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AN ANALYSIS OF POSITIONS ASSUMED BY ONE CLASS OF GRADUATES
OF MONTANA STATE COLLEGE SCHOOL OF NURSING

by

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ABSTRACT

This study proposed to investigate the levels of positions assumed and types of functions performed by the graduates of one class at Montana State College School of Nursing. It also proposed to determine if there were any significant differences between the graduates who received Associate Degrees in Nursing and the graduates who received both Associate Degrees and Bachelor of Science degrees.

No significant differences were found between these two groups in terms of the levels of positions assumed and types of functions performed.

These graduates were able to terminate under one of two programs. One group terminated at the end of eight academic quarters with an Associate Degree and the other group terminated in fourteen quarters with a Bachelor of Science degree.

A questionnaire, constructed by the authors, was employed as the instrument to determine what positions had been assumed, what functions had been performed, what kind of supervision had been demonstrated, whether their education was thought to be adequate preparation and what influence selected factors had had on the assumption of these positions by the graduates.

The graduates believed their education to be adequate preparation for their positions; proper supervision was had by the majority of the graduates; and job and personal motivation had the most influence in the assumption of nursing positions by both groups of graduates. There was no significant difference in the responses between the group of graduates with an Associate Degree and the graduates with a Bachelor of Science degree.

The majority of the graduates tended to remain in the same levels of positions and performed the same types of functions in the second positions they assumed.

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CHAPTER I

INTRODUCTION

"The years since World War II have brought many changes in nursing and nursing education in the United States. There seems to have been an expectation that the close of the war would restore to civilian use the supply of nurses drained away because of war needs. Instead, the shortage of nurses had not only continued but increased. Perhaps it would be more accurate to say that the demand for the services of nurses had exceeded the supply because there are now more nurses employed in the United States than ever in our history. While nursing must feel complimented by this demand for its services, it has brought problems both with respect to nursing service and nursing education."¹

In an attempt to meet this increased demand for nursing services, changes have been made in the nature and types of educational programs designed to prepare nursing practitioners.

There are now three distinct types of basic or beginning education programs for nurses. These are diploma programs in hospital schools, junior college associate-in-arts programs and baccalaureate programs. All three prepare students to take the licensing examinations to become a registered nurse. The diploma programs are the original professional nurse

¹Mildred L. Montag, "Nursing and Nursing Education in the United States," International Nursing Review, Vol. 9, No. 2, p. 44, March/April, 1962.

education programs. These are hospital-sponsored schools with three-year programs. The baccalaureate programs combine a liberal arts program with professional education. These programs, under the control of a college or university, may be four to five years in length. The newest program in nursing education development, the associate degree programs, are usually found in the junior college or community college and require two academic years of study to complete. This is not a "watered-down" version of any other type of program, but is, instead, a terminal program designed to meet the specific need for nurses capable of giving bedside nursing care.

As these programs have continued to grow and change, the nursing profession has become increasingly concerned about the preparation of its practitioners and what these practitioners have done with their preparation. This growing concern is evidenced by the increasing number of follow-up studies of graduates of nursing education programs.

While the purposes of these studies have differed, the general aim has remained similar, that is, to determine what these graduates were doing with their educational preparation.

The Problem Area. Just as other schools of nursing throughout the country have continued to develop their nursing education programs, the Montana State College School of Nursing has instituted changes through the years designed to meet the growing demand for nursing services.

The Montana State College School of Nursing stated in their bulletin that they ". . . offer a curriculum in nursing in two programs, both

leading to a Bachelor of Science degree in Nursing."² The population studied started under this particular program.

Program I led to completion of requirements for the Bachelor of Science degree.

Program II prepared the student, after the successful completion of eight quarters, to write the state licensure examination for the R. N.

In another bulletin prepared by the School of Nursing, the stated objective of Program I was to enable the graduate ". . . to assume first level positions in staff nursing, administration and instruction."³ This program required six quarters beyond the basic eight quarters training common to both programs.

Program II graduates terminated their education after eight quarters. They received a diploma certifying that they have an Associate Degree in Nursing. They were qualified to become general duty staff nurses, trained for bedside nursing responsibilities.

From the differences in education outlined, it is apparent that the Program I graduates should be better-prepared nurses, receive a wider range of job opportunities, and assume greater and more varied responsibilities than Program II graduates. Therefore the basic purpose of this study was to determine if the graduates from the two programs were moving into levels of job positions and responsibilities compatible with

²Montana State College Bulletin, Catalogue Number 1956-1958, (Bozeman, Montana: Montana State College, September, 1956), p. 161.

³Montana State College Bulletin, Catalogue Number 1958-1960, (Bozeman, Montana: Montana State College, September, 1958), p. 172.

their differential training.

Statement of Problem. The statement of the problem is multiple:

1. Is there any significant difference in the levels of positions assumed and types of functions performed in the first positions accepted by the graduates with the Associate Degree in Nursing and the graduates with the Bachelor of Science degree in Nursing at either the Associate Degree or Baccalaureate degree levels?
2. Do these graduates of both programs believe the factors of formal education, professional experience, job and personal motivation and community needs, in whole or in part influence the levels of positions and types of functions performed in the first position assumed after graduation?
3. Is there any evidence of change in the levels of positions and types of functions performed in the subsequent positions assumed by these two groups of graduates?

The Purposes. The purposes of the study were:

1. To determine what levels of positions and types of functions have been assumed and performed.
2. To determine what difference, if any, education and/or experience have made in these positions assumed.
3. To discover if the factors of opportunity for formal education, opportunity for professional experience, job and personal motivation and community needs may have influenced the levels of positions and types of functions assumed and performed.

Hypothesis. The hypothesis tested was: There is no significant difference in the level of positions first assumed by the graduates of these two programs of nursing education.

The alternative to the above null hypothesis was: The Bachelor of Science graduates assumed higher level first positions than the Associate Degree graduates.

The basic assumption was that the education preparation of the graduates of these two programs of nursing would have afforded the student the opportunity to become prepared for assuming beginning positions in professional nursing at the levels stated in the description of the curriculum of the Montana State College School of Nursing.

Definition of Terms. For the purposes of this study, the following definitions were used:

1. Bachelor of Science degree graduate:^{*4} A nurse who has completed fourteen quarters of study of the baccalaureate program. "She is prepared to give professional nursing care to patients in hospitals, public health agencies, homes, nursing homes, and industries. The graduate has the foundations for leadership in nursing and through appropriate experience should advance to beginning positions in instruction and administration without further academic study. Completion of the baccalaureate degree is one qualification for admission to graduate study in nursing."⁵

^{*4}The abbreviation B.S. graduate will also refer to the Bachelor of Science degree graduate.

⁵Ibid., p. 173.

2. Associate Degree graduate:^{*6} A nurse who has completed eight quarters of academic study, (three quarters in pre-nursing and general education and five quarters in the nursing major). She is prepared to care for patients in hospitals, nursing homes, doctor's offices, and clinics. The graduate's preparation is specifically for bedside nursing care and beginning positions in staff nursing.

3. Level of position: Within the hierarchical organization of an agency or institution certain positions are found at lower levels, such as general duty staff nurse, and others are found at upper levels, such as Director of Nursing Service. The level of the position carries certain predetermined functions and responsibilities.

4. Formal education: This consists of the college-controlled curriculum in which the student has part of her studies in general education and part in nursing education and practice.

5. Professional experience: The actual practice of nursing which the graduate engages in as a licensed Registered Nurse.

6. Job and personal motivation factors: Those factors of personal and non-personal nature which encourage or discourage the nurse from accepting or rejecting a position. They may be factors related to home or working situations, to personal interest, and to other interrelated factors.

7. Community needs: Those factors within a community which determine what positions are available for nurses to assume.

^{*6}The abbreviation, A.D. graduate will refer to the Associate Degree graduate.

Justification for the Study. There have not been any previous studies which were concerned with this group of graduates at Montana State College School of Nursing.

These graduates were the first students to enter into this type of program at Montana State College; that is, being able to terminate at the end of eight quarters with an Associate Degree in Nursing or being able to continue with six additional quarters and receive a Bachelor of Science degree.

In the literature, no studies were identified in which different levels of training were correlated with employment positions and responsibilities actually assumed. The review did reveal, however, that the nursing profession is increasingly aware of the need for and value of such studies.

Schools of nursing are constantly evaluating their curriculums for needed changes. It is important then, that the students who graduate from these schools of nursing be evaluated by means of follow-up studies to see what they are doing with their education. This can have a great influence on curriculum changes. As is pointed out in various articles and reports in nursing literature, ". . . we judge an educational program largely on what its graduates are doing."⁷

Methodology. The research method used was the descriptive survey with a specially prepared questionnaire employed as the measuring device.

⁷Second National Conference on Junior-Community College Education for Nursing, (New York: National League for Nursing, 1957), p. 42.

(See Appendix B, p. 34) This was selected as the most appropriate means of obtaining the desired information for this study. The questionnaire was pretested on fifteen Registered Nurses who were working on their Bachelor of Science Degree and ten Registered Nurses who were working on their Master's Degree in Nursing at Montana State College. This pre-test resulted in rewording and revising parts of the questionnaire to clear misunderstandings and ambiguities.

The total population selected for this study consisted of those students who entered the sophomore year of the nursing curriculum at Montana State College in 1958. This was the first quarter in which the program of study was entirely in the nursing major. The courses were taught in the hospital setting. The students may have started on the campuses at Montana State College or Eastern Montana College of Education in 1957 and completed their first three quarters in these institutions.

The class numbered ninety-six when the students enrolled in the hospital setting. Of this group, the population was reduced to the sixty who graduated from a nursing program at Montana State College.

Addresses for the graduates were obtained from the records of the Montana State College School of Nursing. Many of the questionnaires were mailed to the parents' addresses when no recent address of the graduate was known. Also a personal letter was included in some of the questionnaires asking for recent addresses of classmates. This step proved to be well worth the time and effort as several more graduates were located. Of the original sixty graduates to whom questionnaires were mailed, fifty-two

were located.

Accompanying the questionnaire was a stamped, self-addressed envelope and a letter explaining the purpose of the study, assuring anonymity and asking the graduates' cooperation in completing the questionnaire.

At the end of two months a follow-up letter was sent to the non-respondents. This resulted in obtaining several more questionnaires.

The data obtained from these questionnaires were then tabulated and the Mann-Whitney U test for uncorrelated data was applied to the graduates' responses regarding the direct and non-direct nursing care responsibilities they assumed in the first position.

Before the test could be applied however, it was necessary to validate the categorizing of the various nursing duties included in question number six.

The validation process used by the investigators consisted of constructing another questionnaire which asked if the respondent agreed or disagreed that the given nursing duty was primarily a function of a nurse with a certain level of education. The categorizing of the various nursing duties was agreed on by the respondents to the questionnaire. These respondents were persons in responsible positions in a school of nursing who had no connection with the study.

Analysis of the data from question number seven was accomplished by arriving at mean values and placing these in rank order.

The remainder of the data was analyzed through calculating percentages and then comparing these.

Limitations. Limitations of this study were:

1. The interpretation of the findings of the study may be incorrect, according to how the respondents understood the questionnaire.
2. The length of the questionnaire may have discouraged many respondents from answering the questionnaire.
3. The findings of the study were based on opinions and information from the graduate nurses.
4. The sample was limited to the graduates of the class beginning in 1957 as this was the first class in which students could obtain an A.D. at the end of eight quarters.
5. The investigators did not deal with intelligence, individual differences and abilities of the graduates as factors in determining what differences might occur between the graduates.

Review of Literature. Along with all the professions, nursing has become increasingly diversified in recent years. "According to the National League for Nursing, of every 100 nurses, 67 work directly with people who are ill and, for the most part, they work in hospitals and doctor's offices, where supervision or direction is available and is expected. An additional 20 are head nurses, public health nurses, and industrial nurses who function with a greater degree of independence and who may also direct other nursing workers, and 13 are public health and hospital supervisors and nurse administrators and teachers of nursing."⁸

⁸Nurses for a Growing Nation, (New York: National League for Nursing, 1957); Nurses for the West, (Boulder, Colorado: Western Interstate Commission for Higher Education, 1959), pp. 12-13.

"Because the functions of these three kinds of nurses are different, a different educational background is recommended for each group by the profession."⁹

The Associate Degree program prepares professional nurses who give direct care to patients, under supervision. The Baccalaureate degree program prepares professional personnel who hold positions ranging from hospital head nurse and public health staff nurse through service and education administrator. And the Master's or Doctoral degree study prepares professional nurses who become teachers, supervisors, administrators and consultants.¹⁰

Because these different programs are preparing nurses for different levels of nursing positions, there is growing concern as to whether nurses are assuming the specific responsibilities and activities for which they were prepared. The growing shortage of nurses may be one factor pressuring hospital administrations to hire nurses to assume duties and positions for which they were not prepared.

While the nursing profession is concerned with this problem, other health disciplines and the public in general express their confusion about these different "kinds" of nurses. Hospital administrators and physicians are confused, too, by what is the difference in the graduates of these different programs.

"Studies are now being done to answer many of the questions and

⁹Ibid.

¹⁰Ibid.

problems related to the preparation of nurses that have arisen. Such studies permit us to see things as they are, not as one wishes they are or thinks they are."¹¹

One study which relates to this problem was done by Jean Hayter at the Medical College of Virginia. "The purpose of this project was to find out the post-graduation vocational and education activities and future plans of the graduates of the four-year baccalaureate degree program in nursing at Medical College of Virginia, and the opinions of these graduates and their employers concerning the adequacy of the graduates' preparation for their job, as a guide to curriculum development. Answers to the following questions were sought:

1. What types of positions have the graduates taken, where, and how long have they worked?
2. What education (other than inservice) have the graduates had since graduation?
3. What professional activities have the graduates engaged in other than those connected with their jobs?
4. What are the future plans of the above graduates regarding work and education?
5. What are the expressed opinions of the graduates and their employers concerning the adequacy of the graduates' preparation for their jobs?"¹²

"Perhaps the most important outcome of this study was the finding that these graduates have held staff nurse positions far more than any

¹¹Jessie M. Scott, "Seeing Nursing Activities as They Are," The American Journal of Nursing, 62:71, November, 1962.

¹²Ibid.

other type of position."

An important point noted was that 31 percent of the graduates have worked in hospitals with a bed capacity less than 200. Several spoke of some difficulty in adjusting to a small agency and requested that more attention be given to helping graduates make this transition.

When asked for which positions they considered themselves prepared, all the graduates who responded stated that they considered themselves prepared for staff nurse positions in hospitals and public health agencies and for private duty. A majority of them indicated that they would be qualified for head nurse, teaching, and supervisory positions with no further formal education, though the greater part of them considered experience necessary.

The graduates and their employers were asked to rate the adequacy of the graduates' educational preparation for 19 nursing behaviors. In practically all instances graduates and employers as well indicated that the graduates' preparation for these nursing behaviors was completely adequate. Both groups were asked to rate the graduates' preparation for nursing in general, as compared to nurses who have been graduated from other programs and who have had a comparable amount of work experience. Eighty-three percent of the graduates rated their preparation "above other graduates" and none rated her preparation as "below other graduates." Fifty percent of the employers rated the graduates' preparation as "above all other graduates", and only one rated a graduate's preparation as

"below other graduates."¹³

Overview of the Remainder of the Study. The remainder of this study consists of two chapters. Chapter II includes a presentation and analysis of the information obtained from the questionnaires.

Chapter III contains the summary, conclusions, and recommendations for further study.

¹³Ibid.

CHAPTER II

PRESENTATION AND ANALYSIS OF DATA

The selected population consisted of sixty nursing graduates, but only thirty-one of these provided data suitable for analysis. Current addresses for eight were unknown, eighteen failed to respond, two had not accepted positions in nursing, and one was deceased. Thus the total sample consisted of 51 percent of the intended population.

The thirty-one graduates studied were divided into two groups, those 14 who graduated with an Associate Degree and those 17 who graduated with a Bachelor of Science degree. (see Figures 1 and 2, p. 16) The B.S. graduates were first studied and compared with the A.D. graduates when both groups had just the Associate degree, (i.e., both groups had the same preparation and education). Then the B.S. graduates were studied and compared with the A.D. group after the first group received their Bachelor of Science degree. These girls now had more education and preparation.

Of the 17 girls who continued on with their education, 14 first received an A.D. degree, the other three simply continued on until they received their B.S. degree. Also out of this same group, three interrupted their education to work for a period of time before returning to school. Obtaining the A.D. degree first, permitted 13 of these same graduates to work as professional nurses while completing the requirements for the B.S. degree. It was also interesting to note that two graduates had received a Master of Nursing degree at Montana State College.

Title of Position and Clinical Area. Table I, page 17, shows the titles and clinical areas of first positions accepted by the two groups at

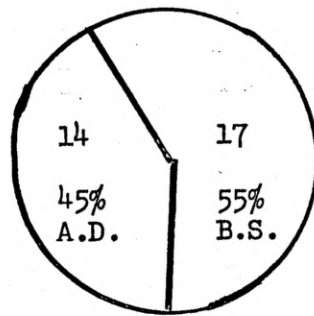


FIGURE 1.

RELATIVE PROPORTION OF ASSOCIATE DEGREE
AND BACHELOR OF SCIENCE DEGREE
GRADUATES RESPONDING
TO QUESTIONNAIRE

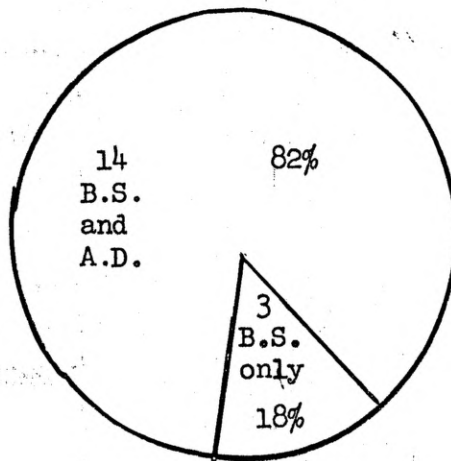


FIGURE 2.

NUMBER AND PERCENTAGE OF BACHELOR
OF SCIENCE GRADUATES
WHO ALSO RECEIVED AN
ASSOCIATE DEGREE

TABLE I

TITLE AND CLINICAL AREA OF FIRST POSITION ASSUMED BY ASSOCIATE
DEGREE AND BACHELOR OF SCIENCE DEGREE GRADUATES

POSITION AND CLINICAL AREA OR AGENCY	NO. TIMES INDICATED		
	A.D.	B.S. ^a	B.S. ^b
Position: General Duty Staff Nurse	10	13	15
Clinical Area: Medical	2	3	2
Surgical	3	2	2
Obstetrics	0	0	1
Nursery	0	1	1
Pediatrics	0	1	2
Operating, Recovery, Emergency	0	5	3
Medical-Surgical	1	0	0
Medical-Psychiatry	1	0	0
Surgical-Obstetrics	1	0	0
All Clinical Areas	2	1	4
Position: General Duty, Shift Supervisor	2	0	0
Clinical Area: Medical-Surgical-Pediatrics	1	0	0
Psychiatry	1	0	0
Position: General Duty, Instructor	0	1	0
Agency: School of Nursing	0	1	0
Position: Charge Nurse	1	0	1
Clinical Area: Medical-Surgical	1	0	0
Surgical	0	0	1
Position: Office Nurse	1	0	1
Agency: Doctor's Office	1	0	1
Respondents in Each Group	14	14	17

NOTE: Under the number of times indicated the abbreviations should be interpreted as follows: A.D. referring to the graduate who terminated with the Associate Degree, B.S.^a referring to the Bachelor of Science graduate who also received an Associate Degree and assumed a nursing position, and B.S.^b referring to the Bachelor of Science graduate in the first position assumed after receiving the Bachelor of Science degree.

the A.D. level and the B.S. level.

The table reveals that almost all the nursing graduates, of both programs, accepted general duty staff nursing as their first position. The favored area for working was in the medical-surgical areas, for both groups at both levels.

The information indicates little difference between the two groups as far as clinical area worked and first positions accepted.

Supervision. Question number three in the questionnaire dealt with the nature of the supervision the graduates had in the first position accepted. Table II, page 19, shows the responses of the graduates to this item.

The data revealed that the majority of the graduates had supervision in the immediate department in which they were employed, and the charge nurse was checked most often as the supervising person.

It is pointed out that several of the graduates indicated more than one response for the supervision they received which accounts for the discrepancy among the numbers in each column.

The data seems to indicate that relatively close supervision was provided the majority of graduates and that the nature of this supervision was multiple (i.e., several persons provided supervision) in certain instances. It is further inferred that there were no outstanding differences between the two groups of graduates as far as supervision in the first position was concerned.

TABLE II

IMMEDIATE SUPERVISOR AND NATURE OF SUPERVISION
FOR FIRST POSITION ASSUMED

IMMEDIATE SUPERVISOR	NO. TIMES INDICATED			NATURE OF SUPERVISION	NO. TIMES INDICATED		
	A.D.	B.S. ^a	B.S. ^b		A.D.	B.S. ^a	B.S. ^b
Charge Nurse	8	10	9				
Floor Supervisor	2	3	1				
Physician	1		1	In immediate Department	8	13	11
Self			1				
Shift Supervisor	1	1	1				
Director Nursing Service	2		3	In Agency or Institution	7	4	4
Director Nursing Education			1	Available by Calling	5	7	6
Respondents in Each Group	14	14	17				

NOTE: Under number of times indicated the abbreviations should be interpreted as follows: A.D. referring to the Associate Degree graduate, B.S.^a referring to the Bachelor of Science graduate at the Associate Degree level, and B.S.^b referring to the Bachelor of Science graduate at the Baccalaureate Degree level.

Size of Institution or Agencies Employed In. Table III, page 21, shows the indications of the graduates regarding the bed capacity of the institutions or the patient load of the agency in which they were first employed.

The majority of both groups of graduates, at both the A.D. and B.S. levels, were employed in 75 to 200 bed hospitals. Again, no dissimilarity between the two groups could be found.

Length of Time Employed in First Positions. Figure 3, page 22, illustrates the responses of the graduates to question number five which concerned the length of time spent in the first position they accepted as professional nurses.

The shortest time spent in the first position for both groups was under three months, while the longest time spent was two years. The average time was eight months. No difference is noted between the groups in this area either.

Direct and Non-Direct Nursing Care Responsibilities. Question number six in the questionnaire dealt with the duties the graduates performed in their first position. The question was divided into two parts, non-direct and direct nursing care. The graduates were asked to indicate which of the listed duties were major responsibilities, which were minor responsibilities and those for which they were not responsible.

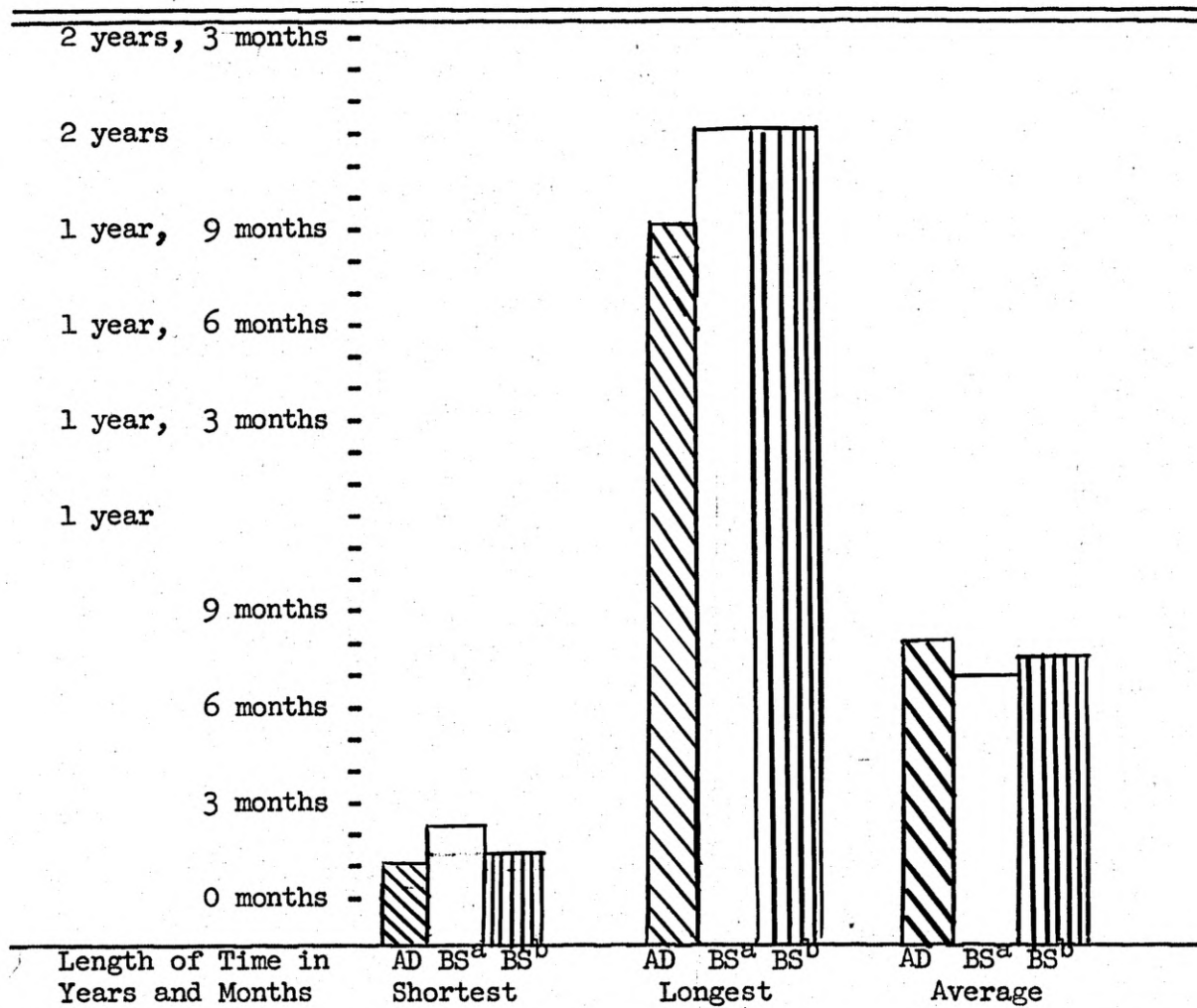
The Mann-Whitney U test for uncorrelated data was applied to the responses of the graduates to this question. The two groups of graduates were compared statistically at both the A.D. and B.S. level.

TABLE III

BED CAPACITY OF INSTITUTION OR PATIENT LOAD OF AGENCY
IN WHICH GRADUATES WERE FIRST EMPLOYED

BED CAPACITY, PATIENT OR STUDENT LOAD	NO. TIMES INDICATED AND PERCENT OF RESPONDENTS					
	ASSOCIATE DEGREE		BACHELOR OF SCIENCE ^a		BACHELOR OF SCIENCE ^b	
24 Beds	2	17%	-	-	-	-
30 Beds	-	-	-	-	1	6%
34 Beds	-	-	1	7%	1	6%
46 Beds	1	8%	-	-	-	-
50 Beds	1	8%	-	-	1	6%
75 Beds	2	17%	-	-	-	-
85 Beds	-	-	-	-	1	6%
90 Beds	-	-	-	-	1	6%
100 Beds	1	8%	-	-	1	6%
150 Beds	-	-	3	21%	2	11%
180 Beds	1	8%	-	-	-	-
200 Beds	1	8%	5	36%	3	18%
250 Beds	1	8%	5	36%	3	18%
520 Beds	-	-	-	-	1	6%
900 Beds	1	8%	-	-	-	-
32 Pts./day	-	-	-	-	1	6%
300 Pts./day	1	8%	-	-	-	-
40 Students	-	-	-	-	1	6%
Number Responding in Each Group	12		14		17	

NOTE: Bachelor of Science^a refers to the first position assumed by the Bachelor of Science graduate after receiving an Associate Degree and Bachelor of Science^b refers to the first position assumed after having received the Bachelor of Science degree.



NOTE: AD refers to the Associate Degree graduate, BS^a refers to the Bachelor of Science graduate assuming a first position after receiving an Associate Degree, and BS^b refers to the Bachelor of Science graduate after receiving the Baccalaureate Degree.

FIGURE 3.

LENGTH OF TIME SPENT IN FIRST POSITION
ASSOCIATE DEGREE AND BACHELOR OF
SCIENCE DEGREE GRADUATES
COMPARED

Non-significant Z scores were obtained on all the comparisons, with one exception. This exception was the comparison of the A.D. graduates and B.S. graduates at the A.D. level on the direct nursing care, major responsibility. The Z score obtained was 2.71 and this was significant at the 5 percent level.

No definite reason can be ascertained as to why the difference between the groups, because at this point, the two groups had exactly the same preparation and education. The B.S. graduates were assuming more responsibility for direct nursing care than were the A.D. graduates.

Factors Influencing Assumption of First Position. Question number seven was concerned with the reasons of why a graduate accepted a certain position. The graduates were asked to indicate which of the reasons listed were a major, minor or of no influence in accepting their nursing positions.

The responses of the graduates to the item were analyzed in terms of arriving at a mean value for each reason listed as having been a major or minor influence. The mean values were then placed in rank order.

Table IV, page 24, shows the comparison of the rank orders of the reasons indicated by the graduates as having influenced the acceptance of the first position in nursing. From this table it may be seen that each group varied in their indications of the most influential factors; these being assigned the rank of one. Also it is noted that several reasons were ranked evenly among each of the groups.

In general, job and personal motivation factors seemed to be

TABLE IV

COMPARISON OF MEAN RANK ORDER OF REASONS INDICATED
BY GRADUATES AS HAVING INFLUENCED
ASSUMPTION OF FIRST POSITION
IN NURSING

REASON	RANK		ORDER
	A.D.	B.S. ^a	B.S. ^b
Type of Institution	1	4	2
Salary	1	4	6
Position Available in Your Area of Interest	1	1	1
Shift to be Worked Appealed to You	1	6	9
Personnel Policies Appealing	2	9	13
Duties Involved More Satisfying Professionally	3	3	3
Duties Involved More Satisfying Personally	4	2	4
Hours to be Worked Appealed to You	5	7	10
Opportunity for Advancement	6	8	11
Community Expressed Need for Professional Services	7	11	12
Inservice Education Program Offered	8	9	13
Orientation Program Offered	8	10	13
Geographic Location Appealing	8	8	8
Only Position in Your Location	9	10	11
Working Situation More Compatible With Home	9	8	5
Opportunity for Further Education	10	5	7
Marital Status	11	9	10

NOTE: AD refers to the Associate Degree graduate, B.S.^a refers to the Bachelor of Science graduate assuming a position after receiving an Associate Degree, and B.S.^b refers to the Bachelor of Science graduate at the Baccalaureate level.

considered the most influential by both groups of graduates at both levels. Of the other influencing factors, community needs was cited as the least important by the graduates.

Education. The last question dealt with education. The majority of both groups of graduates felt their formal education was adequate preparation for the position they had accepted. The remainder of the question was responded to so inadequately, that no findings could be reported.

Subsequent Positions Assumed. The next step was to try to determine if there was any evidence of change in the levels of positions assumed and types of functions performed in the second positions in which the graduates were employed.

Table V, page 26, shows the changes in levels of positions and degree of responsibilities in nursing care duties accepted by the two groups of graduates. The tabulations are based upon the second positions accepted by the A.D. respondents. The change in responsibility was arrived at through analyzing the values tabulated for the major and minor responsibilities assumed in giving non-direct and direct nursing care. This also applies to the tabulations of the second positions assumed by the B.S. degree graduates which are shown in Table VI, page 27.

Table V, page 26, shows that six of the B.S. graduates accepted second positions of a higher level and assumed more responsibility in these positions. But nine of the B.S. graduates accepted second positions which were at the same level of their first positions. The responsibility varied, being greater in the second positions for some graduates and not so for others.

TABLE V

CHANGES IN THE TITLE OF POSITION AND RESPONSIBILITY
 ASSUMED IN THE SECOND POSITION HELD BY THE
 ASSOCIATE DEGREE GRADUATES

TITLE, FIRST POSITION	TITLE, SECOND POSITION	CHANGE IN RESPONSIBILITY
General Duty	General Duty	More in second position
General Duty	General Duty	Remained the same
General Duty	General Duty	More in first position
General Duty	General Duty	More in first position
General Duty	Office Nurse	More in first position
General Duty	Office Nurse	More in second position
General Duty	Office Nurse	More in second position
General Duty	Office Nurse	More in first position
General Duty	Shift Supervisor	More in second position
General Duty, Shift Supervisor	Office Nurse	More in first position
General Duty, Shift Supervisor	General Duty, Shift Supervisor	More in second position
Charge Nurse	General Duty	More in first position
Office Nurse	General Duty	More in second position
General Duty	None assumed	None

CHANGES IN THE TITLE OF POSITION AND RESPONSIBILITY ASSUMED IN
THE SECOND POSITION HELD BY THE BACHELOR OF SCIENCE GRADUATES

TITLE, FIRST POSITION	TITLE, SECOND POSITION	CHANGE IN RESPONSIBILITY
General Duty	General Duty	Remained the same
General Duty	General Duty	Remained the same
General Duty	General Duty	Remained the same
General Duty	General Duty	Remained the same
General Duty	General Duty	Remained the same
General Duty	General Duty	More in second position
General Duty	Office Nurse	More in first position
General Duty	Assistant Charge	More in second position
General Duty	Assistant Charge	More in second position
General Duty	Instructor	Remained the same
General Duty	Supervisor	More in second position
General Duty	Public Health	More in second position
Office Nurse	General Duty	More in second position
Charge Nurse	Public Health	More in second position
General Duty, Instructor	General Duty	More in first position
General Duty	None assumed	None
General Duty	None Assumed	None

CHAPTER III

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary. Research questionnaires from thirty-one graduates representing two levels of nursing education were evaluated by several statistical techniques. The major purpose was to determine whether level of education affected either job positions attained or actual duties performed. The rather limited data collected suggest neither initial and subsequent positions held nor the kinds of duties performed were influenced by the differential kinds of educational preparation these graduates received.

Regardless of education, the two groups of nursing graduates appear to be similar in the following respects. Most worked in medical-surgical or related clinical areas. Most received comparable supervision. First positions assumed were not affected by education. One exception was noted: on direct nursing care responsibilities first position accepted the B.S. graduates assumed more responsibility than the A.D. graduates. This is unusual because both groups had exactly the same educational preparation at this time.

A null hypothesis was formulated in relation to the first problem considered. It read: There is no significant difference in the level of positions first assumed by the graduates of these two programs, of nursing education. The hypothesis as stated was accepted with one exception noted between the A.D. graduates and the B.S. graduates at the Associate Degree level. The exception occurred in relation to direct nursing care, major responsibility.

The second portion of the problem asked: Do these graduates of both programs believe the factors of formal education, professional experience, job and personal motivation and community needs, in whole or in part influence the levels of position and types of functions performed in the first position assumed after graduation?

The analysis of the data through a rank ordering of means revealed that job and personal motivation had the most influence of the factors listed in the graduates' assumption of their first positions. While there were some variations in the rank ordering of each of the seventeen reasons, there did not appear to be a great deal of difference between the two groups of graduates.

From the data collected it could not be determined whether these factors had influenced the levels of positions assumed and types of functions performed. The evidence served as a basis for judgment as to which of the factors had been most influential in the assumption of each position.

The third portion of the problem asked: Is there any evidence of change in the levels of positions and types of functions performed in the subsequent positions assumed by these two groups of graduates?

The second position assumed by each graduate was analyzed and it was determined that while some changes did occur among both groups of graduates, the majority of graduates in each group assumed second positions of a similar level to those of the first positions and that the responsibilities for functions in the second positions also remained similar to those of the first position. There appeared to be little difference

between the two groups as the majority of each group remained in positions of a similar level and having similar responsibilities. There were, however, six Bachelor of Science graduates who moved to higher level positions. These were positions which the graduates had been prepared to assume.

The investigators did not analyze beyond the second position assumed because of incomplete and insufficient numbers of responses.

There were three motivating purposes to this study. First, the levels of positions assumed and the types of functions performed were determined in an effort to ascertain if the graduates were assuming those positions for which they had been prepared. It was found that the majority assumed general duty staff nurse positions which are beginning positions in nursing and which all the graduates had had preparation for assuming.

The second purpose was to determine what difference, if any, education and/or experience made in the positions assumed. It was found through analyzing the second positions assumed that the graduates were remaining at similar levels in terms of their nursing positions. The further education of the Bachelor of Science graduates did not appear to influence the level of the second positions assumed. Similarly, the further experience on the part of the Associate Degree graduates did not appear to influence the level of the second positions assumed.

The third purpose was to discover if the factors of formal education, professional experience, job and personal motivation and community needs may have influenced the levels of positions and types of functions assumed and performed. It was determined that the factor of job and personal

motivation had the greatest influence for the majority of the graduates.

Conclusions. It may be concluded on the basis of this study that no significant differences were found between the two groups of graduates. At the time of this study the A.D. graduates had five years in which to practice professional nursing, whereas, the B.S. graduates had only three years in which to work as professional nurses.

Both groups did assume general duty positions which are beginning positions in nursing and for which all the graduates were prepared. But according to the data studied on the second positions assumed most of the B.S. graduates were still accepting positions and responsibilities very similar to their first.

Recommendations. As a result of the study, the following recommendations are made:

1. That a later investigation of the graduates be made to determine if a change in the levels of positions assumed and types of functions performed occurred.

2. That the employers of these graduates be included in a subsequent study of these graduates so that their opinions and policies could be determined as they apparently have a bearing on the levels of positions assumed and the types of functions performed.

APPENDIX

APPENDIX A

LETTER TO GRADUATES

401 West Curtiss
Bozeman, Montana
March 20, 1964

Dear Graduate,

We are students in the master's program in nursing at Montana State College.

As a partial fulfillment of the requirements for a Master of Nursing degree we are doing "A Study of the Professional Experience and Education of One Class of Nursing Students at Montana State College".

The major aim of this research project will be to determine what first and subsequent positions you, as graduate nurses, have assumed.

The purposes of this study will be to determine what levels and types of positions have been assumed; what difference, if any, education and/or experience have made in these positions assumed; and any other factors which may have influenced the levels and types of positions assumed.

We will be most appreciative of your assistance in helping us to do this study. The questionnaire appears lengthy, but it actually takes less time than it would seem. In pre-testing the questionnaire we found that the approximate time to complete it was twenty-five to thirty minutes, depending upon how many positions were assumed.

Would you please complete and return the enclosed questionnaire within two weeks of date of receiving it.

Enclosed is a self-addressed stamped envelope.

Sincerely,

(Mrs.) Joyce Ahola Neary
(Mrs.) Sandra Bergland Wagner

This study is being made under the guidance of the Montana State College School of Nursing Faculty. Any consideration you can give Mrs. Neary and Mrs. Wagner will be appreciated.

Anna Pearl Sherrick, R.N., Ed. D.

APPENDIX B

QUESTIONNAIRE

DIRECTIONS:

Please check (✓) answers you feel are appropriate to the following questions, fill in spaces provided, and feel free to give suggestions and opinions. Your responses will be held confidential. You may or may not sign your name.

A. Identifying data:

1. Did you receive an Associate Degree (Diploma) in nursing?
Yes () No () Completion date _____
2. Did you receive a Bachelor of Science Degree in Nursing?
Yes () No () Completion date _____
3. Did you continue directly with your education in the nursing program (excluding summer or between quarter break) to complete the Bachelor of Science degree requirements? Yes () No ()
4. Did you work as a professional nurse for a period of time before returning to school? Yes () No ()
If yes, how long? _____ years _____ months
5. Did you work as a professional nurse while completing the requirements for the Bachelor of Science degree? Yes ()
No (). Was it full time () or part time ().
6. Are you working toward completing requirements for another degree? Yes () No () Degree _____
7. Have you already completed requirements for another degree?
Yes () No () Degree _____
Completion date _____

Comments:

B. Type and level of positions and nursing duties assumed:

DIRECTIONS FOR A.D. GRADUATES: Please indicate first position, first area worked, supervision, institution, length of time, nursing duties, education and reasons related to this first position by the numeral 1 (one); then indicate all subsequent positions you have assumed in the same brackets () by a 2 (two) for the second position, 3 (three) for the third, etc. Do this throughout the remainder of the questionnaire. Please ignore any questions which do not pertain to you.

DIRECTIONS FOR B.S. GRADUATES: Please indicate first position assumed after receiving the A.D. whether attending school or not by an A; then indicate first position assumed after receiving the B.S. degree by a 1 (one). Please indicate all subsequent positions you have assumed after receiving the B.S. degree in the same brackets () by a 2 (two) for second position, 3 (three) for third, etc. Do this throughout the remainder of the questionnaire.

1. Title of Position:

General duty, staff nurse	()	Office nurse	()
Charge of nursing unit	()	Public Health	()
Assistant charge nurse	()	Clinical Instructor	()
Floor supervisor	()	Other (specify)	_____
Shift supervisor	()		

2. Clinical Area:

Medical	()	Central Supply	()	Psychiatry	()
Surgical	()	Operating Room	()	Instruction	()
Obstetrical	()	Recovery Room	()	Special Duty	()
Pediatrics	()	Labor & Delivery	()	Public Health	()
Nursery	()	Emergency Room	()	(Indicate level)	_____
Sch.Nursing	()	Doctor's Office	()	Other(specify)	_____

3. Supervision:

A) First position after receiving A.D.:

Did you have supervision? Yes () No ()

Who was your immediate supervisor? (person to whom you were responsible)

Charge nurse	()	Physician	()
Assistant charge nurse	()	Director of Nursing Service	()
Floor supervisor	()	Director of Nursing Ed.	()
Shift supervisor	()	Other (specify)	_____

What was the nature of this supervision?

Available in immediate dept. () Full time ()

Part time ()

Available in agency or institution () Full time ()

Part time ()

Available by calling () Full time () Part time ()

- B) First position after receiving B.S.:
 Did you have supervision? Yes () No ()
 Who was your immediate supervisor? (person to whom you were directly responsible)
 Charge nurse () Physician ()
 Assistant charge nurse () Director of Nursing Service ()
 Floor supervisor () Director of Nursing Ed. ()
 Shift supervisor () Other (specify) _____
 What was the nature of this supervision?
 Available in immediate dept. () Full time ()
 Part time ()
 Available in agency or institution () Full time ()
 Part time ()
 Available by calling () Full time () Part time ()
- C) Subsequent positions assumed: (indicate by 2 for second, etc.)
 Did you have supervision? Yes () No ()
 Who was your immediate supervisor? (person to whom you were directly responsible)
 Charge nurse () Physician ()
 Assistant charge nurse () Director of Nursing Service ()
 Floor supervisor () Director Nursing Ed. ()
 Shift supervisor () Other (specify) _____
 What was the nature of this supervision?
 Available in immediate dept. () Full time ()
 Part time ()
 Available in agency or institution () Full time ()
 Part time ()
 Available by calling () Full time () Part time ()

4. Institution:

What was the approximate bed capacity of each institution, or if an instructor, the approximate number of students in the program, in which you worked? (Indicate which you are expressing)

A.D.: (1st) _____ (2nd) _____ (3rd) _____ (4th) _____ (5th) _____

B.S.: (1st) _____ (2nd) _____ (3rd) _____ (4th) _____ (5th) _____

What was the approximate case load if in a doctor's office or in a public health department? (indicate which you are expressing)

A.D.: (1st) _____ (2nd) _____ (3rd) _____ (4th) _____ (5th) _____

B.S.: (1st) _____ (2nd) _____ (3rd) _____ (4th) _____ (5th) _____

5. Length of time spent in each position:

A.D. graduate: How long did you work in the first position assumed after receiving the A.D.? _____ (years) _____ (months)

Did you work full time () or part time ()

How long did you work in each of the subsequent positions you assumed?

2. _____(years) _____(months) _____(full time) _____(part time)
 3. _____(years) _____(months) _____(full time) _____(part time)
 4. _____(years) _____(months) _____(full time) _____(part time)
 5. _____(years) _____(months) _____(full time) _____(part time)

B.S. graduate: How long did you work in the first position assumed after receiving the A.D.? _____(years) _____(months)

Did you work full time () or part time ()

How long did you work in the first position assumed after receiving the B.S.? _____(years) _____(months)

Did you work full time () or part time ()

How long did you work in each of the subsequent positions you assumed after receiving the B.S.?

2. _____(years) _____(months) _____(full time) _____(part time)
 3. _____(years) _____(months) _____(full time) _____(part time)
 4. _____(years) _____(months) _____(full time) _____(part time)
 5. _____(years) _____(months) _____(full time) _____(part time)

6. What nursing duties did you assume in these positions?
 Indicate your response by a numeral for each position assumed, 1 for first, 2 for second, etc. B.S. graduates please use A for position assumed after receiving A.D., and 1 for first position assumed after receiving B.S., 2 for second, etc. Place these numerals under the category which best describes the types of duties and responsibilities you assumed. Respond to each item listed.

	MAJOR	MINOR	NOT
NONDIRECT NURSING CARE: Responsibility	Responsibility	Responsibility	Responsible
Care of patients environment			
Care of ward environment			
Procuring equipment, supplies			
Cleaning equipment, supplies			
Inspecting equipment, supplies			
Patient record keeping (charts)			
Administrative record keeping			
Receive & give report on pts.			
Assignment of care by other personnel			
Conferences with other personnel			
Consultations with medical staff, other depts. or agencies			
Instructing non-prof. personnel			
Instructing prof. personnel			
Instructing student nurses			
Record on student nurses			
Inservice educ. & morale			
Public relations			
Other duties you may have assumed (specify)			

6. What nursing duties did you assume in these positions? (con't.)
 Indicate your response by a numeral for each position assumed;
 1 for first, 2 for second, etc. B.S. graduates please use A
 for position assumed after receiving A.D., and 1 for first posi-
 tion assumed after receiving B.S., 2 for second, etc. Place
 these numerals under the category which best describes the types
 of duties and responsibilities you assumed. Respond to each
 item listed.

	MAJOR Responsibility	MINOR Responsibility	NOT Responsible
DIRECT NURSING CARE:			
Administering medications			
Administering treatments			
Assist Dr. with examinations			
Assist Dr. with treatments			
Assist Dr. with dressings			
Assist Dr. with diagnostic tests			
Assist patients in exercise, walking			
Assist with electro-shock therapy			
Collect specimens (urine, blood, sputum, etc.)			
Laboratory tests and procedures			
X-ray procedures			
Give diathermy therapy			
Give physical therapy			
Administer blood transfusions			
Administer anesthesia			
Do audiometric testing			
Do vision screening			
Do sterile preps. (surgical or obstetrical)			
Care for patients recovering from anesthesia			
Care for patients in labor and delivery			
Care for patients in emergency cases			
Care for patients in surgery			
Care for infants (newborn/ older or both)			
Bathing patients (tub, shower, bed)			
Give therapeutic baths (oil, sitz, temp.)			
Make beds (occupied/unoccupied)			
Give back rubs			
Turn patients			
Assist patients to eat			
Assist patients to dress/undress			
Give personal care to patients			

6. (con't.)

	MAJOR Responsibility	MINOR Responsibility	NOT Responsible
<u>DIRECT NURSING CARE:</u>			
Give psychological support to patients			
Transport patients			
Orient and instruct patients			
Make rounds with nursing staff			
Make rounds with medical staff			
Make round to visit/for personal observation			
Other duties you may have assumed (specify)			

7. What were the chief reason or reasons for assuming these positions? Respond to each item in the same manner as instructed before.

	MAJOR INFLUENCE	MINOR INFLUENCE	NO INFLUENCE
<u>Type of institution</u>			
<u>Salary</u>			
<u>Position available in your area of interest</u>			
<u>Only position available in your location.</u>			
<u>Duties involved were more satisfying personally</u>			
<u>Duties involved were more satisfying professionally</u>			
<u>Working situation more compatible with home situation</u>			
<u>Hours to be worked appealed to you</u>			
<u>Shift to be worked appealed to you</u>			
<u>Marital status</u>			
<u>Personnel policies appealing</u>			
<u>Inservice education program</u>			
<u>Orientation program offered</u>			
<u>Opportunity for advancement</u>			
<u>Opportunity for further education</u>			
<u>Geographic location appealing</u>			
<u>Community expresses need for professional services</u>			
<u>Any other reasons (specify)</u>			

8. Education: (check appropriate answer)
Do you feel your formal education was adequate preparation for assuming these positions:

A.D.
1st: Yes () No ()
2nd: Yes () No ()
3rd: Yes () No ()
4th: Yes () No ()
5th: Yes () No ()

B.S.
1st: Yes () No ()
2nd: Yes () No ()
3rd: Yes () No ()
4th: Yes () No ()
5th: Yes () No ()

Did you encounter situations wherein you needed further education other than basic job orientation?

A.D.
1st: Yes () No ()
2nd: Yes () No ()
3rd: Yes () No ()
4th: Yes () No ()
5th: Yes () No ()

B.S.
1st: Yes () No ()
2nd: Yes () No ()
3rd: Yes () No ()
4th: Yes () No ()
5th: Yes () No ()

If yes, did you receive instruction which helped you meet these situations?

A.D.
1st: Yes () No ()
2nd: Yes () No ()
3rd: Yes () No ()
4th: Yes () No ()
5th: Yes () No ()

B.S.
1st: Yes () No ()
2nd: Yes () No ()
3rd: Yes () No ()
4th: Yes () No ()
5th: Yes () No ()

What was the nature of this instruction? (Answer by using the same code numbers as instructed earlier)

Formal inservice education ()

Informal inservice education ()

WCHE program ()

Short term traineeship program ()

Workshops ()

College courses ()

Other (specify) ()

for how long? _____
approx. number _____

From whom did you receive this instruction?

Charge nurse () Physician ()

Assistant charge nurse () College instructor ()

Floor supervisor () Nursing instructor ()

Director of Nursing Service () Other (specify) _____

Director of Nursing Education () _____

APPENDIX C

FOLLOW-UP LETTER TO GRADUATES

Bozeman, Montana

April 30, 1964

Dear Graduate,

A few weeks ago we mailed out questionnaires which were concerned with what the graduates in your class in nursing at Montana State College School of Nursing had done and are doing in nursing.

We would appreciate it if you would please complete this questionnaire and return it as soon as possible as we are anxious to complete our study.

If, for some reason, you have not received a questionnaire we would also like to know this so that we might send you a questionnaire to complete.

Thank you for your assistance in this study.

Sincerely,

(Mrs.) Joyce Neary

(Mrs.) Sandra Wagner

7 Yellowstone Court

Bozeman, Montana

APPENDIX D

MANN-WHITNEY U TEST FOR UNCORRELATED DATA

The formula for this statistical test is:¹

$$U = n_1 n_2 + \frac{n_1(n_1 + 1)}{2} - R_1$$

The mean of the sampling distribution of U is determined by:

$$\mu_U + \frac{n_1 n_2}{2}$$

The formula for the standard deviation is:

$$U = \frac{n_1 n_2 (n_1 + n_2 + 1)}{12}$$

The formula for the standard score is:

$$Z = \frac{U - \mu_U}{\sigma_U}$$

¹ John C. Freund, Modern Elementary Statistics, (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1960), p. 298.

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