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SENIOR NURSING STUDENTS' ATTITUDES TOWARD ELDERLY  
PERSONS AND IMPLICATIONS FOR CURRICULUM DESIGN  
IN BACCALAUREATE NURSING SCHOOLS

presented by

Mae E. Markstrom

has been accepted towards fulfillment  
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By

Mae E. Markstrom

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## ABSTRACT

### SENIOR NURSING STUDENTS' ATTITUDES TOWARD ELDERLY PERSONS AND IMPLICATIONS FOR CURRICULUM DESIGN IN BACCALAUREATE NURSING SCHOOLS

By

Mae E. Markstrom

The purpose in this study was to explore attitudes of senior nursing students toward elderly persons and to draw implications from the study findings for curriculum design and course modification in baccalaureate nursing schools. The objectives were to determine factors that influence students' attitudes toward the elderly population; to investigate relationships among students' cognitive and affective knowledge, skills, and experiences in gerontology; and to use the findings to recommend curriculum development and modification that may positively influence attitudes toward elderly persons. Selected variables associated with positive or negative attitudes toward aging were studied.

The population of 202 senior nursing students surveyed represented six Michigan public universities; the response rate was 54%. Data-collection instruments included Palmore's Facts on Aging Quiz: Part 2 (FAQ2), Kogan's Attitudes Toward Old People Scale (ATOP), and a comparative data questionnaire. Descriptive statistics were used to compile a profile of the participants.

Pearson product-moment correlations and one-way analyses of variance were used to determine relationships among variables.

A significant negative correlation was found between respondents' positive and negative attitude scale scores. Statistically significant relationships were found between (a) mean FAQ2 scores and mean ATOP scale scores, (b) respondents' age and geriatric preference, (c) respondents' age and age of clients with whom respondents preferred to work, (d) geriatric preference and length of time spent caring for ill elderly in community settings, and (e) mean FAQ2 scores and respondents' estimates of percentage of U.S. population that is old. Personal experiences positively influenced students' attitudes toward elderly persons. No significant relationship was found between (a) mean FAQ2 scores and amount of clinical nursing experience with well and ill elderly and (b) mean FAQ2 scores and amount of gerontological coursework.

Nurse educators should continue studying students' attitudes toward the elderly to develop positive attitudes toward the elderly in future health care providers. The need to incorporate more gerontology into nursing curricula should be studied. Nursing curriculum models should be evaluated to isolate factors influencing positive attitude formation and change toward elderly persons.

This dissertation is dedicated to  
Charles,  
my husband and best friend.

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## TABLE OF CONTENTS

	Page
LIST OF TABLES . . . . .	x
LIST OF FIGURES . . . . .	xii
Chapter	
I. THE PROBLEM . . . . .	1
Introduction . . . . .	1
Statement of the Problem . . . . .	3
Purpose and Objectives . . . . .	5
Importance of the Study . . . . .	6
Research Questions . . . . .	8
Hypotheses . . . . .	8
Research Methodology . . . . .	10
Assumptions . . . . .	10
Delimitations and Limitations . . . . .	11
Definitions . . . . .	12
Summary and Overview . . . . .	14
II. REVIEW OF LITERATURE . . . . .	16
Introduction . . . . .	16
Attitudes of Health Care Providers . . . . .	16
Attitude Development and Change . . . . .	17
Curricular Implications . . . . .	21
Theoretical Framework . . . . .	24
Summary . . . . .	26
III. DESIGN AND METHODOLOGY . . . . .	28
Introduction . . . . .	28
Design . . . . .	28
Subjects . . . . .	28
Data-Collection Procedure . . . . .	29
Data-Collection Instruments . . . . .	30
The Kogan Attitudes Toward Old People Scale . . . . .	31
Facts on Aging Quiz: Part 2 . . . . .	32
Comparative Data Questionnaire . . . . .	33
Research Questions . . . . .	33

	Page
Hypotheses . . . . .	34
Independent Variables . . . . .	35
Dependent Variables . . . . .	36
Data-Analysis Techniques . . . . .	36
Summary . . . . .	38
IV. RESULTS OF THE DATA ANALYSIS . . . . .	39
Introduction . . . . .	39
Descriptive Information . . . . .	41
Demographic Data . . . . .	41
Geriatric Experience, Education, and Work Preference . . . . .	44
Knowledge . . . . .	52
Respondents' Scores on the Facts on Aging Quiz: Part 2 . . . . .	52
Attitudes . . . . .	54
Respondents' Scores on the Attitudes Toward Old People Scale . . . . .	54
Results of Hypothesis Testing . . . . .	57
Summary . . . . .	72
V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS . . . . .	73
Summary . . . . .	73
Procedures . . . . .	73
Findings . . . . .	74
Conclusions . . . . .	81
Recommendations . . . . .	83
Reflections . . . . .	86
APPENDICES	
A. DATA-COLLECTION INSTRUMENTS . . . . .	88
B. SAMPLE LETTER TO CONTACT PERSON, REQUESTING STUDENT PARTICIPATION IN STUDY . . . . .	95
C. COVER LETTER TO STUDENT, REQUESTING PARTICIPATION IN STUDY . . . . .	96
D. PERMISSION LETTER FROM THE UNIVERSITY COMMITTEE ON RESEARCH INVOLVING HUMAN SUBJECTS . . . . .	97
E. SUMMARY OF RESPONDENTS' ANSWERS TO QUESTION 10 OF THE COMPARATIVE DATA QUESTIONNAIRE . . . . .	98

	Page
F. LISTING OF RESPONDENTS' ANSWERS TO QUESTIONS 11 AND 12 OF THE COMPARATIVE DATA QUESTIONNAIRE . . . .	99
G. NARRATIVE COMMENTS TO QUESTION 1 OF THE COMPARATIVE DATA QUESTIONNAIRE . . . . .	113
REFERENCES . . . . .	115



## LIST OF TABLES

Table	Page
1. Distribution of Respondents by Age . . . . .	42
2. Distribution of Respondents by Race . . . . .	43
3. Distribution of Respondents by Marital Status . . . . .	43
4. Distribution of Respondents by Rural or Urban Orientation . . . . .	44
5. Distribution of Respondents by Gerontology Coursework .	44
6. Percentage of Respondents in Rankings of Nursing Specialty Work Preferences . . . . .	45
7. Respondents' Preferred Client Age Groups . . . . .	46
8. Distribution of Respondents by Content Hours in Gerontology Theory . . . . .	47
9. Percentage of Respondents Reporting Number of Clinical Days in Specific Health Care Agencies . . .	48
10. Respondents' Estimates of the Age at Which One Becomes Old . . . . .	50
11. Ages of Oldest Persons With Whom Participants Had Lived . . . . .	51
12. Percentage of United States Population Who Were Judged Old by Senior Nursing Students . . . . .	53
13. Frequency Distribution of Respondents' Scores on the Facts on Aging Quiz: Part 2 . . . . .	54
14. Frequency Distribution of Respondents' Scores on the ATOP--Positive Scale . . . . .	55
15. Frequency Distribution of Respondents' Scores on the ATOP--Negative Scale . . . . .	56

	Page
16. Mean ATOP Positive, ATOP Negative, and FAQ2 Scores for Three Groups of Senior Nursing Students With Three Levels of Well Elderly Clinical Experience in Community Settings . . . . .	58
17. Mean ATOP Positive, ATOP Negative, and FAQ2 Scores for Three Groups of Senior Nursing Students With Three Levels of Ill Elderly Clinical Experience in Community Settings . . . . .	60
18. Distribution of Mean Scores for Three Groups of Senior Nursing Students With Three Levels of Gerontology Coursework . . . . .	62
19. Correlations Between Variables . . . . .	69
20. Distribution of Mean Scores on the FAQ2 and the ATOP Positive and Negative Scales for Groups of Senior Nursing Students With Five Levels of Hospital Geriatric Clinical Experience . . . . .	71
21. Distribution of Mean Scores on the FAQ2 and the ATOP Positive and Negative Scales for Groups of Senior Nursing Students With Five Levels of Nursing Home Geriatric Clinical Experience . . . . .	71

## LIST OF FIGURES

Figure	Page
1. Scattergram of Relationship Between FAQ2 and ATOP Positive Attitude Scale . . . . .	64
2. Scattergram of Relationship Between FAQ2 and ATOP Negative Attitude Scale . . . . .	66
3. Scattergram of Relationship Between Mean Scores on ATOP Positive Attitude Scale and Mean Scores on ATOP Negative Attitude Scale . . . . .	67

## CHAPTER I

### THE PROBLEM

#### Introduction

The American society of today is experiencing a dramatic growth in its population over 65. The United States Bureau of Census (1990) indicated that the population over 65 was 12.6% of the total population in 1990. This population had increased by 21.5% since 1980, while the total population increased by only 9.2%. By 2000, it is predicted that there will be 35 million people aged 65 and older, 13% of the total population. By the year 2030, it is predicted that there will be approximately 65 million older Americans; over 21% of the total population will be 65 and older (U.S. Bureau of Census).

Despite the fact that Michigan's population has grown more slowly than that of the nation as a whole, the segment of the state's population aged 65 and older increased by 20.82% between 1970 and 1980. In 1990, 11.9% of Michigan's population was 65 and older, and 1.1% was over 85; in 1980, 9.9% of this group was 65 and older. There was a small loss in population due to out-migration to warmer states; however, a portion of this group spends half of the year in Michigan (Commission and Office of Services to the Aging, 1989). In addition, many elderly adults return to their family

homes when they become frail and lack independence. Burnside (1988) stated:

On the average, older persons change residences half as often as younger persons, but those who move out-of-state tend to move to the sun belt. The number of Americans over 60 who are moving to the sun belt has nearly doubled since 1950. A new trend, called countermigration, has emerged in which some persons 60 and over who migrated to the sun belt in their early retirement years return to their home states or the homes of family and friends. (p. 12)

Feldbaum and Feldbaum (1981) stated that:

The aged make major demands on the health system; they become sick more often and stay sick longer than the young. In addition, they comprise the largest proportion of the institutionalized ill. They are most in need of medical, nursing, psychological and health support services. Yet studies claim that persons who deliver such services are reluctant to care for the elderly. (p. 62)

In a study concerning nursing students selecting a career working with the elderly, DeWitt and Matre (1988) found low likelihood of students choosing a career in gerontological nursing. Knowles and Sarver (1985) also found that nursing students least preferred working with older patients.

The older population has an increased tendency toward chronic health conditions and suffers more from physical disability and functional impairment (Metropolitan Life, 1988). Older adults use health care services more than any other age group (Burnside, 1988). In 1984, 11 million (30%) of the patients who were discharged following hospital stays were 65 or older. Of the 245 million days of acute care in 1984, 100 million (41%) were recorded for patients who were 65 years of age or older (U.S. Department of Health & Human Services, 1986, p. 61).

Older adults represent 30% of American hospital costs, although they represent only 11% of the population as a whole (Matteson & McConnell, 1988, p. 70). Older adults make up the vast majority (93%) of nursing-home patients and are the major consumers of health services in the United States (Matteson & McConnell, 1988, p. 71).

According to Ebersole and Hess (1990), 40% of the 65 year and older population are over 85 years of age, and 48% of them are physically challenged by day-to-day existence. Various disabilities leave them vulnerable to loss of independence and institutionalization. The presence of increasing numbers of older people with multiple physical and social problems has created a growing need for nurses who are knowledgeable regarding the special needs and problems of the elderly. Nurses will be needed to provide care in hospitals, nursing homes, and homes.

#### Statement of the Problem

While the older segment of the population is growing and consuming a greater proportion of health care services, social changes affecting the family and the younger generations in the twentieth century have caused social distancing and some isolation of the older generation from younger people. Nursing students come from mixed family and cultural backgrounds from which they have developed varying views on the aging process. Many young people entering the health professions have had minimal social relationships with grandparents and others of that generation. Young family members may find that their first close emotional

experience with an older person is with a sick or frail person requiring considerable personal care (Garrett, 1984).

Because of the increasing older population, the number of elderly clients in nursing homes, hospitals, clinics, and the community is increasing. To meet the large number of nursing hours needed to care for these clients, more nurses must be prepared to identify with the field of gerontology. Malliarakis and Heine (1990) stated:

Nurses are responsible for providing quality health care for older clients. To do this, they must have an educational base in gerontological nursing. Baccalaureate schools of nursing prepare graduates to practice as generalists in gerontological nursing. . . . It is important to encourage the inclusion of gerontological nursing content in all baccalaureate programs and to strengthen it through direct changes in the nursing curriculum. Nurse educators in baccalaureate schools of nursing are responsible for ensuring the presence of gerontological nursing content throughout the curriculum. (p. 4)

Nursing curricula need to reflect positive attitudes toward the aging process (Buschmann, Burns, & Jones, 1981; Webb & Shives, 1988). Bahr (1987) reported that most nursing curricula do not emphasize the importance of understanding the aging process and the unique health care needs of the elderly population. Studies have shown that nurses' attitudes toward elderly people have an important influence on the quality of client care provided that group (Knowles & Sarver, 1985; Martin & Buckwalter, 1984). Because of the negative attitudes toward the elderly population held by society, nurses hold similar attitudes that must be changed in order to provide quality care to elderly clients (Benson, 1982; Webb & Shives, 1988). Maddox and O'Hare (1991) proposed strategies for

designing clinical nursing curricula that foster in nursing students positive attitudes toward the older population. They stated that, by planning clinical experiences that expose students to both positive and negative aspects of aging, students can be guided in developing more positive attitudes.

In summary, while there is an increasing need for nurses who are prepared in gerontological nursing, there is general agreement that nurses have not shown an increasing interest in working with older clients. Because attitudes are related to the quality and quantity of nursing care provided for elderly clients, it is important that nurse educators confer significant status to gerontological nursing within the nursing curricula and devote the attention necessary to promote in nursing students positive attitude change toward elderly clients.

#### Purpose and Objectives

The researcher's primary purpose in this study was to explore the attitudes and knowledge of senior nursing students toward elderly persons and to draw implications from the study findings for curriculum design and course modification in baccalaureate nursing schools. The researcher's specific objectives were as follows:

1. To determine factors that influence senior nursing students' attitudes toward the elderly population.
2. To investigate the relationships among senior nursing students' cognitive and affective knowledge, skills, and experiences in gerontology.



3. To use the study findings to recommend curriculum development and modification which may positively influence baccalaureate nursing students' attitudes toward elderly persons.

Selected variables associated with positive or negative attitudes toward aging in undergraduate nursing students were studied. These included the following independent variables: (a) number of days of clinical nursing experience with well and ill elderly persons, (b) amount of time spent with elderly persons, (c) age of oldest person with whom respondent had ever lived, (d) respondent's perception of the age at which one becomes old; (e) student's estimate of the percentage of the United States population that is old, (f) amount and type of gerontology coursework, (g) student's age, (h) preferred client age group, and (i) nursing specialty preference.

Dependent variables were derived from survey results of tests measuring nursing students' attitudes and levels of knowledge about gerontology. These included (a) nursing students' positive and negative attitude scores as measured on Kogan's Attitudes Toward Old People (ATOP) Scale (1961) and (b) knowledge levels as measured on Palmore's Facts on Aging Quiz: Part 2 (FAQ2) (1981).

#### Importance of the Study

The need for registered nurses prepared in gerontology to care for the increasing number of elderly persons in our population has been well documented (Shimamoto & Rose, 1987; Strumpf, 1987). Research has supported that stereotypes toward elderly persons are

usually negative. The reviewed literature showed a low preference among registered nurses and nursing students for caring for elderly clients. Research results concerning the effect of educational experiences on increasing nurses' preferences for geriatric nursing were conflicting. Some literature revealed a positive correlation among work experience, knowledge, and attitudes, whereas other research indicated no significant correlation. These conflicting data supported the need for further research to investigate the effect of educational experiences on attitudes toward the aging process. It was important to determine nursing students' attitudes and knowledge levels toward aging and to compare these data with the amount of clinical experience nursing students had with well and ill elderly clients and with the amount of gerontology coursework students had in their programs. This investigation provided data about the importance of including varying types and amounts of clinical experiences and gerontology coursework in nursing curricula in baccalaureate schools of nursing. Strategies were proposed that might change nursing students' attitudes so that the elderly client might be seen in a more positive way.

The knowledge gained from this study should have a positive influence on the discipline of nursing and contemporary society. Development of principles and guidelines that facilitate the integration of gerontological concepts into nursing curricula should positively influence attitudinal change in nursing students toward the aging process. In addition, changing the perceived negative

stereotypes toward aging should increase the quantity and quality of geriatric nursing.

### Research Questions

Specific research questions addressed in this study included:

1. What are the nursing students' attitudes toward elderly persons?
2. Are different types of experiential learning associated with varying nursing student attitudes toward caring for elderly persons?
3. What are the relationships among nursing students' knowledge, attitudes, and experiences with the elderly population?

### Hypotheses

The following hypotheses, stated in the null form, were formulated to guide the analysis of data collected in this study. These hypotheses were designed to address the issues identified in the research questions listed above.

Hypothesis 1: The mean scores derived from the Attitudes Toward Old People (ATOP) positive attitude scale will not differ significantly for three groups of senior nursing students with three levels of well elderly clinical experience in community settings (0-5 days, 6-15 days, and 16+ days).

Hypothesis 2: The mean ATOP negative attitude scale scores will not differ significantly for three groups of senior nursing students with three levels of well elderly clinical experience in community settings (0-5 days, 6-15 days, and 16+ days).

Hypothesis 3: The mean knowledge scores on the Facts on Aging Quiz: Part 2 (FAQ2) will not differ significantly for three groups of senior nursing students with three levels of well elderly experience in community settings (0-5 days, 6-15 days, and 16+ days).

Hypothesis 4: The mean ATOP positive attitude scale scores will not differ significantly for three groups of senior nursing students with three levels of ill elderly clinical experience in community settings (0-5 days, 6-15 days, and 16+ days).

Hypothesis 5: The mean ATOP negative attitude scale scores will not differ significantly for three groups of senior nursing students with three levels of ill elderly clinical experience in community settings (0-5 days, 6-15 days, and 16+ days).

Hypothesis 6: The mean FAQ2 knowledge scores will not differ significantly for three groups of senior nursing students with three levels of ill elderly clinical experience in community settings (0-5 days, 6-15 days, and 16+ days).

Hypothesis 7: The mean ATOP positive attitude scale scores will not differ significantly for three groups of senior nursing students with three levels of gerontology coursework (no coursework, specific nonnursing, and specific nursing).

Hypothesis 8: The mean ATOP negative attitude scale scores will not differ significantly for three groups of senior nursing students with three levels of gerontology coursework (no coursework, specific nonnursing, and specific nursing).

Hypothesis 9: The mean FAQ2 knowledge scores will not differ significantly for three groups of senior nursing students with three levels of gerontology coursework (no coursework, specific nonnursing, and specific nursing).

Hypothesis 10: The correlation between the ATOP positive scale scores and the FAQ2 knowledge scores will either be less than or equal to zero.

Hypothesis 11: The correlation between the ATOP negative scale scores and the FAQ2 knowledge scores will either be greater than or equal to zero.

Hypothesis 12: The correlation between the ATOP positive scale scores and the ATOP negative scale scores will either be greater than or equal to zero.

Hypothesis 13: The correlation between the ATOP positive scale scores and student age will either be less than or equal to zero.

Hypothesis 14: The correlation between the ATOP negative scale scores and student age will either be greater than or equal to zero.

### Research Methodology

Participants in this study included 109 senior nursing students from six public Michigan universities. The universities were small to medium in size and represented both urban and rural populations. Nursing students were asked to complete three data-collection instruments: Kogan's Attitudes Toward Old People Scale (1961), Palmore's Facts on Aging Quiz: Part 2 (1981), and a comparative data questionnaire including both descriptive and normative data designed by the researcher (see Appendix A).

Descriptive statistics were used to summarize the characteristics of the sample and the distribution of scores on both the Attitudes Toward Old People Scale and the Facts on Aging Quiz: Part 2. Inferential statistics were used to examine the relationship between the variables under investigation.

### Assumptions

In conducting this study, the researcher assumed that:

1. The senior nursing students participating in this study would willingly complete the data-collection instruments to the best of their ability.
2. The senior nursing students would be honest in their responses and would complete the instruments individually.

3. Based on the selection of the population for the current study, findings could be generalized to future studies with similar populations.

4. The pretested data-collection tools and the comparative data questionnaire designed by the researcher would provide the necessary data to answer the research questions.

#### Delimitations and Limitations

The following delimitations and limitations were identified as affecting this study:

1. The study sample was limited to senior nursing students in four-year generic baccalaureate nursing programs. Registered nurses completing their baccalaureate degrees in nursing were not included as participants in the study.

2. The study results were based on student responses from selected schools of nursing in only one state, Michigan, a constraint limiting the application of generalizations.

3. Because the study was based on student self-report, independent confirmation of self-report claim was not achieved in the current data base.

4. The study was limited to the responses and perceptions of the subjects participating in the research study.

5. The study findings were not analyzed by school; thus, data relevant to specific schools were not identified.

6. The study was descriptive in nature, and no causal statements could be made.

7. For data-analysis purposes, the participants were divided into arbitrarily designated levels of clinical experience. Other groupings might produce alternative descriptions of the data.

### Definitions

The following terms are defined in the context in which they are used in this study.

Affective skills refer to the "use of moral reasoning in decisions for the management of moral and ethical dilemmas and to the development of a value system that guides decisions and activities within the individual's and society's notion of what is good and right" (Reilly & Oermann, 1990, p. 72).

Aged, elderly, and older person all refer to individuals 65 years of age or older, the age used by the United States government in implementing the Social Security Act of 1935.

Aging refers to the process of growing old.

Attitudes are defined as positive or negative reactions or opinions toward various persons, objects, or ideas (Brehm & Kassir, 1990).

Attitudes toward the elderly refer to expressed opinions as scored on Kogan's Attitudes Toward Old People Scale.

Clinical experience refers to nursing laboratory experience in university coursework received in specific clinical agencies such as hospitals, nursing homes, or other agencies within the community.

Cognitive skills refer to "knowledge acquisition, at different levels of complexity, and the development of intellectual skills

. . . including the processes of critical thinking, problem solving, decision making, and clinical judgment" (Reilly & Oermann, 1990, p. 62).

Experiential learning refers to learning gained from both formal (university/college coursework) and informal (contact outside the school setting) experiences with geriatric clients.

Geriatrics refers to "a subfield of gerontology . . . the medical or nursing aspects of gerontology" (Crandall, 1991).

Gerontology refers to the study of old age.

Gerontology coursework refers to curriculum content specifically related to the study of the elderly population.

Knowledge levels in aging refer to scores obtained on Palmore's Facts on Aging Quiz: Part 2.

Psychomotor skills refer to "those domains of nursing practice that entail the ability to behave efficiently in action situations that require neuromuscular coordination" (Reilly & Oermann, 1990, p. 80).

Schools of nursing refer to National League for Nursing-accredited baccalaureate schools of nursing in six public universities of Michigan.

Stereotype is defined as a fixed impression of a person, place, or thing.

Students are defined as senior nursing students in six Michigan baccalaureate nursing programs.



### Summary and Overview

Many researchers have recognized the influence of societal stereotypes toward aging on nursing students' attitudes toward working with elderly clients. Data to support strategies for positive change in attitudes toward the aged have been inconclusive. With the growing population 65 years of age and over, the number of elderly clients is increasing. Studies have shown a lack of registered nurses interested in working with this population. Because attitudes do affect the quality and quantity of nursing care provided elderly clients, it is important to study the variables affecting students' attitudes and how positive attitudinal change can occur. Thus, this writer's purpose was to explore attitudes of senior nursing students toward elderly persons and then to draw implications from the study findings for curriculum design and modification in baccalaureate nursing schools.

Chapter I contained an introduction to the study, a statement of the problem, the writer's purpose and objectives, a presentation of the importance of the study, a description of the research questions and hypotheses, a description of the research methodology, a clarification of assumptions and limitations, and definitions of key terms.

Chapter II contains a review of the literature concerning topics of interest in this study. Literature reviews of the attitudes of health care providers are presented, and curricular implications concerning attitudinal formation are

discussed. The theoretical framework for this research study is identified.

In Chapter III, the design and methodology of the research study are explained. The subjects, data-collection procedure, and instruments are described. The independent and dependent variables are presented, and the techniques used in data analysis are explained.

Results of the data analysis are reported in Chapter IV. Chapter V contains a summary of the study, findings, conclusions, and recommendations for further study.

## CHAPTER II

### REVIEW OF LITERATURE

#### Introduction

In this chapter, the topics selected for review provide the background and theory relevant to the present investigation. The first topic to be reviewed is a background analysis of the tendency toward stereotyping of elderly persons by contemporary society and health care providers. Within this context, the attitudes and values of health care providers are reviewed in relation to their knowledge levels and experiences with the elderly population. Forming and changing attitudes through learning and experience are analyzed. The influence of education on attitude development and maintenance in health care providers is explored, and nursing educators' role in developing positive attitudes toward elderly clients is examined. Last, the theoretical framework for this study is presented.

#### Attitudes of Health Care Providers

Literature reviews on attitudes of health care providers who care for elderly persons have indicated the existence of a generalized negative stereotyping of aging (Baker, 1984; Chandler, Rachal, & Kazelskis, 1986; Lutsky, 1980; Martin & Buckwalter, 1984; Williams, Lusk, & Kline, 1986). Stanley and Burggraf (1986)

indicated that nursing students held similar negative attitudes toward the elderly population, perceptions that they not only held internally, but that negatively affected the quality of care provided for their clients. Studies have shown that nurses' attitudes toward elderly clients influence the quantity and quality of care that is provided to this population (Farley & Faye, 1983; Meyer, Hassanein, & Bahr, 1980).

Controversy exists as to whether health professionals hold positive or negative attitudes toward the elderly. Downe-Wamboldt and Melanson (1985) found in their study of attitudes of baccalaureate nursing students toward the elderly that both first-year and fourth-year students held positive attitudes toward aged patients. This was contrary to the generalized negative stereotype toward the aged held by members of society at large. To develop and maintain these positive attitudes in health care providers, the authors recommended that further research should be done to study the effectiveness of selected gerontological content and experiences in the nursing curriculum.

#### Attitude Development and Change

Most social psychologists base their definition of attitudes on their beliefs concerning the relationships among affective reactions, cognitions, and behavior. Baron and Gyrne (1987) defined attitudes as "lasting, general evaluations of people (including oneself), objects, or issues" (p. 116). Brehm and Kassir (1990) defined attitudes as "positive or negative reactions toward various

persons, objects, and ideas" (p. 438). Myers (1987) defined attitudes as "favorable or unfavorable evaluative reactions toward something or someone, exhibited in one's beliefs, feelings, or intended behavior" (p. 36).

The ABC model of attitudes is presented as the theoretical framework for this study. This model suggests that an attitude has three components: affect, behavior, and cognition (Breckler, 1984). Thus, each attitude is made up of feelings, behavioral intentions, and thoughts and ideas (Baron & Byrne, 1987).

Psychologists have identified three processes that play an important part in attitude formation. These include classical conditioning, instrumental conditioning, and modeling. Baron and Byrne (1987) defined these processes as follows:

Classical conditioning means learning by association. . . . Instrumental conditioning refers to learning in which responses that yield positive outcomes or eliminate negative ones are acquired or strengthened. . . . Modeling refers to learning by observation. (p. 118)

Many of our attitudes are learned through the process of socialization. Socialization, according to Forsyth (1987), "teaches us how to interact with other people, what behaviors are expected of us in various situations, and what things are valued in our society" (p. 222). Attitudes are learned through the guidance of parents and significant others as well as in schools, churches, and other community organizations. In today's society, the mass media have played a significant role in shaping attitudes. These socializing agents influence attitudes by defining what is considered good or bad, by serving as social role models, and by presenting symbolic

cues that define our culture (Forsyth, 1987). People also form attitudes as a result of their experiences, making generalizations and conclusions based on happenings in their lives (Baron & Byrne, 1987).

The prevailing assumption among psychologists and educators is that attitudes and actions have a reciprocal relationship; behaviors are determined by attitudes, and attitudes are affected by one's actions. Myers (1987) presented three competing theories explaining why our actions affect our attitudes.

Self-presentation theory assumes that people, especially those who self-monitor their behavior hoping to create a good impression, will adapt their attitude reports to appear reasonably consistent with their actions. The available evidence confirms that people do adjust their attitude statements out of concern for what other people will think, but also indicates that some genuine attitude change does occur. Dissonance theory explains this attitude change by assuming that we are motivated to justify our behavior in order to reduce the tension we feel when acting contrary to our attitudes or after making a difficult decision. It further proposes that the less external justification we have for an undesirable action, the more we will feel responsible for it, and thus the more dissonance is aroused and attitudes changed. Self-perception theory assumes that when our attitudes are weak we simply observe our behavior and its circumstances and infer what our attitudes must be. (p. 73)

According to Myers (1987), attitudes and behaviors are subject to many influences. Myers stated that "attitudes will predict our behavior if these other influences are minimized, if the attitude corresponds very closely to the predicted behavior, and if we are conscious of our attitudes" (p. 73). Thus, there is a relationship between what we think and how we feel.

According to Baron and Byrne (1987), attitude change is usually easier to plan than it is to achieve. Passive persuasion is a common approach used by advertisers, television commercials, political candidates, and many public service agencies to change attitudes. Successful persuasion is usually dependent on the credibility, expertise, and popularity of the person persuading someone; the presentation of both sides of the issue; and the characteristics of the person who is being persuaded.

Cognitive-response analysis is often used in determining what makes individuals change their attitudes. "People don't just passively absorb persuasive messages. Instead, they often actively think about them, and their thoughts lead to attitude change or resistance" (Baron & Byrne, 1987, p. 130).

Human interaction plays a vital role in attitude formation and change. Since nursing is interaction and participants influence that interaction, increased knowledge and understanding of how attitudes influence gerontological nursing practice is essential to promoting quality nursing care for the elderly population (Hatton, 1977).

In summary, how attitudes are formed or changed is not clearly understood. Forsyth (1987) stated:

Attitudes acquired through exposure to an object, conditioning, or social learning supplant our earlier attitudes. Often, however, attitude change results from persuasion--the communication of facts, arguments, and information calculated to change another person's attitudes. (p. 275)

Attitudes, according to Breckler (1984), are influenced by three elements: affective feelings of liking or disliking are based on

beliefs about an object, which lead to a person behaving in a certain manner. Thus, changes involving affective feelings, beliefs, or behavior will ultimately lead to attitude change.

### Curricular Implications

Burnside (1988) contended that decreasing or nonexistent geriatric content in nursing curricula and nursing students' preferences to work with younger patients are factors promoting a negative bias toward the elderly population. Greenhill and Baker (1986) found that the knowledge base of nursing students about the process of aging increased significantly with planned theoretical and clinical experiences; simultaneously, negative or stereotypical attitudes decreased after these planned learning experiences.

Knowles and Sarver (1985) found that the quality of health care provided by professionals was directly linked to the preferences they had for particular types of patients across a number of patient characteristics. Older patients were less preferred by baccalaureate nursing students, whereas younger patients were most preferred. Nevertheless, because demographic data predict a larger proportion of older Americans in the future, nursing students and other health professionals inevitably will have increased contact with older people, whether these contacts are currently preferred or not (U.S. Bureau of the Census, 1990).

The modification of attitudes has been studied in one form or another throughout human history. Researchers have demonstrated that attitudes can be modified or changed during one's educational



experiences. Adelman and Albert (1987) found that formation of positive attitudes toward older people was dependent on medical students having a positive first-hand experience with a variety of elderly individuals. They recommended the inclusion of contact with well elderly clients within the medical school curriculum as a means of dispelling negative stereotypes. Hart, Freel, and Crowell (1976) concluded that nursing students' attitudes toward the aged population could be improved significantly as a result of specifically structured clinical experiences with healthy elderly persons and frequent contacts with well older people. Attitudes remained positive when students had learning experiences with ill elderly clients after structured experiences with well elderly clients. Cook and Pieper (1985) recommended that students receive clinical experience in less stressful environments, such as with residents in intermediate care or congregate housing units, before clinical placement with elderly clients in nursing homes. Introducing nursing students to the elderly first as people and secondarily as patients seemed to positively influence students' preference for working in nursing homes.

Greenhill and Baker (1986) found that planned curricular experiences related to older adults can positively influence nursing students' attitudes as well as serve to increase their knowledge of the aging process. Their study did not, however, support the hypothesis that experiences with well elderly clients would have a greater influence on nursing students' attitudes than would

experiences with sick elderly clients. Students' negative attitudes improved regardless of types of clinical contacts. In a separate study, Eddy (1986) found no statistically significant improvement in nursing students' attitudes after planned learning experiences with well elderly clients.

In a study with beginning baccalaureate nursing students, Gomez, Otto, Blattstein, and Gomez (1985) found a significant increase in positive attitudes toward elderly clients after a three-week clinical experience caring for ill elderly clients in a long-term-care setting. Langland et al. (1986) also found that initial clinical experiences with institutionalized elderly clients were helpful in fostering positive attitudes toward the elderly population. The experiences did not increase negative attitudes or lessen students' desires to work with elderly clients. Their findings also indicated that previous work experience with elderly people actually increased one's desire to work with this population.

The matter of creating and sustaining sufficient numbers of nurses to serve the health care needs of the elderly population is also of concern. Studies have shown insufficient numbers of nurses working in geriatric nursing. Strumph (1987) indicated that less than 10% of practicing registered nurses work primarily with elderly persons. In a study examining work plans of student nurses and work practices of registered nurses, Feldbaum and Feldbaum (1981) found that few planned to or did work with the elderly.

How do the current nursing curricula address the task of teaching health professionals about the aging process? According to

Bahr (1987), nursing curricula do not reflect the importance of understanding the aging process or the unique health care needs of the elderly population. Strumph (1987) concurred, saying that most nursing programs do not prepare students to work with aged patients. Webb and Shives (1988) contended that:

Nursing faculty must work with nurses providing care to the aged to update knowledge and skills specifically related to gerontology. An all-out cooperative effort must be made to create positive attitudes and increased interest in caring for the frail elderly in our communities. (p. 120)

Lee and Cody (1987), in their study on curriculum in gerontological nursing, found that no consensus existed on a core curriculum in gerontological nursing. They proposed an interdisciplinary approach to core-curriculum development in gerontological nursing.

In this study, the researcher attempted to determine nursing students' attitudes and knowledge regarding working with elderly clients. The study findings will be used to recommend curriculum development and modifications in gerontology offerings, which may positively influence nursing students' attitudes toward elderly persons. Given the increasing numbers of individuals over 65 years of age who will require the services of health care providers, the investigator will provide nurse educators with recommendations that may assist them in stimulating students' interest in and desire for working with the elderly population.

#### Theoretical Framework

The theoretical framework for this research study is based on the ABC model of attitudes--the interrelationship of affect,

behavior, and cognition in attitudinal formation. Breckler (1984) viewed attitudes as comprising three components and each attitude as a combination of affective, behavioral, and cognitive reactions to an object, person, or idea. According to Brehm and Kassin (1990), the affective component consists of evaluating attitudes positively, negatively, or with mixed feelings. The behavioral component of attitudes refers to how an individual behaves toward an object, person, or idea. The cognitive component of attitudes refers to one's beliefs about persons, objects, and ideas.

Rokeach (1968) stated that all attitudinal theories

. . . share the common assumption that man strives to maintain consistency among the cognitive, affective, and behavioral components within a single belief, among two or more related beliefs, among all the beliefs entering into an attitude organization, and among all the beliefs and attitudes entering into a total system of beliefs. (p. 114)

Attitudes are learned in response to life situations and are important motivators for behavioral responses.

Nurses, as part of society, reflect societal attitudes toward the aging process. Because attitudes do influence behavior, nurses' attitudes toward aging do affect the quality of health care provided for the elderly population. Values and attitudes that nurses hold may thus determine the degree of knowledgeable, holistic care delivered to elderly clients.

Some social psychologists prefer to define attitudes only in affective terms; however, the tricomponent view was used in this study. Kallgren and Wood (1986) argued that there is a relationship between cognition and behavior; the more informed one is about

attitudes, the more consistent the attitudes are with behavior. Brehm and Kassin (1990) found that the strength of attitudes was not only measured by the amount of information one had, but also by how that information was acquired. Attitudes are more stable and more predictive of behavior when they are formed through direct, personal experience. Strongly held attitudes, which are very accessible to awareness, guide one's behavior because of their prominence in one's thinking.

The most common way to assess attitudes is to ask. Frequently used methods of information gathering include self-report data or data from multiple-item questionnaires called attitude scales, often employing a Likert scale of measurement. However, researchers have stated that responses to attitudinal scales should be used with caution; individuals may complete their questionnaire in ways they perceive as acceptable to the researcher.

In this study, the researcher assessed attitudes of senior nursing students and determined the correlations between attitudes toward the elderly population, levels of knowledge regarding the aging process, demographic data, and previous-experience factors. In effect, the ABC model of attitudes was tested.

### Summary

In summary, this chapter included a review of the literature on topics and theory relevant to this study. The stereotyping of elderly persons by contemporary society and health care providers was analyzed, as well as factors influencing attitudes of health

care providers who care for elderly persons. Study findings revealed that researchers do not agree on the influence of specific learning experiences on nursing students' attitudes toward elderly clients. Processes used in forming and changing attitudes through learning and experience were analyzed. Studies showed that most researchers agree that the values and attitudes that nurses hold do determine the quality and quantity of holistic care delivered to elderly clients. Literature findings addressing curricular development and change which stimulate the formation of positive attitudes toward the elderly were reviewed. Last, the ABC theoretical model of attitudes was presented.

## CHAPTER III

### DESIGN AND METHODOLOGY

#### Introduction

The writer's purpose in conducting this study was to explore the attitudes of senior nursing students toward elderly persons and to draw implications from the study findings for curriculum design and course modifications in baccalaureate nursing programs. In this chapter, the design of the research study and the research methodology are explained. First, the research subjects are described. Then, the research procedures and instruments used to gather data are discussed. Last, the null hypotheses are restated, the independent and dependent variables are presented, and the techniques used in data analysis are explained.

#### Design

The type of design for this study was descriptive in that quantitative data were obtained through distribution of questionnaire surveys. Some qualitative data were obtained in the comparative data questionnaire. A majority of the research involved correlational studies and parametric procedures.

#### Subjects

The population in this study included 202 generic (four-year) nursing students enrolled in the final semester or quarter of their

senior year of a baccalaureate nursing program. All senior nursing students enrolled in nursing schools located in six public universities in Michigan were asked to participate in the study. One hundred nine students (54%) voluntarily completed the data-collection instruments.

The six nursing schools selected for this study were accredited by the National League for Nursing, the recognized accrediting body for schools of nursing in the United States. Registered nurses enrolled in these baccalaureate nursing programs were not included in the study. There was no risk to the subjects during the course of this research.

The six universities were small to medium in size and were geographically spaced so that nursing students represented all parts of the state of Michigan, both urban and rural. To maximize cooperation in the study, data were not analyzed by school. Thus, schools were not able to use the outcomes of this study for comparing positive and negative curriculum features between schools. Participating schools and students were assured of anonymity in data analysis.

#### Data-Collection Procedure

A letter requesting students' participation in the study was sent to a contact person from each of the nursing schools participating in this study (see Appendix B). The contact person was identified by the dean of nursing from each respective school. The letter to the contact person included a description of the



purpose of the study, provided instructions and time frame for data collection, and assured the protection of human subjects. Student participants were provided with a cover letter describing the purpose of the study and instructions for completing the data-collection instruments. The cover letter also included a statement that student participation was voluntary and subject anonymity was assured (see Appendix C). This study was approved by the University Committee on Research Involving Human Subjects (UCRIHS) at Michigan State University (see Appendix D).

Questionnaires were sent to the contact person from each school for distribution to students. Students were given a packet with data-collection instruments, cover letter, and stamped envelope for return of questionnaires. The contact person was asked to return a postcard indicating the number of packets distributed. The number of completed questionnaires returned was 109 or 54% of the population.

#### Data-Collection Instruments

Nursing students were asked to complete three data-collection instruments used in this research study: the Kogan Attitudes Toward Old People (ATOP) Scale (1961), Palmore's Facts on Aging Quiz: Part 2 (FAQ2) (1981), and a comparative data questionnaire developed by the investigator (see Appendix A). Consent for use of these research instruments was received from each respective author.

The Kogan Attitudes Toward  
Old People Scale

The ATOP Scale, developed by Nathan Kogan (1961), is a Likert-type scale consisting of 17 items with positive content and 17 items with negative content. There are six response categories: strongly disagree (scored 1), disagree (scored 2), slightly disagree (scored 3), slightly agree (scored 4), agree (scored 5), and strongly agree (scored 6). Items in the instrument were developed to learn how respondents feel about elderly people on such issues as personality, intelligence, dependence, living arrangements, personal appearance, and so on. The scale was designed to measure stereotypes associated with aging. The ATOP Scale is very specific to the older age group, is easy to score, and takes little time in administration and analysis.

Mangen and Peterson (1982) stated that reliability of the Kogan instrument can be based on the "relatively extensive information available on the correlation between items and their scale score . . . as well as correlations between positively and negatively worded item pairs" (p. 551). They further stated that examinations of validity have been conducted concerning correlations of scales with other variables and correlation of scales and later behaviors (Mangen & Peterson, 1982, p. 551). The reliability of Kogan's instrument was considered moderate at the time of its development:  $r = .73$  to  $r = .83$  on the negative scale and  $r = .66$  to  $r = .77$  on the positive scale (Kogan, 1961).

Facts on Aging Quiz: Part 2

Palmore's FAQ2 is a 25-item true-false quiz designed to test a person's knowledge about basic physical, mental, and social facts about aging, as well as to uncover misconceptions about the aging process. The FAQ2 is also easy to administer and score. Palmore has developed two Facts on Aging Quizzes (FAQ1 and FAQ2); both measure levels of knowledge about aging. The FAQ2, used in this study, permits the use of an alternative form for measuring knowledge when using the tool before and after a learning experience. Palmore (1988) stated that more than 90 studies have used the two versions of the FAQ; he observed that the two FAQs are the only published tests of knowledge about aging that are both short and documented.

The FAQs may also be used to measure attitudes (Palmer, 1988). The percentage wrong on the quiz measures the amount of misconception that needs to be corrected and serves as the basis for measuring attitudes. The bias scores provide an indirect measure of attitudes toward the aged. Fourteen items in the FAQ2 indicate a negative bias if they are marked incorrectly; they are Items 3, 4, 5, 9, 10, 11, 12, 14, 17, 19, 20, 21, 24, and 25. Five items indicate a positive bias if they are marked incorrectly; they are Items 1, 2, 8, 13, and 16 (Palmore, 1988, p. 32).

Research on the validity of the FAQs is cited in the literature. Palmore (1988) stated that

The primary evidence for the validity of the quiz is the documentation of the items, which cites the statistics and studies demonstrating the facts. Most of the statistics or

findings come from representative national studies or have been substantiated by several local studies and are generally agreed upon by the experts in the area. Thus, all the items have a high degree of "face validity." (p. 54)

Palmore's reliability correlations with the FAQ range from .50 to .80 (Palmore, 1981). Palmore (1988) stated that two other sources of support for FAQ validity are the fact that those with more education in gerontology tend to score higher on the FAQ, and the finding that intergroup reliability is high; i.e., groups with comparable education produce similar scores.

#### Comparative Data Questionnaire

The questionnaire developed by the investigator contains items intended to elicit demographic and descriptive data such as background information concerning exposure to the elderly population, and data related to curriculum content in geriatric nursing. The survey tool is a one-page form designed to obtain both quantitative and qualitative data. Across all students, information concerning amount of geriatric theory and geriatric clinical experience in curricula was correlated with attitudinal scores obtained from the ATOP Survey and the FAQ2.

#### Research Questions

The following research questions were addressed in this study:

1. What are the nursing students' attitudes toward elderly persons?

2. Are different types of experiential learning associated with varying nursing student attitudes toward caring for elderly persons?

3. What are the relationships among nursing students' knowledge, attitudes, and experiences with the elderly population?

### Hypotheses

The following hypotheses, stated in the null form, were formulated to guide the analysis of data collected in this research study and to address the issues identified in the research questions.

Hypothesis 1: The mean scores derived from the Attitudes Toward Old People (ATOP) positive attitude scale will not differ significantly for three groups of senior nursing students with three levels of well elderly clinical experience in community settings (0-5 days, 6-15 days, and 16+ days).

Hypothesis 2: The mean ATOP negative attitude scale scores will not differ significantly for three groups of senior nursing students with three levels of well elderly clinical experience in community settings (0-5 days, 6-15 days, and 16+ days).

Hypothesis 3: The mean knowledge scores on the Facts on Aging Quiz: Part 2 (FAQ2) will not differ significantly for three groups of senior nursing students with three levels of well elderly experience in community settings (0-5 days, 6-15 days, and 16+ days).

Hypothesis 4: The mean ATOP positive attitude scale scores will not differ significantly for three groups of senior nursing students with three levels of ill elderly clinical experience in community settings (0-5 days, 6-15 days, and 16+ days).

Hypothesis 5: The mean ATOP negative attitude scale scores will not differ significantly for three groups of senior nursing students with three levels of ill elderly clinical experience in community settings (0-5 days, 6-15 days, and 16+ days).

Hypothesis 6: The mean FAQ2 knowledge scores will not differ significantly for three groups of senior nursing students with three levels of ill elderly clinical experience in community settings (0-5 days, 6-15 days, and 16+ days).

Hypothesis 7: The mean ATOP positive attitude scale scores will not differ significantly for three groups of senior nursing students with three levels of gerontology coursework (no coursework, specific nonnursing, and specific nursing).

Hypothesis 8: The mean ATOP negative attitude scale scores will not differ significantly for three groups of senior nursing students with three levels of gerontology coursework (no coursework, specific nonnursing, and specific nursing).

Hypothesis 9: The mean FAQ2 knowledge scores will not differ significantly for three groups of senior nursing students with three levels of gerontology coursework (no coursework, specific nonnursing, and specific nursing).

Hypothesis 10: The correlation between the ATOP positive scale scores and the FAQ2 knowledge scores will either be less than or equal to zero.

Hypothesis 11: The correlation between the ATOP negative scale scores and the FAQ2 knowledge scores will either be greater than or equal to zero.

Hypothesis 12: The correlation between the ATOP positive scale scores and the ATOP negative scale scores will either be greater than or equal to zero.

Hypothesis 13: The correlation between the ATOP positive scale scores and student age will either be less than or equal to zero.

Hypothesis 14: The correlation between the ATOP negative scale scores and student age will either be greater than or equal to zero.

#### Independent Variables

Independent variables were derived from data obtained from the comparative data questionnaire designed by the researcher. The independent variables included (a) number of days of clinical nursing experience with well and ill elderly persons, (b) amount of

time spent with elderly persons, (c) age of oldest person with whom respondent had ever lived, (d) respondent's perception of the age at which one becomes old, (e) student's estimate of the percentage of the United States population that is old, (f) amount and type of gerontology coursework, (g) student's age, (h) preferred client age group, and (i) nursing specialty preference.

#### Dependent Variables

Dependent variables included (a) nursing students' positive and negative attitude scores as measured on Kogan's ATOP Scale and (b) knowledge levels as measured on Palmore's FAQ2.

#### Data-Analysis Techniques

Several types of statistical analyses were performed to determine the relationships between variables. The data were analyzed using the Statistical Package for the Social Sciences (SPSS-PC+, Version 3.1). The .05 alpha level was established as the criterion for statistical significance.

Both descriptive and inferential analyses were used in the research study. Descriptive statistics were used to provide a profile of the participants; this profile was based on the normative and descriptive data collected in the questionnaire designed by the investigator.

One-way analysis of variance (ANOVA) was used to (a) compare positive and negative attitude scores as measured on the ATOP scales of three groups of senior nursing students with three levels of well elderly clinical experience in community settings (0-5 days, 6-15

days, and 16+ days); (b) compare knowledge scores as measured on the FAQ2 of three groups of senior nursing students on three levels of well elderly clinical experience in community settings (0-5 days, 6-15 days, and 16+ days); (c) compare positive and negative attitude scores as measured on the ATOP scales of three groups of senior nursing students with three levels of ill elderly clinical experience in community settings (0-5 days, 6-15 days, and 16+ days); (d) compare knowledge scores as measured on the FAQ2 of three groups of senior nursing students with three levels of ill elderly clinical experience in community settings (0-5 days, 6-15 days, and 16+ days); (e) compare positive and negative attitude scores as measured on the ATOP scales of three groups of senior nursing students with three levels of gerontology coursework (no coursework, specific nonnursing, and specific nursing); and (f) compare knowledge scores as measured on the FAQ2 of three groups of senior nursing students with three levels of gerontology coursework (no coursework, specific nonnursing, and specific nursing).

Pearson product-moment correlations were performed to determine associations between (a) ATOP positive attitude scale scores and FAQ2 knowledge scores, (b) ATOP negative attitude scale scores and FAQ2 knowledge scores, (c) ATOP positive attitude scale scores and student age; and (d) ATOP negative attitude scale scores and student age. Based on the ABC theory of attitudes, a positive correlation was predicted between ATOP positive attitude scale scores and FAQ2 knowledge scores, and a negative correlation was predicted between



ATOP negative attitude scale scores and FAQ2 knowledge scores. A positive correlation was predicted between ATOP positive attitude scale scores and student age; older students were predicted to have higher scores on the ATOP positive attitude scale and lower scores on the ATOP negative attitude scale.

The Pearson correlation coefficient was also used to test correlations between other dependent and independent variables. The variables included student's age, age at which one is perceived to become old, student's response to percentage of the United States population that is old, gerontological nursing theory content hours, hospital geriatric clinical experience, community ill elderly experience, and community well elderly experience. These variables were correlated with geriatric nursing preference, mean scores on the FAQ2, ATOP positive and negative attitude scale scores, and age group with which one preferred to work.

### Summary

The research methodology was described in this chapter. The study sample, data-collection instruments and process, independent and dependent variables, and data-analysis techniques were discussed. The research questions and null hypotheses were restated.

## CHAPTER IV

### RESULTS OF THE DATA ANALYSIS

#### Introduction

Results of the analysis of data collected to answer the three research questions are presented in this chapter. The research questions are:

1. What are the nursing students' attitudes toward elderly persons?
2. Are different types of experiential learning associated with varying nursing student attitudes toward caring for elderly persons?
3. What are the relationships among nursing students' knowledge, attitudes, and experiences with the elderly population?

The sources of data for this study were the completed questionnaires from 109 senior nursing students enrolled in six public universities in Michigan. The six universities were selected on the basis of size and location in order to provide a population that was more generalizable to similar populations. The questionnaires included (a) the Attitudes Toward Old People (ATOP) Scale developed by Nathan Kogan (1961), (b) the Facts on Aging Quiz: Part 2 (FAQ2) developed by Erdman Palmore (1981), and (c) a questionnaire assessing demographic and descriptive data designed by

the present researcher. Examples of the data-collection tools are found in Appendix A.

A letter (Appendix B) requesting students' participation in the research study was sent to a faculty contact person selected by the nursing dean of each participating school. The letter included the purpose of the study, ensured the protection of human subjects, and identified the distribution procedure and time frame for completion of the data-collection tools. Student participants were also provided with a cover letter (Appendix C) containing instructions for completing the questionnaires; the letter included a statement that their participation was voluntary, and their anonymity was ensured. Questionnaires were completed during the students' last semester or quarter of their undergraduate nursing programs. The students voluntarily completed the questionnaires on their own time and returned them by mail. Fifty-four percent (109) of the 202 surveys were returned. These 109 completed surveys constituted the data base for this study.

The researcher's purpose in this study was to explore the attitudes of senior nursing students toward elderly persons and to draw implications from the findings of the study for curriculum design and course modification in baccalaureate nursing programs. The descriptive data used in this study included basic demographic data for each respondent and data solicited from all senior nursing student participants concerning geriatric experience, education, and work preferences. Basic demographic data included students' age, race, marital status, and rural or urban orientation. Other

descriptive data included amount and type of geriatric coursework, nursing specialty preference, preferred client age group, course content hours in geriatric nursing, number of days of nursing clinical experience with well and ill elderly persons, respondent's perception of the age when one becomes old, age of oldest person with whom respondent had ever lived, and student's estimate of the percentage of old people living in the United States. Descriptive data were gathered from the researcher-designed questionnaire completed by the study participants.

### Descriptive Information

#### Demographic Data

Age. The distribution of respondents by age is displayed in Table 1. The respondents ranged in age from 21 to 50 years, with the mean age being 27.84. Fifty-seven percent of the students were between the ages of 21 and 25, with the largest number of respondents (24) being 22 years of age.

Race. The race of respondents is shown in Table 2. One hundred of the respondents (97.1%) listed their race as Caucasian. None of the 109 students identified himself/herself as African American or Black; only one respondent was Native American, and two respondents reported "other."

Marital status. The marital status of respondents is identified in Table 3. The number of students who were single or married was fairly evenly distributed--49.5% and 45.7%, respectively.

Table 1.--Distribution of respondents by age.

Age	Frequency	Valid Percent <sup>a</sup>	Cumulative Percent
21	9	8.5	8.5
22	24	22.6	31.1
23	14	13.2	44.3
24	5	4.7	49.1
25	8	7.5	56.6
26	5	4.7	61.3
27	1	.9	62.3
28	4	3.8	66.0
29	1	.9	67.0
30	2	1.9	68.9
31	4	3.8	72.6
32	4	3.8	76.4
33	1	.9	77.4
34	2	1.9	79.2
36	5	4.7	84.0
37	1	.9	84.9
38	2	1.9	86.8
39	5	4.7	91.5
41	3	2.8	94.3
42	2	1.9	96.2
43	1	.9	97.2
44	1	.9	98.1
49	1	.9	99.1
50	1	.9	100.0
Missing data	3		
Total	109	100.0	

Mean age = 27.84

Standard deviation = 7.265

<sup>a</sup>Percentage calculated on 106 respondents.

Table 2.--Distribution of respondents by race.

Race	Frequency	Valid Percent <sup>a</sup>	Cumulative Percent
Caucasian	100	97.1	97.1
Native American	1	1.0	98.1
Other	2	1.9	100.0
Missing data	6		
Total	109	100.0	

<sup>a</sup>Percentage calculated on 103 respondents.

Table 3.--Distribution of respondents by marital status.

Marital Status	Frequency	Valid Percent <sup>a</sup>	Cumulative Percent
Single	52	49.5	49.5
Married	48	45.7	95.2
Divorced	5	4.8	100.0
Missing data	4		
Total	109	100.0	

<sup>a</sup>Percentage calculated on 105 respondents.

Rural or urban orientation. The distribution of participants according to primary type of community lived in during a majority of their lives is shown in Table 4. Fifty-three students (49.1%) lived in rural communities, whereas 55 students (50.9%) indicated they lived in urban communities.

Table 4.--Distribution of respondents by rural or urban orientation.

Community Type	Frequency	Valid Percent <sup>a</sup>	Cumulative Percent
Rural	53	49.1	49.1
Urban	55	50.9	100.0
Missing data	1		
Total	109	100.0	

<sup>a</sup>Percentage calculated on 108 respondents.

Geriatric Experience, Education,  
and Work Preference

Gerontology coursework. The gerontology coursework of respondents is displayed in Table 5. Respondents were asked to indicate university courses that they had completed concerning the aged: (a) specific nursing gerontology course, (b) nonnursing gerontology course, and (c) no course. The majority of nursing students (57.8%) had no formal gerontology course in their nursing program. The remaining respondents had specific nonnursing gerontology courses (24.8%), nursing gerontology courses (14.7%), or both (2.8%).

Table 5.--Distribution of respondents by gerontology coursework.

Gerontology Courses	Frequency	Valid Percent	Cumulative Percent
No course	63	57.8	57.8
Nonnursing gerontology	27	24.8	82.6
Specific nursing gerontology	16	14.7	97.2
Both nursing and nonnursing	3	2.8	100.0
Total	109	100.0	

Nursing specialty preference. Participants were asked to rank nursing specialty areas according to work preference. The results of this ranking are listed in Table 6. Forty-two of the students (38.9%) indicated their number-one work preference as surgical nursing. In contrast, only three students (2.8%) listed geriatric nursing as the most preferred specialty.

Table 6.--Percentage of respondents in rankings of nursing specialty work preferences.

Specialty	Most Preferred			Least Preferred			Missing
	1	2	3	4	5	6	
Surgical	38.9	14.8	20.4	13.0	8.3	4.6	1
Obstetrics	23.1	21.3	14.8	22.2	10.2	8.3	1
Medical	21.5	18.7	17.8	20.6	17.8	3.7	2
Pediatrics	12.1	22.4	15.0	16.8	21.5	12.1	2
Geriatrics	2.8	14.2	23.6	15.1	28.3	16.0	3
Mental health	1.9	8.4	8.4	11.2	14.0	56.1	2

Preferred client age group. The client age group with which respondents preferred to work is shown in Table 7. Twenty-one students (19.3%) did not indicate any age-group preference. Of those indicating a preference, a majority (65.9%) preferred to work with clients between the ages of 22 and 59. Only 13 (14.8%) chose clients 60 years and older.



Table 7.--Respondents' preferred client age groups.

Age Group	Frequency	Valid Percent <sup>a</sup>	Cumulative Percent
0-12	13	14.8	14.8
13-21	4	4.5	19.3
22-35	24	27.3	46.6
36-59	34	38.6	85.2
60-79	11	12.5	97.7
80+	2	2.3	100.0
Missing data	21		
Total	109	100.0	

<sup>a</sup>Percentage calculated on 88 respondents.

Gerontology theory content hours. Respondents were asked to indicate the approximate number of content hours they had experienced in gerontology theory that had been integrated into their nursing courses. The range of gerontological nursing theory content hours was categorized on the survey as 60+ hours, 40-59 hours, 20-39 hours, 1-19 hours, and none. Fifty-three students (48.6%) indicated that they had 1 to 19 theory content hours that focused on gerontological nursing; only eight students (7.3%) reported no content hours in gerontological nursing theory. Table 8 shows the content hours in gerontology theory included in the respondents' nursing curricula, as reported by senior nursing students.

Table 8.--Distribution of respondents by content hours in gerontology theory.

Content Hours	Frequency	Valid Percent	Cumulative Percent
None	8	7.3	7.3
1-19	53	48.6	56.0
20-39	29	26.6	82.6
40-59	12	11.0	93.6
60+	7	6.4	100.0
Total	109	100.0	

Experience with well and ill elderly. Participants were asked to identify the number of clinical days worked with well and ill elderly persons in specific health care agencies. Table 9 shows the percentage of students who reported number of days worked with well and ill elderly across community settings, hospitals, and nursing homes. More than half the respondents (53.2%) reported having five or fewer days of community clinical experience with well elderly persons; 59 respondents (54.1%) spent five or fewer days with geriatric clients in nursing homes. In contrast, most clinical experience was with ill elderly persons in hospitals.

In the researcher-designed questionnaire, respondents were asked to describe in one word a characteristic of being old. A majority of the students (53) used positive words such as wise, friendly, interesting, and experienced to describe old. Thirty-seven students described old with words such as slow, lonely, gray, wrinkled, and so on. Nine students did not respond, whereas 11 were

neutral in their descriptions. Respondents' answers to Question 10, "In one word, describe a characteristic of being old," are found in Appendix E.

Table 9.--Percentage of respondents reporting number of clinical days in specific health care agencies.

Days	Comm. Well (N = 109)	Comm. Ill (N = 109)	Nursing Home (N = 109)	Hospital (N = 108)
0- 5	53.2	30.3	54.1	13.0
6-15	26.6	22.0	17.4	23.1
16-30	11.0	22.0	11.9	23.1
31-45	5.5	10.1	8.3	15.7
46+	3.7	15.6	8.3	25.0

In the researcher-designed questionnaire, students were asked two questions concerning their experiences with "old people." (Question 11: "What types of personal and/or work experiences have you had in your life with 'old people'?" Question 12: "What experiences have affected your attitude toward 'old people'?") Two nursing faculty colleagues analyzed the responses in order to assist the researcher in identifying common themes.

A large number of students had worked in health care facilities with elderly people, and many described positive personal relationships with patients, families, and relatives. Only one student indicated having no personal or work experiences with "old people." A number of students described their elderly grandparents as being positive role models in their lives. Taking care of the

elderly seemed to be a fairly positive experience for many students; however, caring for elderly persons in nursing homes usually elicited a negative or neutral response. Several cited contact with elderly persons in community settings as being quite positive. Personal life experiences with relatives and elderly persons were quoted by many as having had a positive effect on their attitudes. Few students described experiences as having a negative effect on their attitudes. Appendix F gives a detailed listing of respondents' answers to Questions 11 and 12 of the comparative data questionnaire.

Age at which one becomes old. Respondents were asked to identify the age at which one becomes old. Two numbers stood out as the most common responses: ages 65 and 70. Nineteen students (23.2%) reported 65 years of age, whereas 24 students (29.3%) indicated 70 years of age. Twenty-seven students did not specify any age. Overall, 77 students (89%) indicated 65 years or above. Twenty-seven students made narrative comments; general responses included "there is no age," "when they feel old," "strictly subjective according to the client," and "variable with health and attitude." A listing of the narrative comments to Question 1 of the comparative data questionnaire is found in Appendix G. Respondents' estimates of the age at which one becomes old are displayed in Table 10.

Table 10.--Respondents' estimates of the age at which one becomes old.

Age	Frequency	Valid Percent <sup>a</sup>	Cumulative Percent
60	4	4.9	4.9
62	1	1.2	6.1
65	19	23.2	29.3
70	24	29.3	58.5
72	1	1.2	59.8
75	11	13.4	73.2
76	1	1.2	74.4
80	13	15.9	90.2
85	6	7.3	97.6
90	1	1.2	98.8
100	1	1.2	100.0
Missing data	27		
Total	109	100.0	

Mean age = 72.317

Standard deviation = 7.669

<sup>a</sup>Percentage calculated on 82 respondents.

Age of oldest person with whom respondent had lived. Students were asked to identify the age of the oldest person with whom they had lived. The mean age was 60.8, with the maximum age being 93. Table 11 presents the ages of the oldest persons with whom the participants had lived. Two-thirds of the respondents did not report having lived with persons over the age of 65. It is conceivable that some respondents did not understand this question because six indicated that they had not lived with anyone over the age of 36. They might have interpreted the question as indicating the oldest person with whom they were currently living.

Table 11.--Ages of oldest persons with whom participants had lived.

Age	Frequency	Valid Percent <sup>a</sup>	Cumulative Percent
30	1	.9	.9
32	2	1.9	2.8
34	1	.9	3.7
35	1	.9	4.7
36	1	.9	5.6
40	3	2.8	8.4
41	1	.9	9.3
42	1	.9	10.3
44	4	3.7	14.0
45	5	4.7	18.7
46	3	2.8	21.5
47	2	1.9	23.4
48	3	2.8	26.2
49	1	.9	27.1
50	4	3.7	30.8
52	4	3.7	34.6
53	2	1.9	36.4
54	4	3.7	40.2
55	2	1.9	42.1
56	1	.9	43.0
57	3	2.8	45.8
59	1	.9	46.7
60	5	4.7	51.4
62	4	3.7	55.1
63	4	3.7	58.9
64	3	2.8	61.7
65	6	5.6	67.3
67	1	.9	68.2
70	5	4.7	72.9
71	1	.9	73.8
73	1	.9	74.8
75	3	2.8	77.6
76	1	.9	78.5
78	3	2.8	81.3
79	1	.9	82.2
80	6	5.6	87.9
82	2	1.9	89.7
84	3	2.8	92.5
85	2	1.9	94.4
86	3	2.8	97.2
90	2	1.9	99.1
93	1	.9	100.0
Missing data	2		
Total	109	100.0	

Mean age = 60.822

Standard deviation = 15.478

<sup>a</sup>Percentage calculated on 107 respondents.

Percentage of United States population who are old. Respondents were asked to indicate the approximate percentage of the population in the United States who are old. Forty-six students (44.2%) indicated that 20% to 30% of the United States population are old. Table 12 shows the respondents' estimates of the percentage of the United States population who are old.

### Knowledge

#### Respondents' Scores on the Facts on Aging Quiz: Part 2

The distribution of respondents' scores on Palmore's Facts on Aging Quiz: Part 2 (FAQ2) (1981) is displayed in Table 13. The quiz contained 25 true-false items. The purpose of administering the quiz was to measure and compare levels of knowledge across a group of senior nursing students with regard to the physical, social, and mental facts about aging in our society. The mean score on the quiz was 14.6 (58.424%). Respondents' scores ranged from a low of 40% to a high of 76% on the 25-item quiz.

In comparison, Palmore (1981) reported a mean score of 58% on the FAQ2 for 114 persons (students, staff, and faculty at Duke University) with some training in gerontology and 62% for persons untrained in gerontology. A  $t$ -test comparing the respondent sample ( $N = 109$ ) to the population mean of 62% indicated that there was a significant difference ( $t(108) = 5.174, p < .001$ ). There was no significant difference between the population mean of 58% and the respondent mean of 58.424%.

Table 12.--Percentage of United States population who were judged old by senior nursing students.

Percentage	Frequency	Valid Percent <sup>a</sup>	Cumulative Percent
3	1	1.0	1.0
5	4	3.9	4.9
8	1	1.0	5.9
10	3	2.9	8.8
11	2	2.0	10.8
12	2	2.0	12.7
15	5	4.9	17.6
20	21	20.6	38.2
24	1	1.0	39.2
25	7	6.9	46.1
28	1	1.0	47.1
30	16	15.7	62.7
33	2	2.0	64.7
35	9	8.8	73.5
38	1	1.0	74.5
40	11	10.8	85.3
45	2	2.0	87.3
50	4	3.9	91.2
54	1	1.0	92.2
55	1	1.0	93.1
60	2	2.0	95.1
65	3	2.9	98.0
70	1	1.0	99.0
80	1	1.0	100.0
Missing data	7		
Total	109	100.0	

Mean percentage = 29.728

Standard deviation = 15.394

<sup>a</sup>Percentage calculated on 102 respondents.



Table 13.--Frequency distribution of respondents' scores on the Facts on Aging Quiz: Part 2.

Score	Frequency	Valid Percent <sup>a</sup>	Cumulative Percent
10	2	1.8	1.8
11	2	1.8	3.7
12	11	10.1	13.8
13	17	15.6	29.4
14	22	20.2	49.5
15	15	13.8	63.3
16	24	22.0	85.3
17	9	8.3	93.6
18	6	5.5	99.1
19	1	.9	100.0
Total	109	100.0	

Mean score = 14.606

Standard deviation = 1.886

### Attitudes

#### Respondents' Scores on the Attitudes Toward Old People Scale

The distribution of respondents' scores on Kogan's Attitudes Toward Old People (ATOP) Scale (1961) is presented in Table 14 (positive scale) and Table 15 (negative scale). The Kogan scale measures two attitudinal views toward the elderly, one on a positive and one on a negative scale (ATOP positive and ATOP negative). Scores could range from a low of 17 to a high of 119 on each scale.

Each of the Likert-type scales consisted of 17 items, one scale with positive content and one with negative content. The scales address how respondents feel about elderly persons on such issues as personality, intelligence, independence, living arrangements, and

Table 14.--Frequency distribution of respondents' scores on the  
ATOP--positive scale.

Score	Frequency	Valid Percent <sup>a</sup>	Cumulative Percent
65	1	.9	.9
66	2	1.9	2.8
67	1	.9	3.7
68	1	.9	4.6
72	1	.9	5.6
73	3	2.8	8.3
74	1	.9	9.3
75	1	.9	10.2
76	3	2.8	13.0
77	2	1.9	14.8
78	3	2.8	17.6
79	7	6.5	24.1
80	3	2.8	26.9
81	1	.9	27.8
83	8	7.4	35.2
84	3	2.8	38.0
85	4	3.7	41.7
86	8	7.4	49.1
87	5	4.6	53.7
88	3	2.8	56.5
89	6	5.6	62.0
90	4	3.7	65.7
91	5	4.6	70.4
92	3	2.8	73.1
93	1	.9	74.1
94	4	3.7	77.8
95	3	2.8	80.6
96	3	2.8	83.3
97	2	1.9	85.2
98	4	3.7	88.9
99	2	1.9	90.7
100	3	2.8	93.5
101	1	.9	94.4
103	1	.9	95.4
105	1	.9	96.3
106	1	.9	97.2
107	1	.9	98.1
109	1	.9	99.1
114	1	.9	100.0
Missing data	1		
Total	109	100.0	

Mean positive attitude score = 87.046      Standard deviation = 9.659

<sup>a</sup>Percentage calculated on 108 respondents.

Table 15.--Frequency distribution of respondents' scores on the ATOP--negative scale.

Score	Frequency	Valid Percent <sup>a</sup>	Cumulative Percent
18	1	.9	.9
23	2	1.9	2.8
26	3	2.8	5.6
27	1	.9	6.5
28	5	4.6	11.1
29	1	.9	12.0
30	2	1.9	13.9
31	5	4.6	18.5
32	3	2.8	21.3
33	4	3.7	25.0
34	5	4.6	29.6
35	2	1.9	31.5
36	5	4.6	36.1
37	9	8.3	44.4
38	7	6.5	50.9
39	5	4.6	55.6
40	5	4.6	60.2
41	3	2.8	63.0
42	3	2.8	65.7
43	3	2.8	68.5
44	4	3.7	72.2
45	2	1.9	74.1
46	4	3.7	77.8
47	1	.9	78.7
48	2	1.9	80.6
49	3	2.8	83.3
50	1	.9	84.3
51	3	2.8	87.0
52	1	.9	88.0
53	1	.9	88.9
54	5	4.6	93.5
55	1	.9	94.4
58	1	.9	95.4
60	1	.9	96.3
63	1	.9	97.2
65	1	.9	98.1
66	1	.9	99.1
71	1	.9	100.0
Missing data	1		
Total	109	100.0	

Mean negative attitude score = 40.083      Standard deviation = 9.808

<sup>a</sup>Percentage calculated on 108 respondents.

personal appearance. Respondents answered each item with one of six responses: strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), or strongly agree (6).

The mean positive attitude score was 87.1 ( $SD = 9.659$ ), with a maximum score of 114 and a minimum score of 65. This compares to a mean positive attitude score of 83.3 earned by registered nurses in a study done by Smith, Jepson, and Perloff (1982). A high score on the positive scale indicates a more positive attitude toward elderly people.

The mean negative attitude score was 40.1 ( $SD = 9.808$ ), with a maximum score of 71 and a minimum score of 18. This mean score compares to a mean negative attitude score of 40.3 earned by registered nurses in the aforementioned study by Smith et al. (1982). A low score on the negative attitude scale indicates a less negative attitude toward elderly people.

#### Results of Hypothesis Testing

In this section, each null hypothesis is restated, and the results of the statistical test of that hypothesis are presented.

Null Hypothesis 1: The mean scores derived from the Attitudes Toward Old People (ATOP) positive attitude scale will not differ significantly for three groups of senior nursing students with three levels of well elderly clinical experience in community settings (0-5 days, 6-15 days, and 16+ days).

A one-way ANOVA was computed to compare three groups of senior nursing students differing in amount of well elderly clinical experience in community settings, using ATOP positive attitude scale scores as the dependent measure. The groups were divided according

to the number of days of clinical experience with well elderly persons in community settings. Group 1 (58 students) had 0-5 days, Group 2 (29 students) had 6-15 days, and Group 3 (22 students) had 16+ days. The means of the three groups did not differ significantly for ATOP positive attitude scores ( $F [2, 105] = .3065$ ). In Table 16 the distribution of mean scores on the ATOP positive scale for the three groups of respondents is displayed. The null hypothesis was not rejected.

Table 16.--Mean ATOP positive, ATOP negative, and FAQ2 scores for three groups of senior nursing students with three levels of well elderly clinical experience in community settings.

Group	ATOP Pos.		ATOP Neg.		FAQ2	
	<u>N</u>	Mean	<u>N</u>	Mean	<u>N</u>	Mean
1 (0-5 days)	58	87.2241	58	39.8793	58	14.6552
2 (6-15 days)	29	87.7241	29	39.8621	29	14.8276
3 (16+ days)	21	85.6190	21	40.9524	22	14.1818
Total	108	87.0463	108	40.0833	109	14.6055

Null Hypothesis 2: The mean ATOP negative attitude scale scores will not differ significantly for three groups of senior nursing students with three levels of well elderly clinical experience in community settings (0-5 days, 6-15 days, and 16+ days).

A one-way ANOVA was computed to compare three groups of senior nursing students differing in amount of well elderly experience in community settings, using ATOP negative attitude scale scores as the dependent measure. The groups were divided according to days of

clinical experience with well elderly persons in community settings. Group 1 (58 students) had 0-5 days, Group 2 (29 students) had 6-15 days, and Group 3 (22 students) had 16+ days. The means of the three groups (Table 16) did not differ significantly for ATOP negative attitude scores ( $F [2, 105] = .1007$ ). The null hypothesis was not rejected.

Null Hypothesis 3: The mean knowledge scores on the Facts on Aging Quiz: Part 2 (FAQ2) will not differ significantly for three groups of senior nursing students with three levels of well elderly experience in community settings (0-5 days, 6-15 days, and 16+ days).

A one-way ANOVA was computed to compare three groups of senior nursing students differing in amount of well elderly clinical experience in community settings with mean knowledge scores on the FAQ2 as the dependent measure. The groups were divided according to days of clinical experience with well elderly persons in community settings. Group 1 (58 students) had 0-5 days, Group 2 (29 students) had 6-15 days, and Group 3 (22 students) had 16+ days. The FAQ2 mean scores of the groups (Table 16) did not differ significantly ( $F [2, 106] = .7733$ ). The null hypothesis was not rejected.

Null Hypothesis 4: The mean ATOP positive attitude scale scores will not differ significantly for three groups of senior nursing students with three levels of ill elderly clinical experience in community settings (0-5 days, 6-15 days, and 16+ days).

A one-way ANOVA was computed to compare three groups of senior nursing students with three levels of ill elderly clinical experience in community settings, using ATOP positive attitude scale scores as the dependent measure. The groups were divided according to days of clinical experience with ill elderly persons in community

settings. Group 1 (33 students) had 0-5 days, Group 2 (24 students) had 6-15 days, and Group 3 (52 students) had 16+ days. The groups did not differ significantly on ATOP positive attitude scale scores ( $E [2, 105] = 1.0576$ ). In Table 17 the distribution of mean scores on the ATOP positive scale for these groups is presented. The null hypothesis was not rejected.

Table 17.--Mean ATOP positive, ATOP negative, and FAQ2 scores for three groups of senior nursing students with three levels of ill elderly clinical experience in community settings.

Group	ATOP Pos.		ATOP Neg.		FAQ2	
	<u>N</u>	Mean	<u>N</u>	Mean	<u>N</u>	Mean
1 (0-5 days)	33	86.6364	33	39.8485	33	14.6364
2 (6-15 days)	24	89.5417	24	37.5000	24	15.3750
3 (16+ days)	51	86.1373	51	41.4510	52	14.2308
Total	108	87.0463	108	40.0833	109	14.6055

Null Hypothesis 5: The mean ATOP negative attitude scale scores will not differ significantly for three groups of senior nursing students with three levels of ill elderly clinical experience in community settings (0-5 days, 6-15 days, and 16+ days).

A one-way ANOVA was computed to compare three groups of senior nursing students with three levels of ill elderly clinical experience in community settings, using ATOP negative attitude scale scores as the dependent measure. The groups were divided according to days of clinical experience with ill elderly persons in community settings. Group 1 (33 students) had 0-5 days, Group 2 (24 students)

had 6-15 days, and Group 3 (52 students) had 16+ days. The ATOP negative scores of the three groups (Table 17) did not differ significantly ( $F [2, 105] = 1.3466$ ). The null hypothesis was not rejected.

Null Hypothesis 6: The mean FAQ2 knowledge scores will not differ significantly for three groups of senior nursing students with three levels of ill elderly clinical experience in community settings (0-5 days, 6-15 days, and 16+ days).

A one-way ANOVA was computed to compare three groups of senior nursing students differing in amount of ill elderly clinical experience in community settings, using mean knowledge scores on the FAQ2 as the dependent measure. The groups were divided according to days of clinical experience with ill elderly persons in community settings. Group 1 (33 students) had 0-3 days, Group 2 (24 students) had 6-15 days, and Group 3 (52 students) had 16+ days. The mean scores of the three groups on the FAQ2 (Table 17) did differ significantly ( $F [2, 106] = 3.1500$ ,  $p < .05$ ). The null hypothesis was rejected. A Scheffé multiple-range test indicated that only Groups 2 and 3 differed significantly, with Group 2 earning higher scores on the FAQ2 measure.

Null Hypothesis 7: The mean ATOP positive attitude scale scores will not differ significantly for three groups of senior nursing students with three levels of gerontology coursework (no coursework, specific nonnursing, and specific nursing).

A one-way ANOVA was computed to compare three groups of senior nursing students differing in gerontology coursework completed in their nursing programs, using ATOP positive attitude scale scores as the dependent measure. The groups were divided according to types



of gerontology coursework completed. Group 1 had no coursework, Group 2 had a nonnursing gerontology course, and Group 3 had a specific nursing gerontology course. The means for ATOP positive attitude scale scores of the three groups did not differ significantly ( $F [2, 102] = 2.3215$ ). In Table 18 the mean scores on the ATOP positive scale for the three groups are displayed. The null hypothesis was not rejected.

Table 18.--Distribution of mean scores for three groups of senior nursing students with three levels of gerontology coursework.

Group	ATOP Pos.		ATOP Neg.		FAQ2	
	<u>N</u>	Mean	<u>N</u>	Mean	<u>N</u>	Mean
1	63	87.8095	63	39.1270	63	14.8095
2	27	83.3704	27	41.1852	27	14.1111
3	15	88.4000	15	42.4667	16	14.5625
Total	105	86.7524	105	40.1333	106	14.5943

Key: Group 1 = No course, Group 2 = Nonnursing course, Group 3 = Nursing course.

Null Hypothesis 8: The mean ATOP negative attitude scale scores will not differ significantly for three groups of senior nursing students with three levels of gerontology coursework (no coursework, specific nonnursing, and specific nursing).

A one-way ANOVA was computed to compare three groups of senior nursing students differing in gerontology coursework completed in their nursing programs, using ATOP negative attitude scale scores as the dependent variable. The groups were divided according to types

of gerontology coursework completed. Group 1 had no coursework, Group 2 had a specific nonnursing gerontology course, and Group 3 had a specific nursing gerontology course. The means of the three groups on the ATOP negative attitude scale (Table 18) did not differ significantly ( $F [2, 102] = .8890$ ). The null hypothesis was not rejected.

Null Hypothesis 9: The mean FAQ2 knowledge scores will not differ significantly for three groups of senior nursing students with three levels of gerontology coursework (no coursework, specific nonnursing, and specific nursing).

A one-way ANOVA was computed to compare three groups of senior nursing students differing in gerontology coursework completed in their nursing programs, using mean knowledge scores on the FAQ2 as the dependent variable. The groups were divided according to types of gerontology coursework completed. Group 1 had no coursework, Group 2 had a specific nonnursing gerontology course, and Group 3 had a specific nursing gerontology course. The means of the three groups on the FAQ2 (Table 18) did not differ significantly ( $F [2, 103] = 1.2778$ ). The null hypothesis was not rejected.

Null Hypothesis 10: The correlation between the ATOP positive scale scores and the FAQ2 knowledge scores will either be less than or equal to zero.

This hypothesis was tested by use of the Pearson correlation coefficient. The correlation was significantly greater than zero ( $r [106] = .1808, p < .05$ ). This correlation is illustrated in Figure 1. The null hypothesis was rejected. There was a significant positive correlation between the ATOP positive scale scores and the FAQ2 knowledge scores.

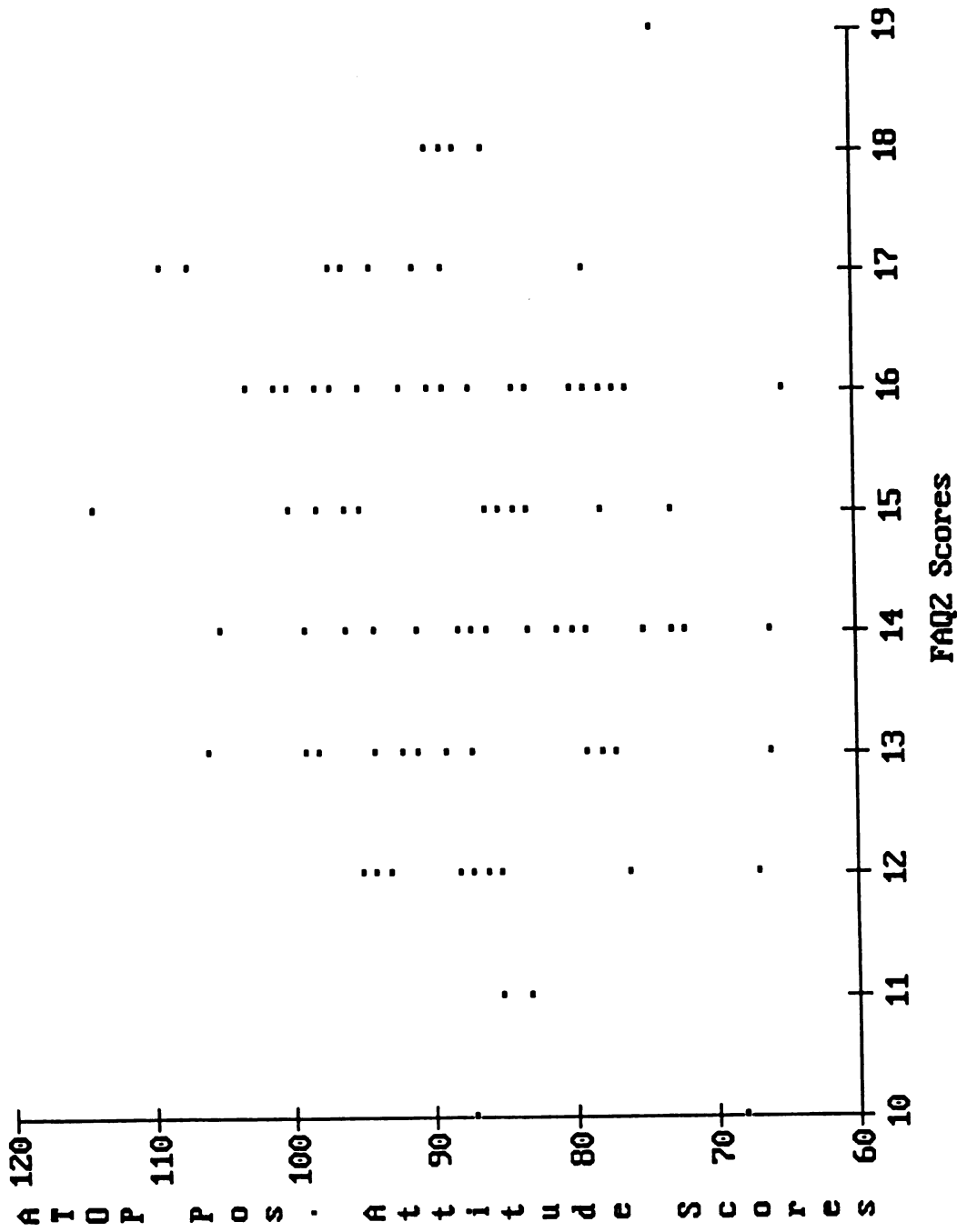


Figure 1: Scattergram of relationship between FAQ2 and ATOP positive attitude scale.\*  
 $r(106) = .1808, p < .05.$

Null Hypothesis 11: The correlation between the ATOP negative scale scores and the FAQ2 knowledge scores will either be greater than or equal to zero.

This hypothesis was tested by use of the Pearson correlation coefficient. The correlation was significantly less than zero ( $r [106] = .2816, p < .01$ ). This correlation is illustrated in Figure 2. The null hypothesis was rejected. There was a significant negative correlation between the ATOP negative scale scores and the FAQ2 knowledge scores.

Null Hypothesis 12: The correlation between the ATOP positive scale scores and the ATOP negative scale scores will either be greater than or equal to zero.

This hypothesis was tested by use of the Pearson correlation coefficient. The correlation was significantly less than zero ( $r [106] = -.4129, p < .01$ ). This correlation is illustrated in Figure 3. The null hypothesis was rejected. There was a significant negative correlation between ATOP positive scale scores and the ATOP negative scale scores.

Null Hypothesis 13: The correlation between the ATOP positive scale scores and student age will either be less than or equal to zero.

This hypothesis was tested by use of the Pearson correlation coefficient. The correlation was not significantly more than zero ( $r [105] = .0704, p > .05$ ). The null hypothesis was not rejected.

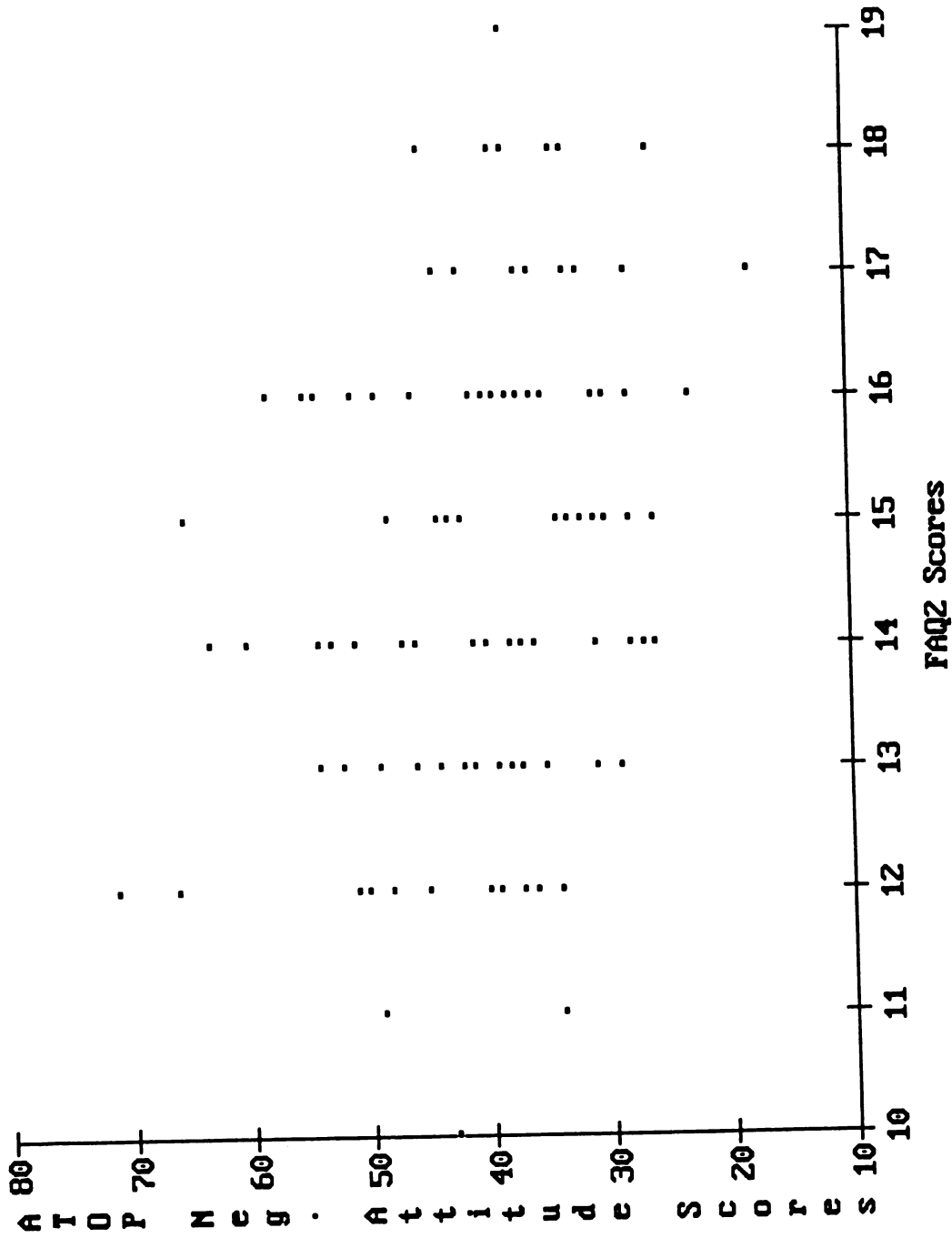


Figure 2: Scattergram of relationship between FAQ2 and ATOP negative attitude scale.\*  
 \* $r(106) = -.2816, p < .01$ .

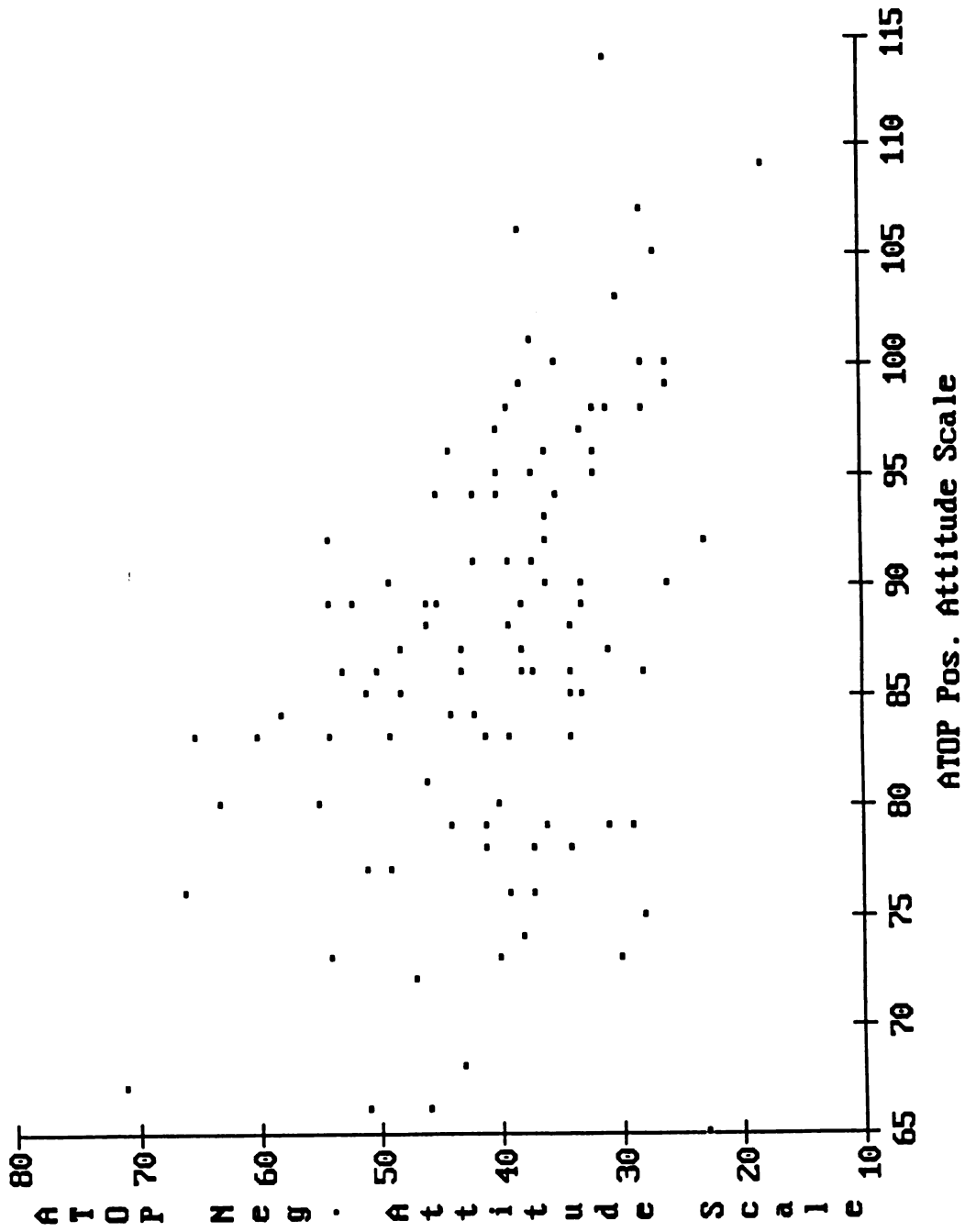


Figure 3: Scattergram of relationship between mean scores on ATOP positive attitude scale and mean scores on ATOP negative attitude scale.\*

\* $r(106) = -.4129, p < .01$ .

Null Hypothesis 14: The correlation between the ATOP negative scale scores and student age will either be greater than or equal to zero.

This hypothesis was tested by use of the Pearson correlation coefficient. The correlation was not significantly greater than zero ( $r_{[105]} = .0151$ ,  $p > .05$ ). The null hypothesis was not rejected.

The Pearson correlation coefficient was used to test correlations between other dependent and independent variables that the researcher thought might have significance to the outcome of the study. In Table 19 the correlations between the variables are displayed. The variables include student age (Age), age at which one becomes old (Ageold), students' response to percentage of United States population that is old (Perctold), gerontological nursing theory content hours (Conthrs), hospital geriatric clinical experience (Hospital), nursing home geriatric clinical experience (Nursingh), community ill elderly experience (Comm.ill), and community well elderly experience (Comm.wel) with the variables: geriatric nursing specialty preference (Geriat), mean scores on FAQ2 (Facts), ATOP positive attitude scale scores (Posatt), ATOP negative attitude scale scores (Negatt), and age group with which one preferred to work (Agepref).

Statistically significant relationships were found between the age of the respondents and geriatric preference and the age of patients with whom one preferred to work. The older students had a greater preference for the geriatric specialty and preferred to work

Table 19.--Correlations between variables.

Variable	Variable				
	GERIAT	FACTS	POSATT	NEGATT	AGEPREF
AGE	-.2894**	-.0533	.0704	.0151	.2166*
<u>n</u> =	(103)	(106)	(105)	(105)	( 85)
<u>p</u> =	.002	.294	.238	.439	.023
AGEOLD	-.1343	.2610**	.2214*	-.1724	.1504
<u>n</u> =	( 80)	( 82)	( 82)	( 82)	( 69)
<u>p</u> =	.117	.009	.023	.061	.109
PERCTOLD	.2015*	-.2888**	-.1707*	.1683*	-.1449
<u>n</u> =	( 99)	(102)	(101)	(101)	( 84)
<u>p</u> =	.023	.002	.044	.046	.094
CONTHRS	-.0934	.0591	-.0291	-.0673	.1046
<u>n</u> =	(106)	(109)	(108)	(108)	( 88)
<u>p</u> =	.170	.271	.382	.244	.166
HOSPITAL	-.0412	-.1463	-.1522	-.0415	.0088
<u>n</u> =	(105)	(108)	(107)	(107)	( 87)
<u>p</u> =	.338	.065	.059	.336	.468
NURSINGH	.0303	-.1351	-.0683	.0466	-.1536
<u>n</u> =	(106)	(109)	(108)	(108)	( 88)
<u>p</u> =	.379	.081	.241	.316	.077
COMM. ILL	-.2952**	-.1240	-.0523	.0645	.1453
<u>n</u> =	(106)	(109)	(108)	(108)	( 88)
<u>p</u> =	.001	.099	.295	.254	.088
COMM. WEL	-.1489	-.1443	-.0943	.0619	.0421
<u>n</u> =	(106)	(109)	(108)	(108)	( 88)
<u>p</u> =	.064	.067	.166	.262	.348
OLDEST	-.1246	.0805	-.0171	.0252	.2960**
<u>n</u> =	(104)	(107)	(106)	(106)	( 86)
<u>p</u> =	.104	.205	.431	.399	.003

(Coefficient/(Cases)/1-tailed significance)

\*Significant at the .05 level.

\*\*Significant at the .01 level.



with older age groups. Students who indicated an older age at which one becomes old had higher knowledge scores on the FAQ2. Significant relationships were also found between students' response to percentage of the United States population that is old and geriatric preference, knowledge scores on the FAQ2, and scores on the ATOP attitude scales. Students who indicated a larger percentage of the United States population to be old had a lower interest in geriatric nursing, had lower scores on the FAQ2, and had less positive (lower ATOP positive scores) and more negative attitudes (higher ATOP negative scores) toward aging. Students with more geriatric hospital clinical experience had higher scores on the ATOP scale, whereas students with more ill elderly experience in community settings had a stronger preference for geriatric nursing. Although no statistically significant relationship was found between students with more well elderly experience in community settings and the preference for geriatric nursing, the correlation approached significance ( $r [104] = -.1439$ ,  $p = .064$ ).

A one-way ANOVA was computed to compare five groups of senior nursing students with differing amounts of clinical experience in nursing homes and hospitals on the knowledge scores on the FAQ2 and the mean scores on the ATOP positive and negative attitude scales. These comparisons are shown in Tables 20 and 21. The only statistically significant comparison was between the knowledge scores on the FAQ2 of groups having differing amounts of time in nursing homes ( $F [4, 104] = 2.6875$ ). A Scheffé multiple-range test

indicated that only Group 1 and Group 5 differed significantly, with Group 1 scoring higher on the measure.

Table 20.--Distribution of mean scores on the FAQ2 and the ATOP positive and negative scales for groups of senior nursing students with five levels of hospital geriatric clinical experience.

Days	FAQ2		ATOP Pos.		ATOP Neg.	
	<u>N</u>	Mean	<u>N</u>	Mean	<u>N</u>	Mean
0- 5	14	14.4286	14	88.0714	14	41.1429
6-15	25	15.2000	25	89.1600	25	39.8800
16-30	25	14.7600	25	87.4800	25	40.0400
31-45	17	14.4706	16	84.6250	16	40.7500
46+	27	14.0741	27	85.2593	27	39.2222
Total	108	14.6019	107	86.9626	107	40.0467

Table 21.--Distribution of mean scores on the FAQ2 and the ATOP positive and negative scales for groups of senior nursing students with five levels of nursing home geriatric clinical experience.

Days	FAQ2		ATOP Pos.		ATOP Neg.	
	<u>N</u>	Mean	<u>N</u>	Mean	<u>N</u>	Mean
0- 5	59	15.5763	59	87.1186	59	39.6441
6-15	19	15.3684	19	88.7368	19	40.2105
16-30	13	14.4615	13	88.3846	13	41.3077
31-45	9	15.0000	8	80.1250	8	40.1250
46+	9	13.0000	9	87.2222	9	40.8889
Total	109	14.6055	108	87.0463	108	40.0833

Summary

In summary, this chapter focused on analysis of descriptive and qualitative data collected in this research study. The results of testing the 14 null hypotheses were presented.

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary

The researcher's primary purpose in this study was to explore the attitudes and knowledge of senior nursing students toward elderly persons and to draw implications from the study findings for curriculum design and course modification in baccalaureate nursing schools. The researcher's specific objectives were as follows:

1. To determine factors that influence senior nursing students' attitudes toward the elderly population.
2. To investigate the relationships among senior nursing students' cognitive and affective knowledge, skills, and experiences in gerontology.
3. To use the study findings to recommend curriculum development and modification which may positively influence baccalaureate nursing students' attitudes toward elderly persons.

#### Procedures

The study population comprised 202 senior nursing students from six public Michigan universities. The nursing students were asked to complete three data-collection instruments: (a) Kogan's Attitudes Toward Old People Scale (ATOP) (1961), (b) Palmore's Facts on Aging Quiz: Part 2 (FAQ2) (1981), and (c) a comparative data

questionnaire soliciting both descriptive and normative self-report data designed by the investigator. The number of completed questionnaires returned was 109 or 54% of the population.

Both descriptive and inferential analyses were used in the study. Descriptive statistics were used to compile a profile of the participants; this profile was based on normative and descriptive data generated from the subjects' responses to the comparative data questionnaire designed by the investigator. Means and standard deviations were the main descriptive statistics used. Pearson product-moment correlations and one-way analyses of variance (ANOVA) were used to summarize relationships among variables.

### Findings

In this section, each research question is restated, followed by the results for that question.

Research Question 1: What are the nursing students' attitudes toward elderly persons?

Means on the ATOP positive and negative scales for senior nursing students were presented in Tables 14 and 15. A review of these tables indicated that the nursing student participants in this study may have held both more positive and less negative attitudes toward elderly persons than are held by providers of nursing care in the field. Illustratively, these ATOP scores were more positive and less negative than scores earned by registered nurses caring for elderly patients in a study done by Smith et al. (1982). As predicted, there was a significant negative correlation between the respondents' ATOP positive and negative scale scores; participants

with more positive attitudes as measured on the positive scale score also held less negative attitudes as measured on the negative scale score.

When nursing students were asked to describe the characteristic depicting "old" in one word, common responses included "wise," "experienced," "interesting," "busy," "slow," "lonely," "gray," and "wrinkled." Fifty-two nursing students' responses had a positive connotation, whereas 37 were negative. Characterizations of the elderly were, in some measure, more kind than critical.

Research Question 2: Are different types of experiential learning associated with varying nursing student attitudes toward caring for elderly persons?

Various researchers have addressed health care providers' attitudes toward working with elderly clients. Nursing students and registered nurses have generally expressed either a reluctance or an unwillingness to work with geriatric clients in nursing homes, hospitals, and health care agencies within community settings (Feldbaum & Feldbaum, 1981; Kayser & Minnigerode, 1975; Knowles & Sarver, 1985; Lynah, 1985; Shimamoto & Rose, 1987). When respondents in the current study were asked to rank nursing specialty areas according to work preferences, only three students (2.8%) listed geriatric nursing as the most preferred specialty. In addition, 16% identified geriatric nursing as the least preferred specialty (Table 6). These results compare to findings by Tollett and Adamson (1982); only 1.3% of the senior nursing students (158) participating in their study on clinical specialty preference

indicated a preference for geriatric practice (p. 579). It is interesting that 38.7% of the nursing students in the Tollett and Adamson study had no preference with regard to their ranking of nursing specialties.

In the current study, statistically significant relationships were found between age of respondents and geriatric preference, as well as between age of respondents and age of clients with whom respondents preferred to work. Only 14.8% (13) of the study participants preferred to work with clients over 60 years of age (Table 7). Older students preferred to work with older clients and tended to indicate geriatrics as a clinical preference.

Respondents who indicated a preference for the geriatric specialty also had more positive attitudes toward elderly persons. Armstrong-Esther, Sandilands, and Miller (1989) also found a high correlation between hospital staff who expressed a preference for working in geriatrics and rehabilitation and high scores on Kogan's ATOP positive scale.

Participants were asked to identify the number of clinical days they had worked with well and ill elderly persons in specific health care agencies. More than half the students reported having five or fewer days of community experience with well elderly persons; likewise, more than half spent five days or less with geriatric clients in nursing homes. Most clinical experience was with acutely ill patients in hospitals. The positive correlation between nursing students' preference for working with elderly clients and length of

clinical experience with ill elderly clients in community settings has implications for curriculum change in nursing schools.

Nursing student participants were asked to describe experiences that affected their attitudes toward "old people." Many acknowledged that their personal relationships with patients, families, and relatives had influenced their attitudes. Some students had lived with an elderly person; others cited work or educational experiences as factors that positively changed their attitudes. A number of students described their elderly grandparents as positive role models in their lives.

Taking care of the elderly seemed to be a fairly positive experience for many students; however, taking care of elderly clients in nursing homes usually elicited negative responses. Personal life experiences with relatives and elderly persons were perceived by many subjects as positively affecting their attitudes; few students described personal experiences with the elderly as having a negative effect on their attitudes toward them.

Research Question 3: What are the relationships among nursing students' knowledge, attitudes, and experiences with the elderly population?

The respondents' mean score on the FAQ2 was 58.4%. This compares to a mean score of 58% on the FAQ2 earned by 114 persons (students, staff, and faculty with some training in gerontology) in a study done at Duke University, and a mean score of 62% received by persons untrained in gerontology (Palmore, 1981). In a study by Huckstadt (1983) measuring levels of gerontology knowledge, nurses with a baccalaureate degree in nursing earned an average mean of



57.8% on the FAQ2. One must consider the validity of the FAQ2 test instrument when students with no training in gerontology earn a higher mean score than students and faculty with training in gerontology. Perhaps the test is more appropriate for the general population, or professionally related biases may be reflected in the answers of health care providers.

A significant relationship was found between respondents' mean scores on the FAQ2 and mean attitude scores on the ATOP positive and negative scales. Students with higher scores on the FAQ2 had more positive and less negative attitudes toward elderly people. This finding supports the work of Linn and Zeppa (1988), who found that medical students with greater knowledge about aging had more positive attitudes toward the elderly.

No significant relationships were found between knowledge scores and amount of clinical nursing experience with well and ill elderly clients in nursing homes, hospitals, and community settings. However, the one-way ANOVA comparing three groups of nursing students with varying amounts of ill elderly experience in community settings using mean knowledge scores on the FAQ2 as the dependent measure revealed a significant difference in mean scores. Group 2 with 6 to 15 days of clinical experience earned higher scores on the FAQ2 than did Group 3 with 16+ days.

When comparing the mean FAQ2 knowledge scores of three groups of senior nursing students with varying amounts of gerontology coursework completed in their nursing programs (specific nonnursing

gerontology course, nursing gerontology course, or no gerontology course), the mean scores did not differ significantly. There appeared to be no relationship between coursework and knowledge levels. One explanation may be that the gerontological test content measured on the FAQ2 was not comparable to content included in specific university gerontological coursework experienced by the nursing students in the current study.

A positive correlation was found between the nursing students' mean knowledge scores on the FAQ2 and the nursing students' responses to estimating the percentage of the U.S. population that is old. Nursing students who judged a larger percentage of the U.S. population to be old had higher scores on the FAQ2. Forty-five percent of the nursing students indicated that 20% to 30% of the U.S. population was old; the mean percentage of the U.S. population judged to be old by nursing students was 29.7%. This finding compares to a mean of 29.3% of the population judged to be old by 160 students at California State University participating in a study concerning young persons' attitudes toward aging (Babladelis, 1987, p. 554).

A positive correlation between the nursing students' mean knowledge scores on the FAQ2 and the age identified at which one becomes "old" was also computed. Nursing students who identified an older age at which one becomes "old" had higher scores on the FAQ2. Eighty-nine percent of the nursing students listed 65 years or older as the age at which one becomes old. This is contradictory to a study done by Babladelis (1987), who found that only 20% of 160

university students labeled "old" as 65 years or older, whereas 80% chose the age of 65 or younger (p. 554). The Babladelis result may reflect views of the full range of the student population; the population in the current study was composed of nursing students whose orientation toward aging may reflect national norms of 65 being the standard age for determining elderly status.

One-way ANOVAs were computed to compare three groups of senior nursing students differing in gerontology coursework completed in their nursing programs using the ATOP positive and negative scale mean scores as the dependent measures. There were no differences in students' attitudes toward elderly persons whether they had completed a nonnursing gerontology course, a specific gerontology course in nursing, or no gerontology course.

No significant relationships were found between amount of gerontological nursing theory content hours included in respondents' nursing curricula and scores on the ATOP attitude scales. To some extent, the amount of time spent working with geriatric patients in hospitals correlated with the ATOP positive attitude scores ( $p = .059$ ); the respondents who spent more time in hospitals had more positive attitudes toward the elderly. However, no significant relationships were found between respondents' attitude scores and the number and types of clinical learning experiences with the elderly. These data support the findings of Greenhill and Baker (1986) that attitude change in nursing students is not dependent on particular types of clinical learning activity.

A review of qualitative data generated in the present study revealed that personal experiences with elderly persons did have a significant effect on respondents' attitudes. The amount of time spent with elderly persons in one's personal life seemed to have a major influence on attitudes. A large number of participants' responses to the question soliciting descriptions of experiences influencing respondents' attitudes toward "old people" were very positive. Examples included: "I have always enjoyed taking care of the elderly; they're most appreciative and want to get well"; "I love to listen; they have so much to share"; "The elderly are a forgotten population and an unrecognized valuable asset"; and "I've enjoyed them very much through all my experiences."

### Conclusions

Based on the qualitative and quantitative findings that emerged from the current study, the following conclusions are presented.

1. Senior nursing students participating in this study held moderately positive attitudes toward elderly persons.
2. Geriatric nursing is not the preferred clinical nursing specialty of senior nursing students.
3. Older senior nursing students preferred to work with elderly clients more frequently than did younger students.
4. Older senior nursing students tended to select geriatric nursing as a clinical specialty more frequently than did younger students.

5. Personal life experiences had a positive effect on nursing students' attitudes toward elderly persons.

6. Senior nursing students who had higher knowledge levels of the aging process had more positive attitudes toward elderly persons.

7. The amount of clinical experience time spent with well and ill elderly clients in nursing homes, hospitals, and clinical agencies within community settings was not associated with senior nursing students' levels of knowledge about the aging process.

8. No relationship was observed between the number and types of clinical learning experiences to which senior nursing students had been exposed in their nursing practice and students' attitudes toward elderly persons.

9. The gerontological knowledge levels of senior nursing students with gerontological coursework were not higher than were the gerontological knowledge levels of senior nursing students who had not experienced gerontological coursework in their nursing curricula.

10. The amount of personal time spent with elderly persons was related positively to nursing students' attitudes toward the elderly.

11. Gerontological knowledge scores and attitude scores toward the elderly did not differ between students who had lived a majority of their lives in rural versus urban settings.

### Recommendations

The findings and conclusions of this study have implications for nurse educators responsible for curriculum design and modification in baccalaureate nursing programs. Based on the findings, the writer makes the following recommendations.

1. Because controversy exists in the literature as to whether nursing students and registered nurses hold positive or negative attitudes toward the aging process and elderly persons, nurse educators should continue to study the attitudes of future health care practitioners in order to develop positive attitudes toward the elderly population, attitudes that may be maintained across health care careers.

2. Because knowledge of the elderly is associated with positive attitudes toward the elderly and the growth of the elderly patient population is a national demographic trend, it is imperative for nurse educators to (a) encourage the inclusion of more gerontological content in all baccalaureate nursing programs and (b) strengthen that component through changes in the curriculum.

3. Because the relationship between gerontological coursework and attitudes is questionable, further study is recommended to ascertain the influence of nursing students' exposure to selected gerontological coursework as an intervention to develop and maintain positive attitudes toward the aging process and toward elderly persons.

4. Further study is recommended to investigate the effectiveness of nursing students experiencing selected clinical learning

assignments with well and ill elderly clients as a means of improving nursing students' attitudes toward elderly persons. Since a positive correlation was found between nursing students' preference for working with elderly clients and the length of clinical experience with ill elderly clients in community settings, educators should explore the outcomes that might be associated with increased placement of nursing students into home care agencies where elderly clients are cared for in their homes.

5. In studying attitudes of baccalaureate nursing students toward elderly persons and the aging process, nurse educators should attempt to identify factors that might promote positive attitude formation and change toward the elderly population. Baccalaureate nursing curriculum models should be studied in an attempt to isolate these factors. Because role modeling has an effect on attitude formation and change, studies investigating the relationship between faculty and student attitudes toward the aging process are recommended. The quality of geriatric content and learning experiences in nursing curricula is another factor that may influence attitudes. The value of incorporating well elderly learning experiences before studying the ill elderly person should be explored.

6. Further study is recommended to investigate the relationship between students' clinical experiences in nursing homes and nursing students' attitudes. Because many nursing students in the current study responded negatively to working in nursing homes,

nurse educators must address the emotional aspects of working with the elderly and ensure that nursing students are prepared psychologically for this experience before placement. This recommendation has significant implications for further study in attitude development.

7. Before replication of this study, an item analysis of answers to questions on the FAQ2 in the current study is recommended. Because gerontological coursework did not relate positively to nursing students' knowledge levels as measured on the FAQ2, the ability of the FAQ2 questions to measure significant knowledge of the aging process should be scrutinized. Another question that must be examined concerns the purpose of gerontological course content included in nursing programs. The gerontological course content may be too oriented toward medical and health-related concepts as opposed to more broadly based content about aging, thereby causing lower test scores on the FAQ2 knowledge measures in this population. In any case, further validation of the FAQ2 test instrument is recommended.

8. Because no significant relationship was found between knowledge scores and amount of clinical nursing experience that senior nursing students experienced with well and ill elderly clients, nurse educators should critically evaluate the quantity and quality of gerontological clinical experiences in their nursing curricula to ensure that positive learning outcomes are achieved.



9. Further study is recommended concerning demographic data that identify personality characteristics of those who choose geriatrics as a clinical specialty preference.

10. Longitudinal studies comparing students' attitudes toward elderly persons and knowledge levels of the aging process are recommended. Such research may provide additional information concerning the effect of gerontological learning experiences on attitude formation and change.

11. Because the current study elicited many positive responses concerning the elderly through use of the descriptive data-collection instrument, further qualitative research is recommended concerning attitude formation and change.

### Reflections

The dissertation process has inspired me to further explore nursing students' attitudes toward elderly persons and the relationship between nursing specialty preferences and health care providers' attitudes. Because the results of this study did not reveal a significant relationship between the amount of time students spend with elderly clients in nursing clinical experiences and positive attitude scores, as one would expect, it is important that nurse educators holistically examine the types and quality of gerontological laboratory experiences included in nursing curricula. Another conflicting finding was that gerontology coursework did not significantly influence knowledge of the aging process. In further

studies one must consider the validity of the test instrument as well as exploring the use of alternative test measures.

As predicted, there was a positive correlation between positive attitudes toward aging and knowledge of the aging process. Nurse leaders and educators should examine alternative approaches to teaching gerontological nursing and investigate the multiple factors that may stimulate attitude change. This may include examining such areas as the influence of faculty role modeling on attitude change, more structured learning experiences with the well elderly population, and development of extended learning experiences with "special elderly persons" to establish more personal relationships between students and clients.

After studying this topic, I more firmly believe that attitudes and values toward the aging process can be changed. The manner in which students are socialized to gerontological nursing must be analyzed. It is the nurse educator's responsibility to structure the learning environment so that students can experience positive feelings and accomplishments when interacting and working with elderly persons. We must examine the negative responses to working in nursing homes and identify strategies that make that clinical area more attractive to health care providers. As our population ages, it is crucial that a sufficient number of health care providers be educated to work with elderly persons.

## APPENDICES

## APPENDIX A

### DATA-COLLECTION INSTRUMENTS

# ATTITUDES TOWARD OLD PEOPLE SCALE

By Nathan Kogan, Ph.D.

The following statements express opinions with which you may or may not agree. Following each statement are six boxes. You are to indicate the degree to which you agree or disagree with each statement by checking the appropriate box. Please consider each statement carefully, but do not spend too much time on any one statement. DO NOT SKIP ANY ITEMS. There are no "right" or "wrong" answers. The only correct answers are those that are true to you. THIS INVENTORY IS BEING USED FOR RESEARCH PURPOSES ONLY AND IS COMPLETELY ANONYMOUS.

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
It would probably be better if most old people lived in residential units with people their own age.	___	___	___	___	___	___
It would probably be better if most old people lived in residential units that also housed younger people.	___	___	___	___	___	___
There is something different about most old people; it's hard to figure out what makes them tick.	___	___	___	___	___	___
Most old people are really no different from anybody else; they're as easy to understand as younger people.	___	___	___	___	___	___
Most old people get set in their ways and are unable to change.	___	___	___	___	___	___
Most old people are capable of new adjustments when the situation demands it.	___	___	___	___	___	___
Most old people would prefer to quit work as soon as pensions or their children can support them.	___	___	___	___	___	___
Most old people would prefer to continue working just as long as they possibly can rather than be dependent on anybody.	___	___	___	___	___	___

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
Most old people tend to let their homes become shabby and unattractive.	—	—	—	—	—	—
Most old people can generally be counted on to maintain a clean, attractive home.	—	—	—	—	—	—
It is foolish to claim that wisdom comes with old age.	—	—	—	—	—	—
People grow wiser with the coming of old age.	—	—	—	—	—	—
Old people have too much power in business and politics.	—	—	—	—	—	—
Old people have too little power in business and politics.	—	—	—	—	—	—
Most old people respect others' privacy and give advice only when asked.	—	—	—	—	—	—
If old people expect to be liked, their first step is to try to get rid of their irritating faults.	—	—	—	—	—	—
When you think about it, old people have the same faults as anybody else.	—	—	—	—	—	—
In order to maintain a nice residential neighborhood, it would be best if too many old people did not live in it.	—	—	—	—	—	—
You can count on finding a nice residential neighborhood when there is a sizable number of old people living in it.	—	—	—	—	—	—
There are a few exceptions, but in general most old people are pretty much alike.	—	—	—	—	—	—
It is evident that most old people are very different from one another.	—	—	—	—	—	—

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
Most old people should be more concerned with their personal appearance; they're too untidy.	—	—	—	—	—	—
Most old people seem to be quite clean and neat in their personal appearance.	—	—	—	—	—	—
Most old people are irritable, grouchy, and unpleasant.	—	—	—	—	—	—
Most old people are cheerful, agreeable, and good humored.	—	—	—	—	—	—
Most old people are constantly complaining about the behavior of the younger generation.	—	—	—	—	—	—
One seldom hears old people complaining about the behavior of the younger generation.	—	—	—	—	—	—
Most old people made excessive demands for love and reassurance.	—	—	—	—	—	—
Most old people need no more love and reassurance than anyone else.	—	—	—	—	—	—
Most old people make one feel ill at ease.	—	—	—	—	—	—
Most old people are very relaxing to be with.	—	—	—	—	—	—
Most old people bore others by their insistence on talking about the "good old days."	—	—	—	—	—	—
One of the most interesting qualities of old people is their accounts of their past experiences.	—	—	—	—	—	—
Most old people spend too much time prying into the affairs of others and in giving unsought advice.	—	—	—	—	—	—

Permission for use granted by Nathan Kogan, Ph.D.

**THE FACTS ON AGING QUIZ: PART 2**

By Erdman B. Palmore, Ph.D.

Directions: Mark each of the following questions "True" or "False."

1. A person's height tends to decline in old age. ☐ True ☐ False
2. More older persons (over 65) have chronic illnesses that limit their activity than younger persons. ☐ True ☐ False
3. Older persons have more acute (short-term) illnesses than persons under 65. ☐ True ☐ False
4. Older persons have more injuries in the home than persons under 65. ☐ True ☐ False
5. Older workers have less absenteeism than younger workers. ☐ True ☐ False
6. The life expectancy of Blacks at age 65 is about the same as Whites. ☐ True ☐ False
7. The life expectancy of men at age 65 is about the same as women's. ☐ True ☐ False
8. Medicare pays over half of the medical expenses for the aged. ☐ True ☐ False
9. Social Security benefits automatically increase with inflation. ☐ True ☐ False
10. Supplemental Security income guarantees a minimum income for needy aged. ☐ True ☐ False
11. The aged do not get their proportionate share (about 11%) of the nation's income. ☐ True ☐ False
12. The aged have higher rates of criminal victimization than persons under 65. ☐ True ☐ False
13. The aged are more fearful of crime than are persons under 65. ☐ True ☐ False
14. The aged are the most law abiding of all adult groups according to official statistics. ☐ True ☐ False



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| 15. There are two widows for each widower among the aged.   | <input type="checkbox"/> True | <input type="checkbox"/> False |
| 16. More of the aged vote than any other age group.   | <input type="checkbox"/> True | <input type="checkbox"/> False |
| 17. There are proportionately more older persons in public office than in the total population.                     | <input type="checkbox"/> True | <input type="checkbox"/> False |
| 18. The proportion of Blacks among the aged is growing.   | <input type="checkbox"/> True | <input type="checkbox"/> False |
| 19. Participation in voluntary organizations (churches and clubs) tends to decline among the healthy aged.          | <input type="checkbox"/> True | <input type="checkbox"/> False |
| 20. The majority of aged live alone.  | <input type="checkbox"/> True | <input type="checkbox"/> False |
| 21. About 3% more of the aged have incomes below the official poverty level than the rest of the population.        | <input type="checkbox"/> True | <input type="checkbox"/> False |
| 22. The rate of poverty among aged Blacks is about 3 times as high as among aged Whites.                            | <input type="checkbox"/> True | <input type="checkbox"/> False |
| 23. Older persons who reduce their activity tend to be happier than those who remain active.                        | <input type="checkbox"/> True | <input type="checkbox"/> False |
| 24. When the last child leaves home, the majority of parents have serious problems adjusting to their "empty nest." | <input type="checkbox"/> True | <input type="checkbox"/> False |
| 25. The proportion widowed is decreasing among the aged.  | <input type="checkbox"/> True | <input type="checkbox"/> False |

### DATA FOR COMPARATIVE ANALYSIS

Please answer the following questions:

1. At what age does one become old? \_\_\_\_\_
2. Approximately what percentage of the population in the United States is old? \_\_\_\_\_
3. Check the age group you would prefer to work with:  
 0-12 \_\_\_\_\_ 13-21 \_\_\_\_\_ 22-35 \_\_\_\_\_ 36-59 \_\_\_\_\_ 60-79 \_\_\_\_\_ 80+ \_\_\_\_\_  
 Don't know \_\_\_\_\_
4. Rank the following nursing specialties in order of preference, with #1 being preferred specialty and #6 being the least preferred specialty:  
 Geriatrics \_\_\_\_\_ Pediatrics \_\_\_\_\_ Medical \_\_\_\_\_  
 Mental Health \_\_\_\_\_ Obstetrics \_\_\_\_\_ Surgical \_\_\_\_\_
5. Indicate approximate amount of gerontological nursing theory content hours in your course work:  
 60+ \_\_\_\_\_ 40-59 \_\_\_\_\_ 20-39 \_\_\_\_\_ 1-19 \_\_\_\_\_ none \_\_\_\_\_
6. Indicate approximate amount of gerontological nursing clinical content in your course work (days):
  - A. Hospital geriatric clinical experience:  
 46+ \_\_\_\_\_ 31-45 \_\_\_\_\_ 16-30 \_\_\_\_\_ 6-15 \_\_\_\_\_ 0-5 \_\_\_\_\_
  - B. Nursing home geriatric clinical experience:  
 46+ \_\_\_\_\_ 31-45 \_\_\_\_\_ 16-30 \_\_\_\_\_ 6-15 \_\_\_\_\_ 0-5 \_\_\_\_\_
  - C. Community setting with ill elderly persons:  
 46+ \_\_\_\_\_ 31-45 \_\_\_\_\_ 16-30 \_\_\_\_\_ 6-15 \_\_\_\_\_ 0-5 \_\_\_\_\_
  - D. Community setting with well elderly persons:  
 46+ \_\_\_\_\_ 31-45 \_\_\_\_\_ 16-30 \_\_\_\_\_ 6-15 \_\_\_\_\_ 0-5 \_\_\_\_\_
7. Indicate university courses you have completed concerning the aged:  
 Specific nursing gerontology course \_\_\_\_\_  
 Nonnursing gerontology course \_\_\_\_\_ No course \_\_\_\_\_
8. What is your: Race \_\_\_\_\_ Age \_\_\_\_\_  
 Marital Status: Single \_\_\_\_\_ Married \_\_\_\_\_ Divorced \_\_\_\_\_
9. What is the age of the oldest person you have lived with in your household? \_\_\_\_\_
10. In one word, describe a characteristic of being old. \_\_\_\_\_

11. What types of personal and/or work experiences have you had in your life with "old people?"
  
12. What experiences have affected your attitude toward "old people"?
  
13. What type of community have you lived in a majority of your life? Rural\_\_\_\_\_ Urban\_\_\_\_\_

(You may use the reverse side of paper to expand on No. 11 & 12.)

## APPENDIX B

SAMPLE LETTER TO CONTACT PERSON, REQUESTING  
STUDENT PARTICIPATION IN STUDY

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March 7, 1991

Dear \_\_\_\_\_ :

\_\_\_\_\_ has been selected to participate in an investigation of senior nursing student attitudes toward elderly persons and the implications for curriculum design in baccalaureate nursing students. With the increasing numbers of individuals over 65 years of age in our society, the investigator hopes to provide nurse educators with information which will assist them in curriculum development in gerontology and which will stimulate student interest in working with the elderly population. Most researchers agree that values and attitudes which nurses hold determine the quality and quantity of holistic nursing care delivered to elderly clients.

Completion of the questionnaires is voluntary and indicates student consent to participate in the study. All responses will remain confidential, and data will be reported in the aggregate for dissertation purposes and for any subsequent publication. Numbers on the questionnaires are for data-collection purposes only and will not be used to identify schools or individual students in any reports of this study. The investigator will destroy records identifying individual students and schools of nursing at the conclusion of the study.

Please forward these questionnaires to senior four-year (generic) students in your baccalaureate nursing program. The questionnaires, which take approximately 30 minutes to complete, include questions related to attitudes and knowledge of gerontology and specific demographic data concerning the students' personal experiences with elderly persons and their individual learning experiences in geriatric nursing. Please have the students return the questionnaires in the enclosed envelopes by March 20, 1991.

As a nurse administrator and educator, your participation in data collection for this dissertation is sincerely appreciated. Thank you for your cooperation. A summary of the results of this study will be sent to you at your school of nursing upon completion of this research study.

Sincerely yours,

Mae E. Markstrom, RN, MSN  
Doctoral Candidate  
Michigan State University

## APPENDIX C

COVER LETTER TO STUDENT, REQUESTING PARTICIPATION IN STUDY



March 6, 1991

Dear Senior Nursing Student,

As a doctoral candidate at Michigan State University, I am conducting a research study to explore the attitudes of senior nursing students toward elderly persons and to draw implications from the study findings for curriculum design in schools of nursing. The population to be studied includes nursing students in six baccalaureate nursing schools in Michigan. Your nursing school has been selected to participate in this study.

Your participation in this study, while it is voluntary, is essential in order to obtain accurate data and will involve completing the attached questionnaire. The entire process should take approximately 30 minutes of your time.

By completing and returning the questionnaires to me, you are giving me permission to use the data in my dissertation. All responses will remain confidential, and the data will be reported in the aggregate. Numbers on the questionnaires are for data-collection purposes only and will not be used to identify schools or individual students in any reports of this study.

Thank you very much for your time and cooperation in helping me gather data for this study. A stamped, self-addressed envelope is enclosed for return of the questionnaires. The results of this study will be made available to your school of nursing following completion of this research. Please return the completed questionnaires by March 20, 1991.

Sincerely yours,

Mae E. Markstrom, RN, MSN  
Doctoral Candidate  
Michigan State University

APPENDIX D

PERMISSION LETTER FROM THE UNIVERSITY COMMITTEE ON  
RESEARCH INVOLVING HUMAN SUBJECTS

## MICHIGAN STATE UNIVERSITY

OFFICE OF VICE PRESIDENT FOR RESEARCH  
AND DEAN OF THE GRADUATE SCHOOL

EAST LANSING • MICHIGAN • 48824-1046

February 27, 1991

Ms. Mae E. Markstrom  
Rte. 1, Box 120A  
Cedarville, Michigan 49719

Re: "Senior Nursing Student Attitudes toward Elderly Persons and Implications  
for Curriculum Design in Baccalaureate Nursing Schools"  
IRB#91-081

Dear Ms. Markstrom:

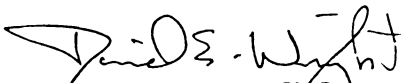
The above project is exempt from full UCRHS review. I have reviewed the proposed research protocol and find that the rights and welfare of human subjects appear to be protected. You have approval to conduct the research.

You are reminded that UCRHS approval is valid for one calendar year. If you plan to continue this project beyond one year, please make provisions for obtaining appropriate UCRHS approval one month prior to February 26, 1992.

Any changes in procedures involving human subjects must be reviewed by the UCRHS prior to initiation of the change. UCRHS must also be notified promptly of any problems (unexpected side effects, complaints, etc.) involving human subjects during the course of the work.

Thank you for bringing this project to our attention. If we can be of any future help, please do not hesitate to let us know.

Sincerely,

  
David E. Wright, Ph.D.  
Chair, UCRHS

DEW/ deo

cc: Dr. George Ferns

APPENDIX E

SUMMARY OF RESPONDENTS' ANSWERS TO QUESTION 10 OF  
THE COMPARATIVE DATA QUESTIONNAIRE

## Data for Comparative Analysis

Nursing students' responses to Question 10: In one word, describe a characteristic of being old.

no response (8)	experienced (5)
peaceful	wisdom (7)
golden	fearful
wrinkled (3)	lonely (4)
needing	tired (2)
retired	quiet
stubborn	sick
dependable	aged (2)
depressed	wise (7)
thoughtful	active
satisfied	slow (3)
sluggish	forgotten
well	fatigued
fatigued	freedom
busy (2)	wrinkles
satisfied/fulfilled	friendly (2)
warmth	slower (4)
mature	dependent (2)
amusing	preoccupied
life change	frail
feeble	fulfilling
fascinating	understanding
age	mellow
happy	retirement
happy and cheerful	amazing
gray (4)	worldly
shuffling	neat
Medicare	disheartened
interesting (2)	forgetful
seasoned	arthritic
knowledgeable	calm
time	independence
content	giving
cute	

## APPENDIX F

LISTING OF RESPONDENTS' ANSWERS TO QUESTIONS 11 AND 12  
OF THE COMPARATIVE DATA QUESTIONNAIRE

### Data for Comparative Analysis

**Nursing students' responses to Question 11: What types of personal and/or work experience have you had in your life with "old people"?**

Parents 75 and 80. Spent summer vacations with grandparent who was wheelchair bound. Worked in nursing home briefly. Visit nursing homes. Visit with elderly patients a lot.

Many. Work for and with them. Am close to parents and acquainted with their friends.

No work experience. I have two grandmothers. I've spent time with them. I've also gotten to know elderly people in my church and appreciate them.

I worked in an adult foster care home for 1 year and have had various experiences on a skilled care unit in a local hospital.

Worked in nursing home--2-1/2 years. Have worked with elderly in home health 2 years. Currently help care for a 78-year-old woman on occasion. No grandparents though, died while I was young. Many elderly patients in the intensive care unit where I work.

Work with elderly in a retirement village regarding wellness, good eating habits and exercise. Lived with 75-year-old grandmother for 1-1/2 years.

Greatest amount of patience was at skilled care facility in a hospital. I hated every minute of clinical as I felt they were not cared for properly. I work on a surgical unit now, and they [older people] are willing to learn, are adaptable, and have good attitudes.

Many. Work on a floor with elderly population.

Many grandparents and great-grandparents in my life. I also have worked with older people at my job.

Worked in a nursing home for 3 years. Work now on a medical-surgical floor which tends to be about 50-80% geriatric patients.

Care and activities with grandparents. Worked in several nursing homes. Hospital setting through employment at clinical in school and community through school experiences.

I work with a lot of elderly patients in the hospital. They're mostly cheerful and happy. They love attention and having someone to talk to.

I work with old people often on a neurology unit as a nurse technician--so see many CVA's, TURP's, overflow cases. I took care of an older woman with M.S. in her home part time for a year. I spend time with a great-aunt whenever I can go back to my hometown. I spend time with my husband's grandma when I go downstate. As a youngster I was in 4-H and a girls' VFW group that threw parties at a few area nursing homes for the residents.

Grandparents, their friends, relatives, and numerous clients.

I have an 83-year-old grandmother. I have lunch with her every week. I also have grandparents in their late 70's. I see them once a month.

I work on medical unit. Most of the patients are over 65. I have two sets of grandparents alive and well.

Father 73 and mom 52. Most friends of family and uncles/aunts are in their 50's to 70's. Clinics in nursing home.

Orthopedic fractures of elderly--hip, knee, etc.

Mostly in acute hospital setting.

Personal--grandparents. Neighborhood and town is mostly elderly.

Took care of 80-year-old father-in-law till death. Mother-in-law (80) now lives with us. Grandma in nursing home for 12 years. Nurse tech in hospital. Home nursing with older clients.

Many.

Eight years in family practice out-patient office. Four years in medical-surgical nursing. Work in community with homeless.

Family.

I have worked in a few nursing homes as well as on the long-term units in a few hospitals.

I have worked in a nursing home as a nurse aide and have worked in a community setting with "old" people.

Work in nursing home.

Grandparents, parents, friends. Golfing and fishing with the elderly. Work in a nursing home and hospital.

Taking care of Grandma, candy-striper, geriatric nursing.



Helping my grandfather who is not well. Working on a gerontological floor.

Parents--86, 83. Grandmother--87. Two years' work as nurse aide in nursing home.

Work at a retirement home as well as being a BSN nursing student. My grandparents are also elderly (70+), and I am very close to them. My grandfather is like my father.

Total care of various geriatric patients.

Care for family members in home. Nurse aide on long-term care.

Everyday general life. Work environment.

Activity therapist assistant. Played games and activities with elderly.

Volunteer in nursing home, general hospital.

Employed as a nurse in long-term care facility.

Home health aide providing personal care and errands.

Lived with grandparents as a child and teenager. Nursed older people in hospital and old people's home.

Close relatives--talk, play, and work with them. Chronic and acute care. Depression.

Clinical experience and grandparents.

Nursing home nurse aide. Hospital setting with elderly. Grandparents and community members.

I've chosen to work on a long-term care floor as a nurse aide part-time. Volunteer my time to the local senior citizen club to help with projects they are doing. Giving rides to those who need it so they can attend the senior dinners. Made lap quilts for a nursing home.

Community health, hospital medical-surgical.

Work on an oncology floor.

Hospitalized and clinic patients.

I spend a lot of time with all four of my grandparents (all 70 years old) and their friends. I love being with them generally, but in the past six months they have been preoccupied with death.

Some are very lazy and dependent, while others are a lot of fun and real go-getters.

In nursing home setting and first-year clinical experience.

Working on an orthopedic unit with many elderly ladies with broken hips.

Lived in home of elderly woman for 1 year who had detached retina and cardiac problems.

Visiting with grandparents. Taking care of geriatric patients at work.

On a social basis, three of my church elderly people are very loving, caring, and helpful. My elderly parents are the same. Work--numerous experiences good and bad with elderly, generally good.

None really.

Medical-surgical nursing, home health care, blood pressure clinics, and family gatherings.

Nursing home aide and hospital medical floor.

Worked at a nursing home as a nurse aide for two years. Have a wonderful grandma, love speaking with the elderly.

Hospital related.

No living grandparents; however, knew 2 great-aunts well during childhood. Wonderful, except for bad experiences when one became "senile"--Alzheimer's? It wasn't well known then.

Worked in the hospital setting which was almost all geriatric for 2 years. Worked in an acute trauma center for 5-1/2 years.

Grandparents. 15+ years of mostly medical-surgical ancillary hospital experience.

Changing ideas and suggestions when conversing. Cleaning and doing some household chores.

Lived with grandparents, but I don't consider them "old people."

I work on a surgical unit; most clients are older than 60 years old.

At the hospital, I've worked with a number of confused, incontinent, elderly patients. Life is a cycle. As a baby, one starts by being very dependent on others. A baby has to be taught everything. From observing a number of elderly patients, it seems like as one gets older, one returns to a baby-like state.

Nursing home for one year. Four years' medical-surgical experience with primarily geriatric population.

As a youngster, I spent a great deal of time with my beloved grandfather whose company I enjoyed and who, I believe, made me enjoy old people all of my life. As I have grown older, I have found that I enjoy caring for the older individual because I can empathize with their situation and find in caring for them I am often asking myself, "How would I want to be treated by a nurse?" I work on an oncology unit and enjoy my work with the older individual very much and find I am able to help some of them ease into acceptance of death and dying.

My grandmother and grandfather lived with us until they died. I work everyday with "old people" on my floor at work. I worked in an extended care facility for three years to put me through ADN program.

In the hospital setting (medical and surgical experiences and one nursing home experience).

Working with elderly at nursing home. Worked on geriatrics ward at Mt. Carem in Detroit. Worked with elderly constantly at U of M Hospital, nurse there.

I have only worked at McDonald's since I was 16 years old, and I have worked with "old people" there. They are only on mornings and are very hard workers.

Parents are 85 and 79 years old. Deliver "Meals on Wheels."

Worked 16 months in medical-surgical area with mostly elderly patients.

Helped take care of two grandfathers who were ill and dying. Worked on a trauma-orthopedic floor. Get a lot of elderly people who have total hip arthroplasties.

Clinical and grandparents.

Community health.

Experience with grandparents, work in rehabilitation unit, medical-surgical unit for school clinicals. Most experiences have been positive. As with younger people, the elderly patients vary, and their responses to illness depend more on their personality and general state of health than their age. Some just want to do what they need to do to get better; others just want to grouse and complain.

Patients at hospital who have needed surgery.

Most experiences have been positive.

Medical floor as student nurse assistant. Clinical at nursing home for eight weeks. Lived with grandmother for two years. Father lives with us six months a year (81 years old).

They prefer to work and are harder workers than the young.

I've worked in a nursing home (one summer). I help taking care of two elderly individuals one night a week. I've worked with senior citizens in my church. Shopping and visiting with my grandmother. I've worked with foster grandparents also.

Spending summers in high school with grandparents and great-grandparents. Helping to take care of grandmother and great-grandparents during illness. Helped parents with assisting older neighbors, yard-work, housekeeping. Work as home health care aide, floated hospital-wide as student nurse.

Very close with grandparents. See almost every week. Took a nursing aide course and trained at nursing home. Worked one summer on a long-term care unit.

Work with older persons at work.

Worked for one year as nurse aide in elderly retirement community that was connected to a 70-bed third-degree medical unit.

Nursing assistant at a "rich" retirement health clinic for one year.

Teach physical education for geriatrics. Nursing home aide. Clinical rotation for one semester, and in clinics and hospital setting.

Clients in school clinics. Aunts and uncles (80+). Friends and their relatives.

Worked one summer as a nurse aide in a small community hospital with most patients being elderly. One floor was a long-term unit. Currently work on orthopedic unit which has at least half the patients being elderly at a given time.

My grandmother helped raise me. Most of my relatives are elderly, and I generally enjoy hearing the stories they have to tell. In NE 210/211 I took care of an elderly man with Parkinson's, and in NE 421 my client was an elderly woman with chronic depression. She was difficult to work with in some ways, but I believe all "old" people can teach us something. My mother and sister both worked as LPN's in a nursing home. I hate nursing homes and believe many of them are just warehouses for the elderly. I feel they deserve better care, and I know I could never work in a nursing home unless major changes were made.

Nursing home as LPN and RN student.

Grandparents. Nursing.

Volunteer in nursing home.

Nursing home aide, community health clinical rotation.

Medical-surgical, cardio-vascular surgery. Alzheimer's and their families.

Senior nurse technician on medical-surgical floor and eight weeks in community health.

Care for geriatric people in hospital and elderly neighbors.

Four months as nursing home aide. Home health work, spending time with grandmother.

Care giver to grandma with Alzheimer's and worked five years in nursing home.

Didn't like working in the geriatric section in VA hospital. In general really like sitting and talking with elderly. My grandmother is 94 and has wonderful stories.

In hospital acute-care setting.

Grandparents were close to me. I worked in the VA system where most of my clients were over 50 years with medical-surgical and oncology problems.

My husband and I are fortunate to have grandparents in their 70's and 80's. I was a nurse technician at a nursing home for one semester. As a youngster, I visited nursing homes with various groups (Girl Scouts, school, etc.).

### Data for Comparative Analysis

#### **Nursing students' responses to Question 12: What experiences have affected your attitude toward "old people?"**

Living with them, talking with them. I have always enjoyed taking care of the elderly; they're more appreciative and want to get well.

Some elderly people are so dependent on the health care team. It almost seems like they would rather stay sick so that they know they will be cared for. It's frustrating as a nurse.

Seeing the nursing home patients sign over their check and not having any dignity or money left.

Through clinicals at nursing homes, I have tended to shy away from the elderly population. I do not enjoy the nursing home environment.

Community health experience was real positive. People living in adult retirement center.

Just working with them has changed my attitude. They are neat people to work with.

All elderly people should be treated with a great deal of respect; they have given to society, and now it's our turn to give back.

My grandparents. Grandfather ill for two years and bedridden. Passed away six months ago.

Confused patients after anesthesia make me worry about elderly people getting surgery.

Throughout all aspects of my life, I have come in contact with elderly persons, and realized they have the same needs, wants, and personality quirks as everyone else.

Hospital experience working with them. Lots of chronic problems. Living with my father (age 81). My father is extremely hard of hearing. He loves to eat out in restaurants, but he tends to yell over the background noises. It is a problem with his hearing aid. Our children get embarrassed. Often I have to tell him to speak softly. He forgets. Now my husband (46) is losing his hearing. I am raising my voice in an attempt to communicate. I hate this. It is tough to get old and lose one's hearing. My dad's problem is not typical of older people I've met. Often, they do not raise their voices. It is easier to communicate with them.

Telling stories about past experiences.

My work in the nursing home. My relationship with my grandmother (she's my best friend).

Love, affection, and great memories of grandparents and great-grandparents. Parents' love and respect for "old people."

I find it hard to work with the elderly who cannot stand to transfer; it's hard for me to transfer them. In community this semester, I worked with two dementia patients, which was difficult for me to get any information I needed for my graded charting. But I enjoyed visiting with the elderly rather than doing activities of daily living; I find it sad.

Seeing how wise older people are.

Working directly with elderly clients in community nursing as well as preoperative consults with clients.

Working at retirement health clinic and getting to really know the older people personally. They weren't necessarily sick, but yet they needed someone to help them with things in life.

I have had little experience with the elderly other than one clinical course.

I've enjoyed them very much through all my experiences.

Philosophy--"old" are people too, someday I'll be "old."

My grandparents have given me a very positive attitude about the elderly and aging.

My grandmother was placed in a nursing home for a few months when I was a kid. From that time on, I vowed never to place my parents in a nursing home. I was always taught to respect my elders, and whenever I work with or talk to an old person, I think back to my grandmother and try to be patient, kind, and nonjudgmental. After all, they may be someone's grandparent.

Positive experience--positive attitude.

I love to listen; they have so much to share.

Maintaining relationships with my grandmothers and four great-aunts, working in a nursing home.

They offer great life experiences and help.

I have found that if you treat people with respect, they will return that respect. This is more pronounced in the aged.

As a teen, I was very prejudiced against elderly. My experience in the hospital has changed this attitude to an appreciation of what they have to offer and teach.

My education has brought me closer to the elderly and helped me to understand them more.

Dealing with death of patients. Exploring attitudes.

Enjoy seeing older people like my grandmother stay active.

Common everyday interactions with them.

Visiting grandparents for vacations. Spending a lot of time with grandmother. Visiting residential homes, talking with elderly patients.

I have wonderful, loving grandparents who have been healthy and supportive of me and my family. They have influenced me the most. They are in their late 70's and are still very active with their friends and community (schools, hospital volunteer). My time spent working in a nursing home gave me the other side--sick, lonely elderly with little or no support from family. I was able to spend time with many of the residents at the home. Most were in need of a little attention and caring. A little bit of caring by the staff goes a long way to change the "bad attitude" and "complaining" behavior of the residents.

Many. Work for and with them; am close to parents and acquainted with their friends.

Being able to talk to them and hearing their stories as well as their wisdom.

My grandfather being ill. My experience as a nursing technician on an orthopedic unit.

All of the above--most are positive, helped me develop respect and understanding. And I do feel that while there are a lot of "older" aged people in politics, they do not appear to represent the actual majority of the population.

Clinical and personal life. Elderly neighbors.

Husband's grandparents recently moved to our community. They have provided an insightful look into two types of older people as one has Alzheimer's disease and the other is a healthy person.



Floor experiences.

I enjoy caring for the elderly. It tends to be more difficult because they usually need more help and support, but they are almost always appreciative and very loving people. They are very great people to learn from, and also they make you feel important. They are so appreciative of everything you do. They show you how important your job is!

All of the above mentioned. The elderly are a forgotten population and an unrecognized valuable asset. I feel if we don't change public attitudes towards the aged and general concepts related to aging and death, we ourselves will soon find ourselves in the disregarded position many of our elderly today are in.

My experiences at the hospital have really changed my attitude toward the elderly. I try to pay attention to their needs and respect them. We can learn much from their experiences.

They are slow to move, so hard to take care of when you are busy with a heavy patient load at work. Sometimes they're bossy. They love to talk and are interesting, but take up a lot of time. They really appreciate what you do for them and the time you spend with them.

Grandparents, their friends, relatives, and numerous clients.

Very positive experiences with my grandparents. Have made me really "appreciate" old people.

Listening to them as they relate their lives and adjust to old age.

I disagree strongly with the attitudes of many people toward so-called "old" people. Many say they are not able to walk or function in society. And that's often a bunch of bull, to put it bluntly. My father was forced to retire before he wanted to from his profession because of his age. He went on to work for 12 more years and retired again (this time by choice) at the age of 68. At age 73, he is like a 50 or 60 year old. My belief is that if the person has a youthful attitude toward life and the people around him (loved ones, friends, etc.), don't treat him/her like he's incompetent. They are just like everyone else (even better because they've been around the block a few times).

They're each very different; most are humorous.

Working with "Sun Down Syndrome" on medical.

Nursing home, community.

Taking care of parents, in-laws, and grandparents. Can be very frustrating at times. Explaining and teaching can be difficult.

Hospital nursing.

Grandparents were mentors. Enjoyed elderly since childhood.

Family, nursing school care.

Many "old people" can function in their own homes with assistance. Too many elderly are hospitalized and lose control of own lives.

Nurse aide and in community. Both of these work experiences have affected my attitude. I have seen both ends of the spectrum of aging, from decrepit to vital.

Positive experiences with people at work and with grandparents.

Conversation and doing certain activities with the elderly.

Basically, seeing sick, old people all the time in the hospital and cleaning body fluids makes us view them as debilitated and useless.

I have a positive attitude about "old people" from working on a gerontological floor. I learned a lot from their experiences.

Parents, grandmother, two years as nurses aide in nursing home.

Working at the retirement home has made me feel less fearful and more appreciative toward the elderly.

The declining health and its mental effect. Spending time engaged in conversation.

Relations with grandparents-in-law.

My grandparents, work environment.

Positive experiences--job. Negative experiences--nursing.

Grandparents visiting, volunteer experiences, long-term.

Past experience with family members and work experiences.

Seeing elderly people who are still self-sufficient gave me a good feeling.

Their passing down traditions and cultural experiences. Their teaching me skills. Their openness and affection in daily encounters. Observing their vulnerability.

My beautiful, generous, loving grandmother; intellectual and cultured grandfather; frisky, healthy-as-a-horse great-aunt (late 80's).

Clinical experiences.

Nursing home elderly are poor situations--limitations--physical impairments, illness, disease--presents poor image.

Their kindness and knowledge. They have taught me a lot of skills and hobbies I now enjoy, such as quilting. I've been brought up with older people--don't think of them as different because they are still active. My father at 66 still plays softball every year, and my 70-year-old neighbor still swims and cross-country skis. Just because you are old does not mean you sit in a rocking chair and watch TV.

Community health visits.

I have no contact with grandparents. All of them are deceased. The only "old" I see are in the hospital.

Seeing family members struggle. Increased amount of work to take care of sick, weak patients. Also a lot of interesting stories.

I respect older people and try to give them the courtesy of my assistance, i.e., driving them on errands, talking, etc.

Working on a medical floor with all nursing home patients.

No matter what you try to help them with, they tell you what is not right with the way you are doing it.

When an elderly patient came in with sepsis and a history of Alzheimer's, she could not identify anyone. But her husband came in every day at least three times to bathe, feed, and turn her, regardless of her behavior. I saw total dedication of the husband to the wife. They were married for 43 years. That has changed my perceptions of the elderly.

Clinical, work, and family experiences.

All of the above plus a love of history. This age group has such fabulous experience, and if encouraged, love to reminisce.

Work--some are so vibrant. They are very young at heart.

Raised in a household that loved, cared for, and respected the elderly.

Primarily positive experiences with family. Primarily negative experiences with medical geriatric patients.

Aging of myself.

Nursing home experience. Just talking to and listening to their life experiences.

View of parents.

Not knowing older people as an adult, no older relatives alive when I became an adult. I don't know quite how to treat them, not entirely comfortable with them.

Good experiences of talking with them in community health and in my own neighborhood.

Respect and higher morale.

Nursing home rotation, "yuck." I had two great-grandmothers in their 80's; they were wonderful.

Working with them as patients.

Working with a number of confused, discontented elderly patients in the hospital has not given me a positive outlook on aging.

Caring for the terminally ill who share their secrets with me has made me very aware of how they think--which is not too different from the young.

## APPENDIX G

### NARRATIVE COMMENTS TO QUESTION 1 OF THE COMPARATIVE DATA QUESTIONNAIRE

**Responses to Question 1 of the Comparative Data Questionnaire: At what age does one become old?**

When one thinks old.

Could be any age, at an age where they can no longer participate actively.

When they need total care.

When one's enthusiasm and zest for life runs out, can happen at 20 or 90.

When one loses health, independence, and mental capabilities.

No certain age!

Whatever age makes them feel "old."

Strictly subjective according to client.

Young mind, young body.

When they feel old.

When they let themselves believe they are, then take on the role of the "old."

When they think they are.

"Old" is a state of mind--differs with each individual.

When one believes they are old.

No numerical/chronological number can be put on it.

"Old" is a state of mind. Aging is ongoing from birth.

Variable with health and attitude.

Varies--it's a personal attitude--one is not "old" until he/she feels he/she is.

No "age" can be given; it's a thing of the heart and soul.

No one age--it is a subjective experience, but usually assumed age 65 based on our government.

Whatever age they feel they become old at.

Variable--depends on the health, psychological, physical, and emotional make-up of the person.

Hopefully to remain independent and enjoy yourself in your later years as each self fits.

State of mind.

When one starts to feel old and declares he/she is old.

Depends on how old they feel legally.

When one feels old.

Depends on the individual.

Depends on person and situation. A 30 year old with cancer can look old.

When they feel old.

There is no age.

Whenever one feels old.

When one feels like it--national stats--age 65.

Over 80 or earlier if the person feels he/she is old.

Unsure-as old as you feel genetically.

Depends on health and well being of person.

When one believes they're old.

No age, when they feel it.

It depends on the person.

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