A STUDY OF THE EXPRESSED ATTITUDES OF 166 REGISTERED NURSES TOWARD THE ELDERLY

by

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TABLE OF CONTENTS

CHAPTER		Page
I.	INTRODUCTION	1
	Introduction to the Problem	1
	Statement of the Problem	2
	Purposes of the Study	4
	Justification of the Study	4
	Definitions	6
	Assumptions	7
	Limitations	8
	Research Design	9
	Overview of the Report	14
II.	REVIEW OF RELATED LITERATURE	15
	Introduction	15
	Aging, A Concept in Evolution	20
	The Development of Attitudes	23
	Factors in the Development of Attitudes toward the Aged	25
	Education Relative to Aging	27
	Related Studies	28
	Studies of Nurses' Attitudes toward the Aged	40
	Summary of the Literature	50
III.	REPORT OF THE STUDY	53
	Introduction	53
	Report of the Study	62
IV.	SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	111
	Summary	111
	Conclusions	115
	Recommendations for Further Study	117
BIBLIOGRAPHY		119
APPENDICES		125

LIST OF TABLES

Table		Page
1	Distribution of the 166 registered nurses by time of graduation from nursing school	64
2	Distribution of the 166 registered nurses according to years of experience in nursing	65
3	Correlation between year of graduation of 166 registered nurses from nursing school and number of years of experience in nursing	67
4	Distribution of the 166 registered nurses according to type of nursing	70
5	Distribution of responses of 143 registered nurses regarding the chronological age at which old age begins	73
6	Distribution of responses of 166 registered nurses regarding the chronological age at which old age begins according to the respondent's year of graduation from nursing school	75
7	Distribution of responses of 166 registered nurses regarding the chronological age at which old age begins according to the respondent's experience in nursing	78
8	Distribution of responses of 166 registered nurses regarding the chronological age at which old age begins according to the respondent's type of nursing	80
9	Summary of responses to Questions 1 through 4 of Section I of the questionnaire by 166 registered nurses	82

LIST OF TABLES (Continued)

Table		Page
10	Percentage distribution of 166 registered nurses' responses to items concerning attitudes toward the elderly	84
11	Rank-order of the 17 paired positive-negative items concerning attitudes toward the elderly as expressed by 166 registered nurses	86
12	Chi-square distribution of responses to the 17 matched positive-negative statements concerning 166 nurses' attitudes toward the elderly with reference to year of graduation	92
13	Chi-square computation of the total number of negative, positive and non-responses to the 17 matched positive-negative statements concerning attitude toward the elderly by year of graduation from nursing school	93
14	Chi-square distribution of responses to 17 matched positive-negative statements concerning the nurse's attitude toward the elderly with reference to the respondent's experience in nursing	98
15	Chi-square computation of the total number of negative, positive and non-responses to the 17 matched positive-negative attitude statements toward the elderly by years of experience in nursing	99
16	Chi-square distribution of responses to the 17 matched positive-negative statements concerning the nurse's attitude toward the elderly with reference to the respondent's experience in geriatric nursing	102
17	Chi-square calculation of the total number of responses to the 17 paired positive-negative attitude items according to type of nursing	103

LIST OF TABLES (Continued)

Table		Page
18	Distribution of the study population of 166 registered nurses' responses to items concerned with the nursing care of the elderly	107
19	Intercorrelation between independent variables, negative attitudinal responses, negative behavioral responses and total negative responses	110

CHAPTER I

INTRODUCTION

Introduction to the Problem

Throughout the entire nation attention is being given to the medical, social, and economic problems of those of advancing age. Medical science has contributed much to assure a long life and continuing good health in the aging process. The effects of chronic disease have been mitigated and advances made in the complicated problem of care for the aged. The goal is a group of useful, happy and relatively healthy senior citizens. However, realization of this goal has not been attained to the extent expected.

The problem lies essentially in the need for a new philosophy of aging. There exists a familiar negative attitude which is based on the conviction that old age is a stage of regression, futility, and despair. This concept of aging represents a stereotype which is rapidly outliving its usefulness. It is a concept that is in need of being replaced by a dynamic and postive attitude toward aging and the aged. Attainment of the aforesaid goal cannot be realized until a change of attitude has taken place. More specifically, advances in the medical science field are of little worth if those caring for the

aged person possess negative attitudes toward the elderly.

The nurse, by the very definition of her profession, is intimately involved in the care of the aged. She has an integral role to play in implementing a philosophy toward the aged which reflects a positive and dynamic attitude. However, she herself must possess a positive attitude toward the elderly, for her attitudes are certain to be manifested in her care of the elderly and it is in the area of care that the nurse has her greatest potential for contributing to the creation of a group of healthy, happy, and relatively useful senior citizens.

Statement of the Problem

There has been an increasing amount of research done in the fields of gerontology and geriatrics, but despite the increase in research activities in these fields, little has been done in the area of attitudes. Of those studies that concern themselves with attitudes, the majority deal with attitudes that the elderly person possesses; only a comparatively minute amount of material has been produced that concerns itself with attitudes toward the elderly. Authorities are beginning to seek answers to questions concerning attitudes and the elderly, and in nursing some investigation has been made into such topics as attitudes and interactions with the elderly, attitudes and work preference for geriatric nursing, and the construction of

devices that can measure the nurse's attitude toward the elderly.

The problem that is to be explored in this study concerns itself with determining the nurse's attitude toward the elderly person, and investigating the relationship between the possessed attitude and the behavior of the nurse as she cares for the elderly patient. The problem may be stated as follows:

It is felt that since nurses are a part of the general population, their attitudes toward the elderly reflect the general population's attitude toward the elderly which is essentially negative in nature. Furthermore, it is felt that the attitude that the nurse has toward the elderly is an influential factor in the quality of care rendered to such patients. Factors that may influence the attitude that the nurse has toward the elderly might be her own age, the amount of experience she has had in the nursing field and the amount of experience she has had in geriatric nursing.

It may be hypothesized, therefore, that (1) the nurse's expressed attitude toward the elderly is not negative in nature, (2) the nurse's expressed attitude toward the elderly is not affected by such variables as year of graduation, experience in nursing and experience in geriatrics, and (3) there is no significant relationship between the nurse's expressed attitude toward the elderly and her expressed behavior in the care of the elderly.

Purposes of the Study

The study was made for the following reasons:

1. to determine the nature of the nurses' attitudes toward the elderly; i. e., postive or negative.
2. to determine the effect and/or relationship that the respondent's year of graduation has upon her expressed attitude toward the elderly.
3. to determine the effect and/or relationship that length of experience in nursing has upon expressed attitudes toward the elderly.
4. to determine the effect and/or relationship that experience in geriatric nursing as represented by types of nursing has upon expressed attitudes.
5. to determine the existence or non-existence of a relationship between the nurse's expressed attitudes toward the elderly and the expressed quality of care of such patients.

Justification of the Study

A study of attitudes and the behavioral consequences of the possessed attitude become important to the realm of nursing in geriatrics when consideration is given to certain trends, changes and conditions that are in existence at the present time.

First, consideration must be given to the number of elderly people in the general population. The pattern of age groups in the population of the United States has shifted considerably in the past 50 years. The number of people who are 65 years of age or over has increased significantly. This has largely been due to advances in the medical science field which have increased the life expectancy from approximately 46 years of age in 1900 to over 70 in 1960.

Second, consideration must be given to the health needs of the elderly person. Chronic long-term illness and disability have their greatest incidence and, hence their greatest prevalence among older persons. Even if all with chronic disease could be cured and patients rehabilitated, there would still be the fact that age itself brings increasing frailty and degeneration of function and that dependency on service and care from others is inevitably increased.

Third, attention must be focused upon the change in the aims of medical treatment and care of the elderly. The beginning of this change started in the 1940's when rehabilitation assumed a prominent role in the field of medicine. As a result of the rehabilitative trend, it is now no longer enough merely to prolong the life of the elderly person; instead, the emphasis is upon helping the elderly patient enjoy to his utmost capacity his added years.

Last, a problem concering supply and demand of nurses needs to be considered. The demand for skilled nursing in geriatrics is

rising and will continue to do so as the life expectancy increases. However, the number of nurses practicing in this particular area is far below the number needed. Seemingly, the basic barrier between the demand and the supply of nurses in the geriatric area is the existence of outdated attitudes toward the aged.

All of the factors discussed hold implications for an investigation of nurses' attitudes toward the elderly. In light of these trends, changes and existing conditions, it would seem only plausible that an investigation of personal attitudes toward the aged is needed and a determination of the relationship between the possessed attitude and behavioral consequences be indicated.

Definitions

For the purposes of this study the following definitions were adopted:

Aging, Biological--a term which describes the change in biological processes with the passage of time.

Aging, Chronological--the use of a birth date in defining an individual's age and, by implication, his appropriate social roles and functions.

Aging, Sociological--the changing roles, functions and status as these are defined by the various social institutions.

Attitude toward the elderly--used to refer to the stand that the

individual nurse or the group of nurses upholds about the individual person categorized as geriatric or about the group of persons falling into such a category.

Elderly, aged and old--used interchangeably throughout the study to represent the concept which fixes the individual at a point in time, usually 65. This arbitrary age is used, not because of an actual change that takes place in the individual, but because it has become the usual age of "retirement" in our society.

Geriatric--refers to the medical treatment of old age and its diseases.

Gerontology--the study of the aging process.

Quality of nursing care--used in this study to refer to the action that the individual nurse or the group of nurses would take in caring for an elderly patient.

Assumptions

Assumptions made for the purposes of this study are as follows:

1. It is assumed that the nurses involved in the study have had experience in the care of the elderly or have had contact with the elderly through some other form of association and have formed attitudes about them.
2. It is assumed that the behavior manifested in the care of the elderly is an indication of a possessed attitude.

3. It is assumed that the year of graduation from nursing school is a reasonable indication of the respondent's chronological age.
4. It is assumed that the number of elderly persons cared for under a particular medical service is a reliable indication of the respondent's opportunity for experience in geriatric nursing.
5. It is assumed that there will be no external factors operating that will affect the responses to the questionnaire.

Limitations

This study was limited

1. to a study group of 166 registered nurses licensed to practice in the state of Oregon and currently members of the American Nurses' Association through membership in the District #1 of the Oregon Nurses Association.
2. to data that were collected by means of a questionnaire mailed to the members of the selected group.
3. to results that applied only to this group of nurses at this particular time. However, selection of the group of nurses was made to represent the nursing population of Oregon as accurately as possible and, therefore, it is hoped that certain findings are indicative of the general population as

well as the selected group.

4. to expressed attitudes and the effect of and/or the relationship between the expressed attitude and indepedent variables such as age, experience in nursing and experience in geriatric nursing. No attempt was made to determine the causal factors of the expressed attitude.

Research Design

Sources of Data

The primary sources of data were the responses obtained from the 166 registered nurses through the use of a mailed questionnaire.

The secondary source of data was the information obtained from reviewing the literature concerning attitudes and the elderly.

Procedure

The study, descriptive in nature and non-experimental in design, was developed as follows:

1. The literature was searched for references on attitudes toward the elderly, trends in the care of the aged, factors influencing the aim and method of treatment of the aged, and related statistics, studies and designs. From this literature it was anticipated that a frame of reference would be established. Related statistics and studies were

noted as a means of further identifying, delineating and illustrating the problem.

2. Unstructured interviews were arranged with local authorities in the field of geriatrics, chronic long-term illness nursing, and attitude studies. These conferences were beneficial to the investigator in three ways:

   First, they contributed to the investigator's understanding and insight into the problems of the elderly and factors influencing nursing care of the elderly.

   Second, they assisted the investigator in setting up a measuring device that could be used to test the hypotheses set forth in the study.

   Third, they helped to establish a relationship that fostered understanding of and co-operation in the study.

   Interviews were sought with

   a. Miss Mary Blake, Assistant Professor of Medical and Surgical Nursing, University of Oregon School of Nursing.

   b. Mrs. Barbara Hiatt, Clinical Associate Professor of Medical and Surgical Nursing; Assistant Administrator of University State Tuberculosis Hospital.

   c. Mrs. Nova Young, Executive Secretary, District #1 Oregon Nurses Association.

d. Mrs. Jeanne Goldstein, Instructor of Nursing 501-Research, University of Oregon School of Nursing.

e. Mr. Dean Mayfield, Administrator, Oregon Gerontological Society, Mt. Angel, Oregon.

f. Sr. Mary Rita, Director of Nursing Service, Benedictine Center for Nursing and Rehabilitation, Mt. Angel, Oregon.

3. A device to measure the attitude of the nurse toward the elderly and to measure the correlation between the possessed attitude and nursing care rendered was constructed. The data collection device was subdivided into three sections. The first section dealt with questions that provided a description of the study population and the independent variables. Section two of the collection tool concerned itself with attitude measurement and was a modification of the Likert-type scale developed by Nathan Kogan in 1961. The third section was comprised of statements related to the care of the elderly which were found in the literature. Each question in the data collection tool was an outgrowth of related information and designed to elicit responses pertinent to the purposes of the study.

4. The data collection device was submitted to a group of professional nurses. They were requested to evaluate the

device in terms of content and format. Revisions were made where necessary.

5. The revised data collection tool was then submitted to a group of experts, consisting of professional nurses currently engaged in geriatric nursing. They were asked to evaluate each question as to whether it tested for attitude or behavior, and were to rate each answer as either it was a positive or negative response.

   The results of their responses were analyzed and there was found to be a high degree of agreement as to what each question tested, and what each response indicated.

6. The data collection device was again submitted to a group of professional nurses. They were requested to complete the questionnaire as directed. One week later they were asked to repeat this procedure. Results were analyzed and a high degree of reliability was found to exist.

7. A pilot study was carried out using a randomly selected group of nurses from District #3 of the Oregon Nurses Association. The pilot study was carried out to determine the feasibility of the study and the data collecting device. The results of the pilot study were analyzed, and revisions were found to be unnecessary before proceeding with the main study.

8. A mailing list of registered nurses currently members of the Oregon Nurses Association, District #1 was obtained. Each name was on a separate piece of paper and each piece of paper was put into a large container. From this container the names of 226 nurses were randomly selected. Two hundred and twenty-six names were chosen in an effort to obtain a sample size that approximated one tenth of the possible total from District #1. It was kept in mind that the data were to be obtained from a mailed questionnaire and with at least a 50% return anticipated, the number representing one tenth of the total was doubled, thus the number of 226 was derived.
9. The data collection tool was mailed to those nurses who were randomly selected. Along with the collection device was sent a cover letter explaining the study and a self-addressed stamped envelope for return.
10. A time limit was established for the purpose of delineating a study group. A period of two weeks was allowed for response; if at the end of that period no response was received then that nurse was not considered a part of the study group.
11. At the end of the stipulated two week period, 166 responses were received. The data from those responses were

categorized, tables and figures constructed and the findings interpreted and discussed.

12. Summarizations of the study were made, conclusions were drawn and recommendations for further study were noted.

Overview of the Report

Chapter I contains an introduction to the general problem, a statement of the problem researched, and the purposes of the study. The chapter also includes the assumptions, limitations and definitions for the study as well as the procedure followed in carrying out the study. Chapter II includes a review of the related research and the current literature in the broad field of geriatrics and more specifically the attitudes toward the elderly. A general discussion of the trends in the field of geriatrics and the factors influencing the care rendered to such a group is included along with specific illustrations of studies relating to attitudes toward the elderly. Chapter III describes the methodology and the findings of the study with an interpretations of the same. The final chapter of this report includes a summary of the study, the conclusions drawn, and recommendations for further study. Appended to the study are the correspondence, final form of the data collection tool, raw data, master tabulations, and formulae.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

> Aging has long been considered an unfortunate tragedy of life which we all shun, postpone, delay, and abhor. It is often regarded as a disease . . . an irreversible, inexorable, deteriorative process which can only be palliated and never cured. (32)

The preceding quote is Kurtner's characterization of the American view of aging which he set forth in his essay "Socio-economic Impact of Aging". Linden characterizes aging as the onset of uselessness, ostracism, rejection, isolation, and most dreaded, dependency in an era when youth, achievement, success and status are idolized. It is a period of sterile, barren, unproductive time spent rocking away idle days, weeks, months and years in a highly competitive world where retirement comes sooner and sooner and where youth reigns supreme. (34)

There are many authors who support Kurtner and Linden in their description of the American view of aging, and who point out that there are many factors operating in American society today that makes refutation of such a negative view reasonable if not necessary. (4, 12, 51)

Research in the medical and scientific fields has led to many discoveries and improvements which have ultimately culminated in a lengthening of life expectancy from 46.3 years of aging in 1900 to 70.2 years of age in 1964. (49) The result of the increased life expectancy has been an increase in the number of persons over 65 in the population. In 1965, there were approximately 18 million people over 65 in the United States representing a little under 10% of the total population. (49) There is indication that this segment of the population is increasing rapidly and it has been conjectured that by the year 2000, 16% of the population will be over 65. (64, 35) To view such a large segment of the population as non-productive and burdensome does not seem feasible. (33)

Another factor indicated in the literature that gives impetus to a rationale for changing the view toward the aged is the magnified demands this age group has for service. In the health field, in particular, the impact of those demands are being acutely felt. In America's Health, it was reported that the progressive aging of the population is a "factor which is largely responsible for the increasing prevalence of chronic illness." (51) Over 77% of persons over 65 suffer from a chronic illness; they use almost two times as many hospital days as those under 65. (3) With the advent of Medicare, it is possible for all persons over 65 with a chronic illness to receive hospital care whereas they previously might not have been able to do

so. The increase in the number of persons over 65 receiving hospital care was 5% for the general hospitals with greater demands being made for chronic and convalescent beds in specialized homes. (48)

Closely associated with the increasing demands for service is the quality of service that is needed for the group of elderly in American society. The literature indicates that it was through the advances of medical science and technology that the possibility of living longer became more reasonable and, as longevity increased, so did the numbers of those beyond the age of 65. The medical science profession now must provide proper medical care for the burgeoning elderly group. The fulfillment of this obligation would be relatively simple if it were not for a change in the focus of proper medical care. Before 1940, proper medical care was best described as the prolongation of life and all efforts were directed toward this goal. However, in the 1940's a new focus evolved from the impact of the rehabilitation movement in medicine. Rehabilitation by its definition involves a completely new approach toward care for the aged. It calls for the restoration to optimal effectiveness and an opportunity to enjoy a meaningful life. It is a phase of medical practice that requires zeal for social benefit. It is deeply rooted in ethics and rests on a primary postulate of human value. (23) Now that rehabilitation principles are a part of the medical practice, it

becomes no longer possible merely to prolong life; instead a restoration to or maintenance of the optimal of functioning in all phases (physical, psychological, sociological, and economical) of life is the goal. According to Hirschberger, the present view toward aging is not at all compatible with this goal. (23)

To bring into focus more clearly for nursing the need for a change in view toward aging, consideration need only be given to the situation in which nursing now finds itself. In the Report of the Surgeon General's Consultant Group on Nursing, it was pointed out that the number of nursing personnel available lags far behind the required number needed for safe and therapeutic nursing care of the aged and aging. (55) It has been stressed that nurses must devote an increasing amount of skills, attention and time to the geriatric patient. (10) Despite the apparent need, a gap still exists between the number of nurses available and the number of nurses needed in geriatrics. Reasons for this apparent gap have been numerous and varied, but the one most frequently mentioned is the fact that nurses do not willingly wish to engage in the care of the elderly patient.

> The discussion of the nurse and the geriatric patient is made necessary because care of old people does not enjoy any prestige and is considered one of the most undesirable assignments, tantamount almost to the disagreeableness of a Siberian exile. (10)

It is unfortunately true that nursing students and graduate nurses are happy only when they are caring for interesting patients. Too often

they define "interesting" as meaning persons who are acutely ill; nurses seem to lose interest in patients who have long term chronic illnesses and actually resist this type of nursing according to Elizabeth Phillips who has written extensively on the rehabilitation aspects of chronic long term nursing care. (10) Furthermore, Donahue points out that nurses belittle other nurses who do care for elderly patients and those with chronic long term illnesses. The negative attitudes toward the elderly are shared by all disciplines represented in the patient care team, shepoints out, but nurses are in the majority when they indicate that the care of the chronically ill and elderly is something with which they should not be personally concerned. (10)

Evidence of the nurse's reluctance to care for the elderly is most acutely seen in nursing homes where a large majority of the elderly gravitate for a variety of reasons. Surveys, as exemplified by Kelleher and Shaughnessey's Report of a Fact Finding Survey of Massachusetts Nursing Homes, reveal that there is a dearth of qualified registered nurses in these homes. The result is that the elderly patient finds a bed, but little more. (29)

Donahue reports some solutions that have been offered in an attempt to relieve the nursing shortage in the geriatric field; however, she does not indicate whether the solutions have been tried or if they have been successful. There is indication in her report that

the dilemma regarding nursing care of the elderly has arisen out of deep seated social and personal attitudes toward the aged, and that the solution lies in the reconditioning of those attitudes. (10)

Aging, A Concept in Evolution

> A phenomenon difficult to appraise at this point in time, emerging with explosive force, surging forth with unprecedented vigor, brings forward an entire new generation . . . the senior citizens, age sixty-five and over. (34)

This statement by Maurice Linden would lead to the belief that aging is merely a chronological cut off point of 65. The belief that age and aging as chronological data are linked is not supported by Bernice Neugarten who indicates that social and personality patterns, attitudes toward aging and style of aging very independently of chronological age. (38) Her belief is supported by Clark Tibbitts who expresses the view that aging is in some broad terminology, a societal matter. (53) What was considered to be aged formerly is no longer the accepted standard. Through a constant push from individuals who live well beyond what was formerly thought to be aged a whole new phase of the human life-cycle has been created. What was once old age is now middle-age and perhaps in the future what is considered old age will be redefined and the limits pushed upward on the chronological ladder. (52)

The literature indicates that attempts to define aging in terms

of chronological data are inadequate because aging as a phenomenon includes many dimensions: chronological, biological, and sociological; dimensions overlapping, intertwined, maturing at different levels and at different times within the life span of the individual. (43)

The theory of disengagement in aging proposes to define aging in terms of withdrawal from stressful and complex interpersonal relationships and a limiting of social participation. Research of Cummings and Henry, proponents of the disengagement theory, indicate that the aged desire to sever their ties with others in society. (8, 28) Accordingly, the aged were expected to have fewer friends, to curtail their social activities, and to decrease the frequency of their contacts with other members of society. When they exhibited this behavior, then they were aged. However, Zborowski and Eyde found in their interviews with 204 men and women between the ages of 51 and 92 that old people maintained their social contacts and expressed a desire to continue their contacts on the same level of intensity as in the past. (68) Kurtner supports this view by pointing out that older people do not want to be excluded, rejected, or discarded; they want to be a part of the family, neighborhood, friendship groups, civic circles, churches, political parties, and interest groups. (32) Again the literature seemingly indicates that aging cannot be defined solely in terms of sociological functioning.

There are others who attempt to define aging in terms of

biological processes and apply the term aged to those who show predetermined biological signs and symptoms. Many systems of care for the aged were predicated on the assumption that an elderly person was one who exhibited these signs and symptoms, either real or imagined, and because of this assumption, nursing homes and homes for the aged dealt with the elderly as if they were unthinking children who required maternal supervision. (32) In addition claims were made that older workers were slow, prone to accidents, were antangonistic, ritualistic, resentful, had a high rate of absenteeism due to illness and were hard to get along with because they suffered from "deteriorative biological changes". The White House Conference on Aging held in January of 1961, reported that extensive studies had revealed older workers were as productive and reliable as younger workers and were not more prone to accidents and absenteeism. (52)

Employment is not the only area where the elderly are discriminated against because of biological changes. Drake pointed out that official positions were often denied them because biological changes made them "talk too much" and were forgetful. (11) Defining aging and aged in terms of biological changes and processes falls far short of an adequate answer to questions concerning the functioning and capabilities of the elderly.

There emerges a pattern that defines aging as a concept not

made up of one dimension but of several. The components may or may not occur simultaneously; more than likely they will not. In any event it has been indicated that it would be a gross error to ascribe any chronological number, any sociological functioning, any biological process to a person and because of it call him aged.

The Development of Attitudes

The American view toward the elderly has been previously described as one in which society tends to cast old persons aside and view them as "has beens" or burdens, forcing them into meaningless, useless roles. (27)

An attitude refers to the stand the individual upholds about objects, issues, persons, groups or institutions. (45) Having the attitude means that there is no longer a neutral inclination toward the referent of the attitude; there is either a positive inclination or negative disposition, depending upon the attitude. Recent work on attitudes by Jahoda, Warren and Allport indicates that "attitude determines for each individual what he will see, hear, think and do . . . and play a decisive role in the determination of behavior." (26) Sherif and Sherif further noted that the behavior toward the referent of the individual's attitude reflects the nature of that attitude. (45)

Attitudes therefore are oriented toward some object or value, display tension even when quiescent, vary in tensity, and are rooted

in previous experience which influence their formation. (26) They indicate a degree of positive or negative effect associated with a psychological object toward which a person has positive or negative feelings. (14) They affect perception, thinking and learning and are manifested overtly or covertly in every phase of life.

Linden suggests that attitudes toward the aged are recently acquired emanating from standards and values springing from an automated, mechanized, accelerated, materialistic era in human history. (34) Slater suggests that attitudes do not occur randomly, but are based on the social, economic and political characteristics of the society in which the attitudes prevail. (47) That this is true is evidenced by the prevailing attitudes toward the elderly in other societies. (28, 27, 17)

American society's attitude toward the aged then is not seen as a sudden eruption of feelings toward them. The attitudes have developed along with the marked societal changes brought about by industrialization, automation, technology, mobility, changes in family and housing patterns, retirement practices, and care of the elderly within the evolving society and culture. The general philosophy of this era with its cult of youth, opportunities, and competition has done much to foster the prevalent negative attitudes because as Linden states, "modern American society lacks a philosophy of aging." (33)

Factors in the Development of Attitudes toward the Aged

Cicero pointed to four fallacies held by Romans concerning old age: withdrawal from active pursuit, weakening of mind and body, deprivation of physical pleasure, and closeness to death. (6) Today these fallacies and others contrived by the centuries have contributed to the present status of the aged in American society. Barron equates the aged with other minority groups applying to the aged the same negative attitudes as are held toward other small ethnic and religious groups. (4) Duncan indicates factors such as urbanization, industrialization and changes in family structure produce a forced isolation in which the elderly feel lost and appear useless. (12) Barron and others see compulsory retirement as an undesirable event for the majority of the elderly and an important factor that contributes toward the disparaging attitude that is held toward them. (20, 4, 33)

There seems to be agreement that because of the present attitude held toward them, the elderly find themselves faced with frustration, isolation and despair. They are expected to retire early yet are expected to care for themselves; they are spoken of with respect and yet they are restricted in social participation and not consulted for advice; they have acknowledged experience and wisdom yet are denied the dignity of individuality; they are dealt with as a

group and not as individuals and have imposed upon them the values of youth. (39) Modern society lives for the future, the aged has none; man takes pride in controlling nature and the aged person has lost his fight against nature; work equals status and since the aged are retired, their status is lowered. By social standards the aged are weak and not worthy of consideration. (33, 37) Wolff considers that in a hostile world such as that of the present it is not surprising that the aged have become burdens, there is a lack of respect, cultural attitudes of rejection and intolerance, hostility and annoyance. The aged are unable to make the sweeping changes expected of them and by the same token are placed in a position to regress. (67)

There prevails an attitude of gloom and doom surrounding older people; they are helpless, cranky, forgetful, live in the past. However, the elderly's behavior at times simply reflects society's expectations. The elderly's performance in society depends on the attitudes expressed and the roles assigned to them by society. (53) At present there exists a tendency to deny old age, to refuse to admit that it will happen to all. There is a feeling that aging itself is a disease process and somehow, unnatural. (9) There is a feeling of shame connected with those negative thoughts about the elderly or at least an effort to hide them from self and others. The unwillingness to admit the true feelings toward the aged prevents better understanding of them. (47) Lack of knowledge about aging and cultural

attitudes seem to be the basis for fear of aging and the aged. Once knowledge of aging and feelings toward aging and aged have been gained, then something can be done to change social and cultural attitudes.

Education Relative to Aging

> Education is our only effective device for altering attitudes. If we are to eliminate the idea that aging means uselessness and accumulated disease, we must begin at the elementary level and teach children about the aging process. We must also combat the idea that older people have no useful function in society, and provide for a utilization of their capacities within our communities. This is a long-term education program in which we have not yet taken even the first step, but it is only by such means that we will ever be able to alter out-moded attitudes. (46)

In discussing how the general hospital should plan for the aged, Martin Steinberg wrote that research is needed in specialized equipment, physical medicine, and nutrition, but the most urgent need is to study and change the prejudiced attitudes of the personnel toward the aged patient. The role education has in changing these attitudes has been described as follows:

> That these attitudes are prejudicial and discriminatory is beyond question, and because they are prejudicial they cannot be erased or changed by simple reasoning. These attitudes must be sought out, analyzed and studied, and out of this study an educational program must be built which will expose the prejudice. (50)

Repeatedly it has been pointed out that there is a need in nursing for such an investigation and analysis of attitudes. (9, 65) A study by Cobb indicates that patients sense the attitudes and feelings of the nurse and sometimes tension and distress can be created because of misinterpretation of the nurse's attitude.

Related Studies

Jacob Tuckman and Irving Lorge have contributed extensively to the measurement of attitudes of numerous groups of people toward the aged. Their first study was an investigation of the attitudes of young adults toward old age. They began their research effort on the basis of their observations that in our culture with its emphasis on youth and speed, old people are expected to play a decreasingly active role in society. These cultural expectations encouraged the formation of misconceptions and stereotypes about old age. Tuckman and Lorge entitled their study "Attitudes Towards Old People" and began collecting data in early 1952. Data were collected by means of questionnaire which consisted of 137 statements of misconception and stereotypes about old people. The statements were essentially negative in nature and covered such areas as conservatism, activities and interests, finances, physical health, family, personality traits, attitudes toward the future, best time of life, insecurity, interference and cleanliness. For some of the statements on the

questionnaire there was a valid basis; for others the evidence was sketchy and inconclusive; for the majority, experimental evidence was completely lacking. The questionnaire was administered to 147 graduate students enrolled in a course on the Psychology of the Adult at Teachers College, Columbia University. The ages of the respondents ranged from 20 to 51, with a mean age of 30.9. The results of the computed data from the questionnaire indicated that the percentage of agreement in each category after comparison of responses according to age difference and sex differences was: 74% for conservatism, 51% for activities and interests, 49% for financial, 48% for physical and family, 43% for personality traits, 38% for attitudes toward the future, 36% for best time of life, 30% for insecurity, 29% for interference, and 14% for cleanliness. The mean percentage of agreement indicated that a certain percentage of the respondents agreed that there were negative aspects inherent in older age; for example in the conservatism category 74% of the respondents agreed that older people are set in their ways, old fashioned, out of step with the times, respected tradition. For each of the 13 categories the percentage of agreement was computed thus revealing the extent of acceptance of stereotypes and misconceptions about older people indicated by the respondents.

The conclusion of the study was that there was a substantial acceptance of the misconceptions and stereotypes about old people.

The acceptance was more significant when consideration was given to the fact that the subjects were sopisticated young adults, many of whom had had a good grounding in psychology, who presumably were well acquainted with individual differences, and who had shown sufficient interest in the problems of the adult to register for such a course. The responses indicated that these graduate students "looked upon old age as a period characterized by economic insecurity, poor health, loneliness, resistance to change and failing physical and mental powers." (57) To the researchers it appeared that those responses reflected the cultural expectations of the old and indicated that older people were living in a social climate which was not conducive to feelings of adequacy, usefulness, security and to good adjustment in later years.

Tuckman and Lorge also conducted a series of studies with young people about the older worker. For their study "Attitudes Toward Older Workers", Tuckman and Lorge devised a questionnaire containing 51 statements about the older worker. The investigators administered the questionnaire to the same 147 graduate students enrolled in the adult psychology course at Teachers College, Columbia University for the purpose of investigating the extent to which the students subscribed to commonly held beliefs about older workers. The investigators' hypothesis that "erroneous and prejudiced ideas about the older worker are prevalent even in persons

who have taken a course dealing with the aging process" was supported. (58)

Tuckman, Lorge and Spooner repeated the studies on attitudes toward older people and attitudes toward older workers using the questionnaires that had previously been developed by Tuckman and Lorge but using a sample population of sophomore college students and their parents. (60) In the study "The Effect of Family Environment on Attitudes Toward Old People and the Older Worker" a sample of 50 sets of parents and a similar number of students (chosen without reference to a representative group) participated in the study, with a range of ages from 18 to 42 for the students, 37 to 80 for the fathers, and 36 to 71 for the mothers. There were 50 subjects in each category for which data were tabulated. The conclusions of the study substantiated and confirmed the previous findings of Tuckman and Lorge.

> The correspondence in attitudes between parents and children is far from perfect. Parents subscribe more to the beliefs, misconceptions and stereotypes about old people than do their children. The difference appears to be due to differences in life experiences. . . . However, the tendency of both parents and children to think of old age in terms of disability rather than ability strongly suggests the need for an educational program to emphasize the normality of the aging process and its positive aspects. (60)

Studies of attitudes toward old people and the older worker were repeated among other groups using the Tuckman and Lorge

questionnaire which resulted in findings consistent with those of previous groups. (61)

Tuckman and Lorge also conducted a series of studies concerning "When Does Old Age Begin and a Worker Become Old?" The investigators asked respondents to reply to two questions, "In your opinion when does old age begin?" and "In your opinion when is a worker old?" The study groups were selected from the following settings:

1. Fifty undergraduate students (25 men and 25 women with a mean age of 19. 5) from Teachers College of Connecticut.
2. Three hundred and four graduate students (184 men and 120 women with a mean age of 31. 7) enrolled either in a course on the psychology of the adult at Teachers College, Columbia University or a course on counseling the older person at New York University.
3. One hundred middle-aged adults (50 men and 50 women with a mean age of 50. 3) the mothers and fathers of the sophomore students enrolled at Teachers College of Connecticut.
4. Eighty-eight older adults (45 men and 43 women with a mean age of 74. 8) residents of an institution for the aged or attending a day center for old people in Hartford, Connecticut.

A majority of the respondents in these four groups believed

that a specific chronological age determined when old age began and when a worker became old. (63)

These same respondents were administered the Tuckman and Lorge questionnaire on attitudes toward old people and attitudes toward the older worker. It was found that respondents who used chronological age as a criterion of aging subscribed more to the stereotypes about old people and the older worker than those who do not. (62)

In 1952, Tuckman and Lorge administered their questionnaire about the older worker to 35 individuals with a great deal of experience and interest in the problems of the older worker. The respondents were representatives of management, labor, government, medicine, social work, and education; the average age of the group was 46 years, with a range from 30 to 70 years. The results of the study, published under the title of "Experts Biases About the Older Worker", indicated that the respondents subscribed to fewer misconceptions about the older worker than did any of the other groups previously tested. However, more than 30% exceeded the mean number of stereotypes subscribed to by graduate students participating in the other studies. Tuckman and Lorge felt the results suggested that individuals generalized about the older worker in terms of their own experience and orientation. (59)

In 1958 Tuckman and Lorge extended their study of attitudes to

individuals who had had experience with the elderly. Ninety-two men and women from 25 to 79 years of age were given a questionnaire consisting of 40 statements from the original 137 item attitude scale and ten statements from the worker's scale. The investigators hoped that this group which had worked with the elderly would show favorable attitudes. The results were ambiguous. In general the group showed more favorable attitudes than other "younger age groups" but at the same time evaded important issues by omitting to answer several questions. (56)

Peggy Golde and Nathan Kogan devised a sentence completion test as a more valid instrument of measuring attitudes toward the elderly. Their purpose was to test the hypothesis that attitudes toward older people were qualitatively different from those concerning the broader class of people in general. Twenty-five matched experiment-control sentence stems were given to 100 undergraduate students, 50 men and 50 women, selected from two dormitories at Brandeis University in 1959. Fifty were given the experimental form asking them to complete the sentence with reference to old people and 50 were given the control form asking them to complete the sentence with reference to people in general. Of the 17 paired old people versus people in general items, 16 yielded statistically significant differences at the .05 level. Of the other eight items for which the control was only analogous, seven yielded significant

differences. The hypothesis of the study was supported. The investigators were aware of some difficulty in ascertaining reliability in this type of subjective test and were aware that the feelings expressed were not entirely negative but then the specific attitudinal direction was not sought. (22)

Kogan and Shelton did a comparison of older and younger adults regarding their beliefs about old people. Their study utilized a modification of the sentence completion test developed by Golde and Kogan. In "Beliefs about Old People: A Comparative Study of Older and Younger Samples," the older age sample was comprised of 46 men and 55 women, ages 50 to 92 years, all of whom were volunteer members of a non-profit gerontological research organization in Boston, Massachusetts. The younger age sample consisted of 44 males and 49 females enrolled in undergraduate psychology courses at Boston University and Tufts University. Analysis of the data revealed that in 6 of the 20 modified items older people responded significantly different than the younger people. Responses were different in the areas of old people's needs, fears, appearance, pleasure, resentments and interpersonal relations with others. Kogan and Shelton concluded that the data reflected a concern on the part of older respondents for being set apart, considered different, or rejected; the investigators inferred that the older respondents were aware of the social context in which they found themselves. (31)

Eisdorfer and Altrocchi compared attitudes toward old persons with attitudes toward people in general and the mentally ill using a quantitative measure of four attitude factors: evaluative, potency, activity and understandability. The subjects were 103 undergraduate summer and nursing students at Duke University. The mean age of the sample population was 21.2 years. The investigators found that attitudes in general were positive or negative depending upon what specific aspect of the attitude was being measured. Nevertheless, the findings supported Golde and Kogan in the belief that young people respond to old people very differently than old people respond to old people. (16)

Eisdorfer and Axelrod did further work on the Tuckman-Lorge questionnaire to establish better validity. A stimulus group validity study was done on the questionnaire. Two hundred eighty students in three sections of the introductory psychology course at Duke University were given the Tuckman-Lorge questionnaire. The students were given identical instructions; one fifth of the students was instructed to apply the statements to persons who were 35; one fifth was to apply the statements to persons who were 45 and so on until the last group applied the statements to persons who were 75 years of age. The questionnaire was so worded that a "yes" response indicated agreement with the stereotypic statement. The results indicated that the mean number of agreement or yes

responses given to the questionnaire by the subject referring to the five age stimulus groups rose from 30% at the 35 year old level to 60% at the 75 year old level. The conclusions drawn from the study were that as the chronological age rose more stereotypes and misconceptions were assigned. (2)

Kogan did a study comparing attitudes toward old people and attitudes toward other segments of human life. Kogan devised a Likert-type scale designed to "facilitate study of both norms and individual differences." Several factors were investigated. A set of 17 matched positive-negative statements about most old people was constructed and a questionnaire was administered to two male samples of 128 and 186 each and one sample of 87 males and 81 females. The subjects were enrolled in introductory courses in psychology. The age range was not given. The author concluded that attitudes toward old people were scalable. Kogan's findings supported his own previous conclusions and those of Eisdorfer and Altrocchi. (30)

Robert Kastenbaum in New Thought on Old Age, devoted a section to the reluctant therapist stating that in general psychotherapists tend to avoid rather than seek contact with the aged. (28) In 1966, Wilensky and Varmack made a study which supported Kastenbaum's belief. They studied doctoral psychology students from six New York universities to determine their long range

interest in various professional settings. It was hypothesized that the student would not elect to work with the elderly. One hundred sixty-five respondents ranging in age from 21 to 49 years answered a questionnaire on their long range goals and interests. Findings indicated that clinical psychology students would not choose to work with elderly patients but would rather avoid them. (66)

Bekker and Taylor believed that a frame of reference from which to view old age would influence attitudes of the young toward the old. In 1966, 100 undergraduate students were administered the modified Tuckman-Lorge questionnaire to determine their perceptions of their grandparents. The investigators hypothesized that prolonged contact with old people in a multi-generational setting promoted more positive attitudes. Their hypothesis was supported. One factor not determined, however, was the societal and cultural background of the students responding to the questionnaire. (5)

Pihlblad and associates attempted to measure aspects of interviewer bias as part of a larger study of rural aged in the state of Missouri. The elderly persons the interviewers came in contact with were residents of eight social areas randomly selected from 64 Missouri towns of from 250 to 5, 000 inhabitants. The study was conducted on the interviewers, the extent of their misconceptions about the older person and the relationship between the possessed misconceptions and subjective evaluation of the aged. The study

population consisted of nine women interviewers, each of whom interviewed at least 100 persons in the aged sample. The age range for the study population of interviewers was from 35 to 54 years and all came from small towns or farm backgrounds. The Tuckman-Lorge scale was one instrument administered to the nine interviewers. The investigators hypothesized that interviewers with relatively higher scores on the attitude questionnaire would show unfavorable evaluation on items calling for subjective judgments of the aged. The Tuckman-Lorge scores were used to determine the variation of attitudes toward the aged with respect to the ages of the interviewer. It was found that the age of the respondents was related to the score on the attitude questionnaire; the older the respondents, the more favorable the attitude. Further, the mean Tuckman-Lorge scores for the three oldest interviewers and the three youngest were significantly different at the .01 level, the younger respondents having the highest scores. The authors concluded that measurable differences existed among the interviewers in attitude toward the aged as measured by the Tuckman-Lorge scale; however, the differences did not affect their subjective evaluation of the aged presumably because of their previous training and experience with the aged. (41)

Studies of Nurses' Attitudes Toward the Elderly

The nursing literature included many aspects of gerontology and geriatrics but very few studies in the area of attitudes of nurses and nursing students toward the aged. Information presented in this section consists of reports of unpublished master's theses and one doctoral study.

Gibbons developed a questionnaire to test attitudes of nurses toward older patients as part of the requirements for a Master's degree at the University of Washington. The questionnaire consisted of 29 items concerning older and younger patients in areas of failing physical powers, failing mental powers, and loneliness. To test the tool she gave it to 50 nursing personnel and 32 undergraduate students in a survey course in sociology. The results indicated that nurses gave more stereotyped responses about older patients than the non-nursing groups. In fact, in all but five of the 29 items, a larger percentage of the nursing group selected stereotyped responses than did the non-nursing group. Some of the stereotyped responses to which they ascribed were that it was necessary to speak loudly when talking with older patients, that older patients were more concerned with bowel function than younger patients, and that the use of rubber mattresses should be a routine requirement for older patients. (21)

Marjorie Elmore, for her Doctoral Dissertation, interviewed nursing students, nursing instructors, and graduate professional nurses to elicit opinions and perceptions regarding problems encountered in caring for older persons. She found some common factors which they stated affected their attitudes toward older patients. All three respondent groups mentioned the following factors most frequently:

1. The negative attitudes of nursing service personnel toward older patients (e.g., the aged have outlived their usefulness, they require too much time, they are harder to care for).
2. The personal characteristics of older people which created problems (e.g., demanding, incontinent, rigid).
3. The progress of older patients for whom the chances of recovery seemed slight.
4. A lack of understanding of the aging process.

The 121 nursing students Elmore interviewed were in baccalaureate, diploma, and associate degree programs; all respondents were in the last year of their respective programs. The nursing instructors interviewed taught in baccalaureate, diploma and associate degree programs, and the graduate professional nurses were employed by the hospitals in which the students had their clinical experience and in which the instructors were teaching. Aspects of

geriatric nursing had received little attention in the curriculum planning of the schools participating in the study. In her interviews with students, one question was, "Do you like to care for aged patients?" Fifty-two percent of all the students qualified their "yes" answers, such as "Yes, if I don't have all old patients to care for." Forty percent gave an unequivocal "yes" answer and 8% answered "no". Even though more than half of the students qualified their "yes" answers, caring for the old people appeared to be seen in generally favorable terms. (18)

Tillman studied attitudes of 30 nursing students toward aged people. The students were in their second or third year of a diploma program and ranged in age from 18 to 25 years. They were in the psychiatric rotation of their program and were affiliating for clinical practice at a state mental institution. They were assigned to the geriatric service for two weeks. The patients in this service ranged in age from 52 to 97. All of the geriatric patients had or had had emotional or behavioral problems. Tillman constructed and administered a questionnaire containing statements about aged persons. The statements were concerned with physical, mental, and social aspects of aged persons, interpersonal relations of aged persons, and student reaction to aged persons. The questionnaire was administered on the first day and again on the last day of the affiliation period to determine the effect this experience had on the student's

attitude toward older people.

The results of the study must be considered with some reservation as Tillman admitted that the questionnaire had not been validated. The findings indicated that the nursing students had desirable attitudes toward aged persons both before and after their experience; there were few predominantly negative replies. The greatest change shown was an increase in the number of students expressing positive attitudes, which was displayed mainly with regard to physical aspects of aged persons. Most students indicated good understanding of social aspects and interpersonal relations of aged persons, but indicated least understanding of mental powers.

More students felt it was easier to establish rapport with the older patient after their clinical experience than before. The students did not find caring for older persons a particularly depressing or disgusting experience, but they felt there was an element of monotony in caring for the aged person. (54) When considering the findings of this study it must be kept in mind that the attitudes toward all aged patients may be somewhat different from attitudes toward mentally ill aged patients. Also to be considered or questioned is the fact that students found it monotonous to care for aged psychiatric patients; this does not necessarily mean that they would find it monotonous to care for all aged patients. The sample size was relatively small, so the findings based on the responses could

well be subjected to further study.

Molbo identified nursing students' attitudes toward old people through the use of Golde and Kogan's sentence completion tool. Her master's thesis, "Value Orientations in Student Nurses and Their Expressed Attitudes Toward the Aged", was concerned with the responses she received on the Golde-Kogan Sentence Completion Test. Participants were sophomore and senior nursing students in a Catholic collegiate school of nursing who had had geriatric clinical experience as part of their basic fundamental course in nursing. Her population of 127 student nurses indicated that most old people's lives contained negative aspects of loneliness, emptiness, and boredom and identified loneliness, rejection and insecurity as old people's greatest fears. The students considered their friendships with an old person as very special and rewarding and accorded them positive qualities (e.g., inspirational, wonderful examples, friendly).

Molbo found some differences in the sophomore and senior student's responses regarding their being with or near an old person. The sophomore students indicated more feelings of discomfort and a need to help when with an old person, but the senior students reported being at ease, talking and enjoying mutual conversation. Ninety-one per cent of the seniors indicated that they would convey an interest in an old person seated next to them, whereas the

sophomores indicated a feeling of strain and discomfort if they were in the same situation. (36)

In 1964, Jeanne Holman completed her master's thesis on "A Study of Opinions Relative to the Aged as Expressed by a Selected Group of Student Nurses." She studied attitudes of baccalaureate students in nursing toward the elderly. Her sample consisted of 129 student nurses in the Clinical Division of the Department of Nursing of the University of Kansas. The Tuckman-Lorge questionnaire was administered. Her premise for conducting the study was that an increasing number of hospitalized aging people would require the services of nursing personnel to a much greater extent than was previously required. The findings of her study were not significant. The variation of agreement with the stereotypic statements of the Tuckman-Lorge questionnaire ranged from 0 to 96%. No one was in agreement with the following statements: old people have too much power in business and politics, they are not important in family affairs, they get no sympathy from their relatives, they are not useful to themselves or others, and they are a nuisance to others. The greatest number of students, 96%, were in agreement with the statement that old people are proud of their children. In addition to the statements of misconceptions and stereotypes about old people, a question was included to determine when the respondents thought old age begins. Responses that aging begins at a definite

chronological age totaled 69%. Of these, 13% gave other criteria in addition to chronological age. Thirty-one per cent did not state a chronological age but gave other criteria for the beginning of old age.

Age and class level of the respondents were the two variables correlated with the total score of the questionnaire. Values from one to five were assigned for the responses of "strongly agree" to "strongly disagree" for the computation of a total score. The correlation coefficients indicated that there was no statistical significance in the relationships of the variables to the total score. (24)

Mary Ann Rice, who completed her master's thesis on "A Study of Opinions Relative to the Aged as Expressed by a Selected Sample of Public Health Nurses", found that the public health nurse had a positive attitude toward the elderly. The Tuckman-Lorge questionnaire was administered to 67 public health nurses and the results of the tabulation indicated that the respondents ascribed fewer misconceptions and stereotypes to the elderly than had been hypothesized. The public health nurses had had considerable experience in working with older people which may have influenced their attitudes. Most of the responding public health nurses who expressed positive attitudes were older women. The recommendation of the study was that attitudes toward the elderly be investigated with respect to age and experience of the respondent. (42)

Hulthen, using a modification of the Golde-Kogan questionnaire

investigated the attitudes of beginning nursing students toward the elderly. Her thesis "A Study of Attitudes of Nursing Students Toward Old People", was completed in 1966. She divided the students into experimental and control groups. One group of 17 students was administered the sentence completion questionnaire before and after clinical experience in a convalescent hospital. Another group of 17 students was administered the questionnaire before and after clinical experience in a private general hospital with patients in all age groups. Both groups of students had courses in nursing fundamentals concurrent with the clinical experience. The data from the study indicated that both groups of nursing students were similar in the responses they gave to most of the sentence stems. Comparison of responses in each group indicated that those given before the clinical experience were different from those given after the clinical experience. However, there was not a great change in 22 of the 30 items.

Students in Group A (experience in a convalescent hospital) thought more positively about old people and their relationships with them at the conclusion of the experience, whereas students in Group B thought more negatively about them.

Comparison of individual student's responses before and after the clinical experience showed that individual students in Group A more frequently changed from negative response before the clinical

experience to a positive response after the clinical experience. Individual students in Group B more frequently changed from a positive to a negative response. (25) The reasons for the change were not conjectured.

Sister Marie Therese Sabourin investigated student nurses' attitudes toward the elderly and preference for work with the elderly. Students from three types of programs participated in her study entitled "Attitudes Toward the Aged and Preference for Work in Nursing: A Study of Senior Nursing Students in Three Types of Programs". The Tuckman-Lorge questionnaire was used to fulfill the purposes of her study. In addition to the questions in the Tuckman-Lorge questionnaire, the students were asked to complete a personal or factual data sheet requesting information as to their age, sex, marital status, previous experience with the aged prior to their nursing studies, their response to this experience in terms of satisfaction or dissatisfaction and finally the presence of a grandparent or great-grandparent in the home. The survey attempted to measure attitudes of 150 senior nursing students from a baccalaureate, a diploma and a vocational program toward the aged and to study possible relationships between the expressed attitudes and their choice of an area of work following graduation. The age range was from 17 to 25. Ninety-one per cent were single, 26% had had experience in working with the aged prior to their nursing studies and

only 9% had had contact with a grandparent or great-grandparent who was presently living at home. The attitude questionnaire pointed to many areas of stereotypes and misconceptions about the aged especially in the Physical, Conservatism, Personality Traits, Activities and Interests, Financial and some items in the Family categories. The percentage of agreement among the groups and the percentage of agreement and disagreement on a particular item varied considerably from item to item and between categories.

Sister Marie Therese agreed that responses to these statements were not based upon a profound knowledge of the aging process but rather on a fairly superficial knowledge gained by observation of older people in their own environment or elsewhere. Responses indicated that this particular sample of 150 senior nursing students looked upon old age as a period marked by economic security, poor health, loneliness, resistance to change, and failing physical and mental powers. She felt that the responses reflected the cultural expectations concerning activities, personality characteristics and adjustments of older people. The data also pointed to the fact that old people are living in a social climate which is not very conducive to their feeling of psychological and spiritual well-being, insofar as this climate is influenced by the attitudes of younger people.

All groups unanimously chose to nurse the young child or young adult but not the mature adult or the aged. If they chose to work with

the young adult they consistently carried this choice into diagnostic groups and settings such as the hospital, public agency, and doctor's offices. In this setting they would more likely or more often experience rapid recovery and turnover of patients. Any condition which led to some hopelessness as to a slower rate and speed of recovery was relegated to the end of the ranking scale. The writer interpreted these data as indicative of the younger nurses' unwillingness to work with the elderly. (43)

Summary of the Literature

The literature has given indication that there prevails in American society a negative attitude toward the elderly or aged. It appears that in light of current trends and conditions this negative attitude is not at all practical or feasible if attainment of the goal of a happy, useful and relatively healthy group of senior citizens is to be reached.

The literature has revealed that part of the difficulty in attempting to change society's attitude toward the elderly has been the effort on the part of various groups to define aging in terms of a specific phenomenon such as chronological year, sociological functioning, and biological changes when in actuality aging is a concept that is comprised of all those dimensions; dimensions that overlap,

Modern attitudes toward the aged are not seen as sudden eruptions of feelings toward them, rather the attitudes have developed along with marked societal changes brought about by industrialization, automation, technology, mobility, changes in family and housing patterns, retirement practices and care of the elderly within the evolving society and culture. Part of the difficulties that the aged encounter can be attributed to the fact that modern society places great emphasis on achievement, success, status and youth; qualities that the elderly no longer possess.

Numerous investigators have attested to the presence of negative attitudes toward the aged. They have shown repeatedly, especially since 1953, that the young do not care to associate with the elderly, that prejudice and discrimination exist against the older worker and that stereotypes about the aged are widely accepted. These attitudes were slightly modified by age of the respondents and experience with the elderly, but despite the modification there still exists a predominantly negative attitude toward the elderly.

The literature suggests that only through a concentrated educational program, can these negative attitudes toward the elderly be altered. Part of the educational program should consist of seeking out, analyzing and studying the present attitudes toward

the elderly and from this study build a program that will expose the prejudices, alter the outmoded attitudes and emphasize the normality of the aging process and its positive aspects.

CHAPTER III

REPORT OF THE STUDY

Introduction

Purposes of the Study

This study, descriptive in nature and non-experimental in design, was undertaken to determine the attitudes that 166 registered nurses held toward the elderly and to investigate the relationship between the expressed attitude of the nurse and the quality of care she says she would render to the elderly patient. The study was designed to (1) identify the nature of the nurses' attitude toward the elderly, i.e., whether positively or negatively inclined, (2) determine the effect and/or relationship the variables of year of graduation from nursing school, experience in nursing and opportunity for experience in geriatric nursing had upon the nurses' expressed attitude toward the elderly, and (3) determine the relationship between the registered nurses' expressed attitude and the expressed quality of nursing care they indicated they would give to the elderly patient. The need for this type of study has been noted by Steinburg,

Kastenbaum, Davis and Linden (48, 63, 8, 31) among others who have suggested that an analysis of attitudes toward the elderly would contribute toward the better understanding and care of the elderly person.

Development of the Tool

The related literature and studies were reviewed and informal conferences were held with persons knowledgeable in the field. From this preparation a questionnaire was developed. Section I of the questionnaire included general information about the sample population of registered nurses and provided an identification of the independent variables. The respondents were asked to identify their year of graduation from nursing school, the number of years they were presently engaged. In addition, the respondents were asked to identify the chronological age at which they feld old age to begin.

Section II of the questionnaire consisted of a modification of the Likert-type scale developed by Nathan Kogan to test attitudes toward old people. (28) The items were matched positive-negative statements and the respondents were asked to choose the one response from each paired statement that best described their feelings about

old people. The purpose of Section II was to elicit responses that would indicate the nature of the nurses' attitude toward old people in general.

Section III of the questionnaire consisted of 15 statements relevant to the nursing care of the elderly. By indicating a "yes" or "no" answer to the 15 items the expressed quality of nursing care rendered to the elderly would be established for the study group. The 15 statements included in the section were an outgrowth of an extensive review of current trends in geriatric nursing practice as reported in literature.

A preliminary draft of the questionnaire was developed and submitted to a group of experienced professional nurses for their constructive criticism in terms of content and format. Only slight revisions were necessary.

Reliability of the Tool

The tool (Appendix B) validated by a group of professional "expert" nurses, was then submitted to a randomly selected group of professional nurses for a test and re-test method of determining

reliability. The randomized sample was selected from the mailing list of nurses who belonged to the Oregon Nurses Association and who practiced in Washington County. The 32 nurses selected were requested to complete the questionnaire as directed. One week later, the samenurses were asked to repeat the procedure. Results were tabulated, and a Pearson Product Moment Correlation was computed to test the accuracy and consistency of the tool. The Product Moment Correlation (Appendix E) was used to test the reliability because the stipulations of random sampling from a normally distributed population and measurement of a linear relationship were met. The correlation was found to be .863 ($P < .01$).

Pilot Study

After testing the tool for validity and reliability, a pilot study was undertaken to determine the feasibility of the study and the data collection device. A mailing list of all registered nurses having membership in the Oregon Nurses Association, District #3 was obtained. From the compiled list, a random sample was chosen by selecting every tenth name on the list until a sample size of 30 was

obtained. The data collection devices were mailed to the sample population accompanied by a cover letter plus a self-addressed, stamped envelope for return. A time limit of two weeks was established in which all questionnaires returned within that period would comprise the pilot study group. Twenty-nine questionnaires were returned by the end of the stipulated time period, a 96.6% return. The results were tabulated and analyzed and found to be such that they could be categorized and used as a basis for the formulation of certain conclusions. No data obtained in the pilot study were included in the final study.

Selection of Participants

The registered nurses upon which the study is based were selected on the basis of the following criteria:

1. The nurse was currently a member of the Oregon Nurses Association, District #1.
2. The nurse was one whose name was chosen on a random basis to comprise the study group.
3. The nurse indicated a willingness to participate in the study by returning the mailed questionnaire within the specified two week period.

Procedure for Collecting Data

The completed questionnaire in its final form (Appendix B) was mailed to 226 nurses who were selected on a random basis. Accompanying the questionnaire was a cover letter (Appendix A) explaining the purposes of the study and countersigned by the thesis adviser, and a self-addressed, stamped envelope for return. At the end of the stipulated two week time limit, 166 of the questionnaires were returned completed, a 74.7% return. The findings of this study were derived from and apply to this group of nurses. A total of 190 questionnaires were returned for a 84% return rate, but 24 of the questionnaires were returned after the stipulated two week time period.

Plan for Analysis

The completed questionnaire served as a record of the responses made by each study nurse. Numerical data were transferred to a master tabulation sheet from which tables and figures could be calculated.

The nurse's attitude toward the elderly was determined by calculating the percentage of negative responses to items 1 through 17 in Section II of the questionnaire. Prior to manipulation of the data, points on a continuous scale were designated by the investigator in an effort to define a negative attitude. On a scale running from 0 to

17, 2 or less negative responses were considered to represent a highly positive attitude toward the aged; 3 to 6 negative responses indicated a positive attitude toward the aged; 6 to 11 negative responses represented an essentially neutral attitude; 11 to 15 negative responses were indicative of a negative attitude, and 15 or more negative responses were considered to represent a highly negative attitude toward the aged. Percentages were calculated for each section of the scale using the formula:

$$\text{Per cent} = \frac{\text{Category frequency}}{\text{total N}} \cdot 100$$

thus, a percentage of less than 11.7 would indicate a highly positive attitude; 11.8% to 35.1% negative responses would be indicative of a positive attitude; 35.2% to 64.7% indicated a neutral attitude; 64.8% to 88.9% was representative of a negative attitude, and over 89% was indication of a highly negative attitude toward the elderly.

The same procedure was carried out in an attempt to define the quality of nursing care given to the elderly patient as indicated by the responses to the 15 items in Section III of the questionnaire. The arbitrary points designated were as follows:

1. Zero to two negative responses (13.3% or less) indicated a highly positive quality of care.
2. Two to five negative responses (13.4% to 33.3%) was indicative of a positive quality of care.

3. Five to ten negative responses (33.4% to 66.7%) indicated a neutral quality of care.
4. Ten to thirteen negative responses (66.7% to 85.8%) was considered a negative quality of care.
5. Thirteen and above negative responses (85.8% and above) indicated an extremely negative quality of care.

The term quality of nursing care is used in this study to represent the responses given by the 166 registered nurses to the 15 questions concerning nursing behavior in the care of the elderly and can only be considered an expression of what the respondents say they would do in the care of the elderly.

The scales constructed for the purposes of measuring the respondents' expressed attitude toward the elderly and the expressed quality of nursing care rendered to the elderly patient were made to approximate a Likert-type scale, a scale which Abdellah defines as one in which the variable(s) is evaluated by a series of statements that when responded to by study subjects, according to a positive and negative response can provide a criterion measure of the variable(s). In this study, attitudes and quality of nursing care are the variables being evaluated by a series of statements which when analyzed will provide some indication of the nature or criterion measure of those variables.

The chi-square computation was used to determine the

significance of difference among the various groups within the independent variables of year of graduation from nursing school, experience in nursing and opportunity for experience in geriatric nursing. These differences were computed with respect to the dependent variables of attitude toward and quality of care of the elderly. The levels of significance used for the purposes of this study ranged from .10 to .005 and the interpretation of those levels ranged from a probability of difference being greater than chance to a highly significant difference between groupings. The risk of committing a Type I error was great at the .10 level of significance; however, the risk of committing a Type II error was great at the .005 level. For the purposes of this study consideration was given to each level of significance with the realization that the conclusions drawn from them could be in error.

The Pearson Product Moment Correlation was employed to indicate relationships between the dependent variables and to indicate relationships between the independent variables. Since a number of variables were measured for the same subjects, the correlation of each possible pair of variables was obtained and all of the resulting coefficients were presented in a correlation matrix. Levels of significance were established at the .05 and .01 levels.

It was anticipated that the aforementioned tests would provide enough information upon which the major hypotheses could be

accepted or rejected. However, the possibility of employing other statistical methods to substantiate or repudiate the hypotheses of the study was not eliminated.

Report of the Study

For the purposes of clarity and consistency, the data collected and analyzed for this study will be presented in the sequence that follows the outline of the questionnaire.

Section I

The first section of the questionnaire was designed to gather background information about the study group and to delimit the independent variables.

Question 1. In what year did you graduate from your school of nursing? This question was designed to give a comparatively reliable estimate of the respondent's age. A direct question was not employed because of the falsification and lack of response that frequently occurs when a direct question is imployed for such purposes. One of the underlying assumptions of this study was stated as such that the correlation between year of graduation from school and chronological age was assumed to be high. It may, therefore, be expected the earlier the respondent graduated from nursing school the older she is chronologically. It must be admitted that there are

currently some older students entering nursing particularly in the Associate Degree programs, but the number is small and does not as yet affect the correlation figures. Data tabulated from responses to Question 1 refer only to year of graduation of the respondent, but because of the assumed high correlation between year of graduation and age, some inference can be made concerning the effect that age of the respondent in addition to the year of graduation from nursing school has upon expressed attitudes. Tabulation of data obtained from responses to Question 1 indicated that one person graduated between the years of 1910 to 1919; 18 persons graduated between 1920 and 1929; 43 nurses graduated between 1930-1939 and the same number graduated between 1940-1949; 26 graduated between the years of 1950-1959 and 35 nurses graduated after 1960. The distribution of the sample population by year of graduation provides an interesting contrast with the national distribution of actively practicing nurses by age. (19) After comparison it may be noted that the study group, comprised of nurses belonging to the Oregon Nurses Association, District #1, has a higher number of older nurses practicing their profession than does the national group of nurses belonging to the American Nurses' Association. Whether this trend is indicative of the total nursing population of District #1 and of the nursing population of Oregon is unknown; however, precautions were taken to eliminate a biased sample so inferences of

this nature could be made.

Grouping of data was presented by ten year intervals in order to facilitate ease of understanding. Separation of data into five year intervals gave a fragmentary effect and groupings greater than ten year intervals distorted the data. The data from Question 1 are presented in Table 1.

Table 1. Distribution of the 166 registered nurses by time of graduation from nursing school.

Time of Graduation	Number of Nurses	Per cent
(1)	(2)	(3)
1910-1919	1	.6
1920-1929	18	10.8
1930-1939	43	25.9
1940-1949	43	25.9
1950-1959	26	15.6
1960-1969	35	21.2
Total	166	100.0

Question 2. How many years have you been actively practicing nursing? This question was designed to provide information concerning experience in nursing according to years of active practice. Findings indicated that the least amount of experience was 1/4 year, and the longest period of experience was 48 years. The mean or

average number of years of experience was 17.3, the median was 16.58 and the distribution had three modes of 10, 14, and 20 years of experience respectively. Over 80% of the participants had 29 or less years of experience. The largest percentage had between 10 and 19 years of experience and a slightly smaller percentage had more than 19 but less than 30 years of experience. These findings are presented in Table 2.

Table 2. Distribution of the 166 registered nurses according to years of experience.

Years of Experience	Number of Nurses	Per cent
(1)	(2)	(3)
0 - 9	44	25.3
10 - 19	49	29.5
20 - 29	44	25.3
30 - 39	24	14.4
40 - 49	4	5.5
Total	166	100.0

There is seemingly a discrepancy between data presented concerning year of graduation and data concerning years of experience in nursing. It was noted in the discussion about the respondents' years of graduation from nursing school that a high percentage of the study population was comprised of nurses who had graduated before 1950;

it has also been noted under the discussion of years of experience in nursing that the largest percentage of nurses have had less than 20 years of experience. The data apparently do not coincide; it might be expected that a large percentage of nurses would have more than 20 years of experience since a large percentage of nurses graduated before 1950, but the data do not indicate this to be true.

There are undoubtedly many factors that could clarify the discrepancy; however, it is not within the realm of this study to investigate those factors. In this study the concern is that there would possibly be no relationship between year of graduation from nursing school and the amount of experience in nursing; this in turn might affect the outcomes of the study. A Pearson Product Moment Correlation was computed to investigate the relationship between year of graduation from nursing school and the amount of experience in nursing. The results of the correlation computation were found to be significant. A correlation figure of -.864 was the result of the computations which is significant at the .01 level. The results were interpreted as indicating a very high relationship between the year of graduation and the amount of experience of the nurse respondents. The probability of this relationship being due to chance alone is less than 1%. What the correlation essentially means is that it would be reasonable to assume that a nurse graduating from nursing school at an earlier period in time would have had more years of experience

in nursing than would a nurse graduating at a later period in time. The negative sign before the correlation figure indicates that the relationship is a negative one, which occurred because of the manner in which numbers were assigned when the test was computed. The correlation does not take into account individual differences however, so the graduate of 1930 who had only two years of experience and the graduate of 1960 who had eight years of experience were not accurately represented. The correlation was computed from data shown in Table 3.

Table 3. Correlation between year of graduation of 166 registered nurses from nursing school and number of years of experience in nursing. *

Year of Graduation	Years of Experience in Nursing				
	0-9	10-19	20-29	30-39	40-49
(1)	(2)	(3)	(4)	(5)	(6)
1910-1919				1	
1920-1929			6	8	4
1930-1939	1	12	15	15	
1940-1949	5	15	23		
1950-1959	3	22			
1960-1969	35				

*Pearson Product Moment Correlation = -. 864**
**Significant at the . 01 level.

Question 3. What type of nursing are you engaged in now? This question was designed to give some indication of the amount of experience the respondent might have had in geriatric nursing. It is difficult to give an accurate account of the exact amount of time spent in any one phase of nursing since much of nursing is integrated. In order to circumvent the problem of trying to identify the exact number of days, months, and years experience in geriatric nursing, the literature was searched for data that indicated the number of elderly persons cared for in each aspect of nursing, and from these data the assumption was made that the larger the number of elderly persons cared for in a particular type of nursing the more experience the nurse would have in geriatric nursing (Chapter I). After the data were compiled, it was found that there were six major types of nursing involved with the care of the elderly. The six were hospital nursing, office nursing, public health nursing, industrial nursing, nursing education and convalescent home nursing, all of which were options in the third item on the questionnaire. Further analysis of the compiled data permitted ranking the types of nursing according to the number of elderly being cared for in that aspect of nursing, and hence give a fairly reliable estimate of the amount of experience in geriatric nursing. The rankings, proceeding from the highest to the lowest number of elderly persons under care were (1) Convalescent Home Nursing, (2) Hospital Nursing, (3) Public Health Nursing,

(4) Office Nursing, (5) Nursing Education, and (6) Industrial Nursing. Another category of "other" was included in the options for those responding nurses who did not feel that they belonged in any of the other six types of nursing.

The distribution of the respondents by type of nursing indicated that 110 were hospital nurses, 17 classified themselves as "other" nurses which with further identification all turned out to be private duty nurses, 12 were public health nurses, 7 were office nurses, 6 were convalescent home nurses, 10 were nurse educators and 4 were industrial nurses. The comparison of the study group with nationwide data reported for members of the American Nurses' Association indicated that the percentage distribution was not much different. (19)

One hundred twenty-eight of the study population indicated that they were one of the top three ranked nursing types with regard to the number of elderly persons being cared for in that aspect of nursing. This could be interpreted to indicate that a large number of the study group had considerable experience in geriatric nursing.

It is recognized that this method of determining the amount of experience the respondent had had in geriatric nursing has its limitations and can only lead to generalities; however, the difficulty of obtaining an accurate account in numbers of days, months, or years of experience in geriatrics becomes almost impossible since geriatric nursing is inherent in many aspects of nursing and further there is

no precise definition of geriatric nursing. Data gathered from responses to Question 3 are presented in Table 4.

Table 4. Distribution of the 166 registered nurses according to type of nursing.

Type of Nursing (1)	Number of Nurses (2)	Per cent (3)
Hospital Nursing	110	66.2
Other Nursing (Private Duty)	17	10.2
Public Health Nursing	12	7.2
Office Nursing	7	4.2
Nursing Education	10	6.0
Convalescent Home Nursing	6	3.6
Industrial Nursing	4	2.6
Total	166	100.0

Question 4. At what chronological age do you consider old age to begin? The purpose of this question was to determine the age group to which respondents had reference when evaluating the expressed attitude toward the elderly and the expressed quality of nursing care rendered to the elderly. The question also served as a referent point for the three independent variables of year of graduation, experience in nursing and experience in geriatric nursing. A determination of the relationship between the possible chronological

age of the respondent, the amount of experience in nursing, the opportunity for experience in geriatric nursing and the chronological age at which the respondent indicated old age began was sought.

In tabulating the data, it was found that the highest chronological age given with reference to when old age began was 80 and the lowest was 45. The mean chronological age given by the respondents in the study group was 68. 2, the median was 70. 53 and the mode was 70. Eighty-five per cent of the respondents indicated that old age began after 65 which is seemingly consistent with the "retirement concept" in American society. Forty-five per cent of the respondents indicated that old age began between the ages of 70 and 75. Fifty-nine respondents indicated that old age began at 70, two designated 72 as the year old age began, and four replied that old age began at 74.

Over half of the respondents who indicated a chronological year in reference to the beginning of old age designated ages above 70. In the study done by Tuckman and Lorge, When Does Old Age Begin and a Worker Become Old?, the findings indicated that the ages most frequently mentioned in determining old age were 60 and 65, the years that serve as a base for pension plans and retirement. (63) The study group indicated that old age began at a much later period than did the group studied by Tuckman Lorge.

Another finding indicated by the responses to Question 4 was

Table 5. Distribution of responses of 143 registered nurses regarding the chronological year at which old age begins.

Chronological Year Old Age Begins	Number	Per cent
(1)	(2)	(3)
80-85	1	.7
75-79	14	9.7
70-74	65	45.4
65-69	43	30.0
60-64	15	10.4
55-59	1	.7
50-54	2	1.4
45-49	2	1.4
Total	143*	100.0

*Twenty-three of the respondents did not indicate a specific age at which old age began. This figure represents 13.8% of the total number of 166 possible responses.

delineated by a specific chronological year; the graduates of 1930-1939 responded much the same way except more designated years below 70 as to when old age began. The 1940-1949 group had an even larger percentage that indicated old age began after 70 with about the same number denying that old age began at any specific chronological age than either the 1920-1929 or 1930-1939 groups. The 1950-1959 group had more respondents who indicated there was no specific age at which old age began than did either the 1940-1949 or 1930-1939

groups, but had a lesser percentage who indicated old age began after 70 and a larger percentage who indicated old age began below 70. The 1960-1969 group presents a paradox in analysis. Even though the respondents in this group were much younger than the other groups, 59% indicated that old age began after 70 or that there was no specific delineating point; furthermore, a lesser percentage indicated old age began below 70 than did the 1940-1949 or 1950-1959 groups and only a slightly greater percentage than the 1930-1939 group. The reasons for this difference are beyond the scope of this study, but it seems that some rather interesting inferences could be made about the influence nursing education has had upon liberalizing views toward the aged.

In summary, as the assumed age of the respondent increased, the chronological year given in reference to when old age begins becomes greater and the number of responses indicating that there is no specific delineating point increases. These findings are supported by the investigations of Tuckman and Lorge that indicate that "as the age of the respondent increases, there is a tendency for the age specified to be set higher". (63) However, the tabulated responses indicated that there was a flexible response on the part of the younger group which is seemingly pertinent. These findings are presented in Table 6.

Table 6. Distribution of responses of 166 registered nurses regarding the chronological age at which old age begins according to the respondent's year of graduation from nursing school.

Chronological Year Old Age Begins Indicated by Respondents	Year of Graduation '10-'19		'20-'29		'30-'39		'40-'49		'50-'59		'60-'69	
	N	%	N	%	N	%	N	%	N	%	N	%
(1)	(2)		(3)		(4)		(5)		(6)		(7)	
45 - 49			1	5								
50 - 54					1	4	1	4			1	3
55 - 59					1	4						
60 - 64			1	5	7	15	2	8	4	16	1	3
65 - 69			5	28	5	11	13	22	7	27	13	35
70 - 74			4	22	18	41	18	41	9	34	16	43
75 - 79			4	22	4	9	3	7	2	7	1	3
80 -					1	4						
No Specific Year Indicated	1	100	3	18	6	12	6	12	4	16	3	13
Totals	1	100	18	100	43	100	43	100	26	100	35	100

The effect that experience in nursing has upon the chronological age given by the respondents in terms of when old age begins may in part explain the expressed liberal view toward when aging begins by the study group.

In general the findings indicated that as the number of years of experience in nursing increased the greater the percentage of responses in the older chronological age categories. The percentage of responses that indicated that the respondents believed that there was no specific age at which old age began remained fairly constant until the last category under years of experience was reached at which time the percentage almost doubled. In the 0-9 years of experience group, 43% of the respondents indicated that old age began after 70 with 14% indicating that there was no specific age at which old age began. The 10-19 years of experience group had a slightly lower percentage who indicated old age began after 70, but a slightly higher percentage who believed there was no specific delineating point. The 20-29 years of experience group had the largest percentage of respondents who believed old age began after 70 but had about the same number of respondents as the other groups who felt there was no specific chronological age at which old age began. The 30-39 years of experience group had a lesser percentage than the 20-29 group who indicated old age began after 70 but a greater percentage indicating no specific chronological age. The same is true for the

40-49 years of experience group except the percentage indicating there was no specific delineating point took a sharp rise. These data are shown in Table 7.

Last to be considered in Section I is the effect that experience in geriatric nursing has upon the respondent's opinions as to when old age begins. Based upon the assumption that the more elderly cared for the greater the opportunity for experience in geriatric nursing, rankings were assigned to various types of nursing.

The tabulated data indicated that a fairly consistent pattern was maintained so that as experience in geriatric nursing increased the higher the chronological age indicated by the respondent in reference to when old age begins. The combined percentage of respondents who believed old age began after 70 and those respondents who indicated that there was no specific delineating point gave a clear cut representation of this trend. The combined percentages of chronologic age over 70 and no specific delineating point was 66% for nurses who worked in nursing homes and hence have concentrated experience in geriatrics, 64% for hospital nurses who were ranked second with respect to opportunity for experience in geriatrics, 61% for public health nurses who were ranked third, 43% for office nurses who were ranked fourth, 50% for nursing educators, 50% for industrial nurses and 59% for "other" nurses who identified themselves as private duty nurses. The rankings held quite consistently except that the findings

Table 7. Distribution of responses of 166 registered nurses regarding the chronological age at which old age begins according to the respondent's experience in nursing.

Chronological Year Old Age Begins Indicated by Respondent	Number of Years of Experience									
	0-9		10-19		20-29		30-39		40-49	
	N	%	N	%	N	%	N	%	N	%
(1)	(2)		(3)		(4)		(5)		(6)	
45 - 49			1	2			1	4		
50 - 54	1	2					1	4		
55 - 59							1	4		
60 - 64	2	5	6	12	5	11	2	8		
65 - 69	16	36	15	30	8	19	4	17	1	25
70 - 74	16	36	17	35	21	47	9	37	1	25
75 - 79	3	7	3	6	4	9	3	13	1	25
80 -					1	2				
No Specific Age Indicated	6	14	7	15	6	12	3	13	1	25
Totals	44	100	49	100	45	100	24	100	4	100

indicated the "other" group of nurses exchanged places with the office nurses. Since the "other" group of nurses was found to consist of private duty nurses who work primarily in hospitals this exchange is to be expected. It is interesting to note that the nurse educators had the largest percentage of respondents who indicated that there was no specific age at which old age began and had the lowest percentage of respondents who indicated a specific chronological age at which old age starts. In contrast, the hospital nurses had a very small percentage of nurses who indicated that there was no specific delineating point, but a large percentage who responded by indicating a chronological age after 70. Findings are presented in Table 8.

For purposes of clarity the data discussed in Section I was condensed and summarized. The findings describe the mean characteristics of the 166 registered nurses in the study. The mean of any sample is influenced greatly by extremes in either direction, thus the mean of the sample may not be the best representation of what the sample is actually like; however, the mean gave the most accurate representation of this study population. The hospital group comprised the largest segment of the study population; the industrial nurses were the smallest group. The nurses who worked in nursing homes were the oldest graduates from nursing school and the ones who were nurse educators were the youngest graduates. With reference to experience in nursing, the nursing home nurses were

Table 8. Distribution of responses of 166 registered nurses regarding the chronological age at which old age begins according to the respondent's type of nursing.

Chronological Year Old Age Begins Indicated by Respondents	Type of Nursing*													
	A		B		C		D		E		F		G	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
(1)	(2)		(3)		(4)		(5)		(6)		(7)		(8)	
45 - 49			2	3										
50 - 54					1	8							1	7
55 - 59			1	1										
60 - 64	1	17	10	9	1	8							3	17
65 - 69	1	17	25	23	3	25	4	57	5	50	2	50	3	17
70 - 74	1	17	50	44	5	44	3	43	1	10	1	25	4	25
75 - 79	1	17	10	9									3	17
80 -			1	1										
No Specific Age	2	32	12	10	2	17			4	40	1	25	3	17
Totals	6	100	110	100	12	100	7	100	10	100	4	100	17	100

A - Nursing Home
B - Hospital Nursing
C - Public Health Nursing
D - Office Nursing
E - Nursing Educators
F - Industrial Nursing
G - Other

the most experienced while the nurse educators were the least experienced. It is interesting to note that industrial nurses had the highest given average in reference to when old age begins and the public health nurses had the lowest. These figures are based upon those nurses who specified a chronological age and does not include those nurses who indicated that there was no specific chronological age at which old age began. If it were to be conjectured what the average nurse in the study population was like, it would be reasonable to assume that she was a hospital nurse, who graduated in the 1940's and has had above 15 but below 20 years of experience in nursing and believed that old age began after 65. Tabulated results are presented in Table 9.

Section II

The second section of the questionnaire was designed to measure and determine the nurses' attitude toward old people in general. The respondent had three options in indicating her attitude toward the elderly; she could mark a positive statement, mark a negative statement or could choose not to answer at all even though the directions did not include this option. For each of the statements responses were tabulated and for each of the response categories the percentage was computed by dividing the number of those responses in a certain category by the total number of responses

Table 9. Summary of responses to Questions 1 through 4 of Section I of the questionnaire by 166 registered nurses.

Type of Nursing	Summary of Responses				
	N	%	Mean Year of Graduation	Mean Years Experience	Chronological Age*
(1)	(2)	(3)	(4)	(5)	(6)
Hospital Nursing	110	65.7	45.5	17.1	68.1
Other Nursing (Private Duty)	17	10.0	44.8	20.0	67.1
Public Health Nursing	12	7.0	47.5	16.6	65.5
Office Nursing	7	4.1	44.7	21.2	67.9
Nursing Educator	10	5.8	55.1	12.0	66.3
Convalescent Home Nursing	6	3.4	30.5	28.0	67.5
Industrial Nursing	4	2.3	38.0	17.3	69.0
Totals	166	100.0	44.3	17.3	67.3

*Chronological age indicated by respondents at which old age began

and multiplying by 100. The nature of the items used for measuring the attitude toward old people may be found in Appendix B, Part II.

The means for determining the nature of the nurses' attitude toward the elderly was the utilization of a Likert-type scale. Points on the scale were arbitrarily designated and the attitude determined by where in the scale the computed percentage of negative responses fell since the scale was constructed on a negative responses basis, i.e., the scale ranged from no negative responses to 17 negative responses.

Percentage	11.8		35.2		64.8		89		100
Hi Pos	/	Pos	/	Neutral	/	Neg	/	Hi Neg	
0	3		7		12		15		17
Responses									

Findings indicate that the overall attitude toward the elderly of this particular study group of 166 registered nurses is positive. The total computed percentage of negative responses was 14.8 which falls within the positive range on the Likert-type scale constructed for the purposes of this study. Tabulated results are presented in Table 10.

Tabulations were done to represent the rank order of the attitudinal items in terms of negative and positive responses. The items that received the most negative responses were concerned with the following: (1) Item 16--the relationship between older and younger generation, with many responses to the negative choice

Table 10. Percentage distribution of 166 registered nurses' responses to items concerning attitudes toward the elderly.

Item Number	Negative Responses		Positive Responses		Non-Responses		Total	
	N	%	N	%	N	%	N	%
(1)	(2)		(3)		(4)		(5)	
1	31	18.6	134	80.8	1	0.6	166	100
2	10	6.0	156	94.0	0	0.0	166	100
3	49	29.6	116	69.8	1	0.6	166	100
4	4	2.6	162	97.4	0	0.0	166	100
5	15	9.2	148	88.9	3	1.9	166	100
6	48	29.0	112	67.2	6	3.8	166	100
7	39	23.6	86	51.8	41	24.6	166	100
8	10	6.0	145	87.2	11	6.8	166	100
9	16	9.8	140	84.2	10	6.0	166	100
10	23	14.0	121	72.6	22	13.4	166	100
11	6	3.7	160	96.3	0	0.0	166	100
12	19	11.6	125	75.0	22	13.4	166	100
13	33	20.0	119	71.2	14	8.8	166	100
14	15	9.2	135	81.4	16	9.4	166	100
15	12	7.6	132	79.0	22	13.4	166	100
16	60	36.6	79	48.3	27	15.1	166	100
17	39	23.6	112	67.2	15	9.2	166	100
Sum Total	429	14.8	2182	77.7	211	7.5	2822	100

which stated that the older generation was constantly complaining about the younger generation; (2) Item 3--adjustment to new situation, many respondents indicating older people were more resistant to change and unable to adjust adequately to new situations; (3) Item 6--mental powers of the aged, 28.4% of the respondents indicated that wisdom was not inherent in aging; (4) Item 17--emotional needs of the elderly, 23.4% of the respondents indicated that old people demand more reassurance and love than do most people; (5) Item 7--social and economic functioning; many respondents indicated that old people have too much power in business and politics.

Items eliciting the most favorable responses were concerned with the following: (1) Item 4--retirement or economic functioning, the respondents indicated that older people would rather work for a living than be supported by pensions or their children; (2) Item 2--the respondents indicated that old people are really no different from other people and that they are as easy to understand as other people; (3) Items 5, 12, and 14--neatness, many respondents indicated that older people keep their homes, their neighborhoods and themselves neat and attractive, and (4) Item 9--communication, many respondents indicated that older people had interesting things to relate to others.

The findings of the data analysis for this study group are very similar to those found by Kogan when he attempted to measure the

attitudes toward the elderly expressed by groups of undergraduate students. (30) He found that item pair 16 received the largest number of negative responses and that item pair 4 received the largest number of positive responses. The same findings were true for the respondents of this study. Data found for the tabulated rank-order of the attitudinal items are found in Table 11.

Table 11. Rank-order of the 17 paired positive-negative items concerning attitudes toward the elderly as expressed by 166 registered nurses.

Order of Items	Positive Ranking	Negative Ranking
(1)	(2)	(3)
1	8	7
2	3	14.5
3	13	2
4	1	17
5	4	11.5
6	14.5	3
7	16	4.5
8	5	14.5
9	6	10
10	11	8
11	2	16
12	10	9
13	12	6
14	7	11.5
15	9	13
16	17	1
17	14.5	4.5

Ranking based upon the highest number of negative or positive responses given to any one item.

Based upon evidence derived from tabulated data, the hypothesis that the nurses' attitude toward the elderly is not negative in nature must be accepted as being tenable. The Chi-square test was applied to test the hypothesis and the statistically treated data yielded evidence to support the null hypothesis. The overall computed percentage of negative responses fell within the positive range on the Likert-type scale constructed for the purposes of this study and no one item elicited negative responses above the neutral range on the scale, making the null hypothesis tenable.

The second hypothesis of the study was that the nurses' expressed attitude toward the elderly would not be affected by the variables of year of graduation, experience in nursing and experience in geriatric nursing. It was hypothesized that there would be no significant difference between responses given by older nursing respondents versus younger nursing respondents to the attitudinal items. Inherent in this hypothesis is that there would be no relationship between the expressed attitude and the year that the respondent graduated from nursing school. To test the existence or non-existence of this hypothesized relationship a Pearson Product Moment Correlation computation was employed (Appendix E). The correlation between year of graduation and the expressed attitude was found to be -. 053, which is non-significant with df - 164 (N - 2).

Further to test the hypothesis that year of graduation had no

effect upon the expressed attitude, the chi-square computation was utilized. If the year of graduation did affect the expressed attitude, then there would be an expected difference between attitudes expressed by graduates of an earlier period in time and attitudes expressed by graduates of a more recent time. For each of the paired positive-negative attitude items, a chi-square was computed. The one general restriction on the use of chi-square is that if the expected frequency is less than 5, a chi-square cannot be legitimately used; therefore, grouping of the graduation categories was done so that this stipulation was met. For some questions it was possible to group the graduation categories by 10 year intervals, for others the grouping had to be on a 20 to 30 year interval basis, even with various grouping there were some questions in which the expected value was too low and therefore a chi-square could not be computed.

Findings of the computed chi-squares indicated that 4 out of the paired 17 items yielded statistically significant differences between younger graduates and older graduates; two items had expected values too low to permit chi-square calculation and 11 items were non-significant at the .10 level or lower. The chi-square computation indicates that there was a difference between the answers given by younger graduates versus older graduates on four of the items; however, the direction is unknown. Examination of the cells within

the tables does permit some inferences concerning the direction that the differences have assumed. For Item 3, the difference seems to be due to the number of negative responses given to the question by the younger graduates. The frequencies found for the various cells (expected frequencies in parentheses) were as follows:

Year Grad.	Neg. Resp.	Pos. Resp.	Non-Resp.
1913-1942	16 (22)	57 (51)	1
1943-1967	33 (27)	60 (66)	0

For the younger graduate the number of negative responses given was higher than what was expected and the number of positive responses was lower than expected. The converse was true for the older graduate; the number of negative responses given was lower than expected and the number of positive responses given was higher than expected. It could be concluded then that for this particular item as the respondent's year of graduation became more recent the more negative the responses.

The difference in Item 5 seems to be caused by the number of negative responses to the item by the older graduates. The frequencies found for the various cells in response to the question of the ability of an older person to maintain a neat and attractive home were as follows:

Year Grad.	Neg. Resp.	Pos. Resp.	Non-Resp.
1913-1942	11 (6)	61 (65)	1
1943-1967	4 (9)	87 (83)	2

For this particular question then, the older graduate replied more negatively than expected and the younger graduate replied more positively than expected.

Item 13, which is concerned with the individuality of the older person, was the third item in which there was found to be a difference between older and younger graduates. The difference again seems to be due to the number of negative responses given by the older graduates. The frequencies found for Item 13 are illustrated as follows: (expected values in parentheses)

Year Grad.	Neg. Resp.	Pos. Resp.	Non-Resp.
1913-1942	22 (14)	40 (50)	8 (6)
1943-1967	11 (19)	76 (66)	6 (8)

Data indicate that the older graduate replied more negatively than expected and the younger graduates replied more positively.

Item 15, concerning the personality of the older person, was the last item that indicated a difference between the two groupings of graduates. The frequencies found were as follows:

Year Grad.	Neg. Resp.	Pos. Resp.	Non-Resp.
1913-1942	7 (5)	51 (57)	14 (10)
1943-1967	5 (7)	80 (74)	8 (12)

(expected values in parentheses) On this item the number of non-responses was high enough to permit including them in a chi-square computation. The data seemingly indicate that the older graduates

responded more negatively than expected and the younger graduates more positively. The younger graduates also had fewer non-responses than expected and the older graduates more non-responses than expected.

In addition to computing a chi-square for each question, a chi-square was done on the total number of negative, positive and non-responses given by the older graduates versus the younger graduates. Findings of the computed chi-squares are presented in Tables 12 and 13.

The data indicate that there is a significant difference between the responses given by older graduates versus the responses given by younger graduates to the attitudinal items. Examination of the chi-square contingency tables reveals that this difference is primarily due to the older graduate replying more negatively than expected and the younger graduates replying more positively than expected.

On the basis of the data revealed by the statistical analyses, the hypothesis that: "There will be no significant difference between the attitude expressed by younger nursing graduates versus older nursing graduates" must be rejected. Findings of this portion of the study are supported by research done by Tuckman and Lorge (60, 62) but are the antithesis of findings from research reported by Golde, Kogan and Pilhblad who found that younger respondents replied more

Table 12. Chi-square distribution of responses to 17 matched positive-negative statements concerning 166 nurses' attitude toward the elderly with reference to year of graduation.

Item Number	Chi-square	Significance	df
(1)	(2)	(3)	(4)
1	3.456	Non-significant	4***
2	.149	Non-significant	1*
3	4.206	Significant at .05	1*
4	Expected value too low		
5	6.532	Significant at .02	1*
6	5.703	Non-significant	4***
7	11.039	Non-significant	8****
8	.722	Non-significant	1*
9	.371	Non-significant	2**
10	2.523	Non-significant	4***
11	Expected value too low		
12	2.871	Non-significant	4***
13	16.342	Significant at .01	2**
14	3.487	Non-significant	2**
15	5.580	Significant at .10	2**
16	10.591	Non-significant	8****
17	.669	Non-significant	4***

* Age categories for respondents with 1 df: 1917-1942, 1943-1967

** Age categories for respondents with 2 df: 1913-1937, 1938-1952, 1953-1967

*** Age categories for respondents with 4 df: 1913-1927, 1928-1937, 1938-1947, 1948-1957, 1958-1967

**** Age categories for respondents with 8 df: 1913-1927, 1928-1937, 1938-1947, 1948-1957, 1958-1967

Table 13. Chi-square computation of the total number of negative, positive and non-responses to 17 matched positive-negative statements concerning attitude toward the elderly by year of graduation from nursing school.

OBSERVED FREQUENCY

Year of Graduation	Positive Responses	Negative Responses	Non-Responses	Total
(1)	(2)	(3)	(4)	(5)
1913-1942	919	214	108	1241
1943-1967	1353	227	101	1681
Total	2272	441	209	2922

EXPECTED FREQUENCY

Year of Graduation	Positive Responses	Negative Responses	Non-Responses	Total
(1)	(2)	(3)	(4)	(5)
1913-1942	965	188	88	1241
1943-1967	1307	253	121	1681
Total	2272	441	209	2922

$$X^2 = \Sigma \frac{(fo - fe)^2}{fe}$$

$$X^2 = \frac{(227 - 253)^2}{253} + \frac{(214 - 188)^2}{188} + \frac{(1353 - 1307)^2}{1307} +$$

$$\frac{(919 - 965)^2}{965} + \frac{(101 - 121)^2}{121} + \frac{(108 - 88)^2}{88}$$

$$X^2 = 17.919 \quad P < .01 \quad df = 2$$

negatively about old people than did older respondents. (22, 31, 41)

The second variable investigated with regard to its effect upon the expressed attitude was the amount of experience in nursing. It was hypothesized that experience in nursing would not affect the responses given to attitudinal items, i.e., there would be no difference between responses given by experienced nurses versus inexperienced nurses to the attitudinal items. Inherent in the hypothesis is a relationship between experience and expressed attitude; to test for the relationship a Pearson Product Moment Correlation was computed and found to be +.189, $P < .05$. The correlation was found to be significant and interpreted as indicating a relationship between experience in nursing and expressed attitude in terms of negative responses to the attitudinal items. The relationship indicates that as the number of years of experience increases, the number of negative responses increases; or, as the number of years of experience decreases, the number of negative responses to attitudinal items decreases.

A chi-square was used to test for differences between experienced and inexperienced nurses' responses to the attitudinal items. There is indication from the computed chi-squares that 6 of the 17 paired positive-negative items elicited a difference in responses from nurses with regard to experience. Where degree of freedom was equal to 1, the computation was based upon a division of years

of experience by 25 year intervals, where the df = 2, the division was on a 15 year basis. The first item in which there was a difference in responses was Item 5, which is concerned with the older person's ability to maintain a neat and attractive surroundings. This particular item elicited 12 negative responses, out of a possible 63, from nurses who had more than 25 years of experience in nursing; whereas, nurses who had less than 25 years of experience gave only 3 negative responses to this item out of a possible 99. It appears that the difference is due to the more experienced nurses responding more negatively to this question than less experienced nurses.

Item 6, which was concerned with the acquisition of wisdom with age, was the second item for which a chi-square indicated a difference in responses given by nurses with varying amounts of experience. Respondents with less than 15 years of experience in nursing gave 19 out of a possible 74 negative responses; respondents with more than 15 years of experience but less than 30 had 19 negative responses out of a possible 61 and nurses with more than 30 years of experience had 11 negative responses out of a possible 24. It becomes evident that as experience in nursing increases the percentage of negative responses increases. The same results were found for Item 12, which was concerned with the older person's ability to maintain a nice residential neighborhood. Respondents with more than 25 years of experience in nursing had a larger

of negative responses to positive responses than did those respondents with less than 25 years of experience.

Item 13, concerning differences between old people, had 2 out of 50 respondents with less than 15 years of experience in nursing respond negatively, 15 of 45 respondents with less than 30 but more than 15 years of experience respond negatively, and 16 out of 40 respondents with more than 30 years of experience in nursing respond negatively. Item 14, which was concerned with the older person's personal appearance, elicited 3 negative responses from the nursing group with less than 15 years of experience; 1 out of 47 nurses with more than 15 years of experience but less than 30 responded negatively and 11 of 56 respondents with more than 30 years of experience responded negatively.

The last attitude item eliciting a difference in responses from nurses with varying amounts of experience in nursing was Item 15, the personality of the older person. Three out of 68 respondents with less than 25 years of experience in nursing indicated that old people are irritable, grouchy and unpleasant. Twelve out of 66 respondents with more than 25 years of experience in nursing responded negatively to this item. This item as well as the other five items that indicated a difference in responses given by nurses with varying amounts of experience in nursing reflects a difference that is seemingly due to the more experienced nurses' responding more

negatively than less experienced nurses.

In addition to computing a chi-square for each question, a chi-square was computed on the total number of negative, positive and non-responses given by nurses with more than 25 years of experience versus nurses with less than 25 years of experience. Findings of the computed chi-squares are presented in Tables 14 and 15.

On the basis of the data that were revealed though correlation and chi-square computations, the hypothesis that: "there is no significant difference between the attitude expressed by experienced nurses versus inexperienced nurses" must be rejected. There was found to be a positive relationship between years of experience and expressed attitude in terms of number of negative responses to the attitudinal items, and this relationship was a positive one that indicated that as the number of years of experience increased the number of negative responses to attitudinal items increased. Chi-square computations revealed that 6 out of the 17 attitudinal items elicited statistically significant responses from nurses with more experience in nursing versus nurses with a lesser amount of experience; furthermore, the total computed chi-square on all 17 attitudinal items revealed a statistically significant difference between respondents with varying amounts of experience.

The last variable tested with respect to effect on expressed attitude was experience in geriatric nursing as represented by the

Table 14. Chi-square distribution of responses to 17 matched positive-negative statements concerning the nurses' attitude toward the elderly with reference to the respondent's experience in nursing.

Item Number	Chi-square	Significance	df
(1)	(2)	(3)	(4)
1	3.582	Non-significant	2**
2	.212	Non-significant	1*
3	1.953	Non-significant	1*
4	Expected value too low		
5	17.955	Significant at .01	1*
6	12.360	Significant at .01	2**
7	3.024	Non-significant	2**
8	.040	Non-significant	1*
9	.426	Non-significant	2**
10	2.475	Non-significant	2**
11	Expected value too low		
12	5.814	Significant at .02	1*
13	14.280	Significant at .01	2**
14	9.587	Significant at .01	2**
15	5.203	Significant at .05	1*
16	3.267	Non-significant	2**
17	4.103	Non-significant	2**

* Experience categories of respondents with 1 df: 0-24, 25-50
** Experience categories of respondents with 2 df: 0-14, 15-29, 30-49

Table 15. Chi-square computation of the total number of negative, positive and non-responses to 17 matched positive-negative attitude statements toward the elderly by years of experience in nursing.

OBSERVED FREQUENCY

Number Years Experience	Positive Responses	Negative Responses	Non-Responses	Total
(1)	(2)	(3)	(4)	(5)
0-24	1622	293	159	2074
25-50	531	146	54	731
Total	2153	439	213	2805

EXPECTED FREQUENCY

Number Years Experience	Positive Responses	Negative Responses	Non-Responses	Total
(1)	(2)	(3)	(4)	(5)
0-24	1592	325	157	2074
25-50	561	114	56	731
Total	2153	439	213	2805

$$X^2 = \Sigma \frac{(fo - fe)^2}{fe}$$

$$X^2 = \frac{(1622 - 1592)^2}{1592} + \frac{(531 - 561)^2}{561} + \frac{(293 - 325)^2}{325} +$$

$$\frac{(146 - 114)^2}{114} + \frac{(159 - 157)^2}{157} + \frac{(54 - 56)^2}{56}$$

$$X^2 = 15.023 \quad P < .01 \quad df = 2$$

various types of nursing. It was hypothesized that there would be no difference between the expressed attitude toward the elderly by nurses with varying amounts of experience in geriatric nursing. Inherent in the hypothesis is a relationship between experience in geriatrics and expressed attitude. A Pearson Product Moment Correlation was used to test for the existence or non-existence of this relationship and found to be -. 214, $P < .01$, $df = 164$ (N-2). Interpretation of the findings indicate that there is a significant relationship between experience in geriatrics and expressed attitude. The negative nature of the relationship indicates that as experience in geriatrics increases the number of negative responses increases and resulted because of the manner in which scores were assigned to the number of negative responses given to attitudinal items and opportunity for experience in geriatrics.

To test the hypothesis further, a chi-square computation was employed to detect differences in responses to the attitudinal items individually according to the amount of experience in geriatrics and to the total number of positive, negative and non-responses to the attitudinal items given by nurses with varying degrees of experience in geriatrics.

Findings of those computations reveal that there were none of the individual items that elicited significantly different responses according to experience in geriatrics, but when the total chi-square

computation was done it revealed a statistically significant difference; however, the difference is seemingly located in the non-response area where it was found that nursing home nurses, public health nurses, office nurses and nursing educators all had more non-responses to the questions than expected and the rest of the nursing types had fewer non-responses than expected. There is, however, a slight trend which seemingly indicates that the more experienced nurses in geriatrics respond slightly more negatively than nurses with less experience in geriatric nursing. Percentage calculations define the trend more clearly. In terms of negative responses, nursing home nurses had 15.68%, hospital nurses had 15.93%, public health nurses had 12.74%, office nurses had 12.60%, nurse educators had 12.35%, industrial nurses had 8.82% and other nurses (private duty) had 19.72% of their total responses negative in nature.

Findings of the computed chi-squares are presented in Tables 16 and 17.

On the basis of the data revealed by the correlation computations and the chi-square statistics along with percentage calculations, the hypothesis that: "there is no difference between responses given to attitude items by nurses with varying degrees of experience in geriatric nursing" must be rejected. Data have indicated that there exists a relationship between expressed attitude toward the elderly and experience in geriatric nursing, a relationship that reveals a

Table 16. Chi-square distribution of responses to 17 matched positive-negative statements concerning the nurses' attitude toward the elderly with reference to the respondent's experience in geriatric nursing.

Item Number	Chi-square	Significance	df
(1)	(2)	(3)	(4)
1	1.69	Non-significant	6
2	3.59	Non-significant	6
3	5.334	Non-significant	6
4	Expected value too low		
5	8.923	Non-significant	6
6	6.003	Non-significant	6
7	8.201	Non-significant	6
8	2.603	Non-significant	6
9	6.318	Non-significant	6
10	10.354	Non-significant	6
11	Expected value too low		
12	9.205	Non-significant	6
13	9.356	Non-significant	6
14	6.393	Non-significant	6
15	6.092	Non-significant	6
16	8.542	Non-significant	6
17	6.295	Non-significant	6

Table 17. Chi-square calculation of the total number of responses to 17 paired positive-negative attitude items according to type of nursing.

Type of Nursing	Positive Responses		Negative Responses		Non-Responses	
	Obs Fo	Exp Fe	Obs Fo	Exp Fe	Obs Fo	Exp Fe
(1)	(2)		(3)		(4)	
Nursing Home Nurses	69	79	16	15	17	8
Hospital Nurses	1452	1435	298	291	120	144
Public Health Nurses	151	157	26	35	27	12
Office Nurses	78	91	15	19	16	9
Nurse Educators	162	180	21	26	27	13
Industrial Nurses	62	52	6	11	0	5
Other Nurses (Private Duty)	221	154	57	45	11	22
Total	2165	2165	439	439	218	218

$$X^2 = \Sigma \frac{(fo - fe)^2}{fe}$$

$$X^2 = \frac{(69 - 79)^2}{79} + \frac{(1452 - 1435)^2}{1435} + \frac{(151 - 157)^2}{157} + \frac{(78 - 91)^2}{91} + \frac{(62 - 52)^2}{52} + \frac{(221 - 154)^2}{154} + \frac{(16 - 15)^2}{15}$$

$$\frac{(298 - 291)^2}{291} + \frac{(21 - 26)^2}{26} + \frac{(26 - 35)^2}{35} + \frac{(15 - 19)^2}{19} + \frac{(6 - 11)^2}{11} + \frac{(57 - 45)^2}{45} + \frac{(17 - 79)^2}{79} +$$

$$\frac{(120 - 144)^2}{144} + \frac{(27 - 12)^2}{12} + \frac{(16 - 9)^2}{9} + \frac{(27 - 13)^2}{13} + \frac{(0 - 5)^2}{5} + \frac{(11 - 22)^2}{22}$$

$X^2 = 92.183 \quad P < .01, \quad df = 12$ (total)

trend of number of negative responses to attitudinal items increasing as experience in geriatric nursing increases. There are, furthermore, chi-square computations that reveal statistically significant differences between responses given by nurses with varying degrees of experience in geriatrics. Percentage computations indicate that the percentage of negative responses increases as experience in geriatrics increases.

Section III

The third section of the questionnaire was designed to elicit responses that would indicate the quality of nursing care that the respondent expressed she would render to the elderly patient. The relationship between this section and Section II of the questionnaire provided the basis for the acceptance or rejection of the third major hypothesis.

As before, the means for determining the quality of nursing care rendered to the elderly patient was the utilization of a Likert-type scale so constructed as to designate the quality of care in terms of highly positive to highly negative behavior toward the elderly. Behavior toward the elderly was determined by what the respondent said she would do in response to the 15 nursing care items. Points on the scale were arbitrarily designated and the quality of care determined by where in the scale the computed

percentage of negative responses fell. The designation of which responses were negative was determined previously in the validation measures taken in the development of the tool (Appendix F).

Percentage of Negative Responses

	13.4		33.4		66.7		85.8		100
Hi Pos	/	Pos	/	Neutral	/	Neg	/	Hi Neg	
0		2		5		10		13	15

Number of Negative Responses

The findings of tabulated data reveal that the overall quality of nursing care expressed by the study group was positive. The total computed percentage of negative responses was 24.8 which falls within the positive range on the Likert-type scale constructed for the purposes of this study. This is a percentage figure 10 points above the percentage of negative responses found in reference to the expressed attitude toward the elderly. Unlike the findings of the attitude determination, there were three items that elicited responses in the behavior determination that fell within the negative range or high neutral range. Those items were concerned with the practice of inserting a permanent urinary catheter after a stroke, application of restraints to eliminate older people from climbing out of bed and leaving siderails down so that an older person might go to the bathroom at night. The respondents indicated that they would insert a permanent catheter, they would apply restraints and they wouldn't leave the siderails down at night--responses that were

negative according to the consensus of the "experts" used in the validation of the tool.

Those items eliciting the most favorable responses had to do with allowing elderly patients to wear personal clothing while in a nursing home, permitting them to make their own beds even if it is time consuming, and instructing them to administer their own insulin. These practices are comparatively new since as previously mentioned much of nursing care was predicated upon the assumption that older persons were unable to do things for themselves. (32) These practices reflect an emerging trend of emphasizing the individuality of the elderly patient. (40)

Based upon the findings, the expressed quality of nursing care that would be rendered to the elderly patient by this particular group of nurses would be positive. Findings are presented in Table 18.

The hypothesis that "there is no significant relationship between expressed attitude toward the elderly and expressed behavior toward the elderly" was tested by performing a Pearson Product Moment Correlation between the number of negative responses given by each individual respondent in Section II and the number of negative responses given in Section III.

To compare the attitude toward the elderly expressed by this particular group with the quality of nursing care they say they would render to the elderly, a Pearson Product Moment correlation was

Table 18. Distribution of the study population of 166 registered nurses' responses to items concerned with the nursing care of the elderly.

Item Number	Neg Responses N	Neg Responses %	Pos Responses N	Pos Responses %	Non-Responses N	Non-Responses %	Total N	Total %
(1)	(2)		(3)		(4)		(5)	
1	124	74.4	34	20.6	8	5	166	100
2	21	12.8	141	84.8	4	2.4	166	100
3	24	14.6	140	84.2	2	1.2	166	100
4	23	13.8	136	81.6	7	4.6	166	100
5	101	60.6	59	36.0	6	3.4	166	100
6	31	18.6	132	79.6	3	1.8	166	100
7	28	16.6	135	81.6	3	1.8	166	100
8	0	0.0	166	100.0	0	0.0	166	100
9	2	1.2	163	98.2	1	.6	166	100
10	31	18.6	132	79.6	3	1.8	166	100
11	15	9.2	145	87.4	6	3.4	166	100
12	29	17.4	134	80.8	3	1.8	166	100
13	57	34.2	101	60.6	8	5.2	166	100
14	108	64.8	51	30.6	7	4.6	166	100
15	36	21.8	125	75.0	5	3.0	166	100
Total	629	24.8	1795	70.8	66	4.4	2490	100

performed and found to be +. 355, which is significant at the . 01 level with 164 degrees of freedom. On the basis of these findings the hypothesis that: "there is no significant relationship between expressed attitude toward the elderly and expressed behavior toward the elderly" was rejected; it is therefore reasonable to assume that there exists a relationship between the expressed attitude toward the elderly and expressed behavior in the care of the elderly. Interpretation of the correlation computation gives indication that as the number of negative responses increases with regard to attitude toward the elderly, the number of negative responses increases with regard to nursing care of the elderly.

No formal hypotheses were made concerning the effect and/or relationship between the independent variables and the expressed quality of care rendered to the elderly patient in the primary design of the study; however, abbreviated statistics were compiled for this purpose. A Pearson Product Moment Correlation was done to investigate the relationship between the three independent variables of year of graduation, experience in nursing and experience in geriatric nursing and expressed quality of nursing care rendered to the elderly patient. Findings of the computations indicate that there is a significant relationship between year of graduation and expressed quality of nursing care. The direction was negative and resulted because of the method employed in assigning numbers to scores.

Interpretation of the relationship is that as year of graduation becomes earlier in time, the number of negative responses to behavior items increases. The findings further indicate that there is a significant relationship between experience in nursing and expressed quality of nursing care rendered to the elderly. Interpretation of this relationship is that as the number of years of experience in nursing increases the number of negative responses indicated in the behavioral section increases. Unlike the relationships previously discussed, the relationship between type of nursing (experience in geriatrics) and expressed quality of nursing care of the elderly is not significant. These relationships along with those found between the independent variables and expressed attitude are presented in Table 19.

Table 19. Intercorrelation between independent variables, negative attitudinal responses, negative behavioral responses and total negative responses.

	1	2	3	4	5	6
1. Year of Graduation	1.000	-.864**	+.005	-.053	-.254**	-.186*
2. Experience in Nursing		1.000	+.021	+.189*	+.178*	+.221**
3. Geriatric Experience			1.000	-.244**	+.014	-.257**
4. Negative Attitude Responses				1.000	+.355**	**
5. Negative Behavior Responses					1.000	**
6. Total Negative Responses						1.000

* Significant at the .05 level with 164 df
** Significant at the .01 level with 164 df

CHAPTER IV

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

In light of existing trends, changes and conditions of the present time, a study of attitudes and the behavioral consequences of the possessed attitude was deemed important in the realm of nursing. The purpose of this study was to investigate the registered nurse's expressed attitude toward the elderly and to examine the expressed behavioral consequences of that attitude.

The method chosen to accomplish the purposes of the study was the tabulation of data obtained through the return of a mailed questionnaire. The study was intended to be descriptive in nature and it was believed that the responses of 166 registered nurses to 4 background items, 17 attitudinal items and 15 nursing care items would provide enough data to describe the population under study and provide a basis for the acceptance or rejection of the major hypotheses. The variables used for the purposes of comparing and contrasting responses were obtained from the background items and consisted of year of graduation from nursing school, experience in nursing and experience in geriatrics.

The study group consisted largely of nurses who had graduated before 1950 (62%). The mean or average number of years of experience in nursing of the study group was 17.3. The majority of the nurses had less than 29 years of experience in nursing. There was seemingly a discrepancy between the year of graduation from nursing school of the respondent and the number of years of experience in nursing. This discrepancy could have been explained on the basis that many nurses have a period of inactivity and then return to nursing; however, a correlation computation was done to establish the existence or non-existence of a relationship between year of graduation from nursing school and number of years of experience in nursing. The relationship was found to be significant and revealed that the number of years of experience increased as the year of graduation became earlier in the time period.

For the purposes of determining the amount of experience the respondent had in geriatrics, a method was used whereby the type of nursing provided a means of estimating the opportunity for experience in geriatric nursing. It was found that 128 of the participants were engaged in a type of nursing that had an above average amount of opportunity for experience with the aged patient.

The last item in Section I was concerned with the chronological age at which the respondent indicated old age began. The mean chronological age given by the respondents in the study group was

68. 2, the median was 70. 53 and the mode 70. Over 85% of the respondents indicated that old age began after 65 which is consistent with the retirement concept in American society. Data further revealed that as the year of graduation became further removed, the chronological year given in reference to when old age began became larger or higher; as experience in nursing increased the chronological number became higher; and as experience in geriatric increased the chronological number became higher.

It was found that the expressed attitude toward the elderly for this particular study group was positive; thus refuting the null hypothesis that "the nurses' expressed attitude would be negative in nature". Further investigation revealed that the year of the respondent's graduation from nursing school, experience in nursing and experience in geriatrics affected responses given to the attitudinal items. There were found to exist significant differences between respondents who graduated at an earlier period of time versus recent graduates, nurses who were more experienced in nursing versus those who were less experienced, and nurses who had a greater opportunity for experience in geriatrics versus those who had a lesser opportunity to care for the aged. It was found that the number of negative responses to the attitudinal items increased as the year of graduation became earlier in time, as the nurse became more experienced and as she had a greater opportunity for experience in

geriatric nursing. Hypotheses concerning the effect the variables had on expressed attitude were rejected.

The remaining portion of the study was concerned with nursing behavior toward the elderly patient. In this section as in the attitudinal section the basis for rejection or acceptance of the hypotheses was expressed behavior, i.e., what the respondent said she would do; this does not necessarily mean that the respondent does or would do as she expresses. The existence or non-existence of a relationship between the nursing care section and the attitudinal section was the basis for acceptance or rejection of the third major hypothesis: "there is no significant relationship between expressed attitude and expressed nursing behavior in the care of the elderly." There was found, however, to exist a significant relationship between expressed attitude and expressed nursing behavior; therefore, the hypothesis was rejected. Abbreviated statistics were compiled to test the relationship between the independent variables and expressed nursing behavior in the care of the elderly even though hypotheses were not made with reference to such in the design of the study. These relationships were found to reflect the findings previously discussed with reference to expressed attitude, i.e., as experience in nursing increased, experience in geriatrics increased and as year of graduation from nursing school became earlier in time the number of negative responses to nursing behavior items increased.

Conclusions

It is concluded on the basis of this study of 166 registered nurses, members of District #1, Oregon Nurses Association, that they have an expressed positive attitude toward the elderly, that year of graduation from nursing school, experience in nursing and experience in geriatric nursing affect the expressed attitude, and that there is a significant relationship between the expressed attitude toward old people and the expressed nursing behavior in the care of the elderly. These facts, however, are only findings and not conclusions. For conclusions to be drawn a more extensive study involving a greater number of nurses would have to be carried out. The findings cannot be generalized to the whole population of registered nurses but they do raise some important questions about attitudes and the role the attitudes play in nursing behavior, and they do permit some inferences to be made.

It was found within the study that older respondents had a tendency to respond more negatively to the attitudinal and nursing behavior items than did younger respondents. It was also revealed within the text of the study that the registered nurses in the sample population had a large percentage of nurses who graduated before 1950 and therefore could be categorized as "older" nurses. These findings raise the question of the adequacy of nursing care being

rendered to the elderly, since it was also revealed in the study that there was a significant relationship between expressed attitude and quality of care. It has seemingly been assumed for some period of time that "older" nurses would be more compassionate and understanding of the elderly since they too were approaching the older age group; however, findings of the study do not support this assumption. Further investigation into this matter would seem to be merited.

Another fundamental question raised by the analysis of findings of the study is that of the part experience in nursing and especially experience in geriatrics has in affecting the attitude toward the elderly. It has long been thought that the more experience a nurse had in nursing and the more experience she had in any one particular field of nursing, the more probable would be the chance of developing the proper attitudes necessary for optimal functioning in that particular field. However, the findings of the study do not coincide with this supposition. It was found in the study that as experience in nursing increased the number of negative responses to attitudinal and behavioral items increased; furthermore, the population was found to consist of nurses who had the opportunity for a great deal of experience in geriatrics. This raises the question of the adequacy of care being rendered to the elderly, since the greater number of experienced nurses were found in the hospital and nursing home nurse population where also is found the greatest population of elderly.

Questions also arise as to the effect that education has upon the changing of attitudes and behavior toward the elderly. There seemingly is some variable that could explain why younger or more recent graduates respond more positively with regard to nursing care and attitudes toward the elderly. It would seem plausible that in part education could explain this phenomenon.

In general, the study answers many questions concerning the nurses' expressed attitude and nursing behavior toward the elderly; but it still leaves many other important and fundamental questions unanswered. At best the study opened the path for further research into the nurse and her attitudes and behavior toward the elderly.

Recommendations for Further Study

On the basis of this study the following recommendations appear pertinent:

1. A more extensive study should be carried out in which this questionnaire would be administered to registered nurses throughout the state, regardless of membership in the American Nurses' Association.
2. This questionnaire should be utilized to determine the effect that an educational assignment through geriatrics has upon the expressed attitude and behavior toward the elderly.

   A study such as the one proposed should have a control

group which is comprised of nurses who have not had any planned experiences or courses in the care of the elderly and an experimental group who has had such experiences and courses.

3. The questionnaire should be tested as to the possible use it may be in determining the individual nurse's potential in the field of nursing.
4. Further study should be carried out to determine the adequacy of the nursing care presently being rendered to the elderly in light of the rehabilitative trend in medicine and nursing.
5. Separate and more extensive studies should be carried out on the effect each of the independent variables has upon expressed atttitude.

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APPENDICES

APPENDIX A

CORRESPONDENCE

10130 S. W. Hillview
Tigard, Oregon 97223
April 1968

_____
_____
_____

Dear _____

In partial fulfillment of the requirements for a Masters of Science degree at the University of Oregon School of Nursing, I am undertaking a study concerning nurses and their feelings about the about the elderly. You are invited to participate in the study. It will involve completing the enclosed questionnaire, which will take approximately ten minutes. A self-adressed, stamped envelope is enclosed for your convenience in returning the completed questionnaire. If you do not wish to participate, enclose the unanswered questionnaire in the envelope provided and return. I would appreciate a response before _____.

Upon completion of this study, copies of the report will be placed in the library at the University of Oregon Medical School.

Yours sincerely,

(Miss) Carol Julian

Carol Julian is a regularly enrolled graduate student at the University of Oregon School of Nursing. Any assistance you can offer Miss Julian will be greatly appreciated.

_____
Lucile Gregerson
Thesis Adviser

APPENDIX B

DATA COLLECTION TOOL

SECTION I - INSTRUCTIONS

Complete the following section by filling in the blank spaces provided with the requested information.

1. In what year did you graduate from your school of nursing? _____

2. How many years have you been actively practicing nursing? _____

3. What type of nursing are you engaged in now?
   Hospital_____ Public Health_____ Industrial_____
   Office _____ Nusing Education_____ Nursing Home_____
   Other_____

4. At what chronological age do you consider old age to begin? _____

SECTION II - INSTRUCTIONS

The following section consists of 17 paired statements. From each of the paired statements choose one response that best describes your feelings about old people. Mark an X in the blank space provided that corresponds with your chosen response. Repeat this procedure for all 17 paired statements.

1. A. It would probably be better if most old people lived in residential units with people of their own age. A. _____
   B. It would probably be better if most old people lived in residential units that also housed younger people. B. _____

2. A. There is something different about old people; it is hard to figure out what makes them tick. A. _____
   B. Most old people are really no different from anybody else; they are as easy to understand as younger people. B. _____

3. A. Most old people are capable of new adjustments when the situation demands it. A. _____
   B. Most old people get set in their ways and are unable to change. B. _____

4. A. Most old people would prefer to continue working just as long as they possible can. A. _____
   B. Most old people would prefer to quit working as soon as their pensions can support them. B. _____

5. A. Most old people tend to let their homes become shabby and unattractive. A. _____
   B. Most old people can generally be counted on to maintain a clean, attractive home. B. _____

6. A. It is foolish to claim that wisdom comes with old age. A. _____
   B. People grow wiser with the coming of age. B. _____

7. A. Old people have too much power in business and politics. A. _____
   B. Old people have too little power in business and politics. B. _____

8. A. Most old people are very relaxing to be with. A. _____
   B. Most old people make one feel ill at ease. B. _____

9. A. One of the most interesting qualities of old people is their accounts of their past experiences. A. _____
   B. Most old people bore others by their insistence on talking about the good old days. B. _____

10. A. Most old people keep to themselves and give advice only when asked. A. _____
    B. Most old people spend too much time prying into the affairs of others and giving unsought advice. B. _____

11. A. When you think about it, most old people have the same faults as anybody else. A. _____
    B. If old people expect to be liked, their first step is to try to get rid of their irritating faults. B. _____

12. A. In order to maintain a nice residential neighborhood, it would be best if too many old people did not live in it. A. _____
    B. You can count on finding a nice residential neighborhood where there is a sizeable number of old people living in it. B. _____

13. A. There are a few exceptions, but in general most old people are pretty much alike. A. _____
    B. It is evident that most old people are very different from one another. B. _____

14. A. Most old people seem to be quite clean and neat in their personal appearance. A. _____
    B. Most old people should be more concerned with their personal appearance; they are too untidy. B. _____

15. A. Most old people are irritable, grouchy and unpleasant. A. _____
    B. Most old people are cheerful, agreeable and good humored. B. _____

16. A. Most old people are constantly complaining about the behavior of the younger generation. A. _____
    B. One seldom hears old people complaining about the behavior of the younger generation. B. _____

17. A. Most old people make excessive demands for love and reassurance. A. _____
    B. Most old people need no more love and reassurance than anyone else. B. _____

SECTION III - INSTRUCTIONS

The following section consists of 15 statements concerning nursing action in the care of old people. Each statement is made with the reservation that no medical contraindication for the action is present. Mark in the blank space provided after each statement

YES: if you would perform this action in the care of the elderly.

NO: if you would not perform this action in the care of the elderly.

	YES	NO
1. Insert a foley catheter on an older person who became incontinent after a stroke.	____	____
2. Allow older persons in the hospital to make their own beds even if it takes them twice as long to do it than if nursing personnel made it.	____	____
3. Instruct older persons on how to give their own insulin injections.	____	____
4. Insert a naso-gastric feeding tube on a patient who is extremely difficult to feed.	____	____
5. Apply restraints to those old people who insist on climbing out of bed.	____	____
6. Recommend occupational therapy for an older person who has no particular medical need for it.	____	____
7. Allow older persons to skip a meal because they are not hungry.	____	____

	YES	NO
8. Permit older people in a nursing home to wear their own clothes.	____	____
9. Confiscate a pile of old cards and letters that are cluttering up the bedside stand.	____	____
10. Take away a tray of food from an older person after "ample" time has been given for all the rest of the patients to eat.	____	____
11. Give a bed bath to an older person instead of letter him take a tub bath or shower.	____	____
12. Get up every patient on a ward where none is capable of ambulation on his own.	____	____
13. Let older persons with severe tremors in their hands feed themselves.	____	____
14. Leave the siderails down on an older person's bed so that he may go to the bathroom on his own at night.	____	____
15. Administer sedatives routinely on those older persons who have a tendency to be noisy, in order to keep a quiet ward.	____	____

APPENDIX C

MASTER TABULATION

SECTION I - INSTRUCTIONS

Complete the following section by filling in the blank spaces provided with the requested information.

1. In what year did you graduate from your school of nursing? Range 1917-1967

2. How many years have you been actively practicing nursing? Range 1/4 - 48yr

3. What type of nursing are you engaged in now?
   Hospital 110 Public Health 12 Industrial 4
   Office 7 Nursing Education 10 Nursing Home 6
   Other 17

4. At what chronological age do you consider old age to begin? Range 45-80

SECTION II - INSTRUCTIONS

The following section consists of 17 paired statements. From each of the paired statements choose one response that best describes your feelings about old people. Mark an X in the blank space provided that corresponds with your chosen response. Repeat this procedure for all 17 paired statements.

1. A. It would probably be better if most old people lived in residential units with people of their own age. A. 31
   B. It would probably be better if most old people lived in residential units that also housed younger people. B. 134

2. A. There is something different about old people; it is hard to figure out what makes them tick. A. 10
   B. Most old people are really no different from anybody else; they are as easy to understand as younger people. B. 156

3. A. Most old people are capable of new adjustments when the situation demands it. A. 116
   B. Most old people get set in their ways and are unable to change. B. 49

4. A. Most old people would prefer to continue working just as long as they possibly can. A. 162
   B. Most old people would prefer to quit working as soon as their pensions can support them. B. 4

5.	A.	Most old people tend to let their homes become shabby and unattractive.	A. 15
	B.	Most old people can generally be counted on to maintain a clean, attractive home.	B. 148
6.	A.	It is foolish to claim that wisdom comes with age.	A. 48
	B.	People grow wiser with the coming of age.	B. 112
7.	A.	Old people have too much power in business and politics.	A. 39
	B.	Old people have too little power in business and politics.	B. 86
8.	A.	Most old people are very relaxing to be with.	A. 145
	B.	Most old people make one feel ill at ease.	B. 10
9.	A.	One of the most interesting qualities of old people is their accounts of their past experiences.	A. 140
	B.	Most old people bore others by their insistence on talking about the good old days.	B. 16
10.	A.	Most old people keep to themselves and give advice only when asked.	A. 121
	B.	Most old people spend too much time prying into the affairs of others and giving unsought advice.	B. 23
11.	A.	When you think about it, most old people have the same faults as anybody else.	A. 160
	B.	If old people expect to be liked, their first step is to try to get rid of their irritating faults.	B. 6
12.	A.	In order to maintain a nice residential neighborhood, it would be best if too many old people did not live in it.	A. 19
	B.	You can count on finding a nice residential neighborhood where there is a sizeable number of old people living in it.	B. 125
13.	A.	There are a few exceptions, but in general most old people are pretty much alike.	A. 33
	B.	It is evident that most old people are very different from one another.	B. 119
14.	A.	Most old people seem to be quite clean and neat in their personal appearance.	A. 135
	B.	Most old people should be more concerned with their personal appearance; they are too untidy.	B. 15

15. A. Most old people are irritable, grouchy and unpleasant. A. 12
    B. Most old people are cheerful, agreeable and good humored. B. 132

16. A. Most old people are constantly complaining about the behavior of the younger generation. A. 60
    B. One seldom hears old people complaining about the behavior of the younger generation. B. 79

17. A. Most old people make excessive demands for love and reassurance. A. 39
    B. Most old people need no more love and reassurance than anyone else. B. 112

SECTION III - INSTRUCTIONS

The following section consists of 15 statements concerning nursing action in the care of old people. Each statement is made with the reservation that no medical contraindication for the action is present. Mark in the blank space provided after each statement

YES: if you would perform this action in the care of the elderly.

NO: if you would not perform this action in the care of the elderly.

	YES	NO
1. Insert a foley catheter on an older person who became incontinent after a stroke.	124	23
2. Allow older persons in the hospital to make their own bed even if it takes them twice as long to do it than if nursing personnel made it.	141	21
3. Instruct older persons on how to give their own insulin injections.	140	24
4. Insert a naso-gastric feeding tube on a patient who is extremely difficult to feed.	23	137
5. Apply restraints to those old people who insist on climbing out of bed.	102	59
6. Recommend occupational therapy for an older person who has no particular medical need for it.	133	31
7. Allow older persons to skip a meal because they are not hungry.	135	29

		YES	NO
8.	Permit older people in a nursing home to wear their own clothes.	166	0
9.	Confiscate a pile of old cards and letters that are cluttering up the bedside stand.	2	163
10.	Take away a tray of food from an older person after "ample" time has been given for all the rest of the patients to eat.	31	133
11.	Give a bed bath to an older person instead of letting him take a tub bath or shower.	16	145
12.	Get up every patient on a ward where none is capable of ambulation on his own.	134	30
13.	Let older persons with severe tremors in their hands feed themselves.	101	58
14.	Leave the siderails down on an older person's bed so that he may go to the bathroom on his own at night.	52	108
15.	Administer sedatives routinely on those older persons who have a tendency to be noisy, in order to keep a quiet ward.	36	126

APPENDIX D

FORMULAE

FORMULAE

Percentage:

$$\text{Per cent} = \frac{\text{Category Frequency}}{\text{Total N}} \cdot 100$$

Chi Square:

$$X^2 = \frac{\Sigma(fo - fe)^2}{fe}$$

where fo = frequency observed

fe = frequency expected

Pearson Product Moment Correlation:

$$r = \frac{\Sigma(x - \bar{x})(y - \bar{y})}{N(SD_x \cdot SD_y)}$$

APPENDIX E

KEY TO RESPONSES

NEGATIVE RESPONSES	POSITIVE RESPONSES
Section II	Section II
1. A	1. B
2. A	2. B
3. B	3. A
4. B	4. A
5. A	5. B
6. A	6. B
7. A	7. B
8. B	8. A
9. B	9. A
10. B	10. A
11. B	11. A
12. A	12. B
13. A	13. B
14. B	14. A
15. A	15. B
16. A	16. B
17. A	17. B
Section III	Section III
1. Yes	1. No
2. No	2. Yes
3. No	3. Yes
4. Yes	4. No
5. No	5. Yes
6. No	6. Yes
7. No	7. Yes
8. No	8. Yes
9. Yes	9. No
10. Yes	10. No
11. Yes	11. No
12. No	12. Yes
13. No	13. Yes
14. No	14. Yes
15. Yes	15. No

Typed by Barbara Glenn

AN ABSTRACT OF THE THESIS OF

CAROL PATRICIA JULIAN

For the MASTER OF SCIENCE in NURSING EDUCATION

Date of receiving this degree: June 12, 1969

Title: A STUDY OF THE EXPRESSED ATTITUDE OF 166 REGISTERED NURSES TOWARD THE ELDERLY

Approved: [redacted]
(Associate Professor in Charge of Thesis)

The primary purpose of this study was to investigate registered nurses' expressed attitude toward the elderly. Secondary purposes were: (1) establish the absence or presence of a relationship between expressed attitude toward the elderly and expressed nursing behavior in the care of the elderly, (2) determine the existence or non-existence of a relationship and/or effect between expressed attitude toward the elderly and the independent variables of year of graduation from nursing school, experience in nursing and experience in geriatrics.

The study was limited to 166 registered nurses who were currently members of the Oregon Nurses Association, District #1,

and who indicated a willingness to participate in the study by responding within a two week time limitation.

Information was obtained through the use of a mailed questionnaire. The questionnaire was divided into three sections; one for background information, one for attitudinal assessment and one for nursing behavior assessment.

Findings

The findings are summarized as follows:

1. The nurses' expressed attitude toward the elderly was found to be positive.
2. There was a significant relationship between expressed attitude toward the elderly and expressed nursing behavior in the care of the elderly.
3. There was found to exist a significant difference between earlier graduates from nursing school and more recent graduates from nursing school in the number of negative responses given to attitudinal items.
4. It was indicated that there existed a significant difference between responses given to attitudinal items by nurses with a greater amount of experience in nursing and those by nurses with lesser amounts of experience in nursing.
5. There was found to exist a significant difference between

nurses who had a greater opportunity for experience in geriatric nursing and nurses who had lesser opportunity for experience in geriatrics in the number of negative responses given to attitudinal items.

Conclusions

The following conslusions were derived from the data collected from the study:

1. The nurses' expressed attitude toward the elderly does not seemingly reflect the prevailing attitude that American society has toward the elderly.
2. There was found to exist a significant relationship between expressed attitude and expressed nursing behavior in the care of the elderly; therefore, it may be concluded that attitudes can and do affect behavior.
3. The scores of this questionnaire would infer that experience in nursing does not seem to have a positive effect upon expressed attitude toward the elderly.
4. Year of graduation from nursing school affected the number of negative responses given to attitudinal items, i.e., the older graduate responded more negatively than the younger graduate.

5. Experience in geriatrics does not seemingly have a positive effect on expressed attitude, i. e., the nurses who had the most experience with older people responded more negatively than those who had a lesser amount of experience with older people.

Recommendations for Further Study

Based on the findings of this study, the following studies are recommended:

1. A more extensive study should be carried out in which the questionnaire would be administered to registered nurses throughout the state regardless of membership in the American Nurses' Association.
2. The questionnaire should be utilized to determine the effect that an educational program in geriatrics for nurses would have upon the attitude and behavior expressed toward the elderly person.
3. Further study should be done to determine the adequacy of nursing care being rendered to the elderly in light of rehabilitative trends in medicine and nursing.
4. A study to determine the effectiveness of the questionnaire as a screening device for nursing potential in geriatrics should be carried out.