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A SURVEY OF CAREER MOTIVATIONAL FACTORS WHICH
INFLUENCE NURSING STUDENTS IN MONTANA

by

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ABSTRACT

The critical shortage of registered nurses which exists in the United States today is a subject which has caused much concern in the health care industry. The major purpose of this study was to determine those motivational factors which most influenced nursing students in Montana in their selection of professional nursing as a career. The researcher as well as cited authorities are of the opinion that data gathered in this area would be of value in recruiting greater numbers of potential professional nurses.

The research was conducted from January to April, 1972. The population for this study consisted of all nursing students enrolled in Montana's five professional schools of nursing. The instrument employed for gathering the data was a survey questionnaire designed by the researcher. Eighty-seven percent (657 students) of the population responded to the survey instrument.

The tallied responses indicated that there were notable career motivational differences between the students enrolled in Montana's three different nursing programs. It was also noted that there were career motivational differences between the male and female nursing students enrolled in Montana's nursing schools.

One conclusion based upon the findings of the study was that there is recruitment value in providing medically related experiences, whether salaried or voluntary, for young people in Montana. The study also indicated that both nurses and doctors do have a positive and measurable impact on the ultimate career selections of Montana's high school students. The research also indicated a need for nursing careers orientation aimed at both educators and parents in the state. The findings of the study clearly indicated that planned recruiting for nursing would be the most effective when directed toward the high school age student.

The results of the study indicate that there are definite actions, which if taken, could result in greater numbers of nursing students in Montana. It was the recommendation of the researcher that the responsibility for the nurse recruiting endeavor be assumed by members of the Montana State Nurses Association.

Chapter I
THE PROBLEM
INTRODUCTION

Continued population growth, the increasing availability of public and private insurance coverage, and consumer involvement have precipitated an increased demand for health services in the United States. The Division of Nursing, U. S. Department of Health, Education and Welfare had indicated that by 1975 there will be a need for 1,000,000 practicing registered nurses.¹ This estimate is an increase of 300,000 more registered nurses than were practicing in 1970.²

The American Association of State Colleges and Universities has recently released information which would make the public believe that the registered nurse shortage could be overcome in the near future.³ In evaluating the actual rate of increase over the past five years, the annual rate of increase has been approximately 21,000 per

¹Richard F. Newcomb (editor), "RN News Caps," RN Magazine, XXXIV (October 1971), p. 5.

²American Nurses Association, Facts About Nursing (New York: American Nurses Association, 1970), p. 10.

³David Lawrence (editor), "Signs of an End to Shortage of Nurses," U. S. News & World Report, LXXII (April 10, 1972), pp. 94-95.

year.^{4,5} Based on these statistics and including a predicted measurable increase, it is reasonable to conclude that the registered nurse shortage will continue to be a problem in delivering health care to the American consumer.

Formalized recruitment programs for professional nursing are a relatively new innovation. The recruitment effort has expanded along with the amplification of the nurse shortage. In view of the consistent insufficiency of present recruitment methods, they have become questionable. Effective recruitment requires an understanding of why people enter nursing and when they decide on a nursing career.⁶ A productive recruitment program must also be based upon the motivational differences which exist between individuals who are studying in the three different types of nursing programs (degree, diploma, and associate degree). It is also essential to identify those people and experiences which have had effects on the students' selection of nursing as a career. Armed with an understanding of this information, the nurse recruiter can best serve the unique needs of the student as well as those of nursing.

⁴Newcomb, op. cit., p. 5.

⁵American Nurses Association, op. cit., p. 10.

⁶Joe K. Taylor and Frances S. Richter, "What Motivates Students Into Nursing?" Hospitals, Journal of the American Hospital Association, XLIII (January 1, 1969), pp. 59-61.

"Health has clearly been recognized as the right of every individual; not just the right to be cared for when ill, but the right to health maintenance, to prevention of illness, to all the positive aspects of health."⁷ If the nursing profession is to meet the expanding needs of the American population, it must utilize a recruitment program which is organized and, most of all, productive.

STATEMENT OF THE PROBLEM

The problem involved in this study is the critical shortage of registered nurses which exists in the United States. The available reference material indicated that there would continue to be a shortage and, as a result, the nursing profession would continue to fall short of meeting the health care needs of the American people.

PURPOSES OF THE STUDY

The study had the following four purposes:

1. To determine those motivating factors which influenced nursing students in Montana in their selection of professional nursing as a career.
2. To isolate and identify those common background factors which became apparent in the responses of students from each of the three

⁷Margaret Courtney, "Nursing Education; The Diploma Programs", RN Magazine, XXXIV (May 1971), p. 37.

types of nursing programs in Montana.

3. To determine whether or not a relationship exists between the motivational factors of the students enrolled in the different types of nursing programs in Montana.

4. To determine whether or not there exists career motivational differences between male and female nursing students in Montana.

OBJECTIVES

Three major objectives were devised by the investigator for the study:

1. To identify those personal factors that motivated students to choose nursing as a career.

A. To ascertain the reasons for nursing students selecting a particular nursing program.

B. To determine the reasons for the transfer of college students into a nursing curriculum. To establish the reasons for transfer of nursing students from one nursing program into another nursing program.

2. To resolve whether or not any relationship exists between the career of the parent and that of the nursing student.

3. To investigate the specific nursing career goal of the nursing student and determine whether this goal could be aligned with the

program the student was attending.

ASSUMPTIONS

The assumptions underlying this study were:

1. A knowledge of motivating and influencing factors which nursing students experienced will be valuable in recruiting other potential nurses.
2. Nursing students will be able to identify those influential factors which preceded their enrollment in a professional nursing program.
3. There are common identifiable factors (experiences) which nursing students had experienced prior to entering a professional nursing program.
4. The current nurse shortage is a major problem in the delivery of health care in the United States today.

LIMITATIONS

The study was limited by the following factors:

1. The complete reliance on the questionnaire as the data gathering device.
2. The utilization of a non-standardized questionnaire which was limited to one pilot test administered to forty-eight nursing students.

3. The lack of control by the investigator over the situation in which the questionnaire was administered to the individual nursing students..

METHODOLOGY

A nonexperimental approach which utilized a non-standardized questionnaire administered to all nursing students in the State of Montana was the methodology used in the study.

DEFINITIONS

1. Nurse: A graduate of a professional nursing program who is registered to practice the science and art of nursing.

2. Nursing Student: A high school graduate registered and studying full time in a professional school of nursing.

3. Recruitment: The process of furnishing or replenishing with a fresh manpower supply.⁸

4. Motivational factors: Those factors which prompt a person to act in a certain way to attain a desired goal.⁹

⁸ Clarence L. Barnhart, The American College Dictionary, (New York: Harper & Brothers Publishers, 1953), p. 1,013.

⁹ Ibid., p. 794.

5. Degree nursing program: A course of study affiliated with a university or college, four years in length, which grants a baccalaureate degree in nursing.

6. Diploma nursing program: A course of study affiliated with a hospital, three years in length which grants a diploma in nursing.

7. Associate degree nursing program: A course of study usually affiliated with a junior college, or in some cases a four year college, which is two years in length and grants an associate degree in nursing.

8. Experiences: The totality of cognitions given by perception; all that is perceived, understood and remembered.¹⁰

9. Medically related experience: An experience in which an individual assists medical professionals in the care of patients.

OVERVIEW OF THE REMAINDER OF THE STUDY

The text of the study is divided into four chapters. The first is a statement of the problem unit. The review of the related literature is found in the second chapter while the third chapter is the discussion of (1) the methodology which was utilized in the study and (2) the analysis, or interpretation, of the data which were gathered. The fourth chapter contains the summary, the conclusions, and the recommendations.

¹⁰Ibid., p. 424.

Chapter 2

REVIEW OF THE RELATED LITERATURE

A review of current nursing literature indicated that very limited research has been conducted in an attempt to isolate those factors that motivated individuals to choose nursing careers. It has been only recently that there appeared to be a recognition of the concept that knowledge in this area could be of value in the overall nurse recruiting effort.

Eli Ginzberg has written that the "crisis" in medical manpower could be more accurately designated a "chronic situation." He contends that an approach to some sort of a solution must start with an effort to learn more about the people who can be recruited and trained.¹

The use of a professional recruiting team by large medical centers has become a common practice. The onset of this technique is an indicator that the medical community or, more specifically, the nursing community has realized what industry has known for a number of years. They are now aware of the fact that concentrated recruitment is both necessary and beneficial. The investigator could find only rare sources that signified this method was being utilized by those individuals or groups responsible for recruiting nursing students.

¹Eli Ginzberg, Men, Money, & Medicine, (New York: Columbia University Press, 1969), p. 59.

The Health Careers Committee of Kentucky conducted a research program in February of 1969.² The purpose of the study was to determine the educational and personal factors that motivated students to choose nursing careers. The data collected was utilized to provide indicators for the recruiters and research investigators in the area of health manpower. The project surveyed 835 nursing students who were enrolled in nursing schools in that state. The study results revealed that the majority of students choose a nursing career out of a love of people. The major factors involved in selection of a particular nursing program were (1) length of study, (2) cost of education, (3) type of program, and (4) size of school. The survey pointed out that the students made their career decisions over a wide age range. Nearly fifty percent of the subjects made the career choice between their 18th and 20th year, while thirty percent of them had made their career selection by the time that they were 10 years of age. The other twenty percent decided on nursing as a career between the ages of 11 and 18. The students were also asked to identify the person or persons who most influenced their career choice. Parents were cited most frequently as an influential party. Almost 25 percent of the students indicated that "no one" influenced

²Tom Connelly, Jr., "Career Commitment," Hospitals, Journal of the American Hospital Association, XLIV (August 16, 1970), p. 142.

their choices. The study pointed out that nearly half of the students had functioned, at one time, in a medically related volunteer or salaried capacity. It was interesting to note that only a small number indicated that this experience had any great influence on their career decision. The study indicated no significant difference among the students in the three types of nursing education programs. The research also found that there existed a direct relationship between the students' homes and the schools they selected. It was found that the majority of students attended programs which were located in their home area.

A similar study was conducted in the metropolitan area of Atlanta, Georgia.^{3,4} This 1966 survey utilized a freshman nursing student population of 384. This study's findings differed from the Kentucky project in that 64.6 percent of the students indicated that they were most influenced by nurses, physicians or both. It should be noted however, that the questionnaire utilized did not list parents as an influencing factor in the career selection. The study discovered that 211 of the students had had medically related experience. A total

³Joe K. Taylor, "Recruiting: Nurse-Power Is the Answer," RN Magazine, XXXIII (April 1970), pp. 61-63.

⁴Joe K. Taylor and Frances S. Richter, "What Motivates Students Into Nursing?" Hospitals, Journal of the American Hospital Association, XLIII (January 1, 1969), pp. 59-61.

of 54.9 percent indicated that this experience influenced their career decision. Love of people was the major impersonal reason 28.7 percent of the students selected nursing. Religious calling, service, and satisfaction were some of the other prominent reasons listed. Personal factors involved a very wide range of answers. The most common being an interest in medicine which was the reply of 11.7 percent of the subjects. Security was the next most common answer and made up 7.8 percent of the responses. The Atlanta study found that the majority of students made their career decision from age 9 to 15. The writers strongly recommended that the recruiting effort should be initiated in the last three years of grammar school and continue on into the high school years. The researchers also felt that the recruitment responsibility rested squarely on the shoulders of today's practicing nurses, physicians, and other health care personnel.

The Registered Nurse Association of Ontario, Canada completed a research study of "The Nurse Recruit" in 1971.⁵ The Canadian based study surveyed students from three nursing schools. The population consisted of 563 students. The study found that the students came from a wide range of socio-economic backgrounds. No conclusions could be drawn as to any class group which provided the largest input

⁵ Moyra Allen and Mary Reidy, "Learning to Nurse," The Registered Nurses Association of Ontario, 1971, (Montreal: Old Rose Printing Co., Inc., 1971), pp. 40-71.

of nursing students. The students were asked what further education was undertaken by their three best friends in high school. The respondents indicated that they did not "move with the crowd." Only 16 percent of the friends listed had also entered nursing. In an attempt to determine factors which may have influenced the students it was found that over 80 percent of the students had at least three relatives or close friends who were active in nursing or medicine. The subjects were also asked the attitude of these relatives and friends toward a nursing career. The findings pointed out that 90 percent of them had favorable attitudes which influenced, in some degree, the students career selection. The study indicated that over half of the students had decided on a nursing career by the time that they had finished primary school (grade school). In selecting a particular nursing program the Canadian students were most often influenced by (1) rules and regulations pertaining to resident requirements, (2) clinical practice, and (3) the setting and atmosphere. The investigators were surprised to find that the reputation of a school had little bearing on the ultimate school selection. Parents were cited as the individuals who most often gave advice and guidance when the students were involved in making their final selection of a nursing program or specific school.

The American Medical Association has noted that high school students considering careers in nursing frequently turn to their

family physicians for advice.⁶ The Association has found that the major area of confusion among potential nursing students was to identify the differences which exist between the various types of educational programs in nursing.⁷ The Medical Association has stated, "There is a regrettable vacuum in supplying parents, high school counselors, and students with information on the various opportunities in the nursing profession. Furthermore, the information that is available is quite limited."⁸

As a result of recommendations of the Surgeon General's Consultant Group on Nursing, the American Medical Association, American Nurses Association, and the National League for Nursing joined forces to promote an educational campaign concerned with nursing careers.⁹ This program's purpose was to clarify, for the public, the various avenues which are available to someone interested in a nursing career.

⁶Florence M. Alexander, "Education for a Career in Nursing," Journal of the American Medical Association, CXCV, (February 14, 1966), pp. 591-593.

⁷Ibid., p. 591.

⁸Florence M. Alexander, "How to Choose a Nursing School," Today's Health, (January, 1966).

⁹U.S., Surgeon General's Office, Toward Quality in Nursing -- Needs and Goals, Public Health Service Publication, No. 992 (Washington: Government Printing Office, 1963), p. 34.

The groups' effort resulted in printed materials which were made available to high school counselors and other individuals who were involved with young people making career decisions. Horizons Unlimited is an excellent example of this joint undertaking.¹⁰

The Nursing Careers Program of the American Nurses Association and National League for Nursing also provides printed reference material concerned with nursing careers. The Program has printed a number of publications which deal with all aspects of nursing. It should be noted, however, that the cost per item ranges from ten to fifty cents -- the expense of which must be borne by the requesting individual.¹¹

Many state organizations of the American Nurses Association have established standing committees whose sole purpose it is to promote recruiting for nursing. These committees are involved in public relations to encourage an interest in nursing careers. Some of the more progressive state organizations have become involved in and sponsored commercial advertising for professional nursing. The investigator could locate no published material which would indicate

¹⁰American Medical Association, Horizons Unlimited (Chicago: American Medical Association, 1970).

¹¹ANA-NLN Nursing Careers Program, "Nursing Career Materials" (New York: ANA-NLN Nursing Careers Program, August, 1970), (Mimeographed.)

the effect of this type of approach. In a meeting with the office of the Montana Nurses Association the writer learned that the Montana Nurses Association did not have a section or committee which dealt with nurse recruiting. Members of the staff at the state office handle individual requests as they are received and, when possible, meet with interested individuals or groups.

Encouraging as overall increased nursing enrollments may be, it should be noted that nursing has been attracting only a small and declining percentage of high school graduates. At present, 4 percent of female high school graduates make nursing their occupational choice. In the 1940's and 1950's nursing attracted between 6 and 7 percent of this group.¹² Some authorities feel that the decline can be attributed to a "bad image" and a "lack of leadership by nursing organizations." Other nurse educators refer to confusion in the ranks of nursing and the controversy among nursing education programs as a negative factor. In general, high school students appear to be confused and uncertain about the future of nursing.¹³

The onset and rapid growth of vocational training programs

¹²American Nurses Association, Facts About Nursing (New York: American Nurses Association, 1970), p. 69.

¹³Richard F. Newcomb (editor), "The Experts Speak Out on the Present and Future," RN Magazine, XXXIV (May 1971), pp. 48-55.

(practical and nursing assistant programs) have had a measurable effect on the numbers pursuing a career in professional nursing.¹⁴ With the introduction of many new vocational programs, the competition for clinical resources has also become more acute.

Although the vast majority of nursing students selected their career out of a love and dedication for and to people, it has been noted that today's young people may not be as devoted to helping mankind as they may appear.¹⁵ Educational leaders have noted that low pay, long hours, and competition from other career areas have had a detrimental effect on the number of high school graduates who are presently entering the nursing ranks.¹⁶

Collegiate nursing programs are somewhat encouraged by the increasing number of women who already have degrees and are now pursuing a second degree in nursing. This influx of a more mature individual into nursing is perceived as a definite asset for the nursing profession. The steady increase in the number of men who are currently studying nursing is also seen as one small means of

¹⁴Ibid., p. 51.

¹⁵Ibid., p. 50.

¹⁶Ibid., p. 50.

helping to fill the current nurse shortage.¹⁷

Although some individual groups may be adding to the total number of practicing nurses there still remains a great deal of concern regarding a much more comprehensive recruitment program. Dr. Dorothy A. Mereness, a leader in the field of nursing education, has stated, "More convincing recruitment programs are needed. Efforts should also be made to reverse the long-standing problem of students who transfer out of the school of nursing into other college programs."¹⁸

Chapter 2 was an attempt to cite sources which were related to recruitment for nursing. It was also used as a means to point out the fact that there will continue to exist a shortage of professional nurses in the United States. The following quote taken from the Virginia Nurse Quarterly states clearly what we can expect in the future.¹⁹

"In the 1970's health service demands in this country will reach an all time high, in line with overall consumer demands for 'more and better' in every area. The need for nurses, already urgent, is expected to become increasingly acute."

¹⁷American Nurses Association, op. cit., p. 71.

¹⁸Dorothy A. Mereness, "The Baccalaureate and Higher Degree Programs," RN Magazine, XXXIV (May 1971), 44.

¹⁹Virginia Nurses' Association, "The Need for Nurses," Virginia Nurse Quarterly, XXXIX (Fall 1971), 131.

Chapter 3

METHODOLOGY AND INTERPRETATION OF DATA

METHODOLOGY

The collected data presented in this study was obtained by the survey questionnaire method. It was found that the written questionnaire was the most acceptable means for the gathering of data for this nonexperimental descriptive research endeavor. The ability of the questionnaire to be used over a large geographic area and its conduciveness to a large population made it the most feasible tool to be utilized.¹

The composition of the questionnaire was, in part, patterned after questionnaires utilized in research completed by Taylor, Richter, and Connelly.^{2,3} The questionnaire (Appendix A) was pretested in January of 1972. It was administered to forty-eight nursing students enrolled in one of Montana's two diploma programs. The subjects had varied ages and backgrounds as would the actual participants. Pretesting was done to determine if the questions were understood by the test group. One minor change was made in

¹Tyrus Hillway, Introduction to Research (Boston: Houghton Mifflin Co., 1956) p. 201.

²Taylor, et. al., op. cit., pp. 59-60.

³Connelly, op. cit., pp. 143,146.

the structure of one question. No change was made in the questions' content, but the order of possible responses was rearranged.

The investigator made personal contact with each of the directors of the schools of nursing in Montana. During these meetings the writer explained the nature and purpose of the study. The overall response was most favorable and all five of the professional schools of nursing in Montana agreed to participate. All but one of the directors indicated that they were interested in receiving a copy of the study results. During these individual meetings it was agreed that the questionnaire would be administered by a faculty member at a time convenient in each of the five schools. All of the questionnaires were administered to the subject population during the first three calendar months of 1972. The population for the study consisted of all nursing students enrolled in Montana's one degree program, two diploma programs, and two associate degree nursing programs.

DEVELOPMENT OF QUESTIONNAIRE

The questionnaire (Appendix A) was comprised of sixteen items. Five of the questions dealt with demographic material aimed at classifying the subjects involved in the study. The other eleven questions were constructed to elicit responses regarding individual career orientation.

Questions one through three --- age, sex, marital status, --- were asked in an effort to gain general knowledge concerning the nursing students in Montana.

Questions four and five --- parents' occupations --- were asked in an indirect attempt to find whether there existed a medical career relationship between the students and their parents.

The purpose of the sixth and seventh questions --- nursing program and status in that program --- was to assist the writer in identifying the scholastic category and level of the individual respondent.

Question eight was designed to determine the major reasons nursing students chose a nursing career.

The intent of question nine was to isolate the number of students who had prior medically related work experience and to determine whether or not the overall percent would indicate a common trend.

Question ten --- serious consideration of other career --- was an attempt to determine the student's degree of commitment toward a career in nursing. It was also asked in order to establish whether other career considerations were also in the area of the "helping professions."

The eleventh question --- age at which career decision was made --- was included in an attempt to identify that age group in which a nurse

recruiting effort might be the most effective in the state of Montana.

The purpose of question number twelve was to cite the individuals who had the most influence on Montana's student nurses in their selection of a career in professional nursing. The investigator felt that compiled responses in this area would also be of value to the individual involved with recruiting for nursing.

Question thirteen was designed to determine why nursing students selected a specific type of nursing program. The question was also an attempt to determine if students in a particular program had common selection criterion.

The major purposes of questions fourteen and fifteen were to identify and isolate those elements which precipitated a transfer from one nursing program to another or a transfer from another curriculum into nursing. Nursing programs in Montana appear to be experiencing an influx of transfer students and these questions were an attempt to determine the exact numbers of students involved.

The last question which dealt with post-graduation career aspirations was included to determine whether or not common goals existed among students in each of the three different nursing programs.

ANALYSIS OF DATA

Questionnaires were distributed to 749 nursing students who were enrolled in Montana's five professional nursing schools. The number

of questionnaires returned to the researcher was 659. The overall response rate was 87 percent. The return for each of the three types of nursing programs is reflected in Table 1.

Table 1
Questionnaire Response to Survey
by Nursing Program

Type of Program	Students Enrolled	Responses	Percent of Response
Degree	515	453	88
Diploma	125	125	100
Associate Degree	<u>109</u>	<u>79</u>	<u>70</u>
Total	749	657	87

The investigator attributed the favorable percentage of responses, in large part, to the rapport which was established with each of the nursing program directors. Their cooperation was a major factor in the successful survey endeavor. All of the returned questionnaires were complete and therefore included in the survey results.

Responses to items concerning the respondent's sex, marital status, and type of program attended are reflected in Table 2.

Table 2

Student Nurses' -- Questionnaire Responses
Items -- General Background Information

General Back- ground items	Frequency	Percent
Sex:		
Female	626	95.20
Male	31	4.80
Marital Status:		
Single	549	83.00
Married	92	14.85
Divorced	15	2.00
Widowed	1	.15
Program Attended:		
Degree	453	69.00
Diploma	125	19.00
Associate Degree	79	12.00

The investigator was interested to find that the percentage of men enrolled in Montana's nursing programs was nearly twice the national average.⁴ This measurable increase is in part due to the fact that all nursing schools in Montana do accept men students. One might also conclude that in Montana there exists a more favorable at-

⁴American Nurses Association, op. cit., p. 71.

titude toward the role of men in nursing.

Responses to Questions 4 and 5 revealed that 5 percent of the students had fathers whose occupation in some way was related to the medical field. The percent of mothers who were associated with the medical professions was 18.3. One might conclude that over 20 percent of the student population was exposed to medically related parent occupations during their formative years. It is interesting to note that when the students were asked to indicate the individual who most influenced their career decision (Item 12), 20 percent of the students indicated parents.

Table 3

Student Nurses' -- Questionnaire Responses
Item -- Major Reason for Career Selection

Selection	Frequency	Percent
Service to people	337	51.0
Type of work	257	39.4
Shortage of nurses	25	3.8
Salary to be earned	18	2.7
Unsure	17	2.5
Parental pressure	2	.3
Experience as a patient	1	.1

Table 3 is a breakdown of the major reasons for which Montana nursing students selected nursing as their chosen career.

The responses to this question would indicate that slightly over

half of the student population was primarily concerned about service to mankind. In constructing this question the investigator had anticipated that a greater number of students would have responded in this area. The present overall concern of today's young people to help others may not be as prevalent as appears. A nursing educator cited in Chapter 2 of this study indicated that this in fact was the case.⁵

The responses to Question 9 indicated that 56.8 percent of the survey population had some salaried or voluntary health-related experiences prior to entering a nursing school. The fact that well over half of the student population had prior medically-related experiences may be seen as an indicator that providing these types of experiences may be one effective means of recruiting for nursing. It is possible that the health exposure did have either direct or indirect bearing on the student's ultimate career selection.

Table 4 is a summary of the types of medically related experiences that the students had.

⁵Newcomb, op. cit., p. 50

Table 4

Student Nurses' -- Questionnaire Responses
Item -- Medically Related Experience

Experiences	Frequency	Percent
Nursing Assistant	246	65.9
Nursing Volunteer	97	26.0
Licensed Practical Nurse	16	4.3
Military Corpsman	9	2.4
Operating Room Technician	2	0.5
X-Ray Technician	1	0.3
Medical Secretary	1	0.3
Dental Technician	1	0.3

The investigator was pleased to find that 16 licensed practical nurses were pursuing advanced education in nursing. This 4.3 percentage figure may be an indication that Montana's nursing schools are encouraging a "ladder concept" in their nursing population.

The number of former military corpsmen who were studying professional nursing may well be another indicator of a potential resource area for the nursing profession nationwide.

The researcher included Question 10 to establish what percentage of the students had seriously considered careers other than

nursing. Table 5 lists the other major career considerations that were expressed by 58.9 percent of the respondents.

Table 5
Student Nurses' -- Questionnaire Responses
Item -- Other Career Consideration

Career	Frequency	Percent
Miscellaneous*	146	37.7
Teaching	118	30.5
Social Work	39	10.1
Other Medical**	25	6.4
Home Economics	21	5.4
Medical Technology	15	3.9
Veterinarian	10	2.6
Physician	8	2.1
Secretary	5	1.3

* Various nonmedical careers which did not total more than five each.

** Various medically-related careers which did not total more than two each.

The investigator felt it was noteworthy to point out that of the 58.9 percent of the students who had seriously considered other careers, only 25 percent of these had considered other medically related careers. This information, plus the large number noted who had considered teaching, might tend to make one believe that job security has had a measurable effect on the number of students studying nursing in Montana. This observation, in large part, is based on the general feeling that Montana may be producing an overabundance of teachers. The findings of Question 14 would tend to reinforce this hypothesis since it was discovered that 19.1 percent of the respondents had transferred into nursing from other curricula. Table 6 indicates that job security was the reason that 31.1 percent transferred into nursing.

Table 6

Student Nurses' -- Questionnaire Responses
Item -- Reason for Transferring into Nursing Curriculum

Reasons	Frequency	Percent
Dissatisfaction with other curriculum	56	45.9
Job Security	38	31.1
Job Satisfaction*	10	8.2
Unsure	8	6.6
Academic Problems	7	5.7
Cost	3	2.5

*Majority of whom expressed desire to work with people.

It is unfortunate that the 56 respondents who indicated dissatisfaction as the major reason for curriculum transfer did not indicate more specific information. This broad type of response did not provide the researcher with the data necessary to make meaningful conclusions. One might speculate that a percentage of these individuals may have also been concerned about job placement or security.

Table 7 is a breakdown of the age period during which the 657 respondents decided on nursing as their chosen career.

Table 7

Student Nurses' -- Questionnaire Responses
Item -- Age of Career Decision

Age	Frequency	Percent
Less than 10 years	87	13.2
10-14 years	100	15.2
15-18 years	338	51.3
19-20 years	86	13.2
More than 20 years	46	7.1

The responses to Question 11 indicate that the student nurses in Montana made their individual career decisions over a wide age span. One could conclude that recruiting for nursing could be somewhat effective when directed toward any age group. However, if one were limited to approaching a specific age group it appears that nurse recruiting during the high school years would be the most productive.

The 20 percent who indicated that their career decision was made after their 19th birthday may primarily be made up of those students who transferred curricula after they were in college.

The responses to Question 12 are reflected in Table 8. This question was an attempt to isolate those individuals who had the most influence on the career selection of Montana's nursing students.

Table 8

Student Nurses' -- Questionnaire Responses
Item -- Individual Who Influenced Career Decision

Individual	Frequency	Percent
No one	311	47.3
Parent	124	18.9
Nurse	113	17.3
Friend*	47	7.3
Physician	27	4.2
Counselor	15	2.3
Prior Patients	8	1.3
Public Relations	6	0.9
Teacher	2	0.3
Minister	1	0.1
Husband	1	0.1
Army Recruiter	1	0.1
Unsure	1	0.1

* Other than professionals listed.

The investigator interprets the large number of "no one" responses as a possible expression of independence on the part of today's young

students. Another investigator, in a similar study, felt that "no one" responses could be interpreted to mean that these students could identify no single person who influenced their career choices.⁶ The large number of students who indicated a parent may be an indicator that at least a portion of the nurse recruiting effort should be aimed at making parents aware of career opportunities in the field of nursing.

It is the opinion of the researcher that nurses and doctors are not aware of the career-influencing effect that they have on potential nurses. The number of responses in this area seems to be a clear indicator that a unified effort, on the part of all medical professionals, could result in even more impressive statistics.

The relatively small percentage of individuals who were influenced by counselors and teachers may be a signification that, in Montana, these individuals were not as knowledgeable as they might be regarding nursing career opportunities.

The fact that 8 of those surveyed stated, in writing, that prior patients had most influenced their career choice reaffirms the value of medically-related experiences explored in Question 9.

⁶Connelly, op. cit., p. 146.

Question 13 was an attempt to determine why Montana's nursing students selected their specific nursing program. Table 9 provides a listing of students' responses.

Table 9
Student Nurses' -- Questionnaire Responses
Item -- Reason for Program Selection

Reasons	Frequency	Percent
Type of Program	416	63.3
Location	123	18.7
Length of Study	56	8.5
Cost	40	6.1
Unsure	9	1.4
School Reputation	7	1.1
Size of School	5	0.8
Religious Preference	1	0.1

It is interesting to note that the majority of students' selections were based on the type of program. This general response appears to indicate that the students selected programs which were aligned with their nursing career goals. Location of the selected

school was also the criterion of a notable number of students.

The responses to Question 15 indicated that 7.6 percent of the students transferred from one nursing program to another. The reasons for their transfers are provided in Table 10.

Table 10
Student Nurses' -- Questionnaire Responses
Item -- Reason for Transferring Nursing Program

Reasons	Frequency	Percent
Advantage of a degree	12	24.0
Cost	8	16.0
Dissatisfaction	7	14.0
Marriage	7	14.0
Family Moved	6	12.0
Academic Problems	5	12.0
School Closed	3	6.0
Illness	1	2.0
Unsure	1	2.0

The responses to Question 15 indicate that the greatest number of students transferred into the collegiate program because of the advantages a college degree affords. Cost, marriage, and general

dissatisfaction with previous programs were also factors which influenced a measurable percentage of the students.

The overall transfer rate of 7.6 percent appears to be relatively high. When combined with the percentage of students who transferred into nursing programs from other curricula, 19.1 percent, we find that the total makes up over 26 percent of the respondents.

The final question dealt with the students' immediate career plans. Table 11 reflects the career plans as indicated in the questionnaire responses.

Table 11

Student Nurses' -- Questionnaire Responses
Item -- Post-Graduation Career Plan

Nursing Area	Frequency	Percent
Clinical	368	56.0
Community	118	17.0
Advanced Education	88	13.4
Military	61	9.3
Unsure	24	3.7

In evaluating the responses, the investigator found that the percentages of those who aspired to practice in clinical and community oriented nursing positions were similar to the national ratio.⁷ However, the researcher was surprised to find the relatively large percentage of students who were interested in pursuing advanced education. This may be seen as an indication that today's nursing students see a need for nursing specialization. Many of the respondents expressed a specific interest in anesthesia, teaching, and administration.

The interest expressed in military nursing appears to be in direct conflict with the general sentiments of other present day college students. The number, however, may be based in large part on the financial assistance programs which both the Army and Navy provide for nursing students in Montana.

The investigator was aware that the responses received in this area were based on what the students would most like to do following graduation. The researcher was conscious of the fact that a percentage of these career aspirations may never be realized.

In comparing the overall responses by nursing programs the investigator found that some interesting differences did exist. Those

⁷ American Nurses Association, op. cit., pp. 23-36.

areas in which measurable differences did exist are discussed in greater detail below.

The survey results indicated that the percentage of male students in the associate degree programs was twice that of those enrolled in the diploma and degree schools. Length of study and cost may well be major factors which caused this difference. Since a majority of the male students were married, it is reasonable to assume that finance was an area which had great bearing on ultimate program selection. It was also noted that the percentage of married, divorced, and widowed students was highest in the associate degree programs. This finding may also have a financial basis. In contrast, it was found that a smaller percentage of the associate degree students selected nursing because of the salary to be earned.

It was noted that the students in the degree nursing program had a higher percentage of parents who had medically related-occupations. This finding indicates that guidance from these parents may have made the students aware of certain advantages to be gained by attaining a baccalaureate nursing degree.

In comparing the major reasons for selecting a career in nursing it was found that the majority of the associate degree and diploma nursing students chose their career because of a desire to be of service to people. The degree nursing students indicated that the type of work was as much a factor as service to people in their

reasons for selecting a career in nursing.

The percentage of students who had some type of health related experience prior to their entering a nursing program was highest in those students enrolled in associate degree programs. A total of 68.4 percent of these students had such experiences; whereas the percent of diploma students was 60.0; and 53.9 percent of the degree students had health related experiences. It was determined that the mean age of the associate degree students was higher than those in other programs. This fact may be the reason for the larger percentage of these students having medically related experiences prior to entering a nursing program. It was also noted that eight of the sixteen licensed practical nurses were enrolled in the two associate degree nursing programs.

The percentage of students who had seriously considered other career areas was found to be highest among the degree nursing students, 58.9 percent. The survey results indicated that 55.2 percent of the students in the diploma programs had seriously considered other careers. The percentage of associate degree students was noticeably lower as only 44.3 percent had given serious consideration to other career avocations. It was also noted that a larger percentage of the associate degree students had decided on a nursing career by the time they were ten years old. This finding tends to explain why fewer of these students had considered other career

areas. As might be expected, it was also noted that the associate degree programs had the highest percentage of students who had decided upon a nursing career after they were twenty years of age or older.

The survey results indicated that over 39 percent of the nursing students in the associate degree programs had been most influenced by nurses and physicians in making their career choice. This figure is nearly twice as high as those in both the degree and diploma programs. The survey results indicated that the students in both the degree and diploma programs were more influenced by parents than were the students in the associate degree programs.

When asked to identify the major reasons for selecting a specific type of program, the diploma and degree students indicated that the type of program was the most common selection criterion utilized. The associate degree students indicated that length, cost, and location of nursing program were the major factors which they considered in selecting their specific nursing school.

Results of the survey indicated that the highest percentage of students who transferred into nursing from other curricula was among the degree students. Nearly a fourth of the degree students surveyed had changed their college major to nursing. Montana's two diploma programs had the largest percentage of students who transferred from one nursing program to another nursing program.

The percentages of the student's career goals or plans were relatively similar in all of the three nursing programs. However, a notable difference was that a higher percentage of the associate degree and diploma students were interested in pursuing advanced education following graduation from their present programs. This might be seen as an indicator that some of these students have benefited from a clearer orientation as to program differences prior to their initial program selection.

Table 12 has been included to provide the reader with an overall appreciation of the age differences which existed between students in Montana's three nursing programs. The table has been constructed to reflect the mean age and age range found in each class of the three different programs.

Table 12

Student Nurses' -- Questionnaire Responses
Items -- Age Breakdown by Program and Class

Program Class	Mean Age	Age Range
Associate Degree:		
First Year	24	18-58
Second Year	27	19-51
Diploma:		
First Year	21	18-32
Second Year	22	19-46
Third Year	21	20-33
Degree:		
First Year	19	18-35
Second Year	19	18-36
Third Year	21	20-49
Fourth Year	23	21-52

In comparing the responses of the male and female subjects some interesting differences were noted. One of the major differences isolated was the fact that the majority of the male students were older than their female classmates. It was also noted that a higher percentage of the male students had parents who were employed in health-related fields.

The survey results indicated that over 75.0 percent of the men students had health related experiences prior to entering a nursing

program. As mentioned earlier in the study, nine, or nearly one-third, of the men had been military corpsmen. It was also interesting to note that the male students indicated that they were most influenced by nurses in making their career selection. Many of the men students noted that the nurse who most influenced their choice was a male member of the nursing profession. This information may indicate the value of using a male nurse recruiter in seeking out other men for the nursing profession.

The survey results indicated that over 33.0 percent of the male students had transferred into nursing from other curricula. The majority of the male students indicated that they were most interested in pursuing advanced education after they completed their particular nursing programs. Since the majority of these students were married, it seems reasonable to assume that they would be primarily concerned about being prepared for nursing positions in which they could best support a family.

SUMMARY

The survey results indicated that the percentage of nursing students enrolled in the three types of nursing programs in Montana did not compare with those found on a national scale.⁸ It

⁸ American Nurses Association, op. cit., p. 72.

was noted that the percentage of degree students studying nursing in Montana far outnumbered those students enrolled in diploma and associate degree programs. The survey also revealed that the percentage of male students in Montana was measurably higher than that found on a national basis.

Results of the study indicated that Montana nursing schools were experiencing an influx of transfer students. The findings of the study pointed out that these transfers were most pronounced in the one degree nursing program. It was also noted that the largest number of students transferring from one nursing program to another were enrolled in the State's two diploma programs.

The student responses indicated that there were notable career motivational differences which existed between the students enrolled in the State's three different types of nursing programs. It was also found that there existed motivational differences between the male and female students enrolled in Montana's nursing schools.

Although the responses to specific questions resulted in a variety of answers, there were general patterns or trends which became apparent in the study. These general areas are discussed in Chapter 4 of the study.

Chapter 4

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

SUMMARY

The study was a nonexperimental survey designed by the investigator to determine those common career motivational factors which influenced nursing students in Montana. The purpose of the study was to isolate those major factors which influenced Montana's nursing students in their selection of nursing as a chosen career. The investigator believes that this data will be of value in recruiting other potential nursing students.

The review of related literature indicated that there would continue to be a shortage of professional nurses in the United States. Increased insurance coverage, more consumer involvement, and the expanding role of the nurse were found to be the major elements which underlie the present and future nurse crisis. The literature indicated that although nursing school enrollments were increasing nationwide, the percentage of high school graduates entering nursing programs continued to decrease.

The population for the research endeavor consisted of students enrolled in Montana's five professional schools of nursing. Although the research was limited to the State of Montana the investigator feels that the findings could have merit and application outside of the State. This assumption is based on the fact that a

large number of the students surveyed came from without the confines of Montana. A sixteen item questionnaire that provided multiple listings as well as open ended responses was the research tool that was utilized. The study population consisted of the 749 student nurses enrolled in Montana's five nursing schools. A total of 657, or 87 percent, of the population returned completed questionnaires to the investigator. The population was made up of students enrolled at one degree, two diploma, and two associate degree schools of nursing.

The data collected were arranged according to class and program in which the individual student was enrolled. A comparison of each program's total responses was made. It was noted that measurable differences between the responses of the degree, diploma, and associate degree students did exist. The responses of male and female students, without regard for specific program, were also compared. Motivational differences were also noted between these two groups. The responses of all the students surveyed were also totaled. These totals were the basis for the conclusions of the study.

CONCLUSIONS

The survey results indicated that a majority of the nursing students had medically-related experiences prior to entering a nursing program. This general trend combined with those responses

which indicated that nurses, physicians and former patients had a marked effect on the students' ultimate choices of a career in nursing tend to point out the recruiting value of these experiences. The survey results appear to indicate that a planned program providing these types of experiences, whether salaried or voluntary, could be one productive means of indirect recruiting for professional nursing.

The study indicated that a large percentage of the student population was most influenced in their career decision by members of the medical team. These responses are an indicator that nurses and physicians do have the ability to interest and motivate young people toward a nursing career. The findings in this area indicate that these professionals should be made aware of the influence that they do and can have on potential nurses. An organized and unified recruitment effort, on the part of Montana's nurses and physicians, could result in greater numbers of people entering the nursing profession.

The responses of Montana's nursing students pointed out that parents do have a measurable impact on the career selections of their children. This information indicates that nurse recruiting, or at least an awareness of nursing career opportunities, directed toward parent groups may be another productive approach to increasing the number of professional nurses.

The relatively low percentage of students who indicated they were influenced by high school counselors and teachers may be evidence that these individuals may not be as knowledgeable about nursing career opportunities as they might be. The investigator feels that the responsibility for orienting both the parent and educational groups lies with the professional nursing organizations in Montana.

The findings of the study clearly indicated that career nurse recruiting would be most effective when directed toward the high school age group. This conclusion is based on the fact that over half of the students surveyed made their career decisions during this time. The survey results also pointed out that there may be value in directing some of the recruiting effort toward a slightly older age group who are currently employed in nonprofessional, medically-related positions. The large numbers of college students transferring into nursing curricula from other areas may also indicate a recruiting potential among uncommitted or dissatisfied college students.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations are made:

1. The Montana State Nurses Association organize, plan and direct a professional nurse recruiting campaign designed for high

school students throughout Montana.

2. The Montana State Nurses Association organize, plan and direct an active campaign of information aimed at the nurses and physicians of Montana to gain awareness of the role these professionals can and do play in influencing the ultimate career selection of young men and women in the State.

3. The Montana State Nurses Association organize, plan and direct an information campaign for Montana hospitals to gain awareness of the recruiting value of providing medically related experiences for young people; and, to encourage hospitals to promote professional nursing among their non-professional staff members.

4. The Montana State Nurses Association develop a campaign to orient both educational and parent groups in Montana concerning career opportunities in the field of nursing.

5. Similar studies be conducted in other states to provide guidelines which could be utilized for national nurse recruiting.

6. A longitudinal study of this subject be conducted in an effort to compare the nursing school completion rates of those students who entered a program following high school and those individuals who transferred into nursing from other curricula.

7. A research project be conducted in which a comparison is drawn between those nursing students who have a prior medically-related experiences and those students who have not.

APPENDIX A

APPENDIX A

This questionnaire is part of a research project concerned with nursing students in the State of Montana. Your cooperation is requested and will be appreciated in answering the following questions. Please do not sign your name to this questionnaire. Your answers are confidential.

1. Age _____ 2. Sex _____ 3. Marital Status:
(M or F) _____
4. What is/was your Father's occupation? _____
5. What is/was your Mother's occupation? _____
6. Type of Nursing Program in which you are presently enrolled:
____ Degree
____ Diploma
____ Associate
7. Current status in this program:
____ 1st Year
____ 2nd Year
____ 3rd Year
____ 4th Year
8. Indicate the MAJOR reason for your selection of Nursing as your career: (Select only ONE)
____ Type of work
____ Shortage of Nurses
____ Service to people
____ Salary to be earned
____ Other (please specify) _____

9. Did you have any health-related experience (voluntary or salaried) prior to beginning your present Nursing program?

_____ Yes _____ No

If Yes, what type of experience? _____

10. Have you SERIOUSLY considered careers other than Nursing?

_____ Yes _____ No

If Yes, please indicate your other MAJOR career consideration.

11. Approximately at what age did you make your career decision?

_____ Less than 10 years old
_____ 10 - 14 years old
_____ 15 - 18 years old
_____ 19 - 20 years old
_____ More than 20 years old

12. Indicate the individual who MOST influenced your career selection. (Select only ONE)

_____ Parent
_____ Friend (Other than professionals listed below)
_____ Nurse
_____ Physician
_____ Teacher
_____ Counselor
_____ No one
_____ Other (please specify) _____

13. Indicate the MAJOR reason for the selection of your present program of study: (Select only ONE)

_____ Length of study
_____ Cost of education
_____ Type of program
_____ Size of school
_____ Location of school
_____ Religious preference
_____ Other (please specify) _____

14. Did you transfer into Nursing from another curriculum?

_____ Yes _____ No

If Yes, please state the MAJOR reason for your transfer.

15. Did you transfer from one Nursing program into your present Nursing program?

_____ Yes _____ No

If Yes, please state the MAJOR reason for this transfer.

16. Indicate your career plans upon completion of your Nursing program. (Select only ONE)

_____ Clinical Nursing
 _____ Community Nursing
 _____ Military Nursing
 _____ Advanced education
 _____ Other (please specify) _____

THANK YOU

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