A comparison of younger and older students graduated from the baccalaureate nursing program at Montana State University in 1973, 1974, and 1975
by Karen Elaine Solstad Johnson

A thesis submitted in partial fulfillment of the requirements for the degree of MASTER OF NURSING
Montana State University
© Copyright by Karen Elaine Solstad Johnson (1976)

Abstract:
This was a descriptive survey designed to identify differences in characteristics between younger and older students who were graduated from the baccalaureate nursing program at Montana State University in 1973, 1974, and 1975. The sample included all of the 27 older students and 63 randomly selected younger students who were graduated from 1973 through 1975.

The characteristics studied included post-high school employment and education before enrolling in the nursing program, needs and problems as a student, employment after graduation from the nursing program, and career goals. Data for comparison and analysis were obtained through the use of a mailed questionnaire. The findings of the study were based on the returned questionnaires (70% of the older students and 76% of the younger students).

Some differences between the two age groups were identified in relation to: the frequency of post-high school education and employment prior to enrolling in the baccalaureate nursing program; the percent who perceived they made no improvement in study skills; the proportion who identified difficulty in clinical performance during the program; and the number who identified problems relating to family responsibilities during the nursing program. With respect to the other characteristics studied, more similarity than difference between the age groups was noted.

The major conclusion of the study was that, although some differences between the younger and older students were noted, there was generally more similarity between the two age groups than between the individuals within each age group. The differences between individuals within each age group were as great or greater than the differences between the two groups.
STATEMENT OF PERMISSION TO COPY

In presenting this thesis in partial fulfillment of the requirements for an advanced degree at Montana State University, I agree that the Library shall make it freely available for inspection. I further agree that permission for extensive copying of this thesis for scholarly purposes may be granted by my major professor, or, in her absence, by the Director of Libraries. It is understood that any copying or publication of this thesis for financial gain shall not be allowed without my written permission.

Signature Karen E. Johnson

Date May 28, 1976
A COMPARISON OF YOUNGER AND OLDER STUDENTS GRADUATED FROM THE BACCALAUREATE NURSING PROGRAM AT MONTANA STATE UNIVERSITY IN 1973, 1974, AND 1975

by

KAREN ELAINE JOHNSON

A thesis submitted in partial fulfillment of the requirements for the degree of

MASTER OF NURSING

Approved:

Jane Barley
Chairperson, Graduate Committee

Anna M. Shannon
Head, Major Department

Henry L. Peterson
Graduate Dean

MONTANA STATE UNIVERSITY
Bozeman, Montana

June, 1976
ACKNOWLEDGMENTS

The writer wishes to express her sincere appreciation to Professor Sue Barkley, Assistant Director of the School of Nursing at Montana State University, for her valuable assistance and guidance throughout this study. Her generosity in the giving of her time as chairman of the examining committee made the formulation and development of this study progress much more smoothly.

The writer also wishes to thank Dr. Laura Walker, Professor of Nursing, Dr. Robert Thibeault, Professor of Education, and Diane Jensen, Assistant Professor of Nursing, for their willingness to serve on the examining committee. Their constructive help and encouragement have been appreciated.

In addition to those who have helped directly with the study, the writer desires to acknowledge her son Stanley as a continual source of joy, who thus provided the moral support and encouragement for the completion of this educational endeavor.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>LIST OF TABLES</th>
<th>vi</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF FIGURES</td>
<td>vii</td>
</tr>
</tbody>
</table>

**CHAPTER**

1. THE PROBLEM AND ITS SETTING ........................................... 1
   - Introduction ........................................ 1
   - Purpose of the Study ..................................... 2
   - Need for the Study ....................................... 2
   - Objectives of the Study .................................... 6
   - Assumptions ............................................. 7
   - Limitations ........................................... 7
   - Definitions ........................................... 8

2. REVIEW OF LITERATURE .................................................. 9
   - Student Characteristics .................................. 11
   - Attrition ................................................ 13
   - Older Students .......................................... 15
   - Learning .................................................. 17
   - Open and Flexible Curriculum ............................. 18
   - Recruitment ........................................... 20
   - Expanding Role of Nursing ................................. 21

3. METHODOLOGY AND ANALYSIS OF DATA .................................. 23
## CHAPTER V

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS</td>
<td>40</td>
</tr>
<tr>
<td>Summary</td>
<td>40</td>
</tr>
<tr>
<td>Conclusions</td>
<td>41</td>
</tr>
<tr>
<td>Recommendations</td>
<td>46</td>
</tr>
</tbody>
</table>

## APPENDIXES

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. INTRODUCTORY LETTER</td>
<td>52</td>
</tr>
<tr>
<td>THE QUESTIONNAIRE</td>
<td>53</td>
</tr>
<tr>
<td>FOLLOW-UP LETTER</td>
<td>57</td>
</tr>
<tr>
<td>B. QUESTIONNAIRE RESPONSES</td>
<td>58</td>
</tr>
</tbody>
</table>

## BIBLIOGRAPHY

<table>
<thead>
<tr>
<th>Bibliography</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>REFERENCES CITED</td>
<td>67</td>
</tr>
<tr>
<td>ADDITIONAL REFERENCES</td>
<td>70</td>
</tr>
<tr>
<td>Table</td>
<td>Page</td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td>1. Problems in Study Skills.</td>
<td>27</td>
</tr>
<tr>
<td>2. Perceptions Concerning Improvement in Study Skills During the Nursing Program</td>
<td>28</td>
</tr>
<tr>
<td>3. Area of Perceived Difficulty in Academic Program</td>
<td>29</td>
</tr>
<tr>
<td>4. Areas Perceived as Irrelevant or Incomplete</td>
<td>31</td>
</tr>
<tr>
<td>5. Perceptions of Younger and Older Students Regarding Assistance of the Nursing Program in Developing Satisfying Relationships</td>
<td>32</td>
</tr>
<tr>
<td>6. Type of Employing Agency, Institution, or Organization</td>
<td>35</td>
</tr>
<tr>
<td>7. Type of Nursing Position Held After Graduation</td>
<td>35</td>
</tr>
<tr>
<td>8. Reasons Indicated as Most Important or Second Most Important for Seeking Current Employment Position</td>
<td>36</td>
</tr>
<tr>
<td>9. Type of Position Graduate Plans to Work Toward in the Next Ten Years</td>
<td>37</td>
</tr>
<tr>
<td>10. Clinical Area of Most Interest to the Student</td>
<td>38</td>
</tr>
<tr>
<td>11. Plans Regarding Further Education</td>
<td>39</td>
</tr>
<tr>
<td>Figure</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1.</td>
<td>Relevancy and Completeness of Course Content in Preparation for Practice</td>
</tr>
<tr>
<td>2.</td>
<td>Non-Academic Areas of Need or Problems While a Student</td>
</tr>
</tbody>
</table>
ABSTRACT

This was a descriptive survey designed to identify differences in characteristics between younger and older students who were graduated from the baccalaureate nursing program at Montana State University in 1973, 1974, and 1975. The sample included all of the 27 older students and 63 randomly selected younger students who were graduated from 1973 through 1975.

The characteristics studied included post-high school employment and education before enrolling in the nursing program, needs and problems as a student, employment after graduation from the nursing program, and career goals. Data for comparison and analysis were obtained through the use of a mailed questionnaire. The findings of the study were based on the returned questionnaires (70% of the older students and 76% of the younger students).

Some differences between the two age groups were identified in relation to: the frequency of post-high school education and employment prior to enrolling in the baccalaureate nursing program; the percent who perceived they made no improvement in study skills; the proportion who identified difficulty in clinical performance during the program; and the number who identified problems relating to family responsibilities during the nursing program. With respect to the other characteristics studied, more similarity than difference between the age groups was noted.

The major conclusion of the study was that, although some differences between the younger and older students were noted, there was generally more similarity between the two age groups than between the individuals within each age group. The differences between individuals within each age group were as great or greater than the differences between the two groups.
Chapter I

THE PROBLEM AND ITS SETTING

Introduction

As society has grown in numbers, in complexity, and in awareness, it has demanded increased and improved health care. Indeed, society has come to accept health care as a basic right of all, rather than a privilege of those who could afford it.

This demand obviously affected nursing service and nursing education. At the same time that public demand for health care, including nursing services, was increasing there was a decline in the percentage of white, middle-class, female high school graduates--the traditional source of nursing students--seeking admission to nursing education programs.\(^1\), \(^2\)

As the result of a number of research studies, nursing educators became aware of this trend as well as the need to "produce" more nurses. Various steps were initiated to meet this need, including the recruitment of a more

\(^1\)Stuart H. Altman, Present and Future Supply of Registered Nurses, DHEW publ. no. 72-134, November, 1971.

diverse group of students. There is now a greater diversity in professional nursing students with respect to age, sex, marital status, education and experience backgrounds, and career goals. With this in mind the researcher sought to answer the following question: Are there significant differences between younger and older students who were graduated from the baccalaureate nursing program of Montana State University in 1973, 1974, and 1975 in relation to post-high school employment and education, needs as a student, and career goals?

**Purpose of the Study**

It was the intent of the researcher to survey the 1973, 1974, and 1975 graduates of the baccalaureate nursing program at Montana State University to investigate and compare characteristics of younger and older students relating to experiences, needs as a student, and career goals. Identification of significant differences in characteristics between these graduates can assist in planning for recruitment, guidance, counseling, placement, and curriculum development.

**Need for the Study**

Over the past fifty years there have been numerous
studies of nurses and their education and services. These studies have focused on aspects such as the shortage of nurses, personality traits of nursing students, career-patterns, role of nurses, and nursing curricula. Nurses have held meetings, workshops and conferences to discuss, analyze and support (or reject) the findings and recommendations of these studies.

As a result of the focus on the shortage of nurses in relation to the demand for their services, efforts have been made to decrease the attrition rate from nursing education programs,\(^3\) to recruit more students from a broader base of the population,\(^4,\) \(^5\) to return inactive nurses to an active, working role and to adjust the work role model.\(^6\)

Along with these efforts within nursing, there have been changes in society which have influenced the present


situation. An increasing number of adults are enrolling in institutions of higher education. More women are combining career and marriage. Classification of jobs by sex is decreasing.

These factors in addition to others are significant to nursing education because they are creating a new profile of the nursing student and graduate. Rheba deTornyay pointed out that

Learning psychologists have demonstrated consistently that learning is a personal matter, that different learners (or the same learner under different circumstances) have different cognitive styles. Therefore, it is essential that we focus on the learner and plan learning experiences with him in mind as a unique individual, capable and eager to participate in decisions about his own learning.7

It is important for the nursing educator not only to possess fundamental knowledge of nursing practice that she can impart to students, but also to be aware of what the student already knows, his frame of reference, and his aspirations or goals.8

---


To this end there have been studies on personality traits of students, there have been conferences and articles written on the expanding role of the nurse, and there have been workshops on the concept of an open, flexible curriculum. These activities have contributed to changes in nursing education toward a more open and flexible curriculum and diverse student population.

In a speech presented at a meeting of the National League for Nursing's Department of Baccalaureate and Higher Degree Programs, Hawken defined the open, flexible curriculum as one that capitalizes on students' diverse backgrounds and abilities and one designed to fulfill the students' interests and capabilities as well.

The student brings into the classroom his past learning experiences, attitudes, and intrinsic needs, and the success of the educational process will be directly influenced by these learning characteristics. Therefore, educators must increase their efforts to identify student


11Hawken, op. cit.
characteristics first and then develop educational programs that will heighten and stimulate learning if they are to provide suitable types of learning experiences for students.\textsuperscript{12}

**Objectives of the Study**

In order to fulfill the major purpose of this study, the identification and comparison of characteristics of the 1973-1975 baccalaureate nursing graduates of Montana State University, the following specific objectives were formulated to direct the study:

1. To identify ages of these graduates at the time of enrollment in the baccalaureate nursing program.

2. To determine and compare post-high school education and employment of these graduates prior to enrollment in the baccalaureate nursing program.

3. To identify and compare their perceived individual assets, needs; and problems as students in relation to:

   study skills
   academic program

\textsuperscript{12}Metz, op. cit., 3.
interpersonal relations
personal needs
4. To classify and compare current employment positions of these graduates.
5. To identify and compare career goals of these graduates.

Assumptions
The following assumptions were basic to the pursuit of this study:
That differences in students' needs and goals have implications for guidance, counseling, placement, and curriculum development.
That the information solicited in the questionnaire described characteristics of students that can be utilized in recruitment, guidance, counseling, placement, and curriculum development.
That the graduates of 1973 and 1974 would be able to recall this information as accurately as the more recent graduates of 1975.

Limitations
Cause and effect relationships for the differences
or similarities between the identified characteristics were not determined.

Graduates of only one school were included in the sample, and conclusions may not be applicable to students or graduates of all types of nursing education programs.

Characteristics of the graduates which could be compared were limited to the data obtained from the returned questionnaires.

The structure of the questionnaire did not rule out subjectivity in the responses.

Definitions

Younger student: a student who enrolled in the baccalaureate nursing program before the age of 23 years.

Older student: a student who enrolled in or transferred into the baccalaureate nursing program at or after the age of 23 years.
Chapter II

REVIEW OF LITERATURE

Three recent and extensive studies in the field of nursing have aspects relating to this study. They are highlighted here first and referred to later in this review of literature.

One of these studies was conducted by Stuart Altman under a Public Health Service contract from the Division of Nursing, National Institutes of Health, and an Urban Institute University Fellowship. The four years of investigation began in 1967 for the purpose of preparing a comprehensive analysis of the impact of economic factors on the present nurse supply and the projected supply through the 1970's. The report, Present and Future Supply of Registered Nurses (November, 1971), addressed the issues of: present nursing manpower or labor supply, the choice of nursing as an occupation, professional nursing education, and projections about future supply of nurses. Many other studies and reports have relied on the data gathered for Altman's study.1

Another notable study was that of the National Commission on Nursing and Nursing Education which reported its

---

1Stuart Altman, Present and Future Supply of Nurses, DHEW publ. no. 72-134, November, 1971.
findings and recommendations in a volume entitled Abstract for Action published in 1970. This independent and incorporated commission extended from September, 1967 to January, 1970. It focused on four key areas or problems of the nursing profession: supply and demand for nurses, nursing roles and functions, nursing education, and nursing careers.

It was noted that

nursing stands at a critical point in American history. Because it is an integral part of the entire health industry, nursing is affected by the entire major movements within our society, in general, and within the health system, in particular.²

The third study is a continuing, twenty year, longitudinal study initiated in 1962 by the National League for Nursing to obtain specific information about the biographical characteristics of nursing students, their occupational goals, and their reasons for choosing nursing as a career. The Nurse Career-Pattern Study is intended to assist Congress in developing effective legislation for improving nurse training. The study provides information to date on nursing students in baccalaureate, diploma, and associate degree programs. The four problems identified for study are:

1. Relation of type of nursing educational program to subsequent employment.

2. Relation of family responsibilities to nurse's work life.

3. Relation of type of nursing educational program to occupational goals.

4. Characteristics of students who withdraw from nursing education programs.

Data on nursing attrition rates imply that institutional factors need to be identified, studied and remedied to decrease student withdrawals and prevent scholastic failure.³

Student Characteristics

It has been established by a number of investigators that individuals with different personality characteristics are attracted to different occupations.⁴ The following two cited studies used the Edwards Personality Preference Schedule (EPPS) to identify characteristics of students.

³Lucille Knopf, dir., From Student to RN: A Report of the Nurse Career-Pattern Study, DHEW publ. no. 72-130, 1972, 1-42.

Bailey and Claus concluded

Nursing students from different institutions and different nursing educational programs do not have identical need patterns as measured by the EPPS . . . However a cluster of similar traits appear in all five groups.  

Adams and Klein compared six studies regarding personality characteristics of nursing students and graduates. They noted the following consistencies in findings: Nursing students scored higher on the need Deference and the need Endurance scales, and scored lower on the following need scales—Exhibition, Dominance, and Autonomy. Inconsistencies in the findings of the six studies ranged from simple failure to support another to direct contradictions. 

Knopf found that practically all students who were admitted to the three types of nursing programs in the samples were women. The highest percentage of men students (4.5%) occurred in associate degree programs in the 1967 sample. The predominant age of entering students in all samples was 18 or 19 years. Married students entering the baccalaureate programs most frequently reported having no

---

5Bailey, op. cit., 326.

children. Baccalaureate students who reported having attended some other nursing program were about equally represented by prior attendance in diploma and baccalaureate schools. Those who had been in practical nursing programs and were now entering a baccalaureate program ranged from 14.0 to 20.0 percent.  

Knopf further found that more than three-quarters of all students in all samples were attending a nursing school in the same State in which they had attended high school, and this was usually the State of their home residence. The only geographic mobility reflected in the data is among the baccalaureate students, of whom about a fifth sought their nursing education in a State other than their home State.  

Attrition  
Cohen and Gesner at the Cook County School of Nursing in Chicago where the attrition rate was 45-50 percent in 1968 analyzed exit interviews of five years and identified two key factors: 1) emotional problems from home

---

7Knopf, op. cit., 7-10.
8Knopf, op. cit., 10.
and family situations, and 2) an inability to accept the demands of the nurse's work role. Contributing factors were: lack of basic skills in reading, writing, mathematics and poor study habits. They initiated a three part preventive program of crisis intervention, remedial skills tutoring, and motivational or achievement group meetings. In summary, the researchers said that attrition was not necessarily due to intellectual incapacity. Emotional problems due to grief, remembrance of past trauma activated by nursing clinical situations, and poor basic preparation and study skills were more important factors. Faculty, too, have an effect on students' performance. Therefore, programs to prevent attrition must take all these factors into consideration, if they are to succeed in reducing the present dropout rate.9

Katzell approached the problem differently in her study of 1852 students in 43 diploma programs. She compared the expectations and experiences of students who withdrew in the first year against the expectations and experiences of those who remained. The data showed that: Students who

remained had experienced more satisfactions, both expected and unexpected, than those who withdrew. It was not the presence of unexpected stresses which was associated with withdrawal, but the absence of expected satisfactions. Students who remained in nursing had more realistic expectations of both the stresses and the satisfactions to be found in nursing than those who withdrew.\textsuperscript{10}

Rottkamp noted that there is usually more than one reason for withdrawal . . . Academic difficulties are related to personal dissatisfactions, physical illness, and disciplinary problems . . . The nursing dropout who has had a lapse of time and experience and later returns to her earlier goal may prove to be the superior student and, later on, the superior practitioner.\textsuperscript{11}

Older Students

Baccalaureate programs were the first to help breakdown the age barrier. After World War II, the older student became part of the college scene; exclusion from the nursing program because of age seemed unreasonable. Community


\textsuperscript{11}Barbara C. Torrkamp, "Attrition in Basic Baccalaureate Nursing Programs," \textit{Nursing Outlook}, 16 (June, 1968) 45.
college programs of the 60's finally gave the older student a place in the sun. Now the older student is not only accepted, but sought and welcomed. Their previous style of education does create some problems for faculty. Ideally the student should be re-educated in current philosophy of education. These students need more specific directions.

Students often bring with them much resentment about past arbitrariness of instructors, exams, and grades, which may be projected into the present situation. Many of these older students have made heavy emotional, social, and financial investments in the nursing program. Passing the course is important, because it may not be possible to try again.

The greatest assets these students bring with them are their maturity and life experiences. The older student often tries to validate her own life experiences, both successes and failures, during the nursing course.  

Richter described a campaign of publicity to attract mature women to nursing in Rochester, New York and surrounding counties. Cleland reported conclusions of a


reactivation study relating to career motivation of married nurses. It presented the following premise regarding combining career and marriage:

that employment for married women must be planned as secondary to family responsibility, but satisfying and meaningful within that framework, and the model of male employment need not be the model for the employment of married women. 14

Learning

It was previously pointed out that learning is a personal matter, differing with individuals and circumstances. 15 The student brings into the classroom his past learning experiences, attitudes, and intrinsic needs, and the success of the educational process will be directly influenced by these characteristics. Divergence of educational and student objectives is a frequent source of frustration to the learner and the teacher, and it reduces the effectiveness of the educational program. If differences in expectations can be identified by the teacher at the


classroom level, adaptations can be made toward developing a more realistic learning environment.  

The process of identifying the learning characteristics and utilizing the information acquired involves four phases: 1) recognition of the necessity of acquiring information about the student's past educational experiences, 2) acquisition of the desired information, 3) determination of the implications of the data and 4) implementation of the prescribed adaptations. Educators must strive to identify the learning characteristics of the student on all educational levels in order to more fully prepare the student to meet the challenge of his professional future.  

Open and Flexible Curriculum  

Much has been written about flexible curricula, articulation in nursing, career ladders, and upward mobility. Tyler recognized in 1966 that if we are to develop a more effective curriculum and a more adequate instructional program, we shall need to experiment, because many of the things we are now doing may be less appropriate.

---

16 Edith A. Metz and Carol M. McCleary, "Knowing the Learner," *Journal of Nursing Education*, 9 (January, 1970), 3, 4.

17 Ibid., 4, 9.
for the conditions we now face, and certainly most of the things we are now doing can be improved in some respects, especially in terms of effectiveness.\textsuperscript{18}

Lysaught noted that the benefits from curriculum studies can come only when new patterns are implemented. Based on study and analysis, one can hope for varied but useful approaches to nursing education and to effective articulation among the institutions involved.\textsuperscript{19} He proposed two basic assumptions that should underlie any curriculum proposal. They were:

\begin{itemize}
\item[a)] The acceptance, as a core value of our American culture, that education should be an open-ended process and that access to enlarged opportunities is a right of every individual.
\item[b)] As a corollary, care must be taken in curricular planning to avoid unnecessary impediments before or between collegiate programs in nursing that would inhibit the orderly transfer and acceptance of qualified individuals who wish to pursue higher career goals.\textsuperscript{20}
\end{itemize}

Hawken defined the open, flexible curriculum and identified some means for permitting flexibility in a


\textsuperscript{19}Lysaught, op. cit., 117.

\textsuperscript{20}Lysaught, op. cit., 116.
curriculum plan. She recognized the following problems and challenges for the teacher:

1. motivating a diverse group of students to become self-directed.
2. providing valid means for assessment.
3. deciding how much of the nursing courses the student can complete through proficiency exams.
4. having faculty available to supervise the clinical assessment.
5. deciding the length of time one may spend in a decelerated program.
6. keeping up with the student is the most crucial and important challenge

Recruitment

The increasing availability of college to more and more young people, and the ever-widening opportunities for women in the traditionally masculine business and professional fields have an impact on the recruitment into nursing. The conventional agencies for recruitment into all the professions are the academic institutions that prepare the future practitioners. In view of the magnitude of the current problems in nursing, the educational

---

21Patty Hawken, "Developing an Open, Flexible Curriculum," speech presented at NLN-DBHDP meeting in Miami, November 12, 1970.

institutions need help in developing public understanding about the opportunities and needs for nursing students.

In view of the growing need for more nurses and the current decline in the choice of a nursing career among students who have traditionally supplied the bulk of the manpower, whole new groups must be drawn into the recruitment effort. These could include: the disadvantaged and minority groups, practical nurses, older women, and men.23

Knopf reminded that schools recruiting older and/or married students must be aware that family responsibilities occupy an important part of the student's life. Schedules and other areas of the curriculum need to be flexible enough to retain these students. With the proliferation of health careers and many changes in nursing itself, nursing must be reinterpreted to prospective recruits and to the lay public.24

Expanding Role of Nursing

In the last several years, significant changes have occurred in the practice of nursing. It has a strengthened scientific basis. Nursing care is given more and more by specialists in short,

23Lysaught, op. cit., 136-140.
24Knopf, op. cit., p. 41.
intensive periods in hospitals and in long-term follow-up periods in out-of-hospital facilities. Specialization has deepened in such clinical areas as coronary care, neurology, renal disorders, kidney dialysis, midwifery, and rehabilitation therapy. Not only are the changes taking place in the many varieties of clinical specialties, but also within whole categories of patient care—pediatrics, geriatrics, care of the chronically ill, intensive care, and rehabilitation care. New and broader nursing roles also are emerging in out-of-hospital areas where health services have heretofore been neglected, as in neighborhood health centers, school health, and in programs aimed at the prevention of illness and the maintenance of health.\(^{25}\)

Lysaught summarized the ideas about the nurses' role thus:

There are some things we can predict with certainty about the future role of the nurse. It will undoubtedly be more complex, more broad, and more varied than it is today—and it will most likely involve far greater degrees of independent judgment and action. This role development will stem from the growth of the population and the critical shortage of physicians. The public and the other health professions will demand that nurses be utilized at their highest possible level of practice.\(^{26}\)


\(^{26}\) Lysaught, op. cit., 158.
Chapter III

METHODOLOGY AND ANALYSIS OF DATA

The purpose of this study was to identify and compare selected characteristics of younger and older students who were graduated from the baccalaureate nursing program at Montana State University in 1973, 1974, and 1975. It was assumed that identification of significant differences between the characteristics of these students could assist in the planning for recruitment, guidance, counseling, placement, and curriculum development.

The population for this research study consisted of the 1973, 1974, and 1975 graduates of the baccalaureate nursing program at Montana State University. Students who were registered nurses at the time of enrolling in the baccalaureate nursing program were excluded from the sample. In addition to age, their previous education and experience in nursing might have been significant factors in influencing their needs as students and their career goals.

The names of the graduates were obtained from the commencement programs. The birthdates and dates of enrollment were obtained from the files of graduates in the School of Nursing.

The sample included: 1) all 27 of the 1973, 1974,
and 1975 graduates who enrolled in or transferred into the baccalaureate nursing program at or after the age of 23 years; 2) 63 randomly selected graduates from 1973-1975 who enrolled in the baccalaureate nursing program prior to the age of 23 years. A total sample size between 75 and 100 was desired. Sixty-three was approximately one sixth of all the younger students. The 63 younger students plus the 27 older students made a total sample size of 90.

A questionnaire was developed to elicit data from the graduates regarding:

1) education and employment before enrollment in the baccalaureate nursing program.

2) aspects of individual needs and problems as a student

3) employment following graduation from the baccalaureate nursing program

4) career goals in relation to employment and education.

The questionnaire was tested on ten registered nurse students from the 1973, 1974, and 1975 graduating classes of the baccalaureate nursing program at Montana State University.

The questionnaire with an introductory letter (see
Appendix A) and a stamped, self-addressed envelope was mailed to each of the 27 older students and 63 younger students in the sample. The addresses of the graduate were obtained from the files of the School of Nursing or the Alumni Office. If the questionnaire was returned to the researcher as nondeliverable to the address indicated in these files, a questionnaire was then sent to the graduate in care of his parents' address when such an address was available.

If the mailed questionnaire was not returned by the graduate within a month, a follow-up letter was sent to the graduate (see Appendix A). Of the 27 older students in the sample, 19 completed and returned the questionnaire (70.4%). A deliverable address was not available for three of the older graduates and the remaining five did not return the questionnaire to the researcher.

Forty-eight (76.2%) of the 63 younger students completed and returned the questionnaire. A deliverable address was not available for two graduates and the questionnaire was not returned by the remaining 13 graduates in the sample of younger students.

The analysis was based only on the responses on the returned questionnaires. Data obtained from the returned
questionnaires and not included in this analysis may be found in Appendix B.

The first two questions requested a listing of all formal education and employment following high school before enrolling in the baccalaureate nursing program. As one might expect, responses to question one showed a significantly greater proportion of the older students had some formal education following high school before entering the baccalaureate nursing program than did younger students. Only fourteen of the younger students (29%) indicated any formal education beyond high school prior to enrolling in the baccalaureate nursing program as contrasted with 89.5% of the older students.

Similarly, responses to the second question indicated a higher percentage of older students had had at least some employment experience before entering the baccalaureate nursing program. Only one of the nineteen responding older students indicated no paid work experience as contrasted with eleven of the 48 younger students. There was a wide diversity in types of work experiences reported by both groups. In both groups of students, experience as a nurse's aide was the most frequently identified job in related health occupations. Nine or 47 percent of the
older students had been employed in a related health occupation prior to entering the baccalaureate nursing program; whereas, only fourteen or 29 percent of the younger students had been employed in a related health occupation.

Organization of time and use of the library were identified more frequently by younger students than by older students. However, more of the older students felt they had difficulty understanding assignments than did the younger students. Table 1 shows the percentage of students who indicated difficulty in each aspect listed. The problems are listed in the order they appeared on the questionnaire.

Table 1
Problems in Study Skills

<table>
<thead>
<tr>
<th>Problem</th>
<th>% of students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>younger</td>
</tr>
<tr>
<td>Reading ability and comprehension</td>
<td>27.1</td>
</tr>
<tr>
<td>Organization of time</td>
<td>47.9</td>
</tr>
<tr>
<td>Use of the library</td>
<td>18.8</td>
</tr>
<tr>
<td>Understanding assignments</td>
<td>2.1</td>
</tr>
<tr>
<td>Relevant notetaking</td>
<td>29.2</td>
</tr>
<tr>
<td>Ability to concentrate</td>
<td>41.7</td>
</tr>
<tr>
<td>Other aspect of self-discipline</td>
<td>14.6</td>
</tr>
<tr>
<td>No problem perceived</td>
<td>2.1</td>
</tr>
</tbody>
</table>
More than half of the students felt they improved their study skills during the program through their own effort. In comparing the younger and older students, they perceived the assistance of others as influencing their improvement in about equal proportions. However, nearly one-third of the older students said they made no improvement regarding their problems of study skills during the program, as contrasted with only one-eighth of the younger students making a similar response. Their responses, given in Table 2, are listed in the order they appeared on the questionnaire.

Table 2
Perceptions Concerning Improvement in Study Skills During the Nursing Program

<table>
<thead>
<tr>
<th>Student's perception</th>
<th>% of Students*</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>younger</td>
<td>older</td>
<td></td>
</tr>
<tr>
<td>No improvement in study skills</td>
<td>12.5</td>
<td>31.6</td>
<td></td>
</tr>
<tr>
<td>Improved through own effort</td>
<td>56.2</td>
<td>57.9</td>
<td></td>
</tr>
<tr>
<td>Improved through own effort and with the assistance of:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>nursing instructors</td>
<td>8.3</td>
<td>10.5</td>
<td></td>
</tr>
<tr>
<td>non-nursing instructors</td>
<td>4.2</td>
<td>5.3</td>
<td></td>
</tr>
<tr>
<td>fellow students</td>
<td>29.2</td>
<td>26.3</td>
<td></td>
</tr>
<tr>
<td>added other</td>
<td>2.1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Did not check any response</td>
<td>2.1</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

*percents total more than 100 because some respondents checked more than one response
Question five related to the academic program and asked if they had difficulty in any of the following areas: non-nursing courses, nursing courses, or clinical performance. Clinical performance was perceived more frequently as an area of difficulty by older students than by younger students. Chemistry was the most frequently specified non-nursing course by both groups of respondents.

Table 3
Area of Perceived Difficulty in Academic Program

<table>
<thead>
<tr>
<th>Area</th>
<th>% of Students*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>younger</td>
</tr>
<tr>
<td>Non-nursing courses</td>
<td>29.2</td>
</tr>
<tr>
<td>Nursing courses</td>
<td>18.8</td>
</tr>
<tr>
<td>Clinical performance</td>
<td>10.4</td>
</tr>
<tr>
<td>No difficulty perceived</td>
<td>45.8</td>
</tr>
</tbody>
</table>

*percent total more than 100 because some respondents checked more than one response

The majority of students in both age groups felt the assistance received in the academic program from faculty was adequate or more than adequate for their needs. One-fifth of the older students felt the assistance from faculty was less than adequate. Thirty percent of the younger students
believed the assistance was less than adequate for their needs.

Question seven asked if the content of courses was relevant and complete for their preparation for practice. A higher proportion of the older students than the younger students did not feel the content of courses was relevant and complete, as illustrated in Figure 1.

![Responses of Younger Students*](#)  
48% no  
54% yes  

![Responses of Older Students](#)  
63% no  
37% yes

*one person checked both yes and no

Figure 1

Relevancy and Completeness of Course Content in Preparation for Practice

Table 4 indicates that a similar proportion of the participants in each age group felt the content of the nursing courses was either incomplete or irrelevant in their
preparation for practice. Respondents in both age groups more frequently identified nursing courses as incomplete or irrelevant than they did non-nursing courses. A greater percentage of the older students than the younger students indicated non-nursing courses and other aspects as incomplete or irrelevant. The clinical aspect was cited most frequently by both age groups (35% of the younger students and 26% of the older students).

Table 4
Areas Perceived as Irrelevant or Incomplete (Younger Students N=48 Older Students N=19)

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Younger Students</th>
<th>Older Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
</tr>
<tr>
<td>Nursing courses</td>
<td>22</td>
<td>41.7</td>
</tr>
<tr>
<td>Non-nursing courses</td>
<td>3</td>
<td>6.3</td>
</tr>
<tr>
<td>Other or not clearly specified</td>
<td>2</td>
<td>4.2</td>
</tr>
<tr>
<td>Total indicating some aspect as irrelevant or incomplete*</td>
<td>23</td>
<td>47.9</td>
</tr>
</tbody>
</table>

*Total is less than the sum of the subgroups because some students indicated more than one area or course.

Interpersonal relationships was the focus of question eight. The student was to indicate whether or not the
nursing program assisted him in developing satisfying working relationships with patients, other students, and faculty, and in developing the skill to establish effective interpersonal relationships for the future. In each category a greater percentage of younger students than older students felt the nursing program had assisted them in developing satisfying or effective interpersonal relationships. In both age groups, fewer students felt the nursing program assisted them to develop satisfying relationships with faculty than with individuals in the other categories.

Table 5
Perceptions of Younger Student about Assistance of the Nursing Program in Developing Satisfying Relationships

<table>
<thead>
<tr>
<th>% of Students</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>With patients</td>
<td>91.7</td>
<td>6.3</td>
</tr>
<tr>
<td>With other students (one checked both yes and no)</td>
<td>87.5</td>
<td>14.6</td>
</tr>
<tr>
<td>With faculty</td>
<td>70.8</td>
<td>27.1</td>
</tr>
<tr>
<td>Skills for the future</td>
<td>93.8</td>
<td>2.1</td>
</tr>
</tbody>
</table>

Perceptions of Older Students about Assistance of the Nursing Program in Developing Satisfying Relationships

| | % of Students |  |
| | yes | no |  |
| With patients | 73.7 | 10.5 | 15.8 |
| With other students | 47.4 | 26.3 | 26.3 |
| With faculty | 42.1 | 42.1 | 15.8 |
| Skills for the future | 73.7 | 10.5 | 15.8 |
The ninth question asked for an indication of non-academic areas of particular need or problem during their enrollment in the nursing program. The following five areas were specified on the questionnaire: finances, family responsibilities, transportation, housing, and health. Their responses are indicated in Figure 2.

**Figure 2**

Non-Academic Areas of Need or Problems While a Student
More than half the respondents in both age groups indicated they had particular financial needs or problems as a student. This area was noted more frequently than any other non-academic area. As might be expected, a higher percentage of older students checked family responsibilities than did the younger students. Health was checked least often by both groups of students.

The next question concerned the adequacy of assistance from university personnel as perceived by the student when assistance was sought for the problems noted in question nine. There did not appear to be great difference in the perceptions of the two age groups regarding the adequacy of the assistance.

Question twelve asked for a listing of employment following graduation from the baccalaureate nursing program. The following two tables identify the type of agencies and type of positions the respondents were employed in since their graduation from the baccalaureate nursing program.

The following tables indicate that a large majority of the graduates accepted employment in a hospital setting in the early months of their professional careers. They
were also most frequently employed in a staff nurse position in the period immediately following graduation.

Table 6
Type of Employing Agency, Institution, or Organization

<table>
<thead>
<tr>
<th>Agency</th>
<th>% of students younger</th>
<th>% of students older</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital/medical center</td>
<td>89.6</td>
<td>78.9</td>
</tr>
<tr>
<td>Military</td>
<td>2.1</td>
<td>15.8</td>
</tr>
<tr>
<td>Nursing home/extended care facility</td>
<td>12.5</td>
<td>5.3</td>
</tr>
<tr>
<td>Community or public health</td>
<td>4.2</td>
<td>10.5</td>
</tr>
<tr>
<td>Clinic/doctor's office</td>
<td>6.3</td>
<td>0</td>
</tr>
<tr>
<td>School of nursing</td>
<td>6.3</td>
<td>0</td>
</tr>
</tbody>
</table>

*Some graduates have held positions in several types of agencies therefore percents total more than 100.

Table 7
Type of Nursing Position Held After Graduation

<table>
<thead>
<tr>
<th>Position</th>
<th>% of students younger</th>
<th>% of students older</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff nurse/private duty</td>
<td>91.7</td>
<td>94.7</td>
</tr>
<tr>
<td>Assistant head nurse or alternate charge nurse</td>
<td>12.5</td>
<td>0</td>
</tr>
<tr>
<td>Head nurse</td>
<td>4.2</td>
<td>5.3</td>
</tr>
<tr>
<td>Supervisor</td>
<td>0</td>
<td>5.3</td>
</tr>
<tr>
<td>Director of nursing</td>
<td>2.1</td>
<td>0</td>
</tr>
<tr>
<td>Instructor</td>
<td>6.3</td>
<td>5.3</td>
</tr>
</tbody>
</table>

*Some graduates had been employed in more than one type of position since graduation.
The thirteenth question requested an indication of the two most important reasons in seeking the current or most recent employment position. Several students checked (X) the reasons rather than ranking (1,2) the factors as requested so it is impossible to get an accurate count of how frequently a reason was identified as most important and how frequently the reason was second most important. Table 8 shows the frequency each factor was selected as either first or second in importance to the individual. The reasons are listed in the order they appeared in the questionnaire.

Table 8

<table>
<thead>
<tr>
<th>Reason</th>
<th>% of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geographical location</td>
<td>43.8 47.4</td>
</tr>
<tr>
<td>Salary</td>
<td>31.3 36.8</td>
</tr>
<tr>
<td>Type of agency or reputation of agency</td>
<td>31.3 31.3</td>
</tr>
<tr>
<td>It's all that was available</td>
<td>10.4 15.8</td>
</tr>
<tr>
<td>Working conditions, such as hours</td>
<td>27.1 21.1</td>
</tr>
<tr>
<td>To be with friends</td>
<td>10.4 5.3</td>
</tr>
<tr>
<td>Other</td>
<td>41.7 36.8</td>
</tr>
</tbody>
</table>
Most of the graduates felt they had several employment opportunities available to them as only ten percent of the younger and fifteen percent of the older students indicated their current position was all that was available to them. There does not appear to be a marked degree of difference between the age groups regarding which factors were important in seeking employment.

The student's plans for employment ten years in the future were the focus of question fourteen. Responses regarding their anticipated future efforts are indicated in Table 9 in the order they appeared on the questionnaire. It can be noted that a great majority of the students within each age group anticipate continuing active employment in the field of nursing.

Table 9
Type of Position Graduate Plans to Work Toward in the Next Ten Years

<table>
<thead>
<tr>
<th>Position</th>
<th>% of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>younger</td>
</tr>
<tr>
<td>Unemployed or retired</td>
<td>2.1</td>
</tr>
<tr>
<td>Field other than nursing</td>
<td>2.1</td>
</tr>
<tr>
<td>In nursing:</td>
<td></td>
</tr>
<tr>
<td>Staff nurse</td>
<td>39.6</td>
</tr>
<tr>
<td>Head nurse or supervisor</td>
<td>10.4</td>
</tr>
<tr>
<td>Nursing education</td>
<td>27.1</td>
</tr>
<tr>
<td>Nursing consultant</td>
<td>2.1</td>
</tr>
<tr>
<td>Nursing research</td>
<td>2.1</td>
</tr>
<tr>
<td>Independent practitioner</td>
<td>14.6</td>
</tr>
</tbody>
</table>
Question fifteen asked the student to identify the broad clinical area of most interest to him/her. It is noteworthy that not one student in either age group identified geriatrics as the clinical area of greatest interest to him or her. Obstetrics was selected more frequently by younger students than by older students. Older students more frequently indicated primary interest in community or public health than did younger students.

Table 10

Clinical Area of Most Interest to the Student

<table>
<thead>
<tr>
<th>Clinical area</th>
<th>% of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>younger</td>
</tr>
<tr>
<td>Adult medical-surgical</td>
<td>39.6</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>10.4</td>
</tr>
<tr>
<td>Obstetrics</td>
<td>16.7</td>
</tr>
<tr>
<td>Psychiatric-mental health</td>
<td>16.7</td>
</tr>
<tr>
<td>Geriatrics</td>
<td>0</td>
</tr>
<tr>
<td>Community or public health</td>
<td>12.5</td>
</tr>
<tr>
<td>Anesthesia/emergency room</td>
<td>2.1</td>
</tr>
<tr>
<td>No answer</td>
<td>2.1</td>
</tr>
</tbody>
</table>

Plans for further education were the focus of the final question. Although soon after graduation slightly more of the younger students began work toward a master's
degree in nursing, a higher percentage of the older students anticipate pursuing advanced degrees in nursing. All of the older students and 94 percent of the younger students plan to continue their formal education. It was noted previously that only two percent of the younger students and five percent of the older students indicated plans for employment in some field other than nursing. Yet, eight percent of the younger students and sixteen percent of the older students anticipate pursuing education in a field other than nursing. Table 11 identifies their responses concerning further education.

Table 11

<table>
<thead>
<tr>
<th>Plans Regarding Further Education</th>
<th>% of Students*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>younger</td>
</tr>
<tr>
<td>Currently, or have been, enrolled in a master's program in nursing</td>
<td>12.5</td>
</tr>
<tr>
<td>Expect to return to school for master's degree in nursing</td>
<td>29.2</td>
</tr>
<tr>
<td>Will perhaps work toward a doctorate</td>
<td>6.3</td>
</tr>
<tr>
<td>Will participate in continuing education programs but not work toward a higher degree</td>
<td>50.0</td>
</tr>
<tr>
<td>Not planning to complete any further formal education</td>
<td>6.3</td>
</tr>
<tr>
<td>Will pursue education in field other than nursing</td>
<td>8.3</td>
</tr>
</tbody>
</table>

*Some students checked more than one response so total percentage is greater than 100.
Chapter IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

It has been demonstrated by several researchers that there has developed a greater diversity than previously among professional nursing students with respect to age, sex, marital status, educational and experiential backgrounds, and career goals. Therefore, a descriptive survey was designed by this researcher to identify differences in characteristics between younger and older students who were graduated from a baccalaureate nursing program. The researcher sought to identify differences in relation to their stated post-high school employment and education, their perceived needs as a student, and their indicated career goals.

The population for this study was the 1973, 1974, and 1975 graduates of the baccalaureate nursing program at Montana State University excluding those graduates who were registered nurses at the time of enrollment in the nursing program. The sample of these graduates included: 1) all students (N = 27) who were 23 years of age or older at the time of enrollment, and 2) a random sample (N = 63) of
those students who were less than 23 years of age at the time of enrollment in the baccalaureate nursing program.

Data for comparison and analysis were obtained through use of a mailed questionnaire. The results of this study were based on the responses on the returned questionnaires (19 of the 27 older students and 48 of the 63 younger students in the sample).

Conclusions

Some differences in characteristics between the younger and older students were identified in this study. Yet, the data indicated there was more similarity between the age groups than between the individuals within each age group. That is, the differences between individuals within each age group were as great or greater than the differences between the two groups.

In relation to education and employment prior to enrollment in the baccalaureate nursing program, there was a significant difference between the groups. A greater proportion of the older students had employment experience and had formal education beyond high school before enrolling in the baccalaureate nursing program. However, the influence of these differences in backgrounds on their needs as
students and their career goals cannot be fully ascertained from the study data.

From the participants' responses regarding problems in the area of study skills, it can be concluded that nearly all of the students felt they had at least some difficulty in this area. The data indicated ability to concentrate was a problem for nearly half the students. Organization of time and use of the library were problems noted more frequently by younger students than by older students. On the other hand, a greater proportion of older students than younger students indicated they had difficulty understanding the assignments.

The data regarding improvement in study skills indicated the majority of the students in both age groups did improve during the program through their own effort or with the assistance of others. Nevertheless, the difference between the percentages of older students (31.6%) and younger students (12.5%) who indicated no improvement in study skills was noteworthy.

In relation to the academic program there was no important difference between the proportions of the students in the two groups who perceived themselves as having had difficulty with the nursing courses nor with the
non-nursing courses. Yet, a greater percentage of the older students than younger students felt they had difficulty in clinical performance in the program. The two groups were similar in their stated perceptions with respect to the degree of adequacy of assistance received in the academic area from faculty.

While a greater proportion of older students than younger students indicated the content of courses was not complete and relevant in their preparation for practice, the difference between the perceptions of individuals within each group was as great or greater than the difference between the groups. The high percentage of students who indicated course content was not complete and relevant in their preparation for practice should not be interpreted as an overall dissatisfaction with their preparation since the respondent often indicated only one course or area as incomplete or irrelevant.

Due to the percentage of older students who did not respond to the question relating to the assistance of the nursing program in developing satisfying interpersonal relationships, the comparison between the two groups was less conclusive. Nonetheless, the perceptions of the groups tended to be more similar than different with the exception
of the category relationships with faculty. Fewer of the older students felt the nursing program assisted them to develop satisfying relationships with faculty. Individual expectations and desires regarding the nature of the various interpersonal relationships and individual conceptions of the degree of personal responsibility for such relationships may have accounted for some of the apparent differences in the perceptions regarding the assistance of the nursing program for developing satisfying and effective working relationships.

Of the five specified, non-academic areas of particular need or problem during the period of enrollment, the greatest difference between the groups occurred in the aspect of family responsibility. It was concluded from the data that the groups were more similar than different with respect to identified needs or problems in the areas of finances, transportation, housing, and health. There was not a significant difference in the perceptions of the two age groups regarding the adequacy of the assistance of the university personnel when assistance was sought for these non-academic problems.

There was considerable similarity between the two age groups in both the type of agency and the position in
which these graduates were employed in the early months of their professional careers. Likewise, the two groups were similar in their identified reasons for seeking their most recent employment.

In relation to their plans for future employment, the greatest differences were noted regarding the staff nurse position and the independent practitioner role. It was concluded that younger students more frequently than older students anticipated employment ten years in the future in a staff nurse position. In contrast, a greater proportion of older students than younger students expressed an intention to become an independent practitioner.

The data also indicated the two age groups were more similar than different with respect to the clinical areas of most interest to the student.

Finally, the two groups were similar in their intent to continue to participate in some formal education even though they differed in the type, timing, area, or extent of education they anticipated they would pursue.

As a result of the study, this researcher would support the conclusion of Smith, who wrote regarding the atypical student:
The fact that a student has lived longer than her classmates . . . may stand out at first, but each student is different in her own particular way--such as being unusually shy or bright or creative. The teacher has the opportunity to help each student make a contribution to nursing by capitalizing on her uniqueness as an individual--a uniqueness which is not only recognized but nurtured while she studies nursing.¹

Recommendations

As the result of this study recommendations were suggested in the areas of nursing education, nursing service, and further research. In terms of recruitment into the nursing education program and the nursing profession, students from both age groups should continue to be recruited. Their needs as students and career goals identified in this study do not suggest a sufficient difference in contribution to the profession or success in the program to warrant discrimination on the basis of age for acceptance into nursing.

The guidance and counseling the student receives during the baccalaureate nursing program ought to continue to be individualized in approach. With respect to study skills, faculty need to increase their ability to detect

the student who is not improving his or her study skills. Once the student and his type of problem with study skills have been identified more appropriate assistance can be provided.

In addition, the researcher believes that faculty should increase their efforts to ascertain the need for academic assistance and their efforts to identify the type or extent of assistance desired by the individual student. These efforts may contribute to a decrease in the number of students who feel faculty assistance is less than adequate in the academic area.

The students' reflections on the relevancy and completeness of course content in preparation for practice should not mean a wholesale curriculum revision. The researcher believes a shared responsibility between nursing education and nursing service is indicated. Faculty should assist the student to determine the relevancy of course content and should promote the student's awareness of his developing skills and knowledge. Nursing service personnel need to analyze not only the institution's needs for nursing services and communicate these to prospective employees, but also to realistically recognize the extent to which nursing knowledge and skills can be present in the new graduate of
a professional nursing program. Such information ought to be considered in the development of appropriate orientation programs, or possibly even nurse internship programs. The assistance and guidance of faculty combined with realistic expectations from nursing service administrators and supervisors may facilitate a greater belief in the adequacy of the preparation for practice in the baccalaureate nursing graduate. Further studies are indicated to determine the degree of correlation between the perceptions of students, graduates, faculty, and nursing service personnel regarding course content and perceived relevancy and adequacy of preparation for practice.

Because of the number of students who indicated particular financial needs, additional sources of scholarships and loans should be sought by the nursing education program. The area of financial needs, as with the other characteristics identified, should receive further study to more specifically define the extent of the problem and to compare the student's perceptions and interpretations with those of faculty or other appropriate individuals.

In light of the development and changes within the nursing profession and the apparent lack of interest of these graduates to pursue a career in nursing research,
this researcher recommends increasing the efforts within the baccalaureate nursing program to stimulate interest in nursing research. Investigation of other baccalaureate nursing programs and their various approaches to incorporating the nursing research component into the undergraduate curriculum is recommended. Increasing involvement of the nursing faculty in clinical research is indicated. In addition to increasing the body of nursing knowledge and facilitating their own professional growth, their involvement should enhance the student's perception of the role of clinical research.

Geriatrics is another area this researcher recommends that the nursing faculty consider their role in changing attitudes or stimulating the interest of students. Further research is necessary to determine more specifically the students' attitudes about gerians and geriatric nursing and to explore means of positively influencing those attitudes.

In terms of this research study and recommendations for further study, the following recommendations are made in addition to the above noted suggestions:

1) A similar study which would include students from
several types of nursing education programs to obtain a larger sample from a broader population.

2) A similar study which would begin before graduation and would include a sample of all students who enroll in the program, not just graduates, to determine if age is a contributing factor to attrition.

3) A study which would incorporate a follow-up five to ten years after graduation to determine fulfillment of and/or changes in career goals.

4) Studies of specific aspects of the identified characteristics and which would include cross-checks of the student's perceptions.
APPENDIXES
INTRODUCTORY LETTER

I am conducting a study of Montana State University nursing graduates for the purpose of identifying differences or similarities between younger and older students regarding their needs as students and their career goals.

I would like you to complete the enclosed questionnaire. Please feel free to use the reverse side to make any additional comments regarding any of the questions. All information will be anonymous and tabulated in groups. Your name will not appear in the study. Your signature at the end of the questionnaire will indicate your permission to use the information you supply in my study. Final copies of the thesis will be on file at the Montana State University library and School of Nursing where you may review it.

The questionnaire is divided into three main time periods in relation to enrollment in the baccalaureate nursing program at Montana State University. It will take you approximately 15-20 minutes to complete the questionnaire. When you have answered all the questions, return it in the enclosed, addressed envelope. If you would like me to forward your current address to the School of Nursing to update their files please place a return address on the envelope. Your cooperation and prompt response will be greatly appreciated.

Sincerely yours,

Karen E. Johnson, R.N.
Graduate nursing student
Montana State University

This study has the approval of the School of Nursing and your cooperation will be appreciated.

Sue Barkley, Acting-Director
Montana State University
School of Nursing
53

THE QUESTIONNAIRE

NAME__________________________________

PRIOR TO ENROLLMENT IN THE BACCALAUREATE NURSING PROGRAM AT MONTANA STATE UNIVERSITY

1. Did you have any formal education following high school graduation before entering the nursing program at MSU? yes_____, no_____. If yes, check the appropriate category:
   _____Completed work on a baccalaureate degree (major_______)
   Did not receive a baccalaureate degree, but attended a college or university:
      3 or more years_____ 
      1 to 3 years_____ 
      less than 1 year_____ 
   _____Completed a vocational-technical program (area of study____________________) 
   _____Other, please specify______________

2. List in sequence, most recent first, all employment following high school graduation prior to entering the baccalaureate nursing program at Montana State University.
   Type of employing agency, institution, or organization_____
   Nature of work or description of position_____
   Dates from___ to___

CONCERNING PERIOD OF ENROLLMENT IN THE NURSING PROGRAM AT MONTANA STATE UNIVERSITY

3. In relation to study skills, what areas were problems for you? (You may check more than one).
   _____reading ability and comprehension
   _____organization of time
   _____use of the library
   _____understanding assignments
   _____relevant notetaking
   _____ability to concentrate
   _____other aspect of self-discipline, specify_______
4. For the problems you identified in question 3 regarding study skills, would you say:
   _____ you made no improvement in study skills
   _____ you improved during the program through your own effort
   _____ you improved through your own effort and with the assistance of:
     nursing instructors
     non-nursing instructors
     fellow students

5. In relation to the academic program, did you feel you had difficulty in any of the following areas? (Leave blank if no, check if yes)
   _____ non nursing courses (specify, if you wish______ )
   _____ nursing courses (specify, if you wish__________ )
   _____ clinical performance

6. Do you feel the assistance that you received in the academic area from the faculty was:
   _____ less than adequate for your needs
   _____ adequate for your needs
   _____ more than adequate for your needs

7. Was the content of the courses (nursing and non-nursing) relevant and complete for your preparation for practice?
   _____ yes
   _____ no, if no identify irrelevant or incomplete areas

8. Concerning your working relationships with others do you feel the nursing program assisted you:
   a) in developing satisfying relationships
      with patients? _____ yes, no_____
      with other students? _____ yes___, no_____
      with faculty? _____ yes___, no_____
      b) and in developing the skill to establish effective interpersonal relationships for the future?
         yes______, no_____

9. Check any of the following which you feel were areas of particular need or presented problems for you while you were a student:
   _____ finances
   _____ family responsibilities (continued)
9. (continued)
   _____ transportation
   _____ housing
   _____ health

10. If you checked any of the items in question 9, how adequately do you feel the University personnel assisted you when you sought their assistance?
   _____ very adequately assisted
   _____ partially assisted
   _____ inadequately assisted

FOLLOWING GRADUATION FROM THE BACCALAUREATE NURSING PROGRAM

11. Month and year of graduation from MSU ______________________

12. List in sequence, most recent first, all employment (nursing and non-nursing) following graduation from MSU. Please indicate and specify any periods of unemployment.

   Type of employing agency, institution, or organization
   Description of Position
   Dates from to

13. What do you identify as the major reasons for seeking your current or most recent employment position? Select two and rank them, use a 1 to indicate most important reason, use a 2 to indicate the second most important reason.

   _____ geographic location
   _____ salary
   _____ type of agency or reputation of agency
   _____ it's all that was available to you
   _____ working conditions such as hours
   _____ to be with friends
   _____ other, please specify_______________________

14. In relation to your future, identify the type of position you plan to work toward in the next ten years. (Check only one)

   _____a. unemployed or retired
   _____b. some field other than nursing

   (continued)
56

c. in nursing (check the appropriate one)
   _____ staff nurse
   _____ head nurse or supervisor
   _____ nursing education (instructor or administrator)
   _____ nursing consultant
   _____ nursing research
   _____ independent practitioner

15. What is the clinical area of most interest to you?
   Select one.
   _____ adult medical-surgical
   _____ pediatrics
   _____ obstetrics
   _____ psychiatric-mental health
   _____ geriatrics
   _____ community or public health

16. Please check the statements which describe your plans regarding further education.
   _____ am currently, or have been, enrolled in a master's program in nursing
   _____ expect to return to school for a master's degree in nursing at some later date
   _____ will perhaps work toward a doctorate
   _____ will participate in continuing education programs but do not anticipate working toward a higher degree
   _____ am not planning to complete any further formal education
   _____ will pursue education in some field other than nursing

Your signature________________________________________ Date_____________________

THANK YOU FOR YOUR PARTICIPATION IN MY STUDY.
I am conducting a study of Montana State University nursing graduates for the purpose of identifying differences or similarities between younger and older students regarding their needs as students and their career goals.

Several weeks ago I sent you a questionnaire so that you might provide me with information that is relevant to my study. As yet I have not received the completed questionnaire from you. If you still have the questionnaire will you please answer the questions and return it to me as soon as possible. If you no longer have the questionnaire or if it has been lost in the mail, will you please notify me by use of the enclosed post card and I will send you another copy of the questionnaire. Please include your name and current address on the post card.

Thank you for your cooperation and assistance.

Sincerely yours,

Karen E. Johnson, R.N.
Graduate nursing student
Montana State University
APPENDIX B

QUESTIONNAIRE RESPONSES

Question 1 - Post-high school education prior to enrolling in the baccalaureate nursing program

<table>
<thead>
<tr>
<th></th>
<th>% of students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>younger</td>
</tr>
<tr>
<td>None</td>
<td>70.8</td>
</tr>
<tr>
<td>Received baccalaureate degree</td>
<td>0</td>
</tr>
<tr>
<td>College, no degree</td>
<td>29.2</td>
</tr>
<tr>
<td>more than 3 years</td>
<td>2.1</td>
</tr>
<tr>
<td>1 to 3 years</td>
<td>22.9</td>
</tr>
<tr>
<td>less than 1 year</td>
<td>4.2</td>
</tr>
<tr>
<td>Vocational-technical program</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
</tr>
</tbody>
</table>

The three older students with a baccalaureate degree prior to enrolling in the baccalaureate nursing program identified their majors as: Fine Arts, Psychology, and Physical Education and Health. The student with the degree in psychology also had received a master's degree. Practical nursing, dental assisting, and secretarial were the three vocational programs previously attended by three older students. One older student specified in the "other" category typing and shorthand at night from a college.
Question 2 - Post high school employment prior to entering the baccalaureate nursing program

Younger students (N = 48)

<table>
<thead>
<tr>
<th>Related Health Occupations</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse's aide</td>
<td>11</td>
</tr>
<tr>
<td>Orderly</td>
<td>1</td>
</tr>
<tr>
<td>First aid instructor</td>
<td>1</td>
</tr>
<tr>
<td>Ambulance driver</td>
<td>1</td>
</tr>
<tr>
<td>Food services</td>
<td></td>
</tr>
<tr>
<td>Waitress/waiter</td>
<td>8</td>
</tr>
<tr>
<td>Busboy/girl</td>
<td>2</td>
</tr>
<tr>
<td>Dishwasher</td>
<td>1</td>
</tr>
<tr>
<td>Cook</td>
<td>1</td>
</tr>
<tr>
<td>Retail sales clerk</td>
<td>5</td>
</tr>
<tr>
<td>Secretarial/clerical</td>
<td>5</td>
</tr>
<tr>
<td>Recreation department</td>
<td>3</td>
</tr>
<tr>
<td>Military</td>
<td>2</td>
</tr>
<tr>
<td>Farm/ranch</td>
<td>2</td>
</tr>
<tr>
<td>Library assistant</td>
<td>2</td>
</tr>
<tr>
<td>Motel maid</td>
<td>2</td>
</tr>
<tr>
<td>Housework/child care</td>
<td>2</td>
</tr>
<tr>
<td>Bank clerk</td>
<td>1</td>
</tr>
<tr>
<td>Quality control</td>
<td>1</td>
</tr>
<tr>
<td>Keypunch operator</td>
<td>1</td>
</tr>
<tr>
<td>Assistant to college professor</td>
<td>1</td>
</tr>
<tr>
<td>Unemployment claimstaker</td>
<td>1</td>
</tr>
<tr>
<td>Camp supervisor for children</td>
<td>1</td>
</tr>
<tr>
<td>No employment</td>
<td>11</td>
</tr>
</tbody>
</table>
Question 2 (continued)

**Older students (N = 19)**

<table>
<thead>
<tr>
<th>Related health occupations</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse's aid</td>
<td>4</td>
</tr>
<tr>
<td>Orderly</td>
<td>2</td>
</tr>
<tr>
<td>Hospital file clerk</td>
<td>1</td>
</tr>
<tr>
<td>Ambulance driver</td>
<td>1</td>
</tr>
<tr>
<td>Lab tech ass't</td>
<td>1</td>
</tr>
<tr>
<td>Receptionist</td>
<td>2</td>
</tr>
<tr>
<td>Ward clerk</td>
<td>1</td>
</tr>
<tr>
<td>Dental Assistant</td>
<td>1</td>
</tr>
<tr>
<td>L.P.N.</td>
<td>1</td>
</tr>
<tr>
<td>Veterinary ass't</td>
<td>1</td>
</tr>
<tr>
<td><strong>Food services</strong></td>
<td></td>
</tr>
<tr>
<td>Waitress/waiter</td>
<td>4</td>
</tr>
<tr>
<td>Cook</td>
<td>1</td>
</tr>
<tr>
<td>Retail sales clerk</td>
<td>2</td>
</tr>
<tr>
<td>Secretarial/clerical</td>
<td>3</td>
</tr>
<tr>
<td>Bookkeeper</td>
<td>1</td>
</tr>
<tr>
<td>Telephone operator/switchbd.</td>
<td>4</td>
</tr>
<tr>
<td>Military</td>
<td>2</td>
</tr>
<tr>
<td>Farm/ranch</td>
<td>1</td>
</tr>
<tr>
<td>Teacher and coach</td>
<td>1</td>
</tr>
<tr>
<td>Forestry</td>
<td>2</td>
</tr>
<tr>
<td>Financial agencies</td>
<td>4</td>
</tr>
<tr>
<td>Teller</td>
<td>2</td>
</tr>
<tr>
<td>Loan clerk</td>
<td>1</td>
</tr>
<tr>
<td>Collection clerk</td>
<td>1</td>
</tr>
<tr>
<td>Foreman, Fish and Game Dept.</td>
<td>1</td>
</tr>
<tr>
<td>No employment</td>
<td>1</td>
</tr>
</tbody>
</table>

9 (some individuals had more than one type of position in this category therefore total of sub-categories is greater than nine)
Question 3 - Comments regarding study skills problems

"Having time for family too"
"Hyper-to much, too fast—I felt that way anyway"
"Seemed to work best under pressure"
"Raising four teenagers drained my study time"
"Trying to get motivated to 'play the game'"

Question 5 - Area of academic difficulty

<table>
<thead>
<tr>
<th>Non-nursing courses</th>
<th>Older students (N = 19)</th>
</tr>
</thead>
<tbody>
<tr>
<td>chemistry</td>
<td>3</td>
</tr>
<tr>
<td>microbiology</td>
<td>2</td>
</tr>
<tr>
<td>anatomy-physiology</td>
<td>1</td>
</tr>
<tr>
<td>genetics</td>
<td>1</td>
</tr>
<tr>
<td>juvenile delinquency</td>
<td>1</td>
</tr>
<tr>
<td>speech</td>
<td>1</td>
</tr>
<tr>
<td>English</td>
<td>1</td>
</tr>
<tr>
<td>non-specified</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nursing courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>non-specified</td>
</tr>
<tr>
<td>101 series</td>
</tr>
<tr>
<td>entire junior year</td>
</tr>
<tr>
<td>Clinical performance</td>
</tr>
<tr>
<td>No area checked</td>
</tr>
</tbody>
</table>

Written comments:

Instructors of all nursing courses unorganized
Impatient with lack of clinical experience offered—spent most of time in community activities!
Inconsistent performance standards set by the nsg. school
Lack of proper preparation on campus
Especially leadership
Question 6 - Adequacy of faculty assistance in the academic area

<table>
<thead>
<tr>
<th>% of students</th>
<th>Younger*</th>
<th>Older</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than adequate</td>
<td>31.2</td>
<td>21.1</td>
</tr>
<tr>
<td>Adequate for needs</td>
<td>60.4</td>
<td>63.2</td>
</tr>
<tr>
<td>More than adequate</td>
<td>14.6</td>
<td>10.5</td>
</tr>
<tr>
<td>No response checked</td>
<td>4.2</td>
<td>5.3</td>
</tr>
</tbody>
</table>

*Five of the younger students checked more than one response so the total percentage is greater than 100%*

Written comments of older students:
Adequate—"except during leadership"
More than adequate—"true--fine non-nursing faculty."

Written comments of younger students:
Less than adequate—"on campus"
"Very"
"Clinical area only"
"I didn't feel they were very helpful when I needed them"
"Again, frustrated with clinical application of nursing skills."
"Only in one instance."

Adequate--
"At MSU"
"Sometimes less"
"In clinical unit"
"Sought rarely"

More than adequate—"especially in clinical units."
Question 7 - Areas perceived as irrelevant or incomplete

Comments of younger students:
- Not enough actual experience; much theory on how a procedure is done but no opportunity to do it.
- Need more time and adequately prepared instructors.
- Definitely need more clinical hours especially pediatrics and maternity.
- Yes, except hospital experience was not enough, too many students—hours on floor were too few.
- Incomplete: maternity, genetics, pharmacology; irrelevant: N 100, 200, 400, case studies, physics, ad infinitum.
- Too much theory without adequate practical experience.
- Very poor clinical experience—academic courses not correlated with clinical at all (OB covered in 2 weeks! with no on floor experience).
- Not enough floor experience in clinical training.
- Yes, if you know the theory you can pick up the practical.
- Some nursing courses were irrelevant—nursing history, etc.
- Not enough nursing skills taught—IV's, etc.
- Incomplete—I think we need ongoing pharmacology course—one quarter is not adequate—more depth in drugs.
- I feel our nursing courses on campus should have been more hospital oriented—I learned most everything in my clinical experience.
- Pediatrics, all areas.
- Not enough actual clinical experience.
- We spent hours and hours on detailed care plans that are non-existent in the real world. We needed training on tracheostomies, traction, lab tests.
- Too brief clinical experience.
- Too little clinical experience.
- Not enough emphasis on pharmacology and drugs.
- Required philosophy and art, I feel are not necessary--history of nursing, I think not necessary, boring--need more clinical hospital training.
- Technical skills need more practice (good theory though). I filled in most of these after graduation. Time element makes this difficult.
- I think I could have used more equipment experience and practical work.
- Chemistry.
- Nursing floor work.
- Weak in pharmacology; CCU--monitoring, reading EKGs; I felt education in public health and psych was quite redundant--should either eliminate the Senior experience in these areas or some of the Junior "introduction." Personally I would be for eliminating the Junior garbage on the topic because often it was taught by unqualified people for that particular field. Registered nurse's role--realistically rather that idealistic. Some more efforts at interdisciplinary education would have been helpful, instead of two years of seeing and working with nothing but nurses and nursing students.

Comments of older students:
- Due to too much emphasis on miscellaneous details.
- Inadequate in pharmacology.
- Chemistry irrelevant; physics 3 quarters has helped me much with traction set up, pulleys, forces, etc.
- I started under a 3 year program and found 4 year program lacking in clinical experience.
- Very poor medical coverage and very poor nursing information.
- Clinical training was inadequate.
- Felt inadequate with IV's--starting them, irrigating them, giving IV piggybacks--IPPB and also other areas of practical skills.
Chemistry and art.

At times basic courses too basic for my experience, not enough experience related subjects.

Pharmacology was inadequate in preparation for practice. Knowledge of drugs in relation to route of administration entirely too vague. What are purposes of administering medication IV except for immediacy of effect and what are precautions and procedures of giving IV push medications. Should they be diluted and given slowly, etc. IV med preparation and administration of blood transfusions, precautions, and side effects entirely inadequate. --General studies electives worthless in nursing curriculum, especially for the older student with a wide and varied background before entering nursing school. --More time needs to be devoted to nursing classes; material given too fast for adequate preparation; also not enough material in nursing is given. --Physical assessment and first aid classes exceptionally helpful.

Child development irrelevant. Poor instruction for clinical experience.

I feel we were short-changed in clinical area, specifically OB and peds.

Question 10 - Perceived adequacy of assistance of the university personnel when assistance was sought for problems identified in question nine.

<table>
<thead>
<tr>
<th>% of Students*</th>
<th>Younger</th>
<th>Older</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very adequately assisted</td>
<td>21.6</td>
<td>25.0</td>
</tr>
<tr>
<td>Partially assisted</td>
<td>56.8</td>
<td>56.3</td>
</tr>
<tr>
<td>Inadequately assisted</td>
<td>21.6</td>
<td>12.5</td>
</tr>
<tr>
<td>No response</td>
<td>6.3</td>
<td>0</td>
</tr>
</tbody>
</table>

*Percentages are based on the 37 younger students who identified problems in question nine and 16 older students with responses to question nine.
Question 11 - Month and year of graduation.

<table>
<thead>
<tr>
<th>Month</th>
<th>Younger</th>
<th>Older</th>
</tr>
</thead>
<tbody>
<tr>
<td>December, 1972</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>March, 1973</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>June, 1973</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>December, 1973</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>March, 1974</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>June, 1974</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>December, 1974</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>March, 1975</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>June, 1975</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>Totals</td>
<td>48</td>
<td>19</td>
</tr>
</tbody>
</table>
REFERENCES CITED


Altman, Stuart H. Present and Future Supply of Registered Nurses, DHEW publ. no. 72-134, November, 1971.


Richter, Lucretia H. "Project Late Start," *Nursing Outlook*, 17 (March, 1969), 34-36.

Rottkamp, Barbara C. "Attrition in Baccalaureate Nursing Programs," *Nursing Outlook*, 16 (June, 1968), 44-47.


ADDITIONAL REFERENCES


Reece, M. M. "Personality Characteristics and Success in a Nursing Program," Nursing Research, 10 (Summer, 1961), 172-176.


Three Challenges to the Nursing Profession, Selected Papers from the 1972 ANA Convention, American Nurses' Association, August, 1972.


A comparison of younger and older students ...