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DEVELOPMENT OF AN INVENTORY TO
MEASURE ATTITUDES OF ADOLESCENTS
TOWARD THE ELDERLY

By

JULIE A. GULLICKSON

A thesis submitted
in partial fulfillment for the requirements for the
degree of Master of Science, Major in
Home Economics, South Dakota
State University

1976

DEVELOPMENT OF AN INVENTORY TO
MEASURE ATTITUDES OF ADOLESCENTS
TOWARD THE ELDERLY

317

This thesis is approved as a creditable and independent investigation by a candidate for the degree, Master of Science, and is acceptable for meeting the thesis requirements for this degree. Acceptance of this thesis does not imply that the conclusions reached by the candidate are necessarily the conclusions of the major department.

Thesis Adviser

Date

Dean, College of Home Economics

Date

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JAG

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Chapter 1

INTRODUCTION

There are various stereotypes and misconceptions believed by young and old alike concerning elderly people in our society. Aged people are accepted until they show signs of weakness, incapacity, illness or senility. There is then a change and the aged person is frequently considered to be a burden and is rejected.

Status is given in a society to those who perform valued functions. In primitive societies the role of the transmission agent for language and societal information was valued highly, a role usually assumed by older members of the extended family. Today a transmission agent is no longer valued, thus the skills of the aged are becoming obsolete and unessential. Older people are considered by Montgomery (1973, pp. 7-13) to be one of the largest deprived groups of individuals in America. There is a need to change negative feelings and to substitute a new image.

The first contact that youth have with the elderly is with grandparents and the image is usually positive. According to Havinghurst, (1974, pp. 17-20) when an adolescent nears high school age the image of the elderly emerges as negative. As youth become older, contact between the young and old becomes impersonal. The 16 to 24-year-old age group sees the elderly as a large, impersonal, grey mass in society, and a social burden. Havinghurst challenged home economists by stating

that the most valuable service home economists can offer youth is to help them understand the problems of the community and raise the status of older adults.

Images or stereotypes are very difficult to change. If the image youth have of aged persons is to be changed, concerted effort is needed to develop innovative and successful classroom experiences. The expertise of persons knowledgeable in the field of clarifying and changing attitudes needs to be utilized.

NEED FOR AN ATTITUDE TOWARD THE ELDERLY INVENTORY

Essential components of the commonly used model for developing successful and repeatable learning experiences are formative and summative evaluation devices. In a system designed to change attitudes toward aged persons, these evaluation devices would be attitude inventories. Without the availability of valid inventories, there is little possibility of assessing the effect of experimental teaching materials.

SEARCH FOR A VALID INSTRUMENT

The exploratory process of finding a researchable problem in the area of attitudes toward the elderly began with the search for a valid inventory. The search began with library and ERIC references. Very little research was found to have been done. Only one inventory, the Tuckman and Lorge "Attitudes Toward Old People" questionnaire, had been

widely used. This questionnaire was not available from a publisher of tests but had been widely used by permission of the authors.

The Tuckman and Lorge questionnaire was rejected as a desirable instrument. The instrument was called a questionnaire rather than an inventory by Tuckman and Lorge; it was not an attitude inventory using a Likert or Guttman type of scale. No evidence of reliability and no norms were reported in the literature available. The researcher desired to use an attitude inventory rather than a checklist; an instrument that would be an acceptable measuring device for hypothesis testing.

In a further attempt to locate a suitable inventory, an advertisement was placed in the February, 1975 issue of the American Psychological Association Monitor.¹

Wanted: Attitude test to measure attitudes of adolescents toward aging and the aged.

One response included an adaptation of the Tuckman and Lorge inventory. Other responses consisted of requests from schools throughout the United States and one from Canada, expressing interest in and a need for an inventory of this type.

A concern throughout the search for an inventory was that the respondent would be guided to think beyond the attitude that he may have toward a certain aged person with whom he had had previous experiences. Measurement of true feelings of adolescents toward old people

¹See page 59 of Appendix

in general or specific groups of old people were the intent of the researcher.

When no satisfactory instrument was found, the decision was made that a new inventory would have to be developed. A type of inventory which appealed to the researcher was the inventory developed by Lehman (1962, pp. 470-473) entitled, "The Teacher and the Community", which measured the attitudes of new teachers toward different ethnic and socio-economic groups. The Lehman inventory consisted of a paragraph describing a situation, followed by statements that described how the subject might feel if he projected himself into the situation. An advantage of an inventory of this type to measure attitudes toward the aged would be that the respondent would project himself into certain situations in which he would have close contact with elderly people. This technique seemed promising for the present study. The technique was an attempt to measure true attitudes of the person rather than attitudes that might be expressed because they are acceptable to one's peers. It might also be possible to measure a subject's real attitudes that might never have been clarified in his own thinking or verbal expression.

PURPOSE OF THE STUDY

The initial intent of the study was to measure adolescent attitudes toward the elderly by using an inventory that had previously been developed by authorities in the field. As a result of clarifying

attitudes toward the elderly, innovative and successful classroom experiences to change any negative attitudes toward the aged could be developed.

No satisfactory inventory could be found. For this reason the purpose of this study was to develop an inventory to measure attitudes of adolescents toward the elderly. An inventory of this type would help teachers to determine the feelings of students about people who are in the aged stage of the family life cycle. It could be of help diagnostically and in measuring changes in attitudes toward the aged. It could be used as an aid in classroom teaching as well as in further research in this area.

An inventory was desired which would be easily comprehended by adolescents, adequate in length for use in classes, reliable, and which authorities in the field would judge to be valid. A supplementary purpose of the study was to test hypotheses concerning the relationship of scores on the inventory to age, sex, and amount of contact time the adolescent had had with the elderly person.

DEFINITION OF TERMS

Throughout the development of the inventory, a few general terms were used.

1. The adolescent was defined as a person at the stage of development between puberty and maturity. (Webster's Dictionary, 1961)
2. Attitude was defined as "a learned predisposition to react consistently in a given manner (either positively or negatively) to certain persons, objects or concepts." (Dictionary of Behavioral Science, 1973)
3. Aging was defined at the 1971 White House Conference on Aging (p. 15) as ". . . a developmental process proceeding at a rate unique to each individual."
4. The aged, elderly, or old person in this study was defined as any person 65 years old or older. This age (Twente, 1965, p. 105) was chosen because it is the customary age of compulsory retirement in the United States. The terms aged, elderly, and old people were used interchangeably throughout the study.

Chapter 2

REVIEW OF LITERATURE

Literature concerning attitudes toward the aged were reviewed for the present study. Recent studies were found to be extremely limited, and thus research is included from the past 25 years. Although there has been an effort to measure attitudes of the aged people themselves and of other adults toward the elderly, the lack of instrument development for measurement of attitudes of adolescents toward the aged became apparent as the researcher reviewed the literature.

DEVELOPMENT OF THE TUCKMAN AND LORGE QUESTIONNAIRE

A few studies have been completed in which attitudes of adults toward old people were measured. One of the first reported was conducted by Tuckman and Lorge in 1951 (1953d, pp. 249-260). These researchers constructed a questionnaire to investigate the attitudes of a group of graduate students in psychology toward old age. Attitudes were measured by scoring responses to statements that represented misconceptions and stereotypes about old people. This Tuckman and Lorge questionnaire, "Attitudes Toward Old People", was one of the first inventories developed to measure attitudes toward aging and it is the only instrument in this area widely used by researchers (Bekker and Taylor, 1966; Drake, 1957; Arnhoff, Leon, Lorge, 1964; Lane, 1964; Tuckman, Lorge, Spooner, 1953; Tuckman and Lorge, 1953a, 1953b, 1953c,

1953d, 1954, 1958). It has sometimes been used in the original form and sometimes modified.

The ideas for the statements in the Tuckman and Lorge questionnaire were obtained through unstructured interviews with 15 adults from 21 to 65 years of age, discussions with social workers or directors of old age institutions or agencies, and literature reviews. The instrument included statements covering a wide variety of areas that were stereotyped as characteristic of old people such as physical change, adjustment to personality disintegration, conservatism, resistance to change, change in personality, family relationships, activities, and interests. Tuckman and Lorge (p. 249) reported that "for some of these statements there is a valid basis; for others the evidence is sketchy and inconclusive; for the majority, experimental evidence is completely lacking."

Thirteen categories (Tuckman and Lorge, 1953a, p. 611) in the final questionnaire were classified as follows:

Old People

- Conservatism (14 statements)
- Activities and Interests (9 statements)
- Financial (6 statements)
- Physical (27 statements)
- Family (13 statements)
- Personality Traits (14 statements)
- Attitude Toward Future (5 statements)
- Best Time of Life (5 statements)
- Insecurity (20 statements)
- Mental Deterioration (14 statements)
- Sex (4 statements)
- Interference (3 statements)
- Cleanliness (3 statements)
- Total (137 statements)

The statements were first classified into the categories by the authors independently. Disagreements in placement were discussed further until an agreement was reached. It was, therefore, noted that all of the statements may not be in a satisfactory classification since placement was based on value judgements.

One hundred forty-seven graduate students responded to the questionnaire. Subjects were to respond "yes" or "no" to each statement indicating agreement or disagreement. There was a high degree of agreement with the misconceptions and stereotypes about old people expressed by the first people interviewed. The group in this particular study had limited knowledge of the aging process, obtained primarily through observation and not from experimental evidence. The predominant conception of old age was that it is a period of economic insecurity, poor health, loneliness, resistance to change, and failing physical and mental powers. Conclusions (p. 260) indicated ". . . that old people are living in a social climate which is not conducive to feelings of adequacy, usefulness, and security and to good adjustment in their later years."

STUDIES IN WHICH THE TUCKMAN AND LORGE QUESTIONNAIRE WAS USED

Additional work by Tuckman and Lorge (1953a, pp. 607-613) included a study in which subjects were asked to estimate the percentage of old people in the various categories of the inventory rather than responding "yes" or "no." Categories included physical and mental decline,

reaction to criticism, attitude toward a job, and interpersonal relationships. The authors (p. 610) concluded:

Although the groups differ in their responses to a number of items on the two questionnaires, they are quite similar when the responses are compared for the categories into which the statements had been classified, and remarkably so when compared for the questionnaire as a whole.

The researchers (Tuckman and Lorge, 1954, pp. 534-536) compared attitudes toward aging of individuals of various ages, educational backgrounds, and socioeconomic status. Factors influencing whether or not these adults considered themselves to be old were recorded. Results were as follows: all individuals under 30 years of age viewed themselves as young, those 60 years old increasingly viewed themselves as young, persons 50-59 years of age were least likely to have a youth image of themselves. There were no sex differences as indicated by the data. The respondents at age 60 were the first of all age groups questioned to indicate that they considered themselves as old.

Factors that influenced the concept of whether or not subjects felt themselves to be old were found to be attitudes of peer groups, marital status, occupation, grandparenthood, death of friends, personality makeup, and the general attitude toward aging. The researchers (p. 535) concluded that "Changes in self-classification with actual chronological age support the suggestion that the self-concept is influenced by their own acceptance of cultural attitudes toward aging."

Another study by Tuckman and Lorge (1953c, pp. 489-492) focused on the stereotyping of old age. The number of stereotypes tended to

decrease as the differences between the subject's own age and the age that he stated as that of beginning old age increased. Subjects closer in age to the age they specified as "old" tended to have more stereotypes about people who were old than those whose own age was further removed. Subjects who used chronological age as a criterion of aging related more to the stereotypes about old people and the older worker than did those who did not specify a chronological age.

Ages most frequently mentioned as the beginning of old age (Tuckman and Lorge, 1953b, pp. 483-488) were 60 and 65 years. Subjects numbering 50 undergraduate students, 304 graduate students, 100 middle age persons, and 88 older age persons were questioned. Undergraduate students and subjects of middle age tended to place a specific chronological age on the process of becoming old. Graduate students responded that the type of work played an important part in determining when workers become old. Older adult respondents refused to accept the attitude that there is a beginning to old age or that workers ever become old.

In a further study by Tuckman and Lorge (1958, pp. 199-204) attitudes toward the aged were recorded of subjects that had had previous experience with aged persons. Ninety-two men and women, ages 25 to 79, were questioned. All of the subjects had had experience with the elderly in either a paid or volunteer position. A limited number of questions from two previous questionnaires were used for the project. Eighty percent of the questionnaire consisted of statements on physical

changes, personality traits, and insecurity. The remaining questions were about interpersonal relationships, mental decline, and attitudes toward jobs. Twenty percent of the subjects questioned objected to the idea that old age began at a certain chronological age. There was little agreement with statements which referred to old people as "old fashioned" or disliking changes with established ways of doing things. Subjects that had had experience with old people accepted fewer statements which were stereotypes of old people. It was concluded that individuals who had had direct contact with elderly people tended to be less negative in their feelings toward old people than those who had had a more limited acquaintance with older people.

Arnhoff and Lorge (1960, pp. 70-71) surveyed professional people who had been working with or associated with elderly people to see if they had stereotypes of aged persons. Twenty-five people with advanced degrees in psychology, sociology, anthropology, psychiatry, economics, political science and physical education were used as subjects. The questionnaire consisted of 100 items to which subjects were to respond "true" or "false". They were also asked to indicate whether they considered the trait to be desirable or undesirable. Results indicated that a majority of the subjects accepted many of the stereotypes about aging. At least half of the subjects agreed with the ideas that elderly people are conservative, they think about the past, they are slow, they are critical of the younger generation, they like to give advice, dislike changes, respect tradition, and worry about health and

financial security. Other characteristics accepted were that aged people have few friends but prefer old friends to making new ones, they expect obedience and respect from children, and they are proud and lonely.

High school students were questioned concerning their attitudes toward aging in a study by Lorge, Tuckman and Abrams (1954, pp. 59-63). Students responded by giving characteristics of various age groups. The adolescent stage was perceived as a period of activeness and new experiences. The Twenties were thought of as an age of establishment, adjustment, and goal orientation. Movement and activeness were also characteristic of the Twenties age group. The Sixties and Seventies were thought of as times of inactivity, lack of interest, and a loss of adult roles. Thus the old person was again thought of in negative connotations.

Tuckman, Lorge, and Spooner (1953, pp. 207-218) surveyed college students in psychology and their parents to measure attitudes toward old people, especially the older worker, and to see the effects of environment on these attitudes. The majority of the statements in the questionnaire expressed beliefs, misconceptions, and stereotypes commonly held about the adjustment and personality make-up of an old person and the skills and job performance of the older worker. There were a few statements where there was a significant difference between fathers and children, mothers and children, and between fathers and mothers, but generally the attitudes toward old people were similar.

The authors (p. 205) concluded that there is ". . . substantial acceptance of the cultural stereotype about aging and indicates that the home environment contributes considerably to the similarity in attitudes between parents and between parents and their children." The authors found a tendency for both the children and their parents to think of old people in a state of physical deterioration instead of strength. The authors concluded that more education is needed to provide an accurate account of the normal aging process and the positive aspects of the process. Through education, attitudes could be changed in young people and in the elderly toward themselves. The idea that old age has to include a decline physically and mentally may be altered.

Lorge teamed with Arnhoff and Leon (1964, pp. 41-58) on a project to study cross-cultural acceptance of American stereotypes toward aging. A 100 itemed "yes" and "no" questionnaire was given to college students. A total of 1739 students from six countries were divided as follows: 423 from the United States, 245 from Great Britain, 305 from Sweden, 184 from Japan, 336 from Greece, and 246 from Puerto Rico. Results indicated that Greek students held the greatest percentage of agreement with stereotypes toward the aged. Students from the United States (46 percent) had the lowest percentage of agreement with the stereotypes. Percentages of agreement with the stereotypes for the other countries taking the inventory were Sweden with 49.4 percent, Great Britain with 52.5 percent, Puerto Rico with 56.5 percent, and Japan with 57.3 percent. The authors concluded that many stereotyped beliefs about aging are held, regardless of country.

These stereotypes are predominately negative in outlook.

Positive and negative statements from Tuckman and Lorge's original questionnaire were again used by Lane (1964, pp. 229-231). The questionnaire was given to 400 high school and college students. Responses indicated that attitudes toward the elderly tended to be slightly positive in direction although relatively few perceived the aged in such a way as to imply decidedly favorable attitudes. Lane (pp. 229-230) explained part of her findings by reasoning,

. . . Despite the increasing number of aged persons in the population, family life teaching has focused much more on the years of courtship, engagement, early marriage, and parenthood than upon later stages in the family life cycle.

The implications of this apparent neutralism of youth toward the elderly is that aged persons in association with youth may be existing in a climate of tolerance rather than in one of acceptance and responsiveness.

Lane presented the following recommendations:

1. to provide a stronger emphasis both in college and high school on the elderly, their roles, and their place in society.
2. to give the students an opportunity for more contact with the aged.
3. to include in family life courses the study of later ages in the life cycle.
4. to keep students informed about the aged by providing current literature.

5. to analyze attitudes toward the aged among students within the classroom.

Attitudes toward the aged, using a multigenerational sample, were studied by Bekker and Taylor (1966, pp. 115-118). The authors used the basic Tuckman and Lorge questionnaire, but changed "old people" to "grandparents". One hundred students were given the questionnaire to see if there was a difference in attitudes between students who had great-grandparents still living, and students who had only grandparents living. Students who had living great-grandparents perceived their grandparents as having fewer characteristics of old age than students who had no living great-grandparents. Analysis indicated that students are less inclined to attribute negative characteristics to members of their own family than to old people in general.

Axelrod and Eisdorfer (1961, pp. 75-80) analyzed empirically the stimulus group (construct) validity of the Tuckman and Lorge questionnaire. The question (p. 75) asked in the study was, "Do respondents discriminate among groups to which the statements may be applied?" The study was an attempt to find if attitudes toward a group are viewed as the predisposition to act toward members of the group in certain ways. Two hundred eighty college students were divided into five groups each of which were given an age group of 35, 45, 55, 65, or 75 to consider. Subjects responded to the questionnaire by considering whether or not each statement was characteristic of people in the age group they were assigned. The researchers concluded that the number of stereotype

traits referred to for a certain age group increased with each age group. Of the 137 original statements, 96 were considered valid.

STUDIES OF ATTITUDES TOWARD AGING USING OTHER DEVICES

A limited number of studies have been done in which the Tuckman and Lorge questionnaire was not used. Instruments have been varied and have taken the form of incomplete sentences, free responses consisting of descriptions of people in various age groups, paired statements comparing "old people" to "people in general", and the Likert type scale consisting of items to which subjects respond in a positive or negative direction.

A hypothesis of differences between attitudes toward "old people" and attitudes toward "people in general" was tested by Golde and Kogan (1959, pp. 356-363). A sentence completion technique was used. Each experimental group completed sentences using "old", such as "When I am with an old person, I . . ."; whereas members of the control group completed sentences with only the word "people", such as "When I am with most people, I" Results showed that happiness and pleasure for older people were in their ties with the past rather than in the future.

Kogan and Sheldon (1962, pp. 3-21) studied characteristics of "old people" and "people in general", a study similar to the earlier work of Golde and Kogan. Subjects were given an instrument which included 20 pairs of statements that reflected such factors as emotions,

physical attributes, interpersonal qualities and values that were attributed to "old people" and to "people in general". One hundred ninety-eight individuals from 49 to 92 years of age were used in the study. The older participants viewed "people in general" as being younger than themselves. Old people were characterized as having a need for satisfying interpersonal relationships, whereas people in general were characterized as receiving gratification from interpersonal relationships. Old people were also more frequently cited as being in need of interests and activities, antidotes to a dull and unstimulating life. Significant differences were obtained for 17 of the 20 item pairs used as the instrument.

In another study by Kogan and Sheldon (1962, pp. 93-111), 20 incomplete sentences were used to find emotions, attributes, interpersonal qualities, and values of "old people". Subjects were 95 college students in psychology from two universities and 101 volunteer members of the Age Center in Boston. Incomplete sentences permitted subjects to select their own response categories. Classifying responses caused difficulties for the recorder and became a restriction for this particular study. The conclusion (p. 108) was that

. . . age differences observed in images and beliefs regarding "old people" are often suggestive of ambivalence, conflict, and inaccurate perception between generations. Younger individuals, perceiving that older persons resent them, attempt to avoid interpersonal contact and partially justify such avoidance by suggesting that older individuals are really more interested in their families and are pre-occupied with death.

Kogan (1961, pp. 44-54) developed a Likert type of scale and correlated attitudes and personality traits. No clear relationships were obtained between the personality traits of authoritarianism and anomie. Pessimism about the future and helplessness were associated with unfavorable attitudes toward the elderly. Subjects that had nurturant personalities, as measured by a personality inventory, had more positive attitudes toward old people.

Factors influencing students' attitudes toward older people were investigated by Drake (1957, pp. 266-271). Three hundred ninety-seven college students in sociology were questioned to learn whether they agreed or disagreed with stereotypes of old people and the extent of their involvement with old people. Drake (p. 271) concluded his research by stating the

. . . idea that more intimate contacts lead to a breakdown of unfavorable attitudes in minority racial and ethnic group relations cannot be carried over to apply to the feelings which college students in this sample seem to hold toward old people.

Further research related to feelings of adolescents toward aging was reported by Kastenbaum (1961, pp. 203-218). Subjects were asked to conceptualize the future. Young people viewed the future as looking ahead, middle aged people viewed the future as the present time or that the future is upon him, and the aged viewed the future by looking back in time in his search for it.

In a project cited by Kastenbaum and Durkee (1964, pp. 237-249) six different groups totaling 585 individuals who were between ages 13

and 55 years were questioned concerning their attitudes toward the aged. Questions included categories concerning the important years concept; which years are the best, the past, the present, or the future? Additional items were about personality changes in aging and age appropriate attitude techniques. Results showed that old people were described as qualitatively different from young people and that young people usually described old people in negative terms. The researchers concluded that there is a compelling reason to believe that old age is commonly stereotyped in our culture as a period of physical, social and emotional decline.

Hickey and Kalish (1968, pp. 215-219) produced two studies in which young people were surveyed as to their attitudes toward old people. The purpose of the first study was to investigate attitudes and perceptions which 8 to 20-year-old people have toward adults and the elderly. A total of 335 subjects were divided into four age groups. Respondents were asked to evaluate each of four adult ages; 25, 45, 65, 85; considering five different characteristics. It was concluded that it is difficult to differentiate between the ages of 65 and 85. Older subjects, many of whom were college students, were reported as having the most difficulty differentiating the 65 and 85 age categories. Hickey and Kalish feel that this may stem from the idea that older children tend to have hostile or skeptical feelings about the adult world in general and therefore are less able to differentiate between the age groups. Hypotheses were confirmed that

children of all ages perceive differences among adults who are in distinctly different age groups. Also concluded was that the older the adult, the less pleasant was the child's image of him. The authors felt that our urban culture, with its advanced communication and technology, has greater effect on young people today than did earlier culture. The eight-year-old today may be equivalent to the high school student of a few years ago. The researchers recommend that more relevant research is needed on personal and social interaction between the young and old.

Hickey, Hickey, and Kalish (1968, pp. 227-235) reported a study of a group of 208 third graders who were asked to write about "old people". The students were selected from four schools, two of which were located in wealthy communities, and two in communities with a lower average income. Two of the authors acted as judges and separated the written comments into two description groups, physical characteristics and social characteristics of old people. Physical characteristics most often described were skin, hair, hearing, visual acuity, and ambulatory skills. Traits associated with social aspects were meanness, kindness, loneliness, and senility. The final results showed that the common physical characteristics submitted were of feebleness or ambulatory difficulty. Three times as many students described old people as being kind or friendly as mean or bossy. The students from the schools in the wealthy communities reported more positive characteristics than did the students from the poorer districts. Students

from the wealthy area also commented more often using the word loneliness or synonyms for it, or the use of leisure time. It was thought by the authors that people in poorer financial standing do not anticipate loneliness and are less likely to think of future leisure. This lower income group submitted more often the idea of old people as being mean, unfriendly, and senile, and they expected peculiar behavior from the elderly. The researchers concluded that the self concept of the young, middle-aged, or elderly adult is in large part due to early experiences. Attitudes that a young child holds might be expected to have a strong influence on his adult reactions to the elderly and also influence his own self concept when he himself becomes old.

Neugarten, Moore, and Lowe (1973, pp. 22-28) were interested in the extent to which people of different ages conformed to the constraints customarily placed on people of their age group. The questionnaire was administered to 400 subjects. Subjects were divided in social classes based on education background, occupation, and area of residence. The 39 items in the questionnaire were grouped into questions relating to occupational career; the family cycle; and recreation, appearance, and consumption behavior. Subjects responded by indicating which of three ages would be regarded as appropriate for a given behavior or whether they approved or disapproved. Results (pp. 26-27) were as follows:

1. Age trends within each set of data are opposite in direction. With regard to personal opinions, there is a highly significant increase in scores with age -- that is, an increase in the extent to which respondents ascribe importance to age norms and place constraints upon adult behavior in terms of age appropriateness.
2. With regard to "most people's opinions" there is a significant decrease in scores with age -- that is, a decrease in the extent to which age constraints are perceived in the society and attributed to a generalized other.
3. Sex differences are minimal with the exception that young women stand somewhat outside the general trend on "personal opinions", with scores that differentiate them from young men but not from middle-aged women.

A questionnaire was developed by Wood, Yamauchi, and Bradac (1971, pp. 160-169) in which the necessary information was secured to match educational, socioeconomic and geographic backgrounds of older and younger subjects. The study was conducted with the thought that there is an avoidance of interpersonal contact between the aged and the young. The authors report that there is no difference in communication effectiveness of the young compared to that of the older generation. Results did not support the hypothesis that people who perceived each other as similar, having had similar educational, socioeconomic, and geographic backgrounds, communicate more effectively than those who view themselves as dissimilar to each other. The study recognized the breakdown of communication and the present lack of common ground between the two generations.

Chapter 3

METHOD OF PROCEDURE

The purpose of the present study was to develop an inventory to measure attitudes of adolescents toward the elderly. The development of the inventory was a process of many steps. Situations in which the subject would have to place himself in a realistic relationship with an elderly person were first formulated. Statements were then constructed which related to the situation and which expressed attitudes toward the elderly. A long trial form of the inventory was assembled with the thought that least successful statements could then be deleted to make a shorter but nevertheless reliable inventory. A pilot study was conducted using a sample of students as a basis for eliminating items that were the least reliable. The final form of the inventory was then administered to a sample of seventh and twelfth grade adolescents.

CONSTRUCTION OF TRIAL FORM OF INVENTORY

Development of Situations

The first step in development of the inventory was to create hypothetical situations in which the student would project himself and in which he would have to have a close relationship with an aged person or persons. The situations would guide the student to disclose his feelings toward aged people in general and toward a particular group of aged persons. To stimulate the subject to project himself into the

particular situations and to make it relevant to himself, the introduction for each situation began with "What if" This beginning phrase later became the title of the inventory.

Groups such as an organized senior citizens' group, an aged liberation group, and a mentally and physically dependent group were considered. The following six situations were developed that would be realistic and relevant to the present time:

1. being employed as a craft director for a senior citizens' center,
2. moving into a neighborhood of elderly people,
3. having an elderly couple move into a home next door that was previously occupied by peers,
4. having a discussion of the liberated senior citizens' movement in a social science class,
5. having physically dependent grandparents move into a mobile home next door, and
6. listening to a candidate for public office speak to a government class about a senior citizens' program in which the elderly would receive an increase in government monetary benefits.

Emphasis on particular groups of aged persons was used to avoid the feelings a student may have toward only a particular aged individual he may have already encountered. The specific situation relating to grandparents was an exception to the above intent.

The six situations were initially read by individuals of various ages for clarity and understanding. A panel of three authorities in sociology, psychology, and child development and family relations later read and commented on the content and wording of the situations.

Development of Statements

The next step in the development of the inventory was to produce attitudinal statements that would express positive and negative feelings about the contact with aged people required in each particular situation. To secure these statements in the words of adolescents, the situations were submitted to approximately 50 eighth grade students from one school. These adolescents were representative of the target population to be used in the administration of the final form of the inventory. Each student was given one situation followed by an open-end question, asking him to write comments on how he would feel if he were in this situation and how he would feel about the people involved.¹ The student was also asked to support his reaction with reasons. Many of these ideas were later used in the inventory as attitude statements following the situations.

Additional ideas for attitude statements were taken from the "Attitudes Toward Old People" questionnaire by Tuckman and Lorge.² Ideas were selected that would directly relate to the situations under consideration.

¹See Appendix page 60

²See Thesis page 7

Attitude phrases used by the students were converted into short statements expressing both positive and negative attitudes. The statements were assigned to the situations to which they seemed relevant. Some statements seemed to pertain to more than one situation, in which case they were used twice.

The trial form of the inventory at this time consisted of six situations with 25 to 32 attitude statements following each situation; a total of 170 statements were included. One page of the trial inventory appears in the Appendix on pages 62 and 63.

The inventory was submitted to three authorities in the field of attitude measurement for the purpose of rejecting some items as well as to secure a scoring key. Each of the experts was asked to individually rate each statement as a positive, negative, or neutral attitude toward older people.¹

Statements upon which authorities agreed were to be accepted.

Agreement was defined as:

1. Unanimous agreement of the three authorities at the positive or negative level of responses, for example:

(+)	(-)	(?)	(+)	(-)	(?)
3	0	0	0	3	0

These attitude statements numbered 78.

2. Agreement by two authorities with the third expressing a neutral position, for example:

¹ See Appendix pages 62-63

(+)	(-)	(?)	(+)	(-)	(?)
2	0	1	0	2	1

A total of 58 attitude statements were selected in this way. Items which the authorities rated as positive or negative, agreeing in any of the above ways, were accepted for the pilot form of the inventory.

Examples of items which authorities rated differently were as follows:

1. Statements given two neutral ratings, for example:

(+)	(-)	(?)	(+)	(-)	(?)
1	0	2	0	1	2

2. Statements that received a negative and a positive rating, for example:

(+)	(-)	(?)	(+)	(-)	(?)	(+)	(-)	(?)
1	1	1	1	2	0	2	1	0

Thirty-four statements were rejected. This resulted in a trial inventory having 136 statements.

A trial test of one situation was conducted in two college home economics classes to see if directions were clear. Comments were received that helped in the rewording and clarifying of some statements. A copy of this situation with the revisions made at this point appears in the Appendix on pages 64 and 65.

Development of Scoring Key

A scoring key was developed from the authorities' judgments as to whether statements were positive or negative. A Likert type scale with five levels of responses was chosen as a desirable type for the present

inventory. Subjects were directed to respond to each statement in the following way:

Blacken the space on the response sheet according to the following code:

In space "A" if you strongly agree with the statement.

In space "B" if you agree in general.

In space "C" if you are undecided or uncertain.

In space "D" if you disagree in general.

In space "E" if you strongly disagree.

Items classified as positive were scored as follows:

SA	A	U	D	SD
5	4	3	2	1

Items classified as negative were scored as follows:

SA	A	U	D	SD
1	2	3	4	5

PILOT STUDY

A pilot study of the inventory was conducted using 237 seventh grade students from one school in South Dakota, one school in Minnesota and from a camp in Ohio. The schools were selected from communities in which it was thought that the final inventory would also be given. The students in the pilot study were not, however, to be used in testing the final inventory.

It was decided that the inventory would be more widely used if responses from the subjects could be completed in a relatively short

amount of time. In addition, better cooperation would be secured from teachers if the inventory was relatively short. The trial form of the inventory was long because it had been developed with the expectation that items receiving low alpha coefficients were to be discarded. For this reason the six situations were divided into two trial inventory forms, each consisting of three situations and the attitude statements that followed. One inventory form, Form A, consisted of 70 attitude statements and the other, Form B, of 66 statements.

Subjects recorded their responses on computer answer sheets. This facilitated scoring the large number of answers, and promoted greater accuracy in recording responses.

Two groups of students of equal number were desired to take Form A and Form B of the inventory. Because students from intact classes were used, the numbers differed slightly, 105 students responding to Form A and 132 students to Form B.

Students were identified only by the name of their school and an identification number written on the inventory. Asking the students to remain anonymous as they responded was an approach intended to promote frank and honest reactions. The following information about the student was requested: grade in school; sex; and three questions concerning the amount of contact time with older people, type of experience with the elderly, and the subject's relationship to the older person.

Difficulties in understanding words were recorded by the researcher as well as the average length of time that was needed for the completion

of the inventory. The time needed to complete the trial form of the inventory formed a basis for estimating the number of items that were needed in the final form. Twenty minutes were needed by the average student for each inventory form. The decision was made to limit the length of the final form of the inventory to an inventory that could be completed in approximately 20 minutes, the length of the trial form.

Reliabilities of subgroups, or situations, as well as of the inventory as a whole were computed. Reliabilities of individual items were also computed as a basis for selecting items for the final form of the inventory.

Cronbach coefficient alpha was selected as the type of analysis to compute reliability. Nunnally (1967, p. 210) stated that, "Coefficient alpha is the basic formula for determining the reliability based on internal consistency." Internal consistency expresses the average correlation among items.

Reliabilities for subgroups of the trial forms of the inventory were as follows:

	Situation	r
Form A	I	0.81
	II	0.85
	III	0.88
Form B	IV	0.73
	V	0.81
	VI	0.83

Reliabilities for the two forms of the trial inventory were as follows:

Inventory Form	r
Form A (Situations I, II, and III)	0.94
Form B (Situations IV, V, and VI)	0.90

Reliabilities were computed for each item within the subgroups. These reliabilities ranged from -0.00 to 0.65.

REVISION OF THE INVENTORY

The two trial forms of the inventory were combined into one inventory. This was done by selecting the most successful items from Form A and Form B. Item-total correlation was used as a basis for selecting the most highly discriminating items for the revised version of the inventory. The higher the indexes of discrimination of the items, the more reliable the instrument. Ebel (1972, p. 399) stated that the index of discrimination (item-total correlation in this case) for most tests can be evaluated as follows:

Index of Discrimination	Item Evaluation
0.40 and up	Very good items
0.30 to 0.39	Reasonably good but possibly subject to improvement
0.20 to 0.29	Marginal items, usually needing and being subject to improvement
Below 0.19	Poor items, to be rejected or improved by revision

All statements with alpha coefficients of 0.40 and above were selected for the final inventory. Statements with item-total correlation of less

than 0.40 were temporarily discarded.

The second computer analysis was made to see if a shorter version of each of the inventory forms, consisting of only the items receiving a reliability of 0.40 and above, would produce as high a reliability as did the longer trial inventory forms. Alpha coefficients for subgroups or situations containing only statements which had received item-total correlations of 0.40 and above were as follows:

Situation	r
Form A I	0.86
II	0.84
III	0.88
Form B IV	0.70
V	0.82
VI	0.84

Subgroup reliabilities from the second analysis were compared to reliabilities obtained from the first analysis of the trial forms.¹ Little was lost in reliability by deleting the items which had received a low item-total correlation. In three of the six situations, a higher reliability was computed for the shorter form.

Alpha coefficients for inventory forms containing only items which had high item-total correlations were as follows:

¹ See Thesis page 32

Inventory Form	r
Form A	0.94
Form B	0.91

The researcher was concerned about the large number of negative statements in comparison to the small number of positive statements which had high item-total correlations. The number of positive and negative statements receiving item-total correlations of 0.40 or above for each situation were as follows:

Situations	Number of Positive Statements	Number of Negative Statements	Total
I	1	10	11
II	6	8	14
III	7	12	19
IV	0	8	8
V	7	5	12
VI	2	10	12
Total	23	53	76

A total of 76 items resulted, including 23 positive statements and 53 negative statements.

Two authorities in the field of attitude tests and measurements were contacted in reference to the unequal ratio of negative to positive items. One authority suggested that a large number of negative statements had high item-total correlations because they are indicative of present adolescent attitudes. The inclusion of these statements would

reflect true feelings and would not necessarily sway subjects' responses. Another authority agreed with the previous statement, but felt that an excessively large ratio of negative to positive statements should be avoided.

Considering the individual subgroups, Situation IV had only eight statements with acceptable item-total correlations. The author arbitrarily decided to delete the situation since all eight statements were negative.

Situation I, with only one positive statement from a total of eleven, was also questioned. The decision was reached that three positive statements were to be added to this situation. The statements added were chosen by selecting the positive items that had the next highest item-total correlation ratings.

The addition of three positive items for Situation I and the omission of Situation IV, resulted in a final inventory form having five situations and 71 statements expressing attitudes. One page of the final inventory appears on page 66 of the Appendix.

Intercorrelations among subgroups were computed. Pearson correlation coefficients for the pilot study subgroups were as follows:

Situations correlated	r
Form A Situation I with II	0.76
Situation I with III	0.62
Situation II with III	0.81

Situations correlated		r
Form B	Situation IV with V	0.64
	Situation IV with VI	0.61
	Situation V with VI	0.62

Values of the correlation coefficients for each subgroup indicated that the situations were definitely intercorrelated and that the inventory was a relatively homogenous instrument.

ADMINISTRATION OF FINAL FORM OF INVENTORY

The final step in the development of the inventory to measure adolescent attitudes toward the elderly was to administer the revised form of the inventory to a sample of adolescents. The sample was selected on the basis of size of school enrollment, required course of study within the school system, and grade level of the student.

Selection of Schools

The intent of the study was to select students from school enrollments of various sizes. This was planned with the thought that attitudes toward the aged may vary considerably among schools of different sizes. Schools selected were as follows:

Schools	Class Enrollments
A	60 students per grade level
B	90 students per grade level
C	180 students per grade level

Selection of Subjects

A sample size of 300 students, 150 in grade seven and 150 in grade twelve, was arbitrarily chosen. Absenteeism and school activities occurring at the same time as the administration of the inventory prevented the collection of data from some students.

Data from subjects in grade 12 were collected from intact classes at each of the three schools. Intact classes were also used for subjects in grade 7 with the exception of the largest school, in which case students from various homerooms were gathered into one large group.

The intact classes of students were from required courses of study at each school. Required courses were used to furnish a sample of students from a full range of socioeconomic levels, family backgrounds, intellectual levels, and students of both sexes. An exception to this desired type of group was that of the largest school in which an elective class was used. This particular class was accepted because of the broad range of students of all types that were enrolled in the course.

Final distribution of students from each school was as follows:

School	Grade 7	Grade 12
A	41	42
B	42	47
C	44	51
Total	127	140

The sample was later reduced to 251 subjects because of incomplete data obtained from some of the subjects.

Procedure for Administration of Inventory

The administrators in the three schools were contacted by the researcher either personally or by telephone. The inventory was administered to all subjects by the researcher. Students were not previously notified that an inventory would be given or of the nature of the study until the time it was presented to them. A brief introduction and an overview of the directions were given to each class before students responded to the inventory. All data were collected for the final inventory during a two week span of time.

Chapter 4

ANALYSIS OF DATA

The purpose of this study was to develop an inventory to measure adolescent attitudes toward the elderly. In addition to the development of the inventory, a supplementary purpose was to test three hypotheses.

Items for the inventory were secured by following a sequence of steps in which members of the target population participated, as well as authorities in the field of attitude measurement. A pilot study was then conducted to obtain preliminary estimates of reliability and inter-correlations between scores on subgroups of inventory items. The inventory was then revised by selecting items with the highest internal consistency. The final form of the inventory was administered to 251 seventh and twelfth grade male and female subjects. Data from this sample were used to secure measures of reliability, descriptive statistics of scores of subjects, and to test three hypotheses.

DESCRIPTIVE DATA ABOUT INVENTORY

Reliability

The coefficient of reliability, computed using the Cronbach alpha formula, was .96. Popham (1972, p. 11) stated that

... educators who have been accustomed to expect reliability coefficients of approximately .89 to .90 must recall that one might anticipate more stability and perhaps more internal consistency from a measure of mathematical competency or intellectual aptitude than from a measure of one's more vacillating self-esteem or attitude toward school.

It is customary to expect lower reliabilities for measures in the affective area than in the cognitive area. For this reason, .96 reliability coefficient may be considered unusually high for an instrument measuring attitudes.

Validity

The instrument involved in this study was constructed using content validity as one of the criteria for the development that would be acceptable for use in further research on adolescent attitudes toward the elderly. According to the American Psychological Association, Standards for Educational and Psychological Tests and Manuals, (1966, p. 13) ". . . evaluating the content validity of a test for a particular purpose is the same as subjectively recognizing the adequacy of a definition." In this case we were concerned with a definition of a positive attitude toward the elderly. Content validity played a part in making the major decision of the type of instrument to be used and in developing relevant situations followed by items which were related to them. The "What If . . ." inventory situations were designed to stimulate the subject to project himself in particular environments in which he would have a relationship with an elderly person. Having the subject respond to the items from such a reference point would tend to get at true attitudes rather than surface reactions.

Frequency Distribution

The maximum score for the inventory was 355, a number computed by multiplying 71 (the number of attitude statements) by five (the score

for the most positive level of response). The midpoint between 0 and the maximum score, 177.50, represents the point beyond which attitudes toward the aged, as measured by this inventory, are in general positive rather than negative. Two subjects (0.8 percent) scored in this negative attitude region. Attitudes of the adolescent subjects were in general positive. If one considers the area between "neutral" and "agree in general" on the scale to represent a low positive attitude toward the elderly then one would have to say that approximately 50 percent of the subjects had a low positive attitude since they scored between 177.5 and 266.25.

As may be observed on the histogram, Figure 1, scores ranged from 163 to 350, with a range of 187.



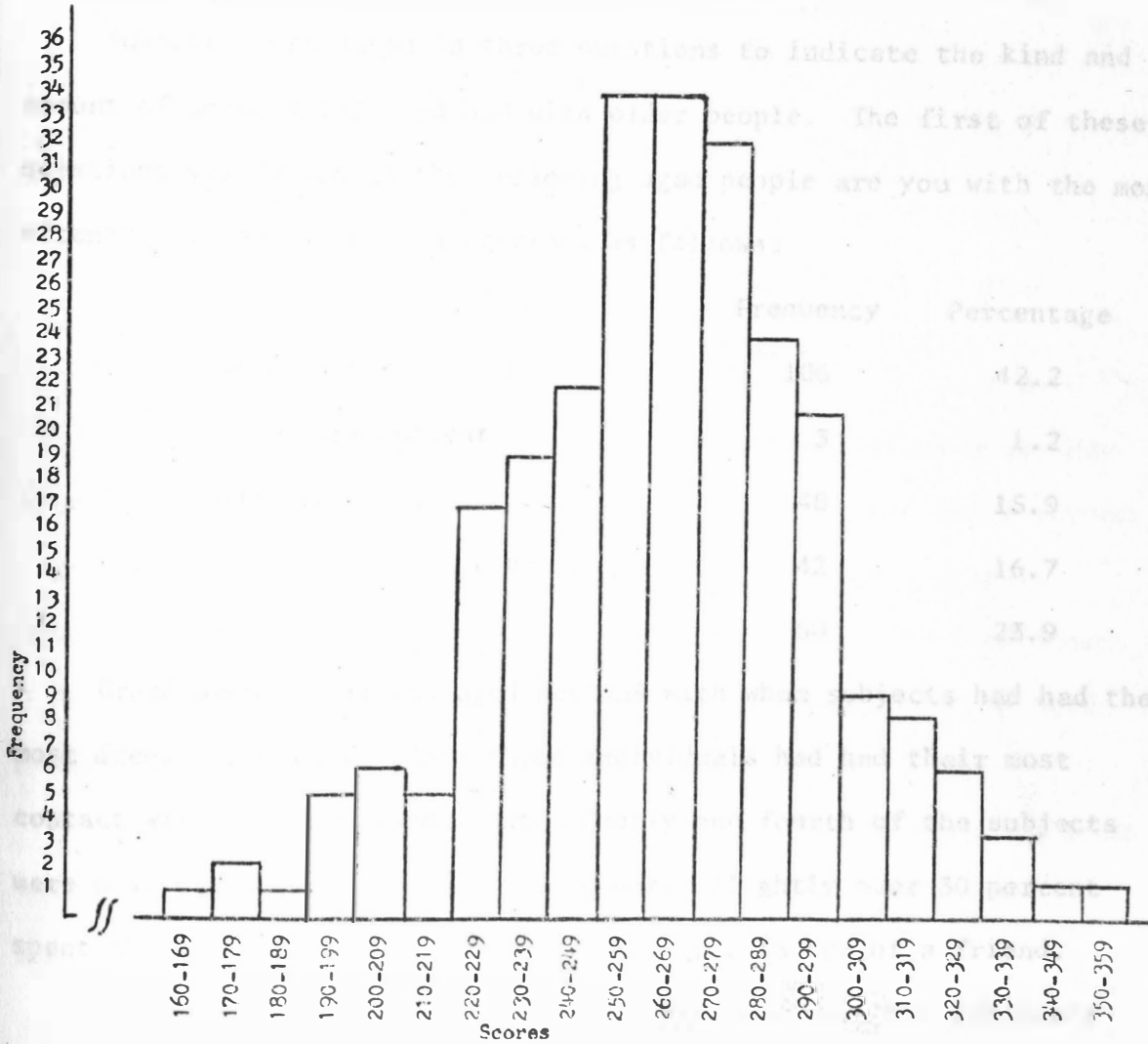


Figure 1

Histogram of Frequency Distribution of Inventory Scores

The distribution resembles very closely a normal curve; the symmetry being evidenced by a mean, median, and mode which were almost identical 262.74, 263.13, and 251.00, respectively. The standard deviation computed for the attitude scores of the subjects was 32.43. This

indicates a reasonable spread of attitude scores.

Subjects were asked in three questions to indicate the kind and amount of contact they had had with older people. The first of these questions was "Which of the following aged people are you with the most often?" Responses were categorized as follows:

	Frequency	Percentage
Grandparent	106	42.2
Great Grandparent	3	1.2
Aunt or Uncle	40	15.9
Relative of a Friend	42	16.7
Neighbor	60	23.9

Grandparents were the aged persons with whom subjects had had the most frequent contact. Only three individuals had had their most contact with a great grandparent. Nearly one fourth of the subjects were most often with an elderly neighbor. Slightly over 30 percent spent the most time with an aunt, uncle, or relative of a friend.

The second question requesting information about the subject's contact with older people was "Approximately how much contact time do you have with the above person per month?" Responses were as follows:

	Frequency	Percentage
Everyday	85	33.9
Once a week	87	34.7
One to four hours a week (an evening or afternoon)	45	17.9
Holidays or vacations only (other than weekends)	30	12.0
None	4	1.6

Two thirds of the students in the sample had contact every day or at least once a week with an elderly person. A very small percentage (1.6 percent) had no contact whatsoever with aged persons. Approximately 30 percent of the subjects spent only a limited amount of time, holidays and an afternoon or an evening a week, with an aged person.

The third question that was asked of the subjects was "How often have you associated with an aged person in a paid or volunteer situation?" Responses were recorded as follows:

	Frequency	Percentage
Very often	14	5.6
Often	44	17.5
Occasionally	117	46.6
Never	69	27.5
No response	7	2.8

Slightly less than one fourth of the subjects had been associated with an aged person very often or often in a paid or volunteer situation. Only a very few students (5.6 percent) responded "very often." The largest percentage of those responding (46.6 percent) had experienced only an occasional paid or volunteer association with elderly people. Over one fourth of the subjects indicated that they had never worked in a paid or volunteer situation with the aged.

HYPOTHESES TESTED

A supplementary purpose of the study was to test three hypotheses:

1. There is no difference between attitudes toward the aged of seventh and twelfth grade adolescents.
2. There is no difference between attitudes toward the aged of male and female adolescents.
3. There is no difference between attitudes toward the aged of adolescents who have experienced close contact with the aged and adolescents who have had a minimum amount of contact time with the aged.

A factorial design was used in which sex, grade, and contact time were the three factors. The resulting analysis of variance is recorded in Table 1.

Table 1
 Analysis of Variance of
 Inventory Scores

Source of Variation	Degrees of Freedom	Mean Squares	F
Sex	1	7599.31	8.34 ^a
Grade	1	8416.52	9.24 ^a
Contact Time (CT)	3	1450.39	1.59
Sex by Grade	1	7135.12	7.83 ^a
Sex by CT	3	22.19	<1
Grade by CT	3	1638.96	1.80
Sex by Grade by CT	3	975.65	1.07
Error	235	910.74	

^aSignificant at the .01 level.

Two of the main factors and one interaction were significant beyond the 1 percent level. Significant sources of variations were sex, grade, and the interaction between sex and grade. Differences in student scores associated with amount of contact time with elderly people as well as the interactions including contact time may be considered chance differences.

The direction of significant differences is clear when the means in Table 2 are studied.

Table 2
 Mean Scores of Seventh and Twelfth Grade
 Male and Female Adolescents

Grade	Sex		Total
	Male	Female	
Seventh	267.69	268.73	268.21
Twelfth	243.08	268.34	255.71
Total	255.38	268.53	

The grade difference will be discussed first. Seventh grade students had a significantly higher mean score than did twelfth grade students, as indicated in the column labeled "Total". It is apparent that the younger subjects, seventh grade students, tended to have more positive attitudes toward the elderly than did twelfth grade students.

The significant difference between male and female subjects was due to the fact that female subjects tended to have more positive attitudes toward the elderly than did male subjects, as indicated by the higher mean score in the last row of the table.

The reason for the significant interaction between sex and grade level may be observed in the means in the body of Table 2. There is little difference between the mean scores of males and females at the seventh grade level. There is in essence no difference between seventh

and twelfth grade female subjects. The subjects who deviated strongly from the others were the twelfth grade male subjects. The mean for these subjects was considerably lower than the other three means, 243.08. It was this group of subjects that caused the significant F values for the two main effects. It is apparent that efforts to improve attitudes toward the aged might well be directed especially to senior high school males.

Chapter 5

SUMMARY AND RECOMMENDATIONS

SUMMARY

The purpose of this study was to develop an inventory to measure attitudes of adolescents toward the elderly. A supplementary purpose was to test three hypotheses concerning the relationship of scores on the inventory to grade, sex, and the amount of contact time with an elderly person.

The plan for the inventory included creating a form that would stimulate the respondent to project himself into a realistic situation and the use of a Likert type scale for responses. The inventory was developed in a series of steps, the first of which was to assemble a rough draft of an inventory of the type envisioned. Ideas for the items were secured by requesting reactions to problematic situations in which an adolescent would need to interact with elderly people. The situations would guide the student to disclose his feelings toward a particular group of aged persons. Six situations were used that would be realistic and relevant to the subject at the present time. Adolescents were asked to write how they would feel in each situation.

From written comments to the above open-end statements, lists of phrases expressing positive and negative attitudes were developed. The trial form of the inventory consisted of six situations with 25 to 32 attitude statements following each situation. This trial form was

presented to three authorities in the field of attitude measurement with the request that they designate each attitude item as positive or negative and comment on the inventory. Items in which the authorities did not agree were deleted. A scoring key was developed using a Likert type of scale with five levels of response ranging from strongly agree to strongly disagree. The reliability of the inventory was .96. This

The second major step in developing the inventory was to conduct a pilot study using 237 seventh grade students. Since the trial form of the inventory was unduly long, the six situations were divided into two forms of approximately the same length. The mean was 262.74, the mode

Reliabilities computed for each of the forms were .94 and .90, respectively. Coefficient alpha was computed for each item as a basis for selecting the most highly discriminating items, .40 being used as the cutting point. Reliability coefficients were again computed using only the selected items. These were found to be higher than the original reliabilities.

Intercorrelations among subgroups of the inventory were computed. Values of the correlation coefficients indicated that these were inter-correlated and that the inventory was a reasonably homogenous instrument.

The final step consisted of administering the revised form of the inventory to seventh and twelfth grade subjects from three schools of different sizes. Two hundred sixty-seven students participated, 251 of whom answered all items correctly and completely. Scores of these 251

students were used to describe how members of the target population may be expected to perform on the inventory and to test hypotheses. A majority of the students were from intact classes of required courses to insure that samples included both sexes and were from a wide variety of socio-economic levels, family backgrounds, and intellectual levels.

Reliability for the final form of the inventory was .96. This reliability coefficient was higher than coefficients obtained from either of the two trial forms of the inventory used in the pilot study and was an unusually high reliability for an attitude measure.

Scores ranged from 163 to 350. The mean was 262.74, the mode 252.00, and the median 263.13. The curve was symmetrical and had a standard deviation of 32.43. All except two subjects had scores that indicated a slightly positive overall attitude toward elderly people.

Three hypotheses were tested to determine if there are differences in attitudes toward the aged between seventh and twelfth grade adolescents, male and female adolescents, and adolescents who had experienced close contact and those who had had a minimum amount of contact time with the aged. Analysis of variance, using a three factor design, was computed to determine the significance of differences between groups of adolescents.

There was a significant difference at the .01 level of confidence between seventh and twelfth grade subjects. Seventh grade students scored higher than twelfth grade students, indicating slightly more positive attitudes toward old people.

There was also a significant difference at the .01 level of confidence between male and female subjects. Females scored higher or were more positive in their attitudes toward the elderly than were males.

The interaction of sex and grade was also significant at the .01 level. There was little difference between the mean scores of male and female subjects at the seventh grade level. There was practically no difference between the seventh and twelfth grade female subjects. Twelfth grade male subjects deviated markedly from the other three groups. Their lower attitudes toward the elderly may be considered a matter of concern.

RECOMMENDATIONS

Recommendations for Further Study of the "What If . . ." Inventory Preparatory to Submitting it for Publication

1. Administer the Inventory to a large sample of students from widespread geographic areas to secure norms for separate age groups.
2. Study validity of the inventory.

Recommendations for Using the Inventory as the Criterion Measure in Further Research

1. Conduct a longitudinal study using the seventh grade subjects in the present study and additional subjects to learn how attitudes toward the elderly change over time.

2. Test hypotheses other than those tested in the present study. Consider especially differences in attitudes toward the elderly between subjects of various ethnic backgrounds, between subjects from urban communities and rural communities, and between subjects who have and those who have not attended family living classes.
3. Experiment with innovative methods of teaching students to communicate with and to enjoy being with elderly people, using the Inventory as pre- and post-test to assess change in attitudes.

Recommendations Based on Hypotheses Testing of the Present Study

1. Include all of the stages of the family life cycle in family living units and courses.
2. Encourage senior high males to enroll in family living classes.

INTRODUCTION

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APPENDIX A
ADVERTISEMENT IN AMERICAN PSYCHOLOGICAL
ASSOCIATION MONITOR

Notes and News
APA Monitor
1200 17th St. N.W.
Washington, D.C. 20036

Wanted: Attitude test to measure attitudes of
adolescents toward aging and the aged.

Write: Dr. Robert Burke
104 Solberg
South Dakota State University
Brookings, South Dakota 57006

... the ... of ... science
... liberation
... about in the
... new one.

APPENDIX B

STAGES IN DEVELOPMENT OF INVENTORY

I. WHAT IF . . . you are sitting in a school social science class, the discussion is on the liberation movements that we hear so much about in the news. The idea is brought up of a new one, the Senior Citizens.

What are some things that you think Senior Citizens might be dissatisfied with? Why?

I. WHAT IF . . . you are sitting in a school social science class, the discussion is on the liberation movements that we hear about in the news. The idea is brought up of a Senior Citizens' Liberation Movement. After listening to the different issues that the Senior Citizens are supporting, what do you think about these old people?

1. I would oppose a Senior Citizens' movement.
2. I would support the Senior Citizens in any way I could.
3. Old people should be satisfied with their present standard of living.
4. Old people already have too much power in business and politics.
5. Old people like to give advice.
6. Old people think the future is hopeless.
7. Old people never had it better.
8. Old people should be treated as other individuals in the community.
9. Old people are prejudiced against other groups.
10. Old people always seem to think they are right.
11. Old people never change their opinions.
12. Old people are critical of the younger generations.
13. Old people dislike changes or interference with established ways of doing things.
14. Old people keep up with current ideas and events.
15. Old people prefer to support themselves.
16. Old people like to take care of themselves.
17. Old people do not mind a lower standard of living.
18. Old people want to work and feel useful.
19. Old people have trouble getting jobs.

- 20. Old people would like to live their lives over again.
- 21. We do not pay enough attention to old people.
- 22. Old people should have more voice and power in the community.
- 23. Old people are bossy.
- 24. Old people feel sorry for themselves.
- 25. Old people are selfish.
- 26. Old people are a nuisance to others.
- 27. Old people are very demanding.
- 28. Old people are irresponsible.
- 29. Old people are self centered.
- 30. Old people are trusting.
- 31. Old people do not spend their money.
- 32. Old people are rattlebrained.

Code: A = strongly agree
B = agree
C = undecided
D = disagree
E = strongly disagree

- I. WHAT IF . . . you are sitting in a school social science class, the discussion is on the liberation movements that we hear about in the news. The idea is brought up of a Senior Citizens' Liberation Movement. After listening to the different issues that the Senior Citizens are supporting, what do you think about these old people?
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- 18. Old people are bossy.
- 19. Old people feel sorry for themselves.
- 20. Old people are selfish.
- 21. Old people are a nuisance to others.
- 22. Old people are very demanding.
- 23. Old people are irresponsible.
- 24. Old people are self-centered.
- 25. Old people are trusting.
- 26. Old people are rattlebrained.

Code 1 = strongly agree
2 = agree
3 = neutral
4 = disagree
5 = strongly disagree

27. Old people are...
28. Old people are...
29. Old people are...
30. Old people are...
31. Old people are...
32. Old people are...
33. Old people are...
34. Old people are...
35. Old people are...
36. Old people are...
37. Old people are...
38. Old people are...
39. Old people are...
40. Old people are...

Code: A = strongly agree
B = agree
C = undecided
D = disagree
E = strongly disagree

- III. WHAT IF . . . you are sitting in a school social science class, the discussion is on the liberation movements that we hear about in the news. The idea is brought up of a Senior Citizens' Liberation Movement. After listening to the different issues that the Senior Citizens are supporting, what do you think about these old people?
32. I would support the Senior Citizens in any way I could.
 33. Old people are prejudiced against other groups.
 34. Old people always seem to think they are right.
 35. Old people should be treated as other individuals in the community.
 36. Old people never change their opinions.
 37. Old people are rattlebrained.
 38. Old people are bossy.
 39. Old people feel sorry for themselves.
 40. Old people should have more voice and power in the community.
 41. Old people are selfish.
 42. Old people are a nuisance to others.
 43. Old people are very demanding.
 44. Old people are trusting.
 45. Old people are irresponsible.