previous work.

In general the strategy for comparative analysis puts great emphasis on theory as a process; that is, theory is treated as an ever-developing entity. The process involves the sequential formulating, testing and redevelopment of propositions until one is able to generate a theory that is integrated, consistent with the data and in a form clear enough to be operationalized for later testing in quantitative research (Glaser and Strauss, 1967).

This inductive method is designed to permit the flexibility that is needed in an exploratory study.

The key definitions used by Glaser and Strauss (1967) in elaborating the method are:

Category:

A conceptual element of the theory which in empirical terms would be called a variable.

Incident:

Relevant response in data collection.

Substantive Theory:

Explanations based on empirical data from the area of inquiry.

Theoretical Relevance:

The basic criterion utilized in deciding whether or not the data indicate a new dimension or direction which should be explored in more detail in order to develop an accurate explanation for the phenomena under investigation.

Propositions:

The interrelationships between categories or among properties which are suggested by the data.

There are four stages included in the constant comparative method: (1) comparing incidents applicable to each category, (2) integrating categories and their properties, (3) delineating the theory and (4) writing the theory (Glaser and Strauss, 1967, p. 105). The elements of theory that are generated by comparative analysis are the conceptual categories, their conceptual

properties and generalized relations among the categories and their properties (p. 35).

Conrad (1975, pp. 22-26) summarizes the process as follows. The researcher codes each datum incident (response of subject) to create many categories of analysis as possible. As categories emerge or as data emerge that fit existing categories, the analyst is able to define theoretical properties of the category. The process continues until categories are saturated. That is, the researcher observes no new categories or properties. The further refinement of categories (or variables) and their interrelationships gradually leads to the development of theory which is presented either in discursive form or a set of propositions.

Testing Postulates

In order to evaluate the propositions and refine the categories and their properties, relevant qualitative data are drawn from both field and documentary sources (Glaser and Strauss, 1967, p. 161). The same principles which underlie theoretical or purposive sampling guide the selection of comparison groups. However, it is not always possible to gain access to all groups especially those who are geographically distant from the researcher. Thus the library is an important but potentially limited source of data (pp. 176-183). The nature of

the propositions determines which technique is appropriate. The active search for relevant data continues until all critical variables and their interrelationships have been saturated; no new relationships are emerging which would suggest more information should be collected (Conrad, 1975, p. 24).

Formulating Theory

After the conceptual categories and properties have been established and the propositions regarding their various interrelationships have been evaluated, the researcher utilizes this information to formulate a theory. Each of the elements is used to create an explanation for the problem or phenomena being studied as well as questions for further research.

In summary, the generation of theory must be viewed as a process. Concepts and propositions emerge gradually and the ultimate generation of theory is dependent upon the data collected throughout the study.

Research Procedure

This study was carried out in three phases:

1. Development of categories, properties and related propositions
2. Development of questionnaire and survey
3. Data analysis and generation of theory

Phase I: Development of Categories, Properties
and Related Propositions

An intensive search of the literature and interviews were used to develop the categories and preliminary explanation for nurses' interest in external degree study. The interview sample was selected from the on-campus students and nurses who had sent letters of inquiry to the NHSA office regarding the proposed off-campus degree program. Telephone or face to face interviews were conducted with the twenty-three respondents. They were encouraged to answer freely, and areas which appeared to be productive of fruitful information were pursued intensively by the interviewer.

The intent of the interviews was to:

1. Determine the reasons why these nurses were interested in furthering their education.
2. Identify perceived constraints/advantages to on-campus programs.
3. Identify perceived constraints/advantages of off-campus programs.
4. Determine perceptions of the nature of an external degree.
5. Identify why they believed the external program would best suit their professional needs.
6. Identify differences between the on and off-campus groups.

The interview schedule was developed on the basis of explanations regarding students' educational interests suggested by the literature review. (See Appendix A). The categories and their properties which provided the working framework for the interview schedule were:

1. Demographic factors--those age, sex, geographic location, and marital characteristics which might influence degree seeking behavior.

2. Accessibility factors--time constraints due to life style, cost of education or the distance from educational institution which can affect one's attraction to graduate study.

3. Instructional methodology preferences--one's perception of own learning style, independent study, flexible time/space classes, media preference, course rigor, credit for life and work experience or part-time study.

4. Professional factors--personal career aspirations, job dissatisfaction, career advancement, maintenance of present position, increased salary and need for degree credential which can affect one's decision regarding further education.

The open-ended interviews were carried out over a period of three weeks. Each interview lasted about one to one and one-half hours. Following the

grounded theory approach of Glaser and Strauss (1967) all answers to questions were considered important and were preserved accordingly. All incidents were summarized into abbreviated phrases which maintained the original language of the respondents (See Appendix B). Questions were altered as indicated. For example, it was immediately apparent that respondents did not know what an external degree was and a definition had to be given which related it to off-campus courses. Other questions regarding age, dependents, current position, place of employment, travel and financial concerns were added as those areas appeared to be productive of useful information.

Interviews continued until no new properties were being identified. The resultant data were tabulated and used to generate categories and their related properties as well as the preliminary propositions which served as the basis for the Phase II survey. The data were examined to determine which intuitive clusters evolved. In other words, the raw data served to define general properties which the researcher used to create conceptual categories. Thus six categories were determined and 67 related properties were identified (See Figures 2 - 4).

Phase I concluded with the generation of preliminary propositions. The two major propositions

Category: Career Aspirations

Related Properties

- Highest degree planned
- Type of graduate study preferred
- Area of graduate study preferred
- Thinking about completing off-campus courses
- Interest in NHSA program
- Fulfillment of personal goals
- Career advancement in current agency
- Commitment to professional responsibility
- Desire for new knowledge
- Belief in the importance of combining work and study
- Increased job opportunities in the field of nursing
- Relevance of courses to work/future career
- Increased salary with a Master's degree in nursing

Category: Family Factors

Related Properties

- Marital status
 - Sex
 - Number and age of dependents
 - Age range
 - Proximity of classes to home and work
 - County of residence
 - Opinion of family regarding continuing your education
 - Need to provide financial support for family
 - Arranging for care of dependents while attending classes
 - Finding time to study after work and family obligations
-

FIGURE 2. Conceptual Categories and Properties;
Career Aspirations and Family Factors.

Category: Work Factors

Related Properties

- Possibility of non-paid released time from work during work time
- Availability of someone to replace you during work time
- Inadequately prepared for current job
- Finding energy to study after work
- Dissatisfaction with current work environment
- Pressure from immediate supervisors
- Master's degree in nursing expected for maintenance of current position
- Freedom to study on job
- Opinion of peer workers regarding continuing your education
- Current employment status
- Size of hospital or employing agency
- Type of nursing position
- Length of time in current position

Category: Financial Need

Related Properties

- Paid released time from work to attend classes
- Availability of full scholarships (tuition plus living)
- Travel expenses
- Availability of financial aid to cover educational expenses
- Educational expenses

FIGURE 3. Conceptual Categories and Properties;
Work and Financial Need.

Category: Education Related Factors

Related Properties

- Maximum distance you would travel to attend classes
- Scheduling of classes week-days 8-5
- Opportunity to interact informally with faculty
- Accessibility of faculty for course/professional related counseling
- Availability of a variety of faculty with expertise in nursing health services
- Receiving academic credit for relevant work experience
- Transfer of non-nursing academic credits
- Opportunity to study with University of Michigan faculty
- Availability of off-campus courses
- Availability of faculty with expertise in nursing administration
- Opportunity to interact informally with students
- Scheduling of classes evenings/Saturday
- Opportunity to take classes with students from same region with similar interests and backgrounds
- Type of basis nursing education
- Highest degree held

Category: Preferred Learning Conditions

Related Properties

- Self-instructional materials
- Discussion plus self-instructional materials
- Discussion plus assigned readings
- Discussion
- Lecture
- Lecture plus discussion
- Lecture plus self-instructional materials
- Part-time study
- Full-time study
- Participation in planning own courses of study
- Audio-visual media

FIGURE 4. Conceptual Categories and Properties; Education and Learning Conditions.

identified in this study were:

(a) A broad range of factors will influence nurses' interest in off-campus courses in a graduate Nursing Health Services Administration program;

(b) Nurses seeking a graduate program in Nursing Health Services Administration will prefer off-campus courses.

Sub-propositions generated and evaluated in this study included:

1. The modified external degree NHSA program is preferred by employed nurses who plan to pursue an advanced degree in nursing health services administration.

2. The career advancement factor will have a higher rating of importance than the increased salary factor among nurses seeking off-campus courses.

3. Nurses in administrative positions will prefer off-campus rather than on-campus courses.

4. One's level of education will be related to the perception of need for additional administrative skills.

5. Respondents with bachelors or higher degrees will show a greater interest in career advancement than will degree nurses.

6. Nurses employed in small, medium and large hospitals will vary significantly in preference

for a master's degree program in NHSA.

7. Respondents who are interested in NHSA graduate study will be primarily attracted to part-time rather than full-time study.

8. Nurses who are employed will prefer a variety of learning conditions rather than exclusive use of self-instructional methods.

9. Education related financial factors will be significantly related to interest in the off-campus program.

10. A high percentage of nurses preferring a modified external master's degree in NHSA will have family related financial responsibilities.

11. Off-campus courses will be perceived by all respondents as having the same rigor as on-campus courses.

12. A high percentage of nurses favoring a modified external master's program in NHSA will be in the 40-50 age range.

Phase II: Development of Questionnaire and Survey of Potential Students

During the second phase, a questionnaire was developed on the basis of categories, properties and preliminary propositions identified in Phase I. The items were pretested with respondents who were similar to those who would participate in the survey phase

of the study. The final format of the questionnaire was revised as a result of this pilot and recommendations from members of the committee who supervised this study (See Appendix C).

Sample

The population consisted of 846 registered nurses who were members of the Michigan Nurses Association's Division of Administration and/or the American Hospital Association. The rationale for selection was that all of these people were either already employed as nursing service administrators or were interested in achieving such a position. The assumption was that these nurses would be desirous of graduate study in their professional area.

Survey Procedure

The revised questionnaire was then mailed to all the 846 Michigan nurses. The instrument was accompanied by a letter which explained the purpose of the research, a consent form and a stamped return envelope. (See Appendix D). Respondents were asked to return questionnaires within three weeks and at the end of that period, a second questionnaire was sent to 105 randomly selected individuals who had not yet returned the instrument. All returned questionnaires were checked in by the researcher and names and code numbers were marked off the

master list. The questionnaires were screened to eliminate those which were returned uncompleted.

Coding of Survey Data

All data were entered into the computer file using the interactive system (See Appendices E and F for data dictionaries). A four point scale ranging from 1 = not at all important, 2 = not too important, 3 = moderately important to 4 = very important was used for questionnaire items relating to interest in nursing administration, the University of Michigan NHSA program and off-campus study, (22-75). A four point scale ranging from 1 = undesirable, 2 = somewhat preferred, 3 = moderately preferred to 4 = highly preferred was used for questionnaire items relating to preferred learning conditions (76-87).

Categories and related properties were combined in order to formulate the dependent and independent variables which constituted the preliminary propositions. The variables and related questionnaire items are summarized in Table 3.

The dependent variables included:

- (a) preference for off-campus study
- (b) preference for graduate study in nursing health services administration
- (c) interest in the University of Michigan NHSA modified external degree (off-campus) program

Table 3

Variables and Related Questionnaire Items

Variables	Questionnaire Item
Preference for off-campus study	18
Highest degree planned	17
Preferred area of graduate study	19
Opinion of off-campus courses	21
Maximum distance to attend class	20
Demographic factors	1-16
Interest in nursing health services administration	22-26
Preference for the Michigan NHSA program	27-32
Work related factors	36,37,45,53,54,57, 61,72,73
Career aspirations	43,46,56,62,63,65, 74
Family factors	4,6-10,44,55,59,60, 68,69
Education related factors	20,34,35,42,48,49, 50,51,58,64,66,67, 70,71
Preferred learning conditions	76-87
Financial factors	33,38,39,40,41,47, 52

- (d) preference for graduate study
- (e) perceived difficulty of off-campus courses

The independent variables included:

- (a) demographic factors
- (b) career aspirations
- (c) work related factors
- (d) family related factors
- (e) education related factors
- (f) financial needs
- (g) preferred learning conditions

In summary, data from a review of the literature and interviews with enrolled and potential NHSA students were used to identify potential elements of a grounded theory which explains nurses' preference for off-campus study. The anticipated interrelationships among the categories and properties were expressed as preliminary propositions and the questionnaire was designed to refine the conceptual categories and to test the propositions. Thus the literature review, the interviews and the survey were utilized to formulate elements of a theory which explained how the various factors in combination, influenced nurses' preference for off-campus study.

CHAPTER IV: DATA ANALYSIS: PHASE III-1

The initial activity in Phase III was the analysis of the Phase II data according to the variables needed to evaluate the two major propositions and 12 sub-propositions. The importance of factors was determined by calculation of mean scores. A mean score of 3 was considered important; a score of 3.5 very important. The paired t-test and chi-square statistical tests were used to evaluate propositions as appropriate. Means, marginal percentages and frequency distributions were calculated for all variables. The use of theoretical sampling created a biased sample and prevented the use of more sophisticated techniques of parametric data analysis.

Only 345 (40%) of the 846 questionnaires were returned and 29 of these were not usable. Fourteen of the 32 nurses who returned incomplete questionnaires stated they were retired, 5 did not choose to respond and 5 stated they already had a master's degree. Five questionnaires were not deliverable because of changed addresses.

Eighty percent of the respondents from the second mailing were not interested in graduate study

in nursing health services administration. Since the intent of the theoretical sampling procedure was to reach those nursing service administrators who were interested in graduate study, only those respondents were retained in the final sample. Therefore, the theoretical sample in this study consisted of 160 nurses who indicated both a preference for off-campus courses and graduate study in NHSA. This group will be referred to in this report as the NHSA sample.

Characteristics of the Respondents

The distribution of the total sample and the NHSA sample within the state is similar to the known distribution of all nurses within the state. The majority of respondents in this study resided in the southern part of the lower peninsula (See Appendices G - I). Four percent of all respondents practiced in a rural community; 39.4% practiced in a suburban or small town community and 56.6% practiced in an urban setting (See Table 4).

Fifty-six percent of the respondents preferred off-campus courses and 35.9% preferred a modified program with both on and off-campus courses. Only 5.1% indicated a preference for on-campus courses. These data are summarized in Table 5. Sixty percent of the respondents preferred graduate study in nursing

Table 4
Distribution of Total Sample and NHSA Sample
By Community Size

Community Size	Total Sample		NHSA Sample	
	N	%	N	%
Rural (under 2,500)	12	4.0	5	3.2
Suburban or small town (2,500 - 50,000)	121	39.4	57	36.3
Urban (over 50,000)	174	56.6	95	60.5
	N = 307		157	

Table 5
Preference Regarding On-Campus and Off-Campus
Courses for All Respondents

Type of Graduate Study Preferred	All Respondents	
	N	%
Off-Campus Courses	166	56.3
Modified Program with Both on and Off-Campus Courses	106	35.9
On-Campus Courses	15	5.1
Other	8	2.7
N = 295		

health services administration whereas 18.5% preferred graduate study in clinical nursing and 10.4% selected education as the field of preference (See Table 6).

Characteristics of the NHSA Sample

The major portion (90.6%) of the respondents who preferred off-campus NHSA graduate study were female. Seventeen percent were single, 67.1% were married, 1.3% had separated from spouse, 5.1% were widowed and 9.5% were divorced. The following age distribution of the NHSA sample was as follows: 9.6% were between 20-30 years; 34.4% were between 30-40; 29.9% were between 40-50; 26.1% were over 50. Eleven percent of the NHSA sample had dependents under six years of age; 36.8% in age group 7-18; 15% in age group 19-25; 8.7% in age group 26-59 and 5% had dependents over 60 (See Appendix J).

Most of the NHSA sample (66%) received their early training in diploma nursing programs; 12.6% were initially prepared in associate degree programs and 21.4% completed baccalaureate degrees in nursing. The highest degree attained by 33.1% was a diploma; 8.3% held associate degrees; 28.0% had earned baccalaureates in nursing; 11.5% held baccalaureates in another field; 10.2% had earned master's degrees in nursing and 8.9% master's degrees in another field. None of the group had a doctorate.

Table 6
Preferred Areas of Graduate Study
for All Respondents

Area of Graduate Study	All Respondents	
	N	%
Nursing Health Services Administration	178	59.7
Clinical Nursing	55	18.5
Education	31	10.4
Other	34	11.4
N = 298		

The majority of nurses in the NHSA sample work full-time in nursing (89.4% full-time and 5.6% part-time). Only 3.8% stated they were unemployed and 1.2% indicated they were in non-nursing positions full or part-time (See Appendix J).

The NHSA sample were employed primarily by medium size hospitals; 34.4% were employed in 100-299 bed hospitals and 27.5% in 300-499 bed hospitals. Other institutions such as public health agencies accounted for only 5.3% (See Table 7).

The data indicated that the NHSA sample held a variety of positions. Directors of nursing service accounted for 32.7%; supervisors 24.8%; others 18.3%; staff nurses 11.1%; head nurses 5.9%; and instructors 4.6%. (See Table 8).

Other positions were described as:

- | | |
|------------------------------|-----------------------------|
| •inservice educator | •assistant director nursing |
| •health care administrators | •educational consultant |
| •director of nursing program | •consultant |
| •assistant administrator | •inservice coordinator |
| •home care coordinator | •patient care coordinator |
| •executive director | •administrative assistant |

Length of time in current position fell predominantly in the over 5 year range with a heavy percentage having been employed between 2 and 5 years (See Table 9).

Table 7
Distribution of NHSA Sample Across Institutions of
Various Sizes

Size of Hospital or Agency	NHSA Sample	
	N	%
Under 50 beds	5	3.8
51 - 99 beds	14	10.7
100 - 299 beds	45	34.4
300 - 499 beds	36	27.5
500 beds or over	24	18.3
Other agencies	7	5.3
N = 131		

Table 8
Current Nursing Positions of NHSA Nurses

Nursing Position	NHSA Sample	
	N	%
Director of Nursing Service	50	32.7
Supervisor	38	24.8
Other	28	18.3
Staff Nurse	17	11.1
Head Nurse	9	5.9
Instructor	7	4.6
Clinical Director	4	2.6
N = 153		

Table 9
Length of Time NHSA Sample have been Employed

Time in Current Position	NHSA Sample	
	N	%
6 months or less	11	7.1
Between 6 months and 1 year	9	5.8
Between 1 year and 2 years	23	14.7
Between 2 years and 5 years	51	32.7
Over 5 years	62	39.7
N = 156		

Reasons for Interest in NHSA Graduate Study

Responses to questions 22-26 were taken to be the sources of interest in NHSA graduate study (See Table 10). The data indicate that the NHSA sample were primarily concerned with the acquisition of leadership skills needed to make changes in nursing and enhancing the credibility and prestige of the nursing profession. Other factors cited included:

- American Nurses Association's emphasis on masters by 1985
- increased expertise in current position
- better qualified for current position
- update knowledge and skill
- continued professional growth
- "letters" needed to get rid of bedpan image
- need management skills
- personal enrichment
- make job easier
- keep current position
- contact with peer group

Reasons for Interest in the University of Michigan NHSA Program

Factors related to interest in the University of Michigan NHSA Program were determined by responses to questions 27-31. The administrative focus of the program, proximity of the program and reputation of the University of Michigan carried the highest percentage responses rates (See Table 11).

Table 10
Relative Strength of Factors Related to NHSA Sample's Interest
in Nursing Health Services Administration

Interest Factors	Not at All Important		Not too Important		Moderately Important		Very Important	
	N	%	N	%	N	%	N	%
I have leadership ability and seek advanced training that will enable me to assume responsibility for directing changes in the field of nursing.	157	1.3	3.8	29.3	65.6			
The credibility and prestige of the profession will be enhanced as more nurses have graduate education.	156	2.6	10.9	45.5	41.0			
I am interested in being employed as a nursing health services administrator.	144	16.7	14.6	28.5	40.3			
I am interested in achieving an administration position within a particular institution so that I might bring about needed changes within that institution.	142	19.0	23.9	24.6	32.4			
Other	19		5.3	94.7				

Table 11
Relative Strength of Factors Related to NHSA Sample's Interest
in the University of Michigan's NHSA Graduate Program

Interest Factors	Not at All Important		Not too Important		Moderately Important		Very Important	
	N	%	N	%	N	%	N	%
The NHSA Graduate Program has an administrative rather than clinical focus.	154	1.3	7.8	39.6	51.3			
This is the only NHSA program that is close by	145	9.0	14.5	26.9	49.7			
The University of Michigan has a national reputation for excellence in education	158	2.5	12.7	38.6	46.2			
The NHSA program is one of the graduate programs in the School of Nursing.	151	3.3	14.6	45.7	36.4			
The School of Public Health has national status.	152	8.6	25.7	38.8	27.0			

Evaluation of Propositions

Survey responses from the NHSA sample were used to evaluate the propositions. Missing data due to incomplete responses accounts for the discrepancy in total numbers in all tables.

Proposition A: A broad range of factors will influence nurses seeking off-campus courses in a graduate NHSA Program.

To determine the relative importance of factors influencing nurses seeking an off-campus program, means were calculated for all questions 33-74 (See Appendix K). For purposes of analysis a mean score of 3 or higher was considered important. On this basis 17 factors were found to have the most bearing on nurses' decision to enroll in off-campus courses. In rank order, they were:

- Desire for new knowledge
- Availability of a variety of faculty with expertise in different aspects of Nursing Health Services
- Proximity of classes to home and work
- Availability of off-campus courses
- Availability of a variety of faculty with expertise in different Nursing Health Services Administration
- Fulfillment of personal goals
- Receiving academic credit for relevant work experience
- Availability of educational resources (books, tapes, computers, clinical facilities)
- Relevance of courses to work/future career
- Commitment to professional responsibility

- Accessibility of faculty for course/
professional related counseling
- Increased job opportunities in the field of
Nursing
- Scheduling of classes evenings/Saturdays
- Transfer of non-nursing academic credits
to new program
- Belief in the importance of combining work
and study
- Opportunity to interact informally with
faculty
- Finding time to study after work and
family obligations

Table 12 summarizes the important factors according to the appropriate category.

Proposition B: Nurses seeking a graduate
program in NHSA will prefer
off-campus courses.

Ninety-two percent of all respondents seeking an NHSA graduate program preferred off-campus courses. Only 7.5% indicated a preference for on-campus or other programs (See Table 13). The proposition was supported.

Sub-proposition 1: The modified external degree
NHSA Program is preferred
by employed nurses seeking
an advanced degree in NHSA.

This proposition was evaluated by stratifying all the NHSA nurses by employment status and comparing their responses. Sixty percent of nurses employed full-time preferred off-campus courses; 33.3% chose a modified off-campus program; 4.2% preferred on-campus (See Table 14). The majority of respondents

Table 12
Mean Scores for Most Important Factors Within
Conceptual Categories

Conceptual Category	Factor	Mean Scores
<u>Education</u>		
	• Availability of a variety of faculty with expertise in Nursing health services	3.6968
	• Availability of off-campus courses	3.6752
	• Availability of faculty with expertise in nursing administration	3.6474
	• Receiving academic credit for relevant work experience	3.5287
	• Availability of educational resources	3.5220
	• Accessibility of faculty for course/professional related counseling	3.3205
	• Scheduling of classes evenings/Saturday	3.2595
	• Transfer of non-nursing academic credit	3.2452
	• Opportunity to interact informally with faculty	3.0130
<u>Career Aspirations</u>		
	• Desire for new knowledge	3.7652
	• Fulfillment of personal goals	3.5849
	• Relevance of courses to work/future career	3.5097
	• Commitment to professional responsibility	3.4937
	• Increased job opportunities in the field of nursing	3.3185
	• Belief in the importance of combining work and study	3.2387
<u>Family</u>		
	• Proximity of classes to home and work	3.2937
	• Finding time to study after work and family obligations	3.0000

Table 13
NHSA Nurses' Preference for Off-Campus
Study

Type of Graduate Study Preferred	NHSA Respondents	
	N	%
Off-Campus Courses	160	92.5
On-Campus Courses	13	7.5

Table 14
 Employed NHSA Nurses' Preference for Modified
 Off-Campus Graduate Program

Type of Graduate Study Preferred	Employed NHSA Nurses	
	N	%
Off-Campus Courses	99	60.0
Modified Program with Both On and Off-Campus Courses	55	33.3
On-Campus Courses	7	4.2
Other	4	2.4

preferred all off-campus courses and therefore, sub-proposition 1 was not completely supported.

Sub-proposition 2: The career advancement factor will have a higher rating of importance than the increased salary factor among nurses seeking off-campus courses.

This proposition was evaluated by utilizing a paired t-test for the significance of the difference between the two variable means. The t-test indicated a significant difference but not in the direction postulated. The results yielded a t-score of -2.4478 which is significant at the .01 level (See Table 15). It seems that a desire for more income was stronger than interest in career advancement.

Sub-proposition 3: Nurses in administrative positions will prefer off-campus rather than on-campus courses.

Responses to questionnaire item 18 were compared for all those nurses who are currently employed in administrative positions. The sub-proposition was supported since 93% of the respondents in administrative positions preferred off-campus courses (See Table 16).

Sub-proposition 4: One's level of education will be related to the perception of need for additional administrative skills.

This proposition was tested by examining the

Table 15
Strength of Career Advancement and Increased Salary
Incentives for NHSA Sample

Factors Influencing Choice of Off-Campus Courses	NHSA Sample		
	Mean	Mean Difference	Standard Deviation
Career Advancement in Current Agency	2.4575	-.27451	1.3871
Increased Salary with a Master's Degree in Nursing	2.7320		-2.4478*

N = 153

*Significant at .01 level

Table 16
 Strength of Preference for Off-Campus Study by
 NHA Nurses Currently Employed in
 Administrative Positions

Type of Graduate Study Preferred	NHA Nurses in Administrative Positions	
	N	%
Off-Campus Study	151	93.2
On-Campus Study	11	6.8

interaction effect between highest degree held (question 12) and reasons for pursuing off-campus, graduate, NHSA education (questions 22-25, 56). The chi-square statistic and contingency coefficient were then calculated. Only variable 22, credibility and prestige of the profession, was found to be related to interest in NHSA and therefore, the proposition was only partially supported (See Table 17). The results of the analyses for questions 23-25 and 56, are in Appendix L.

Sub-proposition 5: Respondents with a bachelors or higher degree will show a greater interest in career advancement than associate degree nurses.

The chi-square test for independence utilized for sub-proposition 4 yielded no significant relationship between education and interest in career advancement. Furthermore, when the scaled responses for interest in career advancement were examined in relation to respondents' educational background the results showed that those nurses with an associate degree were most interested in career advancement (See Table 18).

Sub-proposition 6: Nurses employed in small, medium and large hospitals will vary significantly in interest in a master's degree program in NHSA.

A comparison of respondents by hospital or agency size indicated that those in medium size hospitals

Table 17
Strength of Credibility and Prestige of the Profession Factor According to
Respondents' Level of Education

Highest Degree	Strength of Credibility and Prestige of the Profession Factor		
	Not too Important	Moderately Important	Very Important
Diploma	5 9.4	32 60.4	16 30.2
Associate Degree	2 14.3	7 50.0	5 35.7
Baccalaureate in Nursing	10 19.6	23 45.1	18 35.3
Baccalaureate in Another Field	0	8 47.1	9 52.9
Masters in Nursing	3 17.6	3 17.6	11 64.7
Masters in Another Field	3 18.8	1 6.3	12 75.0

N = 168

DF = 10

Chi-square = 25.1774 Significant at .05 level

Contingency Coefficient = .3610

Table 18
Strength of Career Advancement Factor According to
Respondents' Level of Education

Highest Degree Earned	Interest in Career Advancement							
	Not at All Important		Not too Important		Moderately Important		Very Important	
	N	%	N	%	N	%	N	%
Diploma	18	34.6	9	17.3	11	21.2	14	26.9
Associate Degree	2	15.4	2	15.4	3	23.1	6	46.2
Baccalaureate in Nursing	14	28.0	9	18.0	16	32.0	11	22.0
Baccalaureate in Another Field	4	21.1	5	26.3	5	26.3	5	26.3
Masters in Nursing	8	47.1	4	23.5	4	23.5	1	5.9
Masters in Another Field	8	50.0	3	18.8	1	6.3	4	25.0

were more interested in NHSA study than those in small or large institutions. Only 18.3% of those employed were in hospitals with 500 beds or over (See Table 19). The proposition was supported.

Sub-proposition 7: Respondents who are interested in NHSA off-campus graduate study will be mainly interested in part-time rather than full-time study.

Those respondents who were interested in NHSA graduate study were found to be significantly more interested in part-time than in full-time study. The paired t-test indicated a significant difference between the means of the two variables. The t-score of 9.4730 was highly significant at the .0000 level (See Table 20).

Sub-proposition 8: Nurses who are employed will prefer a variety of learning conditions rather than exclusive use of self-instructional methods.

This proposition was supported. As can be seen in Table 21, calculation of means for preferred learning conditions as obtained from questionnaire items 76-86, yielded the following most preferred learning conditions in rank order:

- part-time study
- lecture plus discussion
- participation in planning own course of study
- lecture plus self-instructional materials
- audio-visual media
- discussion plus self-instructional materials

Table 19
Interest in NHSA Graduate Education by Size of
Employing Institution

Hospital or Agency Size	Proportion of NHSA Respondents	
	N	%
Small (less than 100 beds)	19	14.5
Medium (100 - 499 beds)	81	61.9
Large (500 beds or over)	24	18.3
Other Agencies	7	5.3

Table 20
Extent of Interest in Part-time and Full-time Study
for NHSA Sample

Variable	NHSA Sample		
	Mean	Mean Difference	Standard Deviation
Part-time Study	3.4140	1.3057	1.7271
Full-time Study	2.1083		
			9.4730*

N = 157

*Significant at .0000 level

Table 21
Learning Conditions Preferred by Employed Nurses in NHSA Sample

Variable	NHSA Sample		
	N	Mean	Standard Deviation
Part-time study	153	3.4967*	.77904
Lecture plus discussion	152	3.3026*	.71908
Participation in planning own course of study	155	3.2194*	.87736
Lecture plus self-instruc- tional materials	150	3.0933*	.78874
Audio-visual media	153	3.0523*	.83344
Discussion plus self-instruc- tional materials	157	3.0446*	.80339
Discussion plus readings	159	2.9623	.74534
Discussion	154	2.8377	.94607
Lecture	152	2.5592	.91878
Self-instructional materials	157	2.3248	1.0267
Full-time study	147	2.0748	1.0985

*Mean of 300 more = most preferred

Sub-proposition 9: Education related financial factors will be important for those interested in the off-campus NHSA Program.

A calculation of means for all financial factors yielded scores below 3.0 for all variables (See Table 22). This proposition was not supported.

Sub-proposition 10: A high percentage of nurses preferring a modified external master's degree in NHSA will have family related financial responsibilities.

A chi-square analysis of the test variables relating to respondents' need to provide full or partial family and their preference for off-campus courses yielded no significant relationship between the variables. Apparently such income constraints do not affect one's preference for external degree study (See Tables 23-24).

Sub-proposition 11: Off-campus courses will be perceived as having the same rigor as on-campus courses.

Only 1.3% of the respondents interested in the off-campus NHSA program believed that off-campus courses were easier to complete because standards are lower. However, the results are somewhat misleading, in that the majority of respondents (73.5%) indicated that off-campus courses were easier because travel time is decreased. Seventeen percent of respondents perceived off-campus courses as having the same rigor as on-campus

Table 22
Importance of Education-Related Financial Factors
for the NHSA Sample

Education-related Financial Factors	NHSA Sample		
	N	Mean	Standard Deviation
Possibility of paid released time from work	155	2.6194	1.0707
Increased salary with a Master's degree in nursing	156	2.7051	1.0967
Availability of full scholar- ships	154	2.8377	1.0570
Travel expenses	157	2.7834	1.0084
Need for personal financial support	155	2.6516	1.0481
Availability of financial aid to cover educational expenses	158	2.8228	1.0253
Educational expenses (tuition/ books)	156	2.9295	.93748

Table 23
Relationship Between Interest in Off-Campus Program and Respondents'
Need to Provide Partial Financial Support for Family

Interest in Off-Campus Program	Need to Provide Partial Financial Support for Family		
	Not too Important	Moderately Important	Very Important
Off-Campus Courses	74 46.5	42 26.4	43 27.0
On-Campus Courses	6 60.0	2 20.0	2 20.0
Total Row Percents	47.3	26.0	26.6

N = 169

DF = 2

Chi-square = .68406 Not Significant

Contingency Coefficient = .0635

Table 24

Relationship Between Interest in Off-Campus Program and
 Respondents' Need to Provide Full Financial
 Support for Family

Interest in Off- Campus Program	Need to Provide Full Financial Support for Family		
	Not too Important	Moderately Important	Very Important
Off-Campus Courses	109 71.2	14 9.2	30 19.6
On-Campus Courses	8 80.0	2 20.0	0
Total Row Percents	71.8	9.8	18.4

N = 163

DF = 2

Chi-square = 3.1867 Not Significant

Contingency Coefficient = .2032

courses. Table 25 summarizes these results.

Sub-proposition 12: A high percentage of nurses interested in a modified external master's program in NHSA will be in the 40-50 age range.

This proposition was not supported. Based on calculation of percentages for the age ranges measured, only 29.9% of the NHSA sample were in the 40-50 age range. Forty-four percent were between 20 and 40 years of age; 26.1% were over 50 years of age.

Table 26 summarizes these results.

Additional Group Comparisons

In keeping with the process focus, additional groups were selected. Key factors identified for the NHSA group were contrasted with key factors isolated from other potentially meaningful groups: total sample, age, degree, marital status, on-campus and regions 1-3 in northern Michigan (See Appendix M-N). These groups were not large enough to enable the researcher to conduct a comparison of means with statistical tests. The important factors are asterisked on the basis of having a mean score of 3.0 or more. They suggest implications for further study at another time.

Summary

The final survey phase of the study was focused only on nurses who indicated an interest in both off-campus study and the NHSA Master's Degree Program at

Table 25
Perceived Difficulty of Off-Campus Courses
by NHSA Sample

Completing Off-Campus Courses	NHSA Sample	
	N	%
Easier to complete (travel time decreased)	111	73.5
Same as on-campus program	26	17.2
Harder to complete	10	6.6
Easier to complete (standards lower)	2	1.3
Other	2	1.3
N = 151		

Table 26
Age Distribution of Nurses in NHSA Sample

Age Range	NHSA Respondents	
	N	%
20 - 30	15	9.6
30 - 40	54	34.4
40 - 50	47	29.9
Over 50	41	26.1
N = 158		

The University of Michigan (NHSA sample). The purpose was to determine which of several factors were most strongly associated with a desire for graduate study in an off-campus program. Therefore, only the questionnaire responses of the NHSA sample were analyzed. Perhaps as a result of the sampling technique, the survey was biased toward urban nurses. It seems that nurses who practice in rural outstate areas are not as likely as their metropolitan counterparts to belong to either the Michigan Nurses Association or the American Hospital Association.

Within the limitations of this study, the results indicated that respondents preferring NHSA graduate study were predominantly female. The majority were married, were between ages 30-50 and had dependents between 7 and 25 years of age. The major portion of potential students reside in the southern part of the lower peninsula with the largest proportion living in the urban Detroit Region.

The potential NHSA students were usually full-time employees in medium or large size hospitals. They frequently held management positions even though a very high percentage of them have less than a baccalaureate degree (41%). Very few (19%) had a master's degree.

The NHSA sample indicated a preference for a mode of study which combined self-instruction with

lecture or discussion and allows them to participate in planning their own programs. Most (93%) of these respondents would be attracted to a program which allowed them to continue working.

Sixteen factors within four categories were found to exert influence on nurses' decision to seek a graduate NHSA off-campus program. These factors were:

Educational Resources

- Availability of a variety of faculty with expertise in different aspects of Nursing Health Services/Administration*
- Receiving academic credit for relevant work experience
- Availability of educational resources
- Accessibility of faculty for courses/professional related counseling
- Transfer of non-nursing academic credits to a new program.
- Opportunity to interact informally with faculty

Career Aspirations

- Desire for new knowledge
- Fulfillment of personal goals
- Relevance of courses to work/future career
- Commitment to professional responsibility
- Increased job opportunities in the field of nursing
- Belief in the importance of combining work and study

*The two factors related to faculty with expertise in nursing health services and nursing health services administration were combined to form one factor.

Flexibility in Course Delivery

- Availability of off-campus classes
- Proximity of classes to home and work
- Scheduling of classes evenings/Saturdays

Family

- Finding time to study after work and family obligations

Two main propositions and several sub-propositions were postulated on the basis of the Phase I interviews and literature review. The following were confirmed by the survey data:

Main Propositions

A. A broad range of factors will influence nurses seeking off-campus courses in a graduate Nursing Health Services Administration program.

B. Nurses seeking a graduate program in Nursing Health Services Administration will prefer off-campus courses.

Sub-propositions

1. The modified external degree NHSA Program is preferred by employed nurses.

2. Nurses in administrative positions will prefer off-campus rather than on-campus courses.

3. The perception of need for additional

administrative skills in order to enhance the credibility and prestige of the nursing profession will be related to one's level of education.

4. Nurses employed in small, medium and large hospitals will vary significantly in interest in a master's degree program in NHSA.

5. Respondents interested in NHSA graduate study will be mainly interested in part-time rather than full-time study.

6. Nurses who are employed will prefer a variety of learning conditions rather than exclusive use of self-instructional methods.

CHAPTER V: TOWARD A THEORY OF EXTERNAL
DEGREE PREFERENCE PHASE III-2

The third phase of this study concluded with (1) the development of a substantive theory of external degree preference among nurses in health services administration and (2) a summarization of implications for future direction and research.

Generation of Theory

The first phase of this study including the literature review and the interviews suggested that 6 major conceptual categories might form the basis for explaining students' preference for off-campus study. These were education, preferred learning conditions, financial need, career aspirations, work and family responsibilities. The survey data collected during the third phase supported the importance of four conceptual categories: educational resources, career aspirations, flexibility in course delivery and family factors. Using the concepts, related properties and the information resulting from the testing of the preliminary propositions, a work-study theory of preference for off-campus study was developed (See Figure 5).

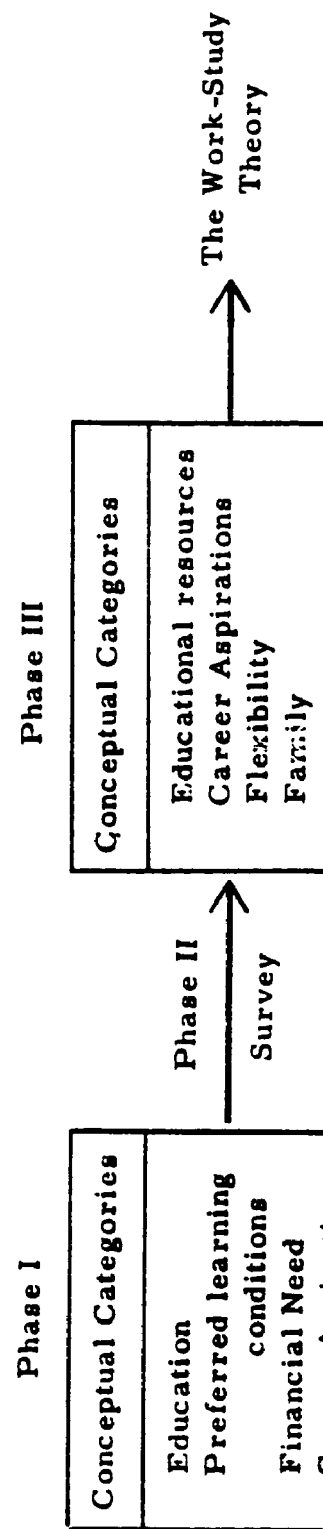


FIGURE 5. The Development of the Work-Study Theory.

Elaboration of the Work-Study Theory

In keeping with the grounded theory approach, the emergent work-study theory is close to the data obtained and reflects the refined categories and the results of the preliminary proposition evaluations. The theory centers around 12 major propositions:

Educational Resources

- Nurses seeking an off-campus graduate NHSA Program are interested in a quality program with faculty and educational resources equivalent to on-campus programs.
- Opportunities to interact with faculty both formally and informally are considered essential in off-campus NHSA Programs.
- Acceptance of relevant work experience and selected non-nursing academic credits are considered important by potential NHSA students.

Career Aspirations

- Nurses in administrative positions have a strong desire for new knowledge and are very interested in fulfilling personal goals.
- Nurses seeking a graduate NHSA degree have a strong commitment to their job and to the profession of nursing.
- Nurses with less than a baccalaureate degree are functioning in administrative positions and are very interested in obtaining graduate education.

Flexibility in Course Delivery

- Maintenance of employment is considered essential; nurses in administrative positions do not wish to attend a graduate nursing program on a full-time basis.

- Potential NHSA students are seeking a master's degree program in which course scheduling is flexible and classes are taught close to home and/or work
- Students seeking off-campus graduate study in NHSA prefer a variety of learning formats rather than the exclusive use of self-instructional methods

Family/Demographic

- A large percentage of nurse administrators have been employed over five years and the majority are between 30 and 50 years of age
- Nurses seeking a graduate degree in NHSA will pursue their education regardless of family and education related expenses
- Nurses in administrative positions in large urban regions will be more likely to pursue graduate education than those in rural or small community regions

The Work-Study Theory is the postulation that potential off-campus NHSA students are mature, career nurses who wish to maintain their current life style while studying. They desire a quality education which is equal to the on-campus program in faculty and educational resources. Therefore, the optimal arrangement is one which allows them to stay in their own community. This interest is not necessarily related to financial need alone but rather to a strong commitment to the idea that one should remain continuously active in his or her profession.

Implications and Research Questions

Implications

The NHSA study has several implications for nursing educators in Michigan and for future research. The literature suggests that the desire for further education depends upon one's academic background. This was not found in this study. The present investigation suggests that nurses with less than a baccalaureate degree also desire further education. This implies that nurses prepared at the diploma and associate degree level have career aspirations which will be unfulfilled if accrediting institutions do not develop appropriate learning opportunities. Educators need to determine how to best bring resources to bear on this problem.

The strong interest in quality education and flexibility in course delivery coupled with the overwhelming support for part-time study and maintenance of present employment suggests that there is a large group of potential students who are willing to meet their own educational expenses while continuing their present employment. This has major implications for graduate programs which are currently losing traineeship funds. The researcher has observed that on-campus students already enrolled in the NHSA Program frequently do not realize the extent of education

related expenses until enrolled. This may account for the discrepancy between the interview and survey data regarding financial factors.

A major finding in this study was the preference for self-instructional materials in combination with lectures, seminars and the combined use of audiovisual media. This would suggest that educators developing off-campus programs should not proceed to develop independent study materials without planning for group interaction. Further research needs to be done before an over-commitment is made to independent study materials. In addition, attention needs to be given to exploration of flexibility in current programs regarding course scheduling and methodology.

The NHSA group of nurses are predominantly located in the southeastern part of the lower peninsula which is urban in nature. Some rural nurses may have been excluded from the sample but perhaps there is less perceived need for administrative knowledge and skills. Rural areas have smaller hospitals and agencies as compared to the urban regions in this state. This finding has implications for the expansion of graduate programs to external learning centers. More data needs to be collected in rural areas to ascertain the extent of educational need by nurses seeking graduate programs.

Potential nursing students for the NHSA Program

were between the ages of 30 and 50 (63%). Present graduate curriculums in nursing are predominantly geared to the younger student and do not take into account work and life experiences. This has implications for nursing faculty in the NHSA Program and may actually involve "education for the educators" regarding the principles of adult learning.

Research Questions

Several potential studies could evolve as the result of questions raised in the present investigation. Are nursing administrators different than nurses with other career goals? An investigation needs to be carried out which allows for comparison of the NHSA sample with nurses interested in clinical or education careers. As a rule, nurses do not stay in nursing very long. Yet this study found the majority of administrators were employed at least five years.

The differences between on and off-campus students should be investigated. The interview data collected from enrolled students suggests that both on and off-campus students have the same educational interest and needs. If adequate funding were available a study should be carried out using interviews and open-ended questions.

The very nature of the questionnaire used in this research may well have masked possible results.

In finalizing the questionnaire it was necessary to combine responses in order to develop a tool that seemed to best represent factors identified. In this regard, the researcher still questions the importance of financial factors. It may well be that the questions regarding financial concerns were not clear or these concerns are not realized until enrollment in graduate study.

The theory and related propositions need to be tested in a quantitative study which includes other nurses interested in other kinds of graduate programs. Such a study must tap all the nurses in Michigan who are interested in graduate study and this demands sampling methods other than the one used in this study.

Conclusion

This study has produced data which supports the development of the off-campus program in NHSA in a limited geographic area, the southeastern part of the lower peninsula in Michigan. Although the study was confined to nursing service administrators, the obtained factors may well be generalizable to students in other academic programs. Further study is essential if the proposed theory is to be tested and refined.

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APPENDIX A

STUDENT INTERVIEW SCHEDULE

APPENDIX A

Student Interview Schedule

INTRODUCTION

Hello, I am Lillian Simms from The University of Michigan Nursing Health Services Administration Program. I noted that you have indicated some interest in our graduate degree. I am also a doctoral student and I am interested in collecting additional information so that we can better plan for new students. I wonder if I could ask you a few questions related to your interest. All of your comments will be considered completely confidential and treated accordingly.

GENERAL INFORMATION

Respondent Number _____

Place of Employment _____

Interviewer _____

Date _____

COMMENTS:GENERAL QUESTIONS

- I. Why are you interested in nursing health services administration?

Follow-up probing questions related to:

Work Setting:

Position:

Educational Background:

Why are you interested in the University of Michigan program?

What other programs do you know about?

Other comments:

II. We are thinking of offering part of the Nursing Health Services Administration Program off-campus.

What would make this arrangement attractive to you?

What would make this unattractive to you?

III. How do you learn best?

What is there about past educational experiences that makes you think this is the way you learn best?

Other comments:

Do you think age is a factor in learning?

SPECIFIC QUESTIONS

PROFESSIONAL FACTORS:

1. Do you believe that people you work with think you are adequately prepared?

Nurses:

Doctors:

Administrators:

2. Of what advantage is it to you to continue your education?
3. Of what advantage is it to you to complete a master's degree in Nursing Health Services Administration?

ACCESSIBILITY FACTORS:

1. What non-work responsibilities influence any decisions you make regarding taking graduate courses?
2. In what ways is your work setting conducive to going to school?

In what ways and to what extent do work responsibilities create problems?

3. Is current course scheduling a problem for you?
4. To what extent is travel a problem for you?
5. How difficult is it for you to get to resource materials?
6. Are there any other factors which inhibit or facilitate your taking graduate courses?
7. If financial aid is a factor, what kind of funding is needed?

INSTRUCTIONAL METHODOLOGY:

1. The Nursing Health Services Administration Program is a modified external degree program. This means that part of the credits may be offered off-campus. Do you think there are differences in admission standards between an on-campus and off-campus program?

Describe.

2. Do you think it would be easier to complete an off-campus program?

Are course requirements/grading standards lower?

Why?

How?

3. Do you think courses in an off-campus program would be more relevant to your work/future career plans?

Why?

How?

4. To what extent do you think you are capable of participating in planning your own course of study?

Do you enjoy this?

Why do you think this?

ADDITIONAL COMMENTS:

APPENDIX B

SUMMARY OF RESPONSES OBTAINED

FROM INTERVIEWS

APPENDIX B

Summary of Responses Obtained

From Interviews

Interviewees included students enrolled in the on-campus program and nurses who have indicated an interest in the program. The sample of potential off-campus students was drawn from letters of inquiry about the program which have been received in the NHSA department.

Question

Number of respondents	13 on-campus students; 10 potential students
Place of Employment	Small, medium and large hospitals; visiting nurses association; health department
Interviewer	Lillian M. Simms
Time Schedule for interviews	12/28/76 - 1/18/77

Comments:

Of the 13 on-campus students, only 4 can be called traditional full-time students. Only 2 students actually live on-campus. The rest are commuter from Ann Arbor, Detroit, Lansing and Toledo areas.

On-Campus Students	Potential Off-Campus Students
-----------------------	-------------------------------------

Why are you interested in nursing health services administration?

Nursing needs leadership	1	3
Nursing 40 years behind	1	0

	On-Campus Students	Potential Off-Campus Students
Likes leadership role	5	2
Change agent aspirations	3	2
Career aspirations	2	0
Application outside health industry	1	0
Professional contribution	1	0
Leadership ability	1	3
Teaching possibilities	1	0
Likes administration and research	1	0
Interested in administration	2	4
Power	0	1
<u>Work setting?</u>		
22 years in nursing	0	1
Work supportive of interest	1	0
In position to recognize interest	3	3
In administration now	1	1
Sees ineffective leadership	1	0
<u>Educational background?</u>		
Diploma to BSN	3	2
Diploma, BSPHN, MPH	1	0
BSN, CE	4	3
Cadet RN, BSN, Postgraduate study	1	0
Diploma, BA, CE	1	1
Diploma, BSN, CE	2	0
AD, BSN	1	0
BSN,	0	2
BSN, MS	0	1
AD, BS Allied Health	0	1
<u>Position?</u>		
Chief Nursing education	0	1
Staff nurse	5	2
Clinical director	1	0
Director of nursing	2	1
Charge nurse	2	2
Assistant director of nursing	2	2
Faculty	0	1

	On-Campus Students	Potential Off-Campus Students
<u>Why are you interested in the University of Michigan program?</u>		
Image of the U of M	1	6
Want knowledge	0	2
Other programs too clinical	4	0
U of M devoted to Adminis- tration	3	0
Credibility of School of Public Health	5	2
Curriculum approach	1	2
Association with School of Nursing	1	2
Acceptance of previous work	1	0
Proximity to home	4	3
Interdisciplinary approach	1	0
Needs skills	1	2
Needs the paper	1	0
<u>What other programs do you know about?</u>		
Wayne	6	5
None	4	3
University of California	1	0
Seattle	1	0
Iowa	1	0
Illinois	1	0
Ohio	1	0
Michigan State University	0	1
Georgia	0	1
Boston	0	1
<u>Other comments:</u>		
No programs in Florida	1	
Bachelors would have been in Nursing but U of M had no program	1	
Dissatisfaction with staff nursing	1	
Management needed; not clinical	1	2
Wayne wouldn't accept previous credits	1	
Wants to be education consultant	1	

	On-Campus Students	Potential Off-Campus Students
Colleagues poorly prepared		1
<u>What would make off-campus courses attractive to you?</u>		
Travel time decreased	2	4
Can work more	2	1
Closer to home	2	6
Flexible class times	4	2
Cost	2	2
Could continue to work	1	2
Convenience	2	3
Can maintain full-time work	1	2
Don't know	1	0
Nothing	1	0
Almost anything	0	1
Valuable	2	0
Friends	0	1
<u>What would make off-campus courses unattractive to you?</u>		
Exposure to faculty and students limited	4	3
Conflict between work and education	0	1
Disadvantages with part- time study	1	0
Working students can't divorce selves from work	1	0
Have no need for campus life	1	0
Nothing	5	2
Decreased prestige	1	0
Modified courses	2	1
University more professional	1	0
No growth with self study	0	1
Limited physical resources	2	1
Decreased educational resources	3	4

	On-Campus Students	Potential Off-Campus Students
<u>How do you learn best?</u>		
Audio-visual plus on job demonstration	0	1
Independent study	0	2
Lecture plus seminar	4	0
Self instruction with feedback	1	0
Lecture plus seminar plus reading	1	1
Lecture plus independent study	1	2
Self instruction plus library plus real life	1	2
Structured setting	1	0
Seminar plus independent	3	1
Lecture	3	1
Dislikes discussion	1	0
<u>What is there about past educational experiences that makes you think this is the way you learn best?</u>		
Always had lecture	2	2
Work experience	0	1
Undergraduate work	1	4
Field work	0	1
Exposure to self instruction	3	1
Excitement with seminar/discussion	3	0
Dislikes independent study	1	0
Has photographic memory	1	0
Better grades	1	0
Always studied alone	0	1
Don't retain self instruction	1	0
Doesn't like lecture	2	0
Tests do not reflect learning	1	1
Application of learning to work	1	0
Teachers are facilitators	1	1
No opportunity to explore with lecture	1	0
Learns on job-responsible now for million dollar budgets	1	0

	On-Campus Students	Potential Off-Campus Students
Gains a lot from groups	0	1
Likes programmed instruction	0	1
Likes digging into books	0	1
<u>Do you think age is a factor in learning?</u>		
No	3	1
Yes	0	1
Openness important	1	0
Younger students better math background	1	0
Determination important	1	0
Takes longer but learn more when older	1	0
Older try harder	0	1
<u>Do you believe that people you work with think you are adequately prepared?</u>		
Yes	8	7
Overprepared	3	0
Probably	1	0
Some	0	1
Nurses:		
Masters expected	2	2
Makes no difference	1	0
Overprepared	2	0
Yes	6	7
Doctors:		
Yes	7	6
Not known	3	1
Needs masters	1	0
Overprepared	0	1
Yes and no	0	2
Administrators:		
Immediate supervisor: No	5	3
Immediate supervisor: Yes	6	5
Director opposed	0	1
Young BSN graduate not ready for administration	0	1

	On-Campus Students	Potential Off-Campus Students
<u>Of what advantage is it to you to continue your education?</u>		
Mobility	0	1
Must get degree	1	0
Job satisfaction	0	1
Personal goals	4	6
Likes administration	1	0
Natural ability	1	0
Do better job with management skills	2	1
Job opportunities	6	4
Career aspirations	1	2
Self fulfillment	1	3
Not money	2	1
Position	0	1
Money	2	2
Credibility	1	1
Degree expected	1	2
New knowledge	2	1

<u>Of what advantage is it to you to complete a master's degree in Nursing Health Services Administration?</u>		
Administrative position wanted	1	2
Seeks directorship	0	1
Necessary for present job	1	1
Get more money if director retires	1	0
No financial gain	1	0
Job with better hours	0	1
Essential for management positions	3	5
Dissatisfaction with staffing	2	0
Money not important	1	0
Wants public health plus nursing	1	1
Opportunity for growth	1	2
Acquire tools of manage- ment	4	0
Needed to change positions	1	0
Money	0	2
Power position	0	1
Contribution to health care	1	0

	On-Campus Students	Potential Off-Campus Students
<u>What non-work responsibilities influence any decisions you make regarding taking graduate courses?</u>		
Family constraints	0	3
Husband not working	1	0
Husband not supporting family	0	1
Self-supporting	1	0
Affluent aspirations	1	0
Children	6	2
Time	1	0
Sole family support	1	0
Encouragement from family	8	5
Personal goals	1	1
Belief in CE	1	0
Needs to work	1	0
None	1	0
<u>In what ways is your work setting conducive to going to school?</u>		
Not appropriate	2	0
None	3	0
Flexible work hours	4	5
Location of work	1	0
Educational leave	2	4
Can study on job	1	0
Part-time work permitted	1	0
Staff supportive	2	3
<u>In what ways and to what extent do work responsibilities create problems?</u>		
Not appropriate	2	0
Terrible (real bummer)	1	0
Crisis situations	2	1
Number of work problems	2	3
Belief in 40 hours/week	3	2
Long days	0	1
Part-timers lose benefits	1	0
Part-timers must work week-ends	1	0

	On-Campus Students	Potential Off-Campus Students
Fatigue	2	2
Replacement while gone difficult	0	1
No support from peers	0	1
None	0	2
<u>Is current course scheduling a problem for you?</u>		
No	10	3
Yes	3	7
Baby sitting a problem, likes courses on same days	0	1
<u>To what extent is travel a problem for you?</u>		
Parking	4	1
Snow	2	1
Time	4	4
None or minimal	4	1
Distance	3	5
Overnight expenses necessary	0	3
Could go anywhere week- ends	0	1
<u>How difficult is it for you to get to resource materials?</u>		
Not at all	7	5
Difficult to reach libra- ries on school days	4	4
Hospital not well stocked with readings	2	3
Has other resources	0	1
Must make extra trips	1	1
<u>Are there any other factors which inhibit or facilitate your taking graduate courses?</u>		
Xerox expenses	1	1
Money	5	2
Parking	10	0

	On-Campus Students	Potential Off-Campus Students
<u>If financial aid is a factor, what kind of funding is needed?</u>		
Educational plus living	5	3
Kids in college	3	2
Buying a home	1	0
Travel money	1	1
Cost of husband's new business	0	1
Tuition	0	1
Insurance	0	1
Family support	0	1
Would be on campus full- time if money available	1	1
<u>Do you think there are differences in admission standards between an on- campus and off-campus program?</u>		
No	4	2
Don't know	6	7
Yes	1	1
Not as strict	0	2
Geared to community	1	0
Can't answer	1	0
Shouldn't be	1	0
<u>Do you think it would be easier to complete an off-campus program?</u>		
Don't know	4	1
Easier	4	2
No, would take longer	1	2
Yes, travel and commuting decreased	4	5
<u>Are course requirements/ grading standards lower?</u>		
Might be	3	0
Don't know	1	1
Yes	0	1
Not necessarily	3	0

	On-Campus Students	Potential Off-Campus Students
Should be the same	3	2
No	1	3
Harder	0	1
Could do independently	0	2
Depends on instructor	3	1
<u>Do you think courses in an off-campus program would be more relevant to your work/future career plans?</u>		
Could be	7	5
Not necessarily	3	3
Don't know	3	1
<u>To what extent do you think you are capable of parti- cipating in planning your own course of study?</u>		
Very much	4	6
Some	0	4
Not at all	3	0
Needs much guidance	5	0
Don't know	1	0
Enjoy participating	4	6
Wants direction	3	2
Knows own needs	4	7
Need for alternatives and guidance	3	2
Wants freedom only with electives	1	0
Too much alone now	1	0
<u>Additional comments gathered during interviews:</u>		

Linkage with faculty and campus important
 More individualized planning needed
 More older adults interested in graduate education
 Three-fourths of nursing directors do not have a
 bachelors degree
 Most nurses must work
 Students should have credit for work experience

Recognition needed for administration experience
Program doesn't allow for transfer of credit
Problems with mathematics among older students
Must go to school "now or never"
Would like heavier course load spring/summer
Nothing in graduate education available on western
side of state
Nurses are getting degrees outside nursing because
nursing degrees not available

APPENDIX C

QUESTIONNAIRE: FACTORS INFLUENCING NURSES
SEEKING OFF-CAMPUS COURSES IN A GRADUATE
NURSING HEALTH SERVICES
ADMINISTRATION PROGRAM

APPENDIX C

**Questionnaire: FACTORS INFLUENCING NURSES SEEKING OFF-CAMPUS COURSES IN A
GRADUATE NURSING HEALTH SERVICES ADMINISTRATION PROGRAM**

For purposes of this survey, off-campus courses are regular credit courses which could be offered at various locations around the state or on an independent study basis.

A. Please answer all questions as directed.

1. County of residence _____
2. Type of community in which you practice (circle one)
 1. rural (under 2,500)
 2. suburban or small town (2,500-50,000)
 3. urban (over 50,000)
3. Sex (Circle one)
 1. male
 2. female
4. Marital status (circle one)
 1. never married
 2. married
 3. separated
 4. widowed
 5. divorced
5. Age range (circle one)
 1. 20-30
 2. 30-40
 3. 40-50
 4. over 50
- Indicate number of dependents in each age range
 6. _____ 0-6 years
 7. _____ 7-18 years
 8. _____ 19-25 years
 9. _____ 26-59 years
 10. _____ over 60
11. Type of basic nursing education (circle one)
 1. diploma
 2. associate degree
 3. baccalaureate in nursing
 4. other (specify _____)
 5. _____
12. Highest degree held (circle one)
 1. diploma
 2. associate degree
 3. baccalaureate in nursing
 4. baccalaureate in another field
 5. masters in nursing
 6. masters in another field
 7. doctorate
13. Current employment status (circle one)
 1. full-time in nursing
 2. part-time in nursing
 3. full-time in non-nursing
 4. part-time in non-nursing
 5. unemployed
14. If employed by hospital or nursing home, indicate size (circle one)
 1. under 50 beds
 2. 51-99 beds
 3. 100-299 beds
 4. 300-499 beds
 5. 500 beds or over
 6. other (specify _____)
15. Type of current nursing position (circle one)
 1. clinical director
 2. director of nursing service
 3. supervisor
 4. head nurse
 5. staff nurse
 6. instructor
 7. other (specify _____)
16. Length of time in current position (circle one)
 1. 6 months or less
 2. between 6 months and 1 year
 3. between 1 year and 2 years
 4. between 2 years and 5 years
 5. over 5 years

17. Highest degree you plan to complete (circle one)
1. none
 2. baccalaureate in nursing
 3. baccalaureate in another field
 4. masters in nursing
 5. masters in another field
 6. doctorate
 7. other (specify _____)
18. Type of graduate study preferred (circle one)
1. off-campus courses
 2. on-campus courses
 3. modified program with both on- and off-campus courses
 4. other (specify _____)
19. Area of graduate study preferred (circle one)
1. clinical nursing
 2. nursing health services administration
 3. education
 4. other (specify _____)
20. Maximum distance you would travel in a day to attend classes (circle one)
1. less than 5 miles
 2. 6-24 miles
 3. 25-50 miles
 4. 51-75 miles
 5. 76-100 miles
 6. 101-200 miles
 7. over 200 miles
21. Compared with on-campus courses, what is your thinking about completing off-campus courses? (circle one)
1. easier to complete (standards lower)
 2. easier to complete (travel time decreased)
 3. same as on-campus program
 4. harder to complete
 5. other (specify _____)

- B. Which of the following factors best describes why you are interested in Nursing Health Services Administration? For each factor, please circle the appropriate number in the columns on the right that best describes the degree of importance for you.

	Not as all important	Not too important	Moderately important	Very important
22. The credibility and prestige of the profession will be enhanced as more nurses have graduate education.	1	2	3	4
23. I have leadership ability and seek advanced training that will enable me to assume responsibility for directing changes in the field of nursing.	1	2	3	4
24. I am interested in achieving an administration position within a particular institution so that I might bring about needed changes within that institution.	1	2	3	4
25. I am interested in being employed as a nursing health service administrator.	1	2	3	4
26. Other (Specify _____)	1	2	3	4

- C. Which of the following factors best describes your interest in the University of Michigan Nursing Health Services Administration graduate program? For each factor, please circle the appropriate number in the columns on the right that best describes the degree of importance for you.

	Not as all important	Not too important	Moderately important	Very important
27. The University of Michigan has a national reputation for excellence in education.	1	2	3	4
28. The School of Public Health has national status.	1	2	3	4

	Not at all important	Not too important	Moderately important	Very important
29. The Nursing Health Services Administration program is one of the graduate programs in the School of Nursing.	1	2	3	4
30. The Nursing Health Services Administration graduate program has an administrative rather than clinical focus.	1	2	3	4
31. This is the only Nursing Health Services Administration program that is close by.	1	2	3	4
32. Other (Specify _____)	1	2	3	4

D. We wish to determine those factors influencing nurses seeking off-campus courses in a graduate Nursing Health Services Administration program. For each factor, please circle the appropriate number in the columns on the right that best describes the degree of importance for you.

	Not at all important	Not too important	Moderately important	Very important
33. Possibility of paid released time from work to attend classes during work time.	1	2	3	4
34. Scheduling of classes weekdays 8-5.	1	2	3	4
35. Opportunity to interact informally with faculty.	1	2	3	4
36. Possibility of non-paid released time from work during work time.	1	2	3	4
37. Availability of someone to replace you during class times.	1	2	3	4
38. Increased salary with a Master's degree in Nursing.	1	2	3	4
39. Availability of full scholarships (tuition plus living expenses).	1	2	3	4
40. Travel expenses (mileage, parking, overnight accommodations/etc.).	1	2	3	4
41. Need for personal financial support.	1	2	3	4
42. Availability of a variety of faculty with expertise in different aspects of Nursing Health Services.	1	2	3	4
43. Increased job opportunities in the field of nursing.	1	2	3	4
44. Proximity of classes to home and work.	1	2	3	4
45. Inadequately prepared for current job.	1	2	3	4
46. Fulfillment of personal goals.	1	2	3	4
47. Availability of financial aid to cover educational expenses (tuition/books).	1	2	3	4
48. Accessibility of faculty for course/professional related counseling.	1	2	3	4
49. Availability of educational resources (books, tapes, computers, clinical facilities).	1	2	3	4
50. Receiving academic credit for relevant work experience.	1	2	3	4
51. Transfer of non-nursing academic credits to new program.	1	2	3	4
52. Educational expenses (tuition/books).	1	2	3	4
53. Finding energy to study.	1	2	3	4
54. Dissatisfaction with current work environment.	1	2	3	4
55. Opinion of family regarding continuing your education.	1	2	3	4
56. Career advancement in current agency.	1	2	3	4
57. Pressure from immediate supervisors.	1	2	3	4
58. Opportunity to study with University of Michigan faculty.	1	2	3	4

	Not at all important	Not too important	Moderately important	Very important
59. Need to provide partial financial support for family.	1	2	3	4
60. Need to provide full financial support for family.	1	2	3	4
61. Masters degree in Nursing expected for maintenance of current position.	1	2	3	4
62. Commitment to professional responsibility.	1	2	3	4
63. Relevance of courses to work/future career.	1	2	3	4
64. Availability of off-campus courses.	1	2	3	4
65. Desire for new knowledge.	1	2	3	4
66. Availability of a variety of faculty with expertise in different aspects of Nursing Health Services Administration.	1	2	3	4
67. Opportunity to interact informally with students.	1	2	3	4
68. Arranging for care of dependents (children or adults) while attending classes.	1	2	3	4
69. Finding time to study after work and family obligations.	1	2	3	4
70. Scheduling of classes evenings/Saturdays.	1	2	3	4
71. Opportunity to take classes with students from same region with similar interests and backgrounds.	1	2	3	4
72. Freedom to study on job.	1	2	3	4
73. Opinion of peer workers regarding continuing your education.	1	2	3	4
74. Belief in the importance of combining work and study.	1	2	3	4
75. Other (Specify _____)	1	2	3	4

E. Please circle the appropriate number in the columns on the right that best describes the conditions under which you learn best.

	Undesirable	Somewhat Preferred	Moderately Preferred	Highly Preferred
76. Self-instructional materials in which you proceed at your own pace and do not attend formal classes.	1	2	3	4
77. Discussion plus self-instructional materials.	1	2	3	4
78. Discussion plus assigned readings.	1	2	3	4
79. Discussion.	1	2	3	4
80. Lecture.	1	2	3	4
81. Lecture plus discussion.	1	2	3	4
82. Lecture plus self-instructional materials.	1	2	3	4
83. Part-time study.	1	2	3	4
84. Full-time study.	1	2	3	4
85. Participation in planning own course of study.	1	2	3	4
86. Audio-visual media.	1	2	3	4
87. Other (Specify _____)	1	2	3	4

Thank you for your cooperation. Your help is greatly appreciated. Please fold the completed questionnaire, place in the envelope provided and mail to the Nursing Health Services Administration program at the University of Michigan School of Nursing.

APPENDIX D

LETTER OF INFORMATION DESCRIBING

STUDY WITH CONSENT FORM

APPENDIX D



The University of Michigan

SCHOOL OF NURSING

1335 CATHERINE STREET
ANN ARBOR, MICHIGAN 48109

(313) 763-1474

March 25, 1977

Dear Nurse:

In order to meet the growing demand for continuing professional education beyond the Bachelor's Degree, the University of Michigan is designing programs that provide potential students with alternative modes of study for a formal degree. The School of Nursing is exploring the possibility of implementing a modified external Master's degree program in Nursing Health Services Administration. Planning and implementation of the off-campus portion of the program requires an accurate determination of numbers of potential students and reasons for seeking off-campus programs.

Off-campus courses are regular credit courses which could be offered at various locations around the state or on an independent study basis. In determining those factors which affect professional nurses' decision to continue their formal education in off-campus programs, it is important to collect data from all nurses in Michigan who are interested in or presently employed in nursing service administration positions. Therefore, I am seeking your cooperation in the collection of data. The information provided is vital to continued program planning.

If you are willing to participate in this survey, I ask for your signature below as evidence of your free and informed voluntary consent. Your name will not go on the attached questionnaire and your name will not be linked to your answers. A number coding system will be used to preserve anonymity. All data will be treated confidentially and will not be released to other persons in any way which would identify respondents.

Please read and sign the consent form below before completing the questionnaire. Return both documents in the stamped return envelope by April 15, 1977. Thank you very much.

Sincerely,

Lillian M. Simms, R.N., M.S.
Assistant Professor of Nursing
Doctoral Candidate in Education
Nursing Health Services Administration Graduate Program

I have read the above letter and am willing to participate in the described project by completing the enclosed questionnaire.

Signature _____

APPENDIX E

COUNTIES IN MICHIGAN AND ASSIGNED

CODE NUMBER

APPENDIX E

Counties in Michigan and Assigned
Code Numbers

<u>County</u>	<u>Code</u>	<u>County</u>	<u>Code</u>
Alcona	301	Gladwin	526
Alger	102	Gogebic	127
Allegan	403	Grand	
Alpena	304	Traverse	228
Antrim	205	Gratiot	529
Arenac	506	Hillsdale	830
Baraga	107	Huron	531
Barry	708	Houghton	132
Bay	509	Ingham	633
Benzie	210	Ionia	434
Berrien	711	Iosco	535
Branch	712	Iron	136
Calhoun	713	Isabella	537
Cass	714	Jackson	838
Charlevoix	215	Kalamazoo	739
Cheboygan	316	Kalkaska	240
Chippewa	117	Keewenaw	141
Clare	518	Kent	442
Clinton	619	Lake	443
Crawford	320	Lapeer	644
Dickinson	121	Leelanau	245
Delta	122	Lenawee	846
Eaton	623	Livingston	947
Emmet	224	Luce	148
Genesee	625	Mackinac	149

<u>County</u>	<u>Code</u>
Macomb	950
Manistee	251
Marquette	152
Mason	453
Mecosta	454
Menominee	155
Midland	556
Missaukee	257
Montcalm	458
Monroe	959
Montmorency	360
Muskegon	461
Newago	462
Oakland	963
Oceana	464
Ogemaw	565
Ontonagon	166
Osceola	467
Oscoda	368
Otsego	369
Ottawa	470
Presque Isle	371
Roscommon	572
Saginaw	573
Sanilac	574
Schoolcraft	175
Shiawasee	676
St. Clair	977
St. Joseph	778
Tuscola	579
Van Buren	780

<u>County</u>	<u>Code</u>
Washtenaw	981
Wayne	982
Wexford	283

APPENDIX F

DATA DICTIONARY

4

APPENDIX F

Data Dictionary

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PRINT /FILE
:      1      ITEM 1 'COUNTY' NNN (1-999)
:      2      ITEM 2 'COMMUNITY' N (1-3)
:      3      ITEM 3 'SEX' N (1-2)
:      3.2    TRAN M 1
:      3.4    TRAN F 2
:      4      ITEM 4 'MARITAL' N (1-5)
:      5      ITEM 5 'AGE' N (1-5)
:      6      ITEM 6 'DEPS 6' NN (0-25)
:      7      ITEM 7 'DEPS 18' NN (0-25)
:      8      ITEM 8 'DEPS 25' NN (0-25)
:      9      ITEM 9 'DEPS 59' NN (0-25)
:     10      ITEM 10 'DEPS 99' NN (0-25)
:     11      ITEM 11 'BASIC MSG ED' N (1-4)
:     12      ITEM 12 'DEGREE' N (1-7)
:     13      ITEM 13 'EMPL STATUS' N (1-5)
:     14      ITEM 14 'HOSP SIZE' N (1-6)
:     15      ITEM 15 'POSITION TYPE' N (1-7)
:     16      ITEM 16 'POSITION TIME' N (1-5)
:     17      ITEM 17 'HIGHEST DEG' N (1-7)
:     18      ITEM 18 'GRAD STUDY TYPE' N (1-4)
:     19      ITEM 19 'GRAD STUDY AREA' N (1-4)
:     20      ITEM 20 'MAX DIST' N (1-7)
:     21      ITEM 21 'OFF CAMPUS COURSES' N (1-5)
:     22      ITEM 22 'CRED AND PRES' N (1-4)
:     23      ITEM 23 'LEAD ABIL' N (1-4)
:     24      ITEM 24 'ADMIN POSIT/CHGS' N (1-4)
:     25      ITEM 25 'EMPLOY AS ADMIN' N (1-4)
:     26      ITEM 26 'OTHER' N (1-4)
:     27      ITEM 27 'REP OF UM' N (1-4)
:     28      ITEM 28 'REP OF SPH' N (1-4)
:     29      ITEM 29 'SCH OF MSG' N (1-4)
:     30      ITEM 30 'ADMIN VS CLIN' N (1-4)
:     31      ITEM 31 'CLOSE BY' N (1-4)
:     32      ITEM 32 'OTHER' N (1-4)
:     33      ITEM 33 'PAID REL TIME' N (1-4)
:     34      ITEM 34 'CLASSES' N (1-4)
:     35      ITEM 35 'INTERACT' N (1-4)
:     36      ITEM 36 'NON PAID' N (1-4)

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:	37	ITEM 37	'REPLACE' N (1-4)
:	38	ITEM 38	'SALARY' N (1-4)
:	39	ITEM 39	'SCHOLARSHIPS' N (1-4)
:	40	ITEM 40	'TRAVEL' N (1-4)
:	41	ITEM 41	'FINANCIAL' N (1-4)
:	42	ITEM 42	'AVAILABILITY' N (1-4)
:	43	ITEM 43	'JOBS' N (1-4)
:	44	ITEM 44	'CLASSES' N (1-4)
:	45	ITEM 45	'CURRENT JOB' N (1-4)
:	46	ITEM 46	'GOALS' N (1-4)
:	47	ITEM 47	'FINANCIAL AID' N (1-4)
:	48	ITEM 48	'ACCESSIBILITY' N (1-4)
:	49	ITEM 49	'RESOURCES' N (1-4)
:	50	ITEM 50	'CREDIT' N (1-4)
:	51	ITEM 51	'CRED TRANS' N (1-4)
:	52	ITEM 52	'EXPENSES' N (1-4)
:	53	ITEM 53	'ENERGY' N (1-4)
:	54	ITEM 54	'SATISFACTION' N (1-4)
:	55	ITEM 55	'OPINION' N (1-4)
:	56	ITEM 56	'CAREER' N (1-4)
:	57	ITEM 57	'PRESSURE' N (1-4)
:	58	ITEM 58	'OPPORTUNITY' N (1-4)
:	59	ITEM 59	'FAM SUPPORT' N (1-4)
:	60	ITEM 60	'FULL FAM SUPPORT' N (1-4)
:	61	ITEM 61	'MAIN CURR POS' N (1-4)
:	62	ITEM 62	'PFOFES RESP' N (1-4)
:	63	ITEM 63	'RELEVANCE' N (1-4)
:	64	ITEM 64	'AVAIL OFCC' N (1-4)
:	65	ITEM 65	'DESIRE' N (1-4)
:	66	ITEM 66	'AVAIL VAR FAC' N (1-4)
:	67	ITEM 67	'OPP INTER STUD' N (1-4)
:	68	ITEM 68	'CARE DEP' N (1-4)
:	69	ITEM 69	'STUDY TIME' N (1-4)
:	70	ITEM 70	'SCHEDULING' N (1-4)
:	71	ITEM 71	'OPPORTUNITY' N (1-4)
:	72	ITEM 72	'FREEDOM' N (1-4)
:	73	ITEM 73	'OPINION' N (1-4)
:	74	ITEM 74	'BELIEF' N (1-4)
:	75	ITEM 75	'OTHER' N (1-4)
:	76	ITEM 76	'MATERIALS' N (1-4)
:	77	ITEM 77	'DISCUSSION' N (1-4)
:	78	ITEM 78	'DISCUSSION' N (1-4)
:	79	ITEM 79	'DISCUSSION' N (1-4)
:	80	ITEM 80	'LECTURE' N (1-4)
:	81	ITEM 81	'LECT + DIS' N (1-4)
:	82	ITEM 82	'LECT + MAT' N (1-4)
:	83	ITEM 83	'PART TIME' N (1-4)
:	84	ITEM 84	'FULL TIME' N (1-4)
:	85	ITEM 85	'PLANNING' N (1-4)
:	86	ITEM 86	'A V' N (1-4)
:	87	ITEM 87	'OTHER' N (1-4)
:			

APPENDIX G

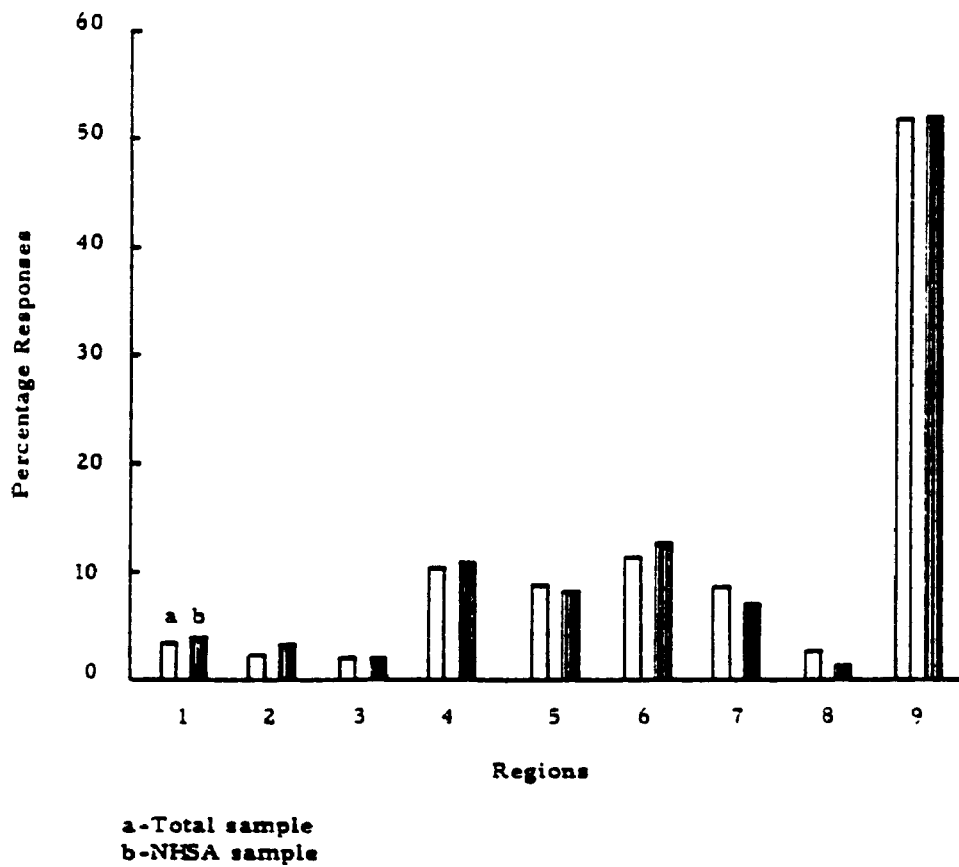
COUNTIES IN MICHIGAN BY ASSIGNED REGION

APPENDIX H

**GRAPHIC DISTRIBUTION OF TOTAL SAMPLE AND
NHSA SAMPLE BY REGIONS IN THE
STATE OF MICHIGAN**

APPENDIX H

Graphic Distribution of Total Sample and
NHSA Sample by Regions in the
State of Michigan



APPENDIX I

**PERCENTAGE DISTRIBUTION OF TOTAL SAMPLE
AND NHSA SAMPLE BY GEOGRAPHIC REGION**

APPENDIX I

Percentage Distribution of Total Sample
and NHSA Sample by Geographic Region

Region	Total Sample		NHSA Sample	
	N	%	N	%
1. Upper Peninsula	11	3.5	6	3.8
2. Traverse Bay	7	2.2	5	3.1
3. Alpena	6	1.9	3	1.9
4. Grand Rapids - Muskegon	32	10.1	17	10.6
5. Saginaw - Bay City	27	8.5	13	8.1
6. Lansing - Flint	35	11.2	20	12.5
7. Kalamazoo - Battle Creek	27	8.5	11	6.9
8. Jackson	8	2.5	2	1.3
9. Detroit	163	51.6	83	51.9
	N = 316		160	

APPENDIX J

DEMOGRAPHIC CHARACTERISTICS

OF THE NHSA SAMPLE

APPENDIX J

Demographic Characteristics
of the NHSA Sample

Characteristic	NHSA Sample	
	N	%
<u>Marital Status:</u>		
Married	106	67.1
Never Married	27	17.1
Divorced	15	9.5
Widowed	8	5.1
Separated	2	1.3
<u>Age Range:</u>		
Age 20-30	15	9.6
Age 30-40	54	34.4
Age 40-50	47	29.9
Over 50	41	26.1
<u>Age Range of Dependents:</u>		
1-6 years	18	11.2
7-18 years	59	36.8
19-25 years	24	15.0
26-59 years	14	8.7
Over 60 years	8	5.0
<u>Basic Nursing Education:</u>		
Diploma	105	66.0
Associate Degree	20	12.6
Baccalaureate in Nursing	34	21.4
<u>Highest Degree Attained:</u>		
Diploma	52	33.1
Associate Degree	13	8.3
Baccalaureate in Nursing	44	28.0
Baccalaureate in Another Field	18	11.5
Masters in Nursing	16	10.2
Masters in Another Field	14	8.9
Doctorate	0	
<u>Employment Status:</u>		
Full-time in Nursing	143	89.4
Part-time in Nursing	9	5.6
Unemployed	6	3.8
Full-time in Non-nursing	1	.6
Part-time in Non-nursing	1	.6

APPENDIX K

**MEAN IMPORTANCE SCORES OF ALL FACTORS INFLUENCING
NURSES SEEKING OFF-CAMPUS COURSES
IN A GRADUATE NHSA PROGRAM**

Mean Importance Scores of All Factors Influencing
Nurses Seeking Off-Campus Courses
in a Graduate NHA Program

Factors	Mean	Factors	Mean
Possibility of paid released time from work to attend classes during work time.	2.6194	Dissatisfaction with current environment.	2.0195
Scheduling of classes weekdays 8-5.	2.4094	Opinion of family regarding continuing your education.	2.6497
Opportunity to interact informally with faculty.	3.0110*	Career advancement in current agency.	2.4087
Possibility of non-paid released time from work during work time.	2.4870	Pressure from immediate supervisors.	1.6680
Availability of someone to replace you during class time.	2.7516	Opportunity to study with University of Michigan faculty.	2.8903
Increased salary with a Master's degree in Nursing.	2.7851	Need to provide partial financial support for family.	2.5535
Availability of full scholarships (tuition plus living expenses).	2.8377	Need to provide full financial support for family.	1.9004
Travel expenses (mileage, parking, overnight accommodations/etc.).	2.7834	Master's degree in Nursing expected for maintenance of current position.	1.9800
Need for personal financial support.	2.6516	Commitment to professional responsibility.	3.4937*
Availability of a variety of faculty with expertise in different aspects of Nursing Health Services.	3.6960*	Relevance of courses to work/future career.	3.5097*
Increased job opportunities in the field of Nursing.	3.3105*	Availability of off-campus courses.	3.6752*
Proximity of classes to home and work.	3.6937*	Desire for new knowledge.	3.7652*
Inadequately prepared for current job.	2.4005	Availability of a variety of faculty with expertise in different aspects of Nursing Health Services Administration.	3.6674*
Fulfillment of personal goals.	3.5849*	Opportunity to interact informally with students	2.9150
Availability of financial aid to cover educational expenses (tuition/books).	2.8220	Arranging for care of dependents (children or adults) while attending classes.	1.7152
Accessibility of faculty for courses/professional related counseling.	3.3205*	Finding time to study after work and family obligations.	3.0000*
Availability of educational resources (books, tapes, computers, clinical facilities).	3.5228*	Scheduling of classes evenings/Saturdays.	3.2595*
Receiving academic credit for relevant work experience.	3.5207*	Opportunity to take classes with students from same region with similar interests and backgrounds.	2.7911
Transfer of non-nursing academic credits to new program.	3.2652*	Freedom to study on job.	2.4103
Educational expenses (tuition/books).	2.9295	Opinion of peer workers regarding continuing your education.	2.1962
Finding energy to study.	2.9070	Belief in the importance of combining work and study.	3.2307*

*Mean = 3.0 or more considered important; computed from the four-point scale on which the factors were rated; these range from 1 = no importance to 4 = very important.

APPENDIX K

APPENDIX L

RELATIONSHIP BETWEEN LEVEL OF EDUCATION AND INTEREST IN NHSA FACTORS

Relationship Between Level of Education and
Leadership Ability

Relationship Between Level of Education and
Interest in Achieving an Administration
Position

Relationship Between Level of Education and
Interest in Employment as a Nursing
Health Service Administrator

Relationship Between Level of Education and Interest
in Career Advancement in
Current Agency

APPENDIX L

Relationship Between Level of Education and
Leadership Ability

Highest Degree	<u>Leadership Ability</u>					
	Not too Important		Moderately Important		Very Important	
Diploma	3	5.6	18	33.3	33	61.1
Associate Degree	1	7.1	5	35.7	8	57.1
Baccalaureate in Nursing	2	4.0	13	26.0	35	70.0
Baccalaureate in Another Field	1	5.3	4	21.1	14	73.7
Masters in Nursing	2	11.8	5	29.4	10	58.8
Masters in Another Field	0		3	20.0	12	80.0

N = 169

DF = 10

Chi-square = 5.1718 Not significant.

Contingency coefficient = .1723

APPENDIX L

Relationship Between Level of Education and Interest
in Achieving an Administration Position

Highest Degree	Interest in Achieving Administrative Position			
	Not too Important	Moderately Important	Very Important	
Diploma	25 50.0	12 24.0	13 26.0	
Associate Degree	4 28.5	3 21.4	7 50.0	
Baccalaureate in Nursing	17 36.9	10 21.7	19 41.3	
Baccalaureate in Another Field	4 25.1	4 25.0	8 50.0	
Masters in Nursing	12 70.6	3 17.6	2 11.8	
Masters in Another Field	5 45.5	4 36.4	2 18.2	

N = 154

DF = 10

Chi-square = 14.2844

Contingency Coefficient = .2913

APPENDIX L

Relationship Between Level of Education and Interest
in Employment as a Nursing Health
Service Administrator

Highest Degree	<u>Interest in Employment as Administrator</u>		
	Not too Important	Moderately Important	Very Important
Diploma	20 40.0	14 28.0	16 32.0
Associate Degree	5 38.5	2 15.4	6 46.2
Baccalaureate in Nursing	6 12.5	16 33.3	26 54.2
Baccalaureate in Another Field	4 28.5	5 35.7	5 35.7
Masters in Nursing	9 52.9	3 17.6	5 29.4
Masters in Another Field	4 28.6	3 21.4	7 50.0

N = 156

DF = 10

Chi-square = 15.9684

Contingency Coefficient = .3047

Not Significant

APPENDIX L

Relationship Between Level of Education and Interest
Career Advancement in Current Agency

Highest Degree	Career Advancement in Current Agency			
	Not too Important	Moderately Important	Very Important	
Diploma	27 51.9	12 21.2	13 26.9	
Associate Degree	4 30.8	3 23.1	6 46.2	
Baccalaureate in Nursing	23 46.0	16 32.0	11 22.0	
Baccalaureate in Another Field	9 47.4	5 26.3	5 26.3	
Masters in Nursing	12 70.6	4 23.5	1 5.9	
Masters in Another Field	11 68.8	1 6.3	4 25.0	

N = 167

DF = 10

Chi-square = 12.1202

Contingency Coefficient = .2601

Not Significant

APPENDIX M

MEANS OF INFLUENCING FACTORS FOR COMPARISON

GROUPS: NHSA, AGE, DEGREE

APPENDIX M

Means of Influencing Factors for Comparison

Groups: NHSA, Age, Degree

Variable	Total Sample	MSA Off-Campus Sample	Age Range 20 - 30	Age Range 30 - 40	Age Range 40 - 50	Age Range Over 50	Answer Degree	Score-Laurson in Reading
33. PAID REL	2.6689	2.6194	2.8911	2.6604	2.6500	2.8181	2.7588	2.6875
36. CLASSES	2.3921	2.6096	2.6107	2.2995	2.3621	2.5962	2.6366	2.5888
39. INTERACT	2.9728	3.0130 #	2.9730	2.9556	2.9758	2.9865	2.8400	3.0625 #
36. NEW PAID	2.5400	2.6878	2.6111	2.6065	2.5606	2.6267	2.6088	2.6026
37. ATEPLACE	2.6583	2.7516	2.7222	2.3222	2.6623	2.9872	2.6888	2.6625
38. SALARY	2.7789	2.7051	3.0811 #	2.6489	2.6500	2.7333	2.8888	2.9620
39. SCHOLARS	2.9021	2.8377	3.2973 #	3.0112 #	2.8835	2.8621	2.8606	3.1013 #
40. TRAVEL	2.8668	2.7836	3.0811 #	2.7666	2.8272	2.8701	2.8888	2.9625
41. FINANCIA	2.7059	2.6516	3.1351 #	2.8766	2.5632	2.6465	2.9200	3.0250 #
42. AVAILABI	3.6215 #	3.6668 #	3.6757 #	3.6008 #	3.7581 #	3.6933 #	3.6400 #	3.5500 #
43. ACT7	3.3172 #	3.3185 #	3.5025 #	3.3333 #	3.3659 #	3.1316 #	3.2088 #	3.6512 #
44. CLASSES	3.6712 #	3.6937 #	3.6216 #	3.6333 #	3.7678 #	3.7273 #	3.5200 #	3.7125 #
45. CURRENT	2.3901	2.6605	2.1111	2.3295	2.2658	2.6757	2.6258	2.3185
46. GRADES	3.5706 #	3.5866 #	3.6216 #	3.6292 #	3.6173 #	3.6557 #	3.5600 #	3.6667 #
47. FINANCIA	2.8997	2.8228	3.1622 #	3.1008 #	2.7125	2.7403	3.0400 #	3.1750 #
48. ACCESSIO	3.3265 #	3.3205 #	3.6056 #	3.1333 #	3.4268 #	3.3886 #	3.3600 #	3.3788 #
49. RESUME/C	3.5045 #	3.5220 #	3.5966 #	3.3778 #	3.6088 #	3.6937 #	3.5888 #	3.5266 #
50. CREDIT	3.5821 #	3.5287 #	3.6406 #	3.5227 #	3.6825 #	3.5128 #	3.6400 #	3.6872 #
51. CREDIT TRA	3.2155 #	3.2632 #	3.2632 #	3.1788 #	3.2152 #	3.2876 #	3.6258 #	3.2312 #
52. EXPENSES	2.3860	2.9295	3.2162 #	3.0667 #	2.8781	2.9879	2.9208	3.1852 #
53. EMPLOY	3.0666 #	2.9878	3.3688 #	3.0112 #	3.1588 #	3.0666 #	2.7826	3.0888 #
54. SATISFAC	2.6965	2.8199	2.5888	2.8789	1.8866	2.8132	2.6583	2.6673
55. OPTIMISM	2.3088	2.6607	2.3706	2.5361	2.6075	2.5385	2.7588	2.7778
56. CAREER	2.3951	2.6607	2.8109	2.5586	2.6957	2.1667	2.8866	2.6188
57. PRESSURE	1.6626	1.6688	1.5966	1.5682	1.6088	1.7821	1.7091	1.6829
58. OPTIMISM	2.7763	2.8983	2.5878	2.7222	2.7758	2.9211	2.3688	2.9088
59. FAN SUPP	2.6755	2.5536	2.6863	2.6292	2.5663	2.2185	2.6600	2.6606
60. FILL FAN	1.9823	1.9906	2.1622	2.0665	1.9828	1.8686	2.1888	2.0388
61. MAIN CUR	1.9261	1.9888	1.7938	1.8333	1.8866	2.1881	1.8333	1.9588
62. PERSONAL	3.6691 #	3.6637 #	3.6856 #	3.6666 #	3.6937 #	3.3333 #	3.5288 #	3.6566 #
63. RELEVANC	3.6526 #	3.5067 #	3.6888 #	3.5738 #	3.6325 #	3.0266 #	3.6791 #	3.6250 #
64. AVAIL OP	3.6261 #	3.6752 #	3.3786 #	3.6222 #	3.6788 #	3.6667 #	3.6600 #	3.6700 #
65. DEFEND	3.7666 #	3.7592 #	3.6688 #	3.7667 #	3.8866 #	3.7888 #	3.68	
66. AVAIL VA	3.5296 #	3.6676 #	3.6963 #	3.6886 #	3.6789 #	3.6600 #	3.3200 #	3.5632 #
67. OPP INTE	2.9196	2.9159	2.9659	2.9898	2.9861	3.0396 #	2.8600	2.8966
68. CAREER REP	1.7178	1.7152	1.8900	2.0270	1.5632	1.6267	2.7400	1.8171
69. STUDY TI	2.9887	3.0888 #	3.0811 #	3.1573 #	2.9625	2.7588	2.9583	3.1111 #
70. SCHEDULE I	3.2222 #	3.2555 #	3.2778 #	3.3586 #	3.2683 #	3.0888 #	3.2400 #	3.2025 #
71. OPTIMISM	2.7563	2.7911	2.8333	2.8956	2.7687	2.8971	2.6888	2.7875
72. PERSON	2.3788	2.6183	2.6667	2.6270	2.2278	2.3533	2.5888	2.5888
73. OPTIMISM	2.1957	2.1962	2.1822	1.8886	2.2125	2.3718	2.0888	2.1825
74. RELI UP	3.1406 #	3.2387 #	3.2162 #	3.1513 #	3.2175 #	3.1888 #	3.2617 #	3.1887 #
N =	316	160	38	93	92	88	25	85
# = mean of 3, 0 or greater								

APPENDIX N

MEANS OF INFLUENCING FACTORS FOR COMPARISON GROUPS:

MARITAL STATUS, ON-CAMPUS, NORTH REGIONS, MEN.

APPENDIX N
Means of Influencing Factors for Comparison Groups:
Marital Status, On-Campus, North Regions, Men.

Variable	Never Married	Married	Separated	Widowed	Divorced	Prefer On-Campus	Regions 1 - 3	Men
33. PAID REL	2.4219	2.4010	1.7500	3.1176	3.0000	2.9231	3.1667	2.9206
34. CLASSES	2.2500	2.4971	1.9000	2.5002	1.9901	2.3233	2.3009	2.7692
35. INTERACT	2.9924	2.9714	3.0000	3.0900	3.0000	3.0769	3.1500	3.3333
36. WHM PAID	2.3071	2.5005	2.0007	3.1176	2.4001	2.5033	2.0000	2.9710
37. REPLACE	2.5710	2.7079	1.5000	2.8924	2.4000	2.0033	3.0326	2.6667
38. SALARY	2.7627	2.7099	2.2500	2.9002	2.9130	3.1010	2.0947	3.1333
39. SCHOLARS	2.9900	2.0750	2.5000	2.7059	3.4304	3.1007	3.3150	3.2000
40. TRAVEL	2.7009	2.0101	2.7500	3.0500	3.0035	2.6667	3.1500	3.0007
41. FINANCIA	2.0730	2.5909	2.7500	2.0471	3.0035	2.7602	3.0000	3.1333
42. AVAILAB	3.0500	3.0200	3.2500	3.5002	3.0522	3.7692	3.7000	3.0000
43. JOBS	3.3333	3.3107	3.5000	2.9012	3.5092	3.0002	3.3150	3.5333
44. CLASSES	3.5000	3.7310	3.2500	3.0071	3.5017	3.7092	3.0000	3.5333
45. CURRENT	1.0014	2.5002	3.3000	2.5002	2.3030	2.0000	2.0300	2.2667
46. CHALS	3.5000	3.0007	3.5000	3.2001	3.5000	3.0102	3.0500	3.3333
47. FINANCIA	2.0007	2.0030	2.7500	3.1176	3.1739	2.9167	3.2500	3.2000
48. ACCESSIB	3.3333	3.3000	3.5000	3.0110	3.0000	3.3077	3.0500	3.0007
49. RESOURCE	3.0003	3.5111	3.7500	3.5002	3.0522	3.3000	3.0500	3.0000
50. CREDIT	3.3710	3.0270	3.0007	3.5002	3.5000	3.0523	3.7000	3.6667
51. CRED TRA	2.0007	3.3200	3.3333	3.1176	3.2170	3.5305	3.3150	3.5333
52. EXPENSES	2.0010	2.9770	2.7500	3.0500	3.3070	3.2500	3.3000	3.1333
53. FUNDING	3.1052	2.9000	3.7500	3.2001	3.1504	2.0002	3.1033	2.7333
54. SATISFAC	1.9909	2.0030	1.0000	2.0199	2.2279	2.3000	2.2109	2.5333
55. OPINION	1.0000	2.7929	3.0000	2.0110	2.2170	2.5309	2.9900	2.0007
56. CAREER	2.3007	2.0220	1.7500	2.2393	2.3913	2.2300	2.0070	2.0007
57. PRESSURE	1.0230	1.0320	1.7500	2.1170	1.0300	1.0107	1.0000	1.0007
58. PROMOTION	2.5323	2.0100	2.7500	2.5002	2.9505	2.3000	3.0500	2.0007
59. FAN SUPO	1.0000	2.0033	2.0000	2.5333	2.5500	2.3333	3.0520	2.9333
60. FILL FOR	1.0071	1.0101	1.7500	2.7007	2.7301	1.0333	2.3000	3.0710
61. MAIN CUR	1.0151	1.0009	2.5000	2.0003	1.0524	1.7092	1.9000	2.1333
62. PREFERENCES	3.3005	3.0000	3.5000	3.3790	3.0001	3.0107	3.5700	3.0000
63. RELEVANC	3.7333	3.0505	3.5000	3.1707	3.3099	3.0300	3.7700	3.7700
64. AVAIL MP	3.0000	3.0517	3.5000	3.0071	3.0522	2.0333	3.0007	3.7333
65. DESIRE	3.0029	3.7950	3.5000	3.7007	3.0790	3.5033	3.0500	3.0007
66. AVAIL VA	3.5000	3.5101	3.2500	3.5002	3.5710	3.0107	3.0002	0.9970
67. APP INTR	2.7030	2.0010	2.7500	3.0110	2.0002	2.0333	3.1007	3.2007
68. CURE DEP	1.3333	1.0030	1.2500	1.5200	1.0001	2.0033	2.3150	1.2007
69. STUDY VI	2.7013	3.0070	3.2500	3.0000	2.9505	3.0769	3.0000	2.6667
70. SCHOLARSH	3.1003	3.2007	4.3000	2.0179	3.3030	3.1007	3.2532	3.3333
71. PROMOTION	2.5003	2.0000	2.2500	2.0000	2.0102	2.7500	2.7500	2.6667
72. PREFERENCE	2.2007	2.0000	2.5000	2.2500	2.0000	1.0007	2.3329	2.2000
73. OPINION	1.0052	2.1709	2.2500	2.5002	2.2279	1.0107	2.3000	2.2007
74. COLLIER	1.1379	3.1530	3.7500	3.3920	3.3030	3.1007	1.2032	3.5710
N =	45	195	4	10	20	13	20	15

* = mean of 3.0 or greater