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SIXTH, NINTH, AND TWELFTH GRADERS' STEREOTYPES
AND KNOWLEDGE OF ELDERLY PERSONS

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of the Ohio State University

By
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* * * * *

The Ohio State University
1983

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Introduction

An area of concern to many counselors working with the elderly is that of the prevalent negative stereotypes about old people which permeate our fast-paced, youth-oriented society. These stereotypes are inaccurate, unfounded beliefs which portray older persons as senile, dependent, rigid, ignorant, silly, and unable to lead a healthy lifestyle. They tend to label all elderly people as being the same, negating individual talents, strengths, and weaknesses. Butler (1969, 1975) has asserted that belief in these stereotypes results in negative attitudes and behaviors toward older persons which he calls "ageism". He believes that ageism is learned and operates in the same manner as other prejudices such as sexism or racism, which makes it difficult to overcome. Butler has documented the widespread existence of these myths in our culture and their insidious effects on the elderly as well as on younger peoples' views of aging and older people. Bunzel (1972) has documented similar myths and their effects, labelling them "gerontophobia". Bunzel has implied that prejudices against older people are the result of not only distorted perceptions, myths, and stereotypes about older people, but also of younger persons' fears about their own aging. In support of Butler's and Bunzel's work, Bassili & Reil (1981) reported that while young people are stereotyped by a variety of attributes, elderly people are consistently stereotyped by their age.
If Butler's (1969, 1975) and Bunzel's (1972) arguments that ageism is another form of prejudice are accurate, it would seem useful to assess at what ages these negative stereotypes are internalized so that efforts to counter them can be initiated before they are entrenched in a person's belief system. Research into other forms of prejudice, such as racism, has indicated that these beliefs are learned in childhood from parents and family (Adorno, et. al., 1960; Mussen, 1960) and as children grow into adolescence, from peers, friends, and other opinion leaders in their lives (Lazarfeld, et. al., 1944). These prejudices are based upon emotions rather than facts and provide an outlet for fears and aggression by identifying a scapegoat toward whom they can be expressed (Silverman, 1971). Miller & Buzelski (1945) found that prejudiced attitudes tend to increase after frustrating experiences to levels significantly greater than existed beforehand.

Research into reducing prejudicial beliefs has shown that they are possible though difficult to change. In reviewing the literature on prejudice, Silverman concluded that four considerations are essential in reducing prejudiced attitudes:

1. Assist prejudiced primary groups, such as parents, to refrain from transmitting their prejudice to secondary groups, such as children.
2. Acquire and communicate accurate information about the person or group at whom the prejudices are directed.
3. Reward unprejudiced behavior.
4. Increase contact and intermingling between those who are prejudiced and those whom they are prejudiced against.
However, even the presence of these conditions may not reduce prejudiced attitudes consistently. Research has shown that several factors act against reduction of prejudices and stereotypes in peoples' belief systems. First, they are often emotionally based, so the presentation of empirical information may have little effect (Silverman, 1971; Sheriff & Sheriff, 1969). Second, people will often interpret their own beliefs and personal experiences as fact and discount other information as untrue, or exceptions to the rule, despite statistical evidence to the contrary (Crockett, 1978; Vaughan, 1961). Third, people believe information from trusted sources more than information presented by experts, especially when the information pertains to their fears (Sheriff, 1969). Finally, people tend to selectively perceive their environment, looking for evidence which confirms their opinions and avoiding or discounting evidence which counters those opinions; remembering what they want to remember and forgetting what they do not want to believe (Jones & Kohler, 1958; Levine & Murphy, 1943).

There is an additional complication with stereotypes of the elderly. People prejudiced against an ethnic group, for example, may take comfort in the fact that they will never be a member of the group. However, few people assume they will never be old. For this reason, some researchers (Butler, 1975; Buckley, 1972; Bunzel, 1972) believe prejudices toward the elderly are even more difficult to irradicate. They assert that young people who greatly fear their own aging and death, may project those fears on to older persons and attempt to deny their own aging by stereotyping older people as senile and helpless to a degree seemingly impossible to degenerate to by the younger person.
This allows younger people who fear aging and death to believe that although they will age, they will never be as physically and mentally infirm as they presently imagine older people to be. Experimental support for Butler's, Buckley's and Bunzel's assertion was reported by Schweibert (1978), who found that negative stereotyping of older persons was significantly related to death anxiety such that as death anxiety increased, so did negative stereotyping of older persons.

Preliminary research regarding stereotypes of the elderly suggest, as did Butler, that negative stereotypes are reflections of underlying fears and prejudices. Numerous studies support the existence of these stereotypes (Drake, 1957; Gerbner, et al., 1980; Korzenny & Nuendorf, 1980; Linn, 1959; Tuckman & Lorge, 1952, 1953). Donahue (1965) has suggested that aging stereotypes are learned early in childhood or adolescence and do not readily yield to traditional educational approaches. This view is supported by Drake (1957), Auerbach & Levinson (1977), and Tuckman & Lorge (1953) and parallels the findings of attitude-change research in regards to other prejudices mentioned earlier. Crockett (1978) has reported that elderly persons described as active or intelligent are viewed as exceptions despite empirical evidence showing these characteristics to be common for most elderly people.

The existing research seems to indicate that stereotypes exist which denigrate the elderly and promote prejudice toward them by younger people as well as other older people (Gerbner, 1980; Gutman, 1981; Butler, 1969, 1975). By age eighteen, these beliefs appear to be well established and resist change (Tuckman & Lorge, 1953; Donahue,
1965). But despite speculations that these stereotypes develop early in life (Donahue, 1965) and some evidence to support those speculations (Drake, 1957), we know little about when the stereotypes develop, how widely held they are among persons under age eighteen, or how factual knowledge may mediate the effects of these stereotypes on childrens' and adolescents' views of the elderly.

These are important questions. Understanding the nature of aging stereotypes among youths may allow for the development of methods to counter the myths before they become entrenched as "fact". Whether the latter occurs by the time a person is eighteen is as yet, unknown.

Factual knowledge has been shown to affect attitudes when presented at appropriate times such as before people have been exposed to stereotypic beliefs (Sheriff, 1969). Newcomb (1943) found that attitudes may change more readily when people are personally involved in an issue and have personal contact with others holding different beliefs.

No studies were found to indicate the amount of factual information youths have about the elderly, where they obtained their information, or what effects the systematic presentation of information may have on their beliefs about older persons. Neither are their studies identifying what stereotypes about older people are held by youths or how those stereotypes are related to varying amounts of factual knowledge.

Two studies attempted to assess the effects of short-term, intensified contact between high school students and elderly people. Drake (1957) found that neither the amount of contact, nor the intimacy
of that contact affected the attitudes of youths toward their elderly associates. Conversely, Wallach et al. (1979) found that repeated informal, intimate contact between high school students and elderly persons changed the students' attitudes in a positive direction.

The results of other studies using contact as a predictor of attitudes toward older persons have been mixed. Ivester & King (1977) found opinions of college students toward the elderly were more negative and hostile after taking a humanities course with several elderly people. However, Rosenkranz & McNevin (1969) found that reported contact by college students with older persons correlated positively with favorable attitudes toward them.

There has been speculation among mental health professionals working with the elderly that personal contact between people of all other age groups and older persons is important in reducing the barriers and stereotypes which presently exist. They fear the trend of mass movement by many older persons to retirement villages which offer many conveniences, but tend to remove older persons from the community at large. This may result in a situation where youths have few, if any, role models to dispel the negative stereotypes which abound in our culture (Ansel, 1981, personal communication).

For many young people, the only elderly people they see are either in long-stay health-care facilities where the elderly people are often in poor health and fit the negative stereotypes (Hussein, 1981) or those on television. The impact of visiting elderly relatives who are chronically ill is not clear, but it may affect both the quality and quantity of contact. It may also result in generalization of the
characteristics observed in the sick elderly relative to all older persons. Presently, there is little in the literature to clarify this issue.

Television may be an important mediator of attitudes toward the elderly. Gerbner et al. (1980) found that television programs portray older persons negatively and inaccurately. Gerbner & Gross (1974) found that people who watch many hours of television tend to look at other people and groups significantly more stereotypically than do those who watch television infrequently. Hartman & Husband (1971) examined childrens' television viewing and found that in the absence of extensive personal contact and experience with a group, children rely on television to form their social attitudes. Given the negative portrayal of the elderly on television and the declining contact with older persons in the community, these findings have profound implications.

Other media appear to be more sensitive to the plight of older persons. Recent reviews of how the elderly are portrayed in newspapers (Buchholz, 1982) and magazines (Kent, 1980) reveal that most coverage of older persons has been neutral or positive. Although some negative coverage existed, it was no more severe than that given other age groups. Television news programs have recently been devoting more time to covering issues relevant to aging and the elderly, and recently a movie, "On Golden Pond", was released which dealt with issues of aging and examined older persons as individuals. The impact of the increased focus on the elderly and presentations such as "On Golden Pond" is not yet clear, but they may be steps in a helpful direction.
A major limitation of the research on stereotypes of the elderly is that nearly all of it employs subjects at least eighteen years of age. Whereas much of the research that has helped in understanding the causes and development of racial and other prejudices has focused on children and adolescents, there has been little research on stereotypes or knowledge of these groups toward the elderly.

A search of the literature revealed one study of elderly stereotyping among persons under eighteen years of age. Bekker & Taylor (1966) used the Tuckman-Lorge Attitude Scale to assess the attitudes of high school seniors toward their grandparents as a function of whether their grandparents and great-grandparents were alive or dead. The results indicated that students with living great-grandparents stereotyped older persons significantly less than those students whose great-grandparents were dead. It should be noted, however, that the students were within two years of college age students on whom many studies have been conducted. In addition, the study assessed attitudes about grandparents rather than older persons in general and there is evidence that young people may view grandparents differently than they do other older persons (Crockett, 1978).

Other studies on children's or adolescents' views of the elderly have used the Old Peoples' Scale (Kogan, 1961) or similar instruments which require subjects to choose between a positive term or a negative term describing older persons. Often, both terms reflect an erroneous stereotype. While these instruments indicate the positiveness or negativeness of images of the elderly, they do not reveal whether the image is stereotypic or based upon reality. Neither do they discern if
respondants believe either of the two possible choices are valid, or are choosing the lesser of two inaccurate choices.

Another problem with previous studies is that they have used instruments designed for adults. Often the words require a reading level too advanced for many children to understand. If children and adolescents do not comprehend the questions they are reading on these instruments, their responses are unlikely to be valid.

A better understanding of the development of negative stereotypes of the elderly may have important implications for counselors. Stereotypes can influence the quality of counseling for the elderly (Herr & Weakland, 1977; Piggrem & Schmidt, 1982) and whether counseling is made available to them. Ginsberg & Goldstein (1974) found that elderly people were referred for psychological counseling significantly less often than younger people showing similar abnormality on MMPI scores. Kucharski (1979) obtained similar results measuring referrals by physicians of hypothetical clients. Sue (1976) found that age was second only to ethnicity as a predictor of the quality of service that a person receives in community mental health centers, with the quality of service declining as clients' ages increase. Sue concluded that counselors are as ignorant of the realities of aging as the rest of the population and need better training in dealing with aging clients.

There are several ways in which counselors might benefit from a better knowledge of the information youths have about older persons, the extent to which they stereotype older persons, and the mediating factors of these conditions. First, since counseling with elderly persons often involves other family members as well (Herr & Weakland, 1979; Sinick,
1977), the process may at times call for the counselor to educate family members as to the realities of aging. Failure to do so may result in gains made by older persons being neutralized by well-meaning, but ill-informed relatives. Sometimes family education involves teenagers and pre-teenagers, but our present knowledge is limited as to their attitudes toward the elderly and effective ways to educate them. Needlessly presenting information family members already possess is a waste of both time and effort. Not addressing misconceptions or negative beliefs may allow them to undermine the counseling effort. Currently there are few guidelines for counselors in this region.

Second, several researchers (Drake, 1957; Wallach et. al., 1979) have initiated programs which attempted to improve young people's attitudes toward the elderly by involving them with each other, but with mixed results. Some programs showed positive changes (Wallach et. al., 1979) but others have shown little attitude change by youths toward older persons. It is of interest that the programs did not attempt to directly counter the myths youths held about older people. With more thorough knowledge of the stereotypes youths hold about the elderly, counselors might modify these programs to be more effective.

Third, several authors (Sinick, 1977; Herr & Weakland, 1979) have recommended that youths be offered counseling about the aging process. Sinick proposed that "Life-Span Counseling" toward aging begin early in childhood so that people may learn the realities of aging early in life and be prepared to deal with the aging of family members as well as their own. For such an approach to be implemented, more knowledge is needed about the information youths have about the elderly.
To summarize, stereotypes about the elderly are a major concern for older people and for counselors working with them. These negative stereotypes appear to be widely believed by young as well as older persons, professionals and lay persons. The prevalence of these beliefs affects the well-being of older persons, causes unnecessary fears about aging among younger people, and creates problems for counselors and older people working to overcome these erroneous beliefs.

Although it has been suggested that these negative stereotypes are the result of prejudice against older persons similar to other types of prejudice, there is little evidence documenting the development of these beliefs and their predominance during the years when other prejudices appear to be formed. Furthermore, since anyone may eventually become an older person, prejudice against older persons may be characterized by qualities unique from other forms of prejudice.

Previous research has focused largely on people eighteen and over, but the development of old-age stereotypes may occur before then. High-school age youths appear to hold these stereotypes, although we do not know how they developed or if a lack of adequate information has contributed to that development. The acceptance of these negative beliefs among youths may be exacerbated by declining contact with the elderly and by negative television portrayals, but this remains unclear. It is also unclear if the recent trend to highlight problems of aging by the media has had any impact on attitudes toward the elderly.

Finally, a better knowledge of what stereotypes exist among youths, and what knowledge they have about the elderly may be useful to counselors working with the issues of aging and older persons. Such
knowledge might contribute to better care for their elderly clients, increased self-awareness of their own misconceptions about aging, and better educational techniques for teaching others about aging and older persons.

The purpose of this study was to assess youths' stereotypic beliefs and factual knowledge of older persons as a function of their age and sex, and with respect to the extent of their television viewing, the contact they report with older persons, the health of their elderly relatives, and whether they have seen the movie "On Golden Pond". The specific questions to be examined are:

1. What factual knowledge do youths have about older persons?
2. To what extent do youths stereotype older persons?
3. Does the extent of stereotyping and factual knowledge vary between early adolescence and late adolescence?
4. Do male and female youths differ in their stereotyping and factual knowledge of older persons?
5. Does stereotyping or factual knowledge correlate with the amount of television reportedly watched by youths?
6. Does stereotyping or factual knowledge correlate with the amount of contact youths report with older persons?
7. Does stereotyping or factual knowledge correlate with the reported health of youths' elderly relatives?
8. Does stereotyping or factual knowledge correlate with viewing the movie "On Golden Pond"?
9. Do levels of stereotyping correlate with levels of factual knowledge?
10. How old must a person be for youths to consider that person to be elderly and does this correlate with levels of factual knowledge or stereotyping?

11. From where do youths believe they receive most of their information about older persons?
Selected Literature

This section will review selected literature on the development and change of prejudicial attitudes, attitude changes as part of adolescent development, stereotyping of older persons and some of its mediators, and counseling with older persons. Within each topic attention will be given to areas of particular relevance to this study.

Development and Change of Prejudicial Attitudes

According to Silverman (1971), prejudice is a particular form of attitude which results in a judgement based on fear and emotion rather than fact and logic. Such judgement is often irrational and used to compensate for self-doubts by expressing hostility toward another person or group by which the prejudiced person feels threatened. Prejudices are learned by young children primarily from parents. As they grow they also learn prejudices from teachers, siblings, other relatives, and peers. The importance of the source of the prejudice appears to be a determiner of whether children will integrate the prejudice into their belief systems. Since parents are usually a young child's most trusted and influential source of information, their importance in the formation of prejudices can be crucial.

Once formed, prejudices can be very difficult to reduce. They are reinforcing in that they provide an outlet for frustrations and
hostility, and once formed they tend to distort peoples' perceptions of the environment so that evidence supporting the prejudice is sought out while evidence countering the prejudice is avoided or discounted.

Silverman (1971) concluded that four considerations are necessary to eliminate prejudice:

1. Assist prejudiced primary groups, such as parents, to refrain from transmitting their prejudice to secondary groups, such as children.
2. Acquire and communicate accurate information about the person or group at whom the prejudices are directed.
3. Reward unprejudiced behavior.
4. Increase contact and intermingling between those who are prejudiced and those whom they are prejudiced against.

Several researchers have focused on specific factors influencing the acquisition or the reduction of stereotypes and prejudice. Most have examined racial or ethnic prejudices, as these have provided the most obvious examples.

Berkowitz (1969) examined the tendency for groups which are the object of prejudice to be used as scapegoats for the problems of prejudiced groups. His findings supported Silverman's (1971) assertion that prejudiced people use prejudice as an outlet for aggression and hostility by treating the objects of their prejudice as scapegoats. Specifically, four factors were revealed to be commonly found in groups who are the object of prejudice. They were:

1. Safety. There was little chance that the group would attempt retaliation or could develop effective retaliation.
2. Visibility. The group must have some significant difference from the prejudiced group.

3. Strangeness. The group was perceived as strange or unusual, often due to a lack of knowledge by the prejudiced group.

4. Prior dislike for the group. In times of stress, even minimal dislike could be exaggerated, resulting in stereotypes, hostility, and aggression.

Adorno, et. al. (1950) examined family backgrounds of children and found that children who were high in prejudice tended to report harsh and threatening home environments. They were not usually allowed to express hostile impulses at home and subsequently projected those impulses toward outsiders, often a group unlike their parents. Adorno found a high degree of ethnocentrism in these children. They tended to like only themselves and their families, disliking most outsiders and often condemning persons for relatively minor faults. These children also had a high intolerance for ambiguity.

A major concept in the development of stereotypes and prejudice is selective perception. Cantril (1957) tested earlier observations by Allport and found that people tend to pick out details which are significant to them when looking at two different pictures in a stereoscopic slide-viewer. When participants viewed two different faces in the slide viewer, they saw one face consistently; the face that contained features of a group that posed the greatest perceived threat to viewers.
Hammond (1948) gave subjects an informational test which contained some easily identifiable answers, as well as items with ambiguous solutions so that subjects' responses would reveal their attitudes. Hammond found that people tended to guess answers matching their biases. Further, Vaughan examined pro-Latin/anti-Latin prejudices. Subjects classified statements according to their degree of pro-Latin/anti-Latin bias. Many subjects refused to accept the pro-Latin statements as truthful, often stating personal experiences as proof of the invalidity of the pro-Latin statements. Vaughan concluded that people interpret their experiences as "fact" and will discount other facts as untrue.

Sheriff & Sheriff (1969) offered further support for this in their review of reactions by local communities to flouridization of water supplies. Despite well-documented evidence of the beneficial aspects of flouridization, people discounted or refused to believe the evidence, preferring to accept rumor and false information given them by other local residents (trusted sources). Sheriff & Sheriff concluded that if the "facts" were associated with underlying fears, they would be believed instead of empirical facts. In effect, hearing "facts" from a trusted source lowered the rejection threshold for fear-producing or disagreeable realities.

Examining a related aspect of selective perception, Levine & Murphy (1943) tested how well people remember agreeable versus disagreeable information. When people listened to a speech on national affairs in which both sides of an important issue were presented, people remembered significantly more information they agreed with, than
information they disagreed with. Levine & Murphy concluded that when people are exposed to information, they pay better attention to that information which supports their viewpoints and therefore remember it better than material which conflicts with their viewpoints. Kleinhesselink & Edwards (1975) found experimental support for this conclusion in a study of how well people listen to pro and con arguments. Their results indicated that people listen to arguments which conflict with their viewpoints only when such arguments are easy to refute. People tended to forget or distort arguments with which they disagreed and could not easily refute.

Clarifying this issue, Jones & Kohler (1958) asked subjects to listen to strong and weak pro/con arguments. Subjects remembered strong pro-viewpoint arguments and weak anti-viewpoint arguments. They tended to forget weak pro-viewpoint arguments and strong anti-viewpoint arguments. In sum, the research has consistently found that once attitudes are solidified, people will seek out evidence supporting and ignore evidence refuting those attitudes.

Contact between different groups has proven to be important in attitude development, but the results have not been as positive as some researchers had hoped. Mussen (1950) observed enforced contact between white and black boys over a four-week period at a summer camp. Whereas some of the boys' prejudice declined, nearly as many boys' prejudice increased. Mussen concluded that personality factors were more important in changing prejudice levels than contact. His results also indicated that those whose prejudice increased expressed more hostility toward parents, lending support to Adorno et. al.'s (1950) findings.
Cook (1970) reported similar results with a group of white, southern college females. He selected the most prejudiced of his volunteers and placed them in close contact with black, female co-workers for a forty-hour period, working on tasks which required close co-operation. Cook found that while 40% decreased in levels of prejudice, 40% exhibited no measurable change, and 20% increased in degree of prejudice. Cook's results are significant in that his experimental design included long-term follow-up measures which found the reported changes to be long-lasting.

In a classic study, Newcomb (1943) examined attitude change among female students at Bennington College. All of the subjects came from conservative, middle-to-upper class backgrounds. Nearly all subjects modified their attitudes to reflect the liberal attitudes expressed by the college community. The students exhibiting the greatest attitude change were those most involved in college life. Those changing least were the students least involved in school activities, who spent the most time by themselves. The results of this study implied that the degree of personal involvement with those possessing different attitudes is as important as contact with them. A follow-up study, conducted over twenty years later, (Newcomb, 1967) indicated that the attitudes developed at Bennington College had changed little. Newcomb concluded that being in a new environment with little support for their own viewpoint and surrounded by peers and authority figures having different viewpoints made it easier for the students to change their attitudes. After they left school, they were not immersed in such an environment again, giving their new attitudes time to solidify, and making them
more resistant to change.

Finally, Deutsch & Collins (1951) examined prejudice at two housing complexes in Chicago: one integrated and one segregated. They found that contact between blacks and whites in the integrated housing project reduced levels of prejudice significantly. They attributed the lowered prejudice to three factors:

1. informal intermingling between groups
2. a favorable attitude toward intermingling by residents
3. the replacement of ignorance by knowledge of what each group was really like

Contact appears to be an important mediator in changing attitudes. Unfortunately, it sometimes appears to increase levels of prejudice. It is of interest, however, that studies reporting the greatest success in lowering prejudice levels (Deutsch & Collins, 1951) or the most attitude change (Newcomb, 1943) involved permanent living situations, whereas those with the least success (Cook, 1970; Mussen, 1950), were temporary or contrived situations. It may be that Newcomb's (1943, 1967) assertions regarding level of involvement reflect an important part of the reasons for the differences in the results of the above studies.

Another factor in the development of stereotypes involves the credibility or attractiveness of the source. Brim (1954) studied women's reactions to a physician's advice on force-feeding a baby. The results indicated that women who held physicians in low esteem were significantly less likely to follow his advice than women who physicians in high esteem. Bochner & Insko (1966) examining communicator credibility found that subjects disagreed more frequently and were more
likely to disagree with a paper on sleep needs when they believed the paper was written by a Y.M.C.A. director rather than a Nobel Prize winner. In both studies, the authors concluded that the credibility of the source was a key factor in the acceptance of information from that source. In reviewing the literature on source credibility, Aronson (1980) asserted that when a major attitude change occurs, the source of the new information is usually considered expert and trustworthy by the person whose attitude has changed.

Related to source credibility is source attraction. Back (1951) examined effects of attraction to a group on attitude change. He gave two groups a topic to discuss and measured attitude change as a function of the discussion and attraction to the group. His results indicated that the stronger the attraction to the group, the greater the degree of attitude change after the discussion.

The context in which a message is delivered can be an important determiner of the credibility of the sender and the acceptability of the message. Walster, et. al. (1966) examined the effects of prestige on credibility. People described as criminals presented messages advocating either tougher or more lenient punishment for convicted criminals. When they presented the message for more lenient treatment, people tended to dismiss the message. However, when they presented the message advocating tougher punishment for criminals, people viewed them as quite trustworthy, believing them more than policemen advocating the same position. Walster, et. al. concluded that part of our willingness to accept a message depends upon what motives we perceive to be behind the
message as well as the credibility of the sender. If we suspect that someone might gain by advocating a particular viewpoint, we are less likely to trust them or accept their message.

A final contributor to the development of prejudice may be media. Gerbner & Gross (1974) examined the effects of television viewing on stereotyping. Their results indicated that people watching several hours of television per day tend to think of members of other racial and ethnic groups in terms of prevailing stereotypes significantly more than people who watch little or no television. Blacks who watched several hours of television per day perceived middle-class whites in more positive terms than other blacks, suggesting that they accepted portrayals of whites and blacks on television as more truthful than their personal experiences. A disturbing finding reported by Gerbner & Gross (1974) was that stereotypes presented on television were simplistic, inaccurate, and misleading.

Lichter & Johnson (1969) examined the effects of texts picturing both blacks and whites versus texts picturing only whites, on the prejudice levels of second-graders in a predominantly white, mid-western city. They found that students using multi-ethnic readers exhibited a significantly greater decrease in prejudice than students using all-white readers. They concluded that with young children, vicarious exposure to members of different racial and ethnic groups through texts can reduce prejudice.

In summary, the attitude research regarding prejudices support Silverman's conclusions that they are learned early and are difficult to change. There appear to be several factors which influence their
development, including family relationships, selective perception, contact with object groups and the context of that contact, source credibility and attractiveness, and early exposure to anti-prejudicial information. Finally, personality factors may be important to the success of intervention attempts, and there is little that can be done, en masse, to reduce deeply held, highly valued prejudices.

Adolescents' Attitudes Toward the Elderly

Research on adolescents' attitudes toward the elderly is relatively sparse and the few published studies report conflicting results. Differences in methodology and questions about the validity of the instruments make it difficult to generalize the results of these studies. However, several studies report findings which merit further investigation.

Drake (1957) examined attitudes of high school students toward the elderly as a function of contact with older persons. His results indicated that neither the frequency of contact, nor intimacy of contact between youths and older persons affected youths' attitudes. Similarly, Ivester & King (1977) found that reported contact between grandparents and ninth and twelfth graders was not related to how positively older persons were viewed by the students, Ivester & King also found that youths from upper socio-economic groups had significantly more positive attitudes toward the elderly than youths from lower socio-economic groups. They speculated that youths in lower socio-economic groups were more apt to have older persons in ill health living with their families. These older persons may be an emotional as
well as economic burden to their families, which can produce resentment by the youths toward all elderly persons. Overall, Ivester & King found that attitudes of youths in their study were more positive toward the elderly than were attitudes of high school and college students reported in earlier studies. They speculated that perhaps the greater exposure given to older persons by the media was affecting youths' and adults' attitudes toward the elderly.

Earlier studies had consistently found the attitudes of high school and college age students to be predominantly negative toward the elderly. Kastenbaum & Durkee (1964) found a majority of adolescents and young adults expressed negative views of older persons. The elderly were perceived as "old-fashioned", "bound to the past", and "inflexible"; attitudes quite similar to the negative stereotypes which Butler (1975) asserted to be major problems for the elderly.

Although Hickey & Kalish (1968) sampled a wider range of subjects, from third graders to college students, their results were similar to those of Kastenbaum & Durkee (1964). The major difference was that third graders were three times as likely as other subjects to see the elderly as "nice". The study's design did not allow for interpretation of this difference in terms of developmental change or specific characteristics of third graders in the study.

Using the Tuckman-Lorge attitude Scale, Bekker & Taylor (1966) studied the attitudes of high school students toward elderly persons as a function of living grandparents and great-grandparents. Their findings indicated that students with living great-grandparents had fewer stereotypes about their grandparents. However, those students were more
apt to view elderly persons in general more stereotypically than they did their grandparents, implying that they perceived their grandparents as exceptional. Rosenkranz & McNevin (1969) used a semantic differential with college students and found that reported contact correlated significantly with their attitudes toward older persons. Students reporting the most contact with older persons tended to see them most favorably.

In reviewing these studies, Ivester & King (1977) speculated that youths of the nineteen-seventies may have held different attitudes toward the elderly than youths of the previous two decades. However, they stated that despite mixed results regarding contact as an attitude mediator, they saw it as an important factor in attitudes toward the elderly to be examined in regards to its quality as well as its quantity.

One of the few studies employing a more sophisticated approach toward adolescents' attitudes about older people was conducted by Wallach, Kelley, & Abrahams (1979). They developed an experimental program to allow sixteen and seventeen year old students to work with elderly V.A. hospital patients. The research design was based on research by Thralow & Watson (1974), who found that older persons working with sixth grade student therapists showed significant improvement in self-awareness and self-esteem over a control group. Students in the study also expressed an increased interest in the older people with whom they had worked. However, since the student therapists' attitudes toward other older persons were not assessed, it is not known if their increased interest generalized to other older persons.
The role played by contact as a mediator of youths' stereotypes of older people remains unclear. The few studies examining contact and aging stereotypes have not isolated it from other factors influencing stereotypes. Whether the changes in reported attitudes toward old people by youths are due to changes in youths' attitudes, changes in available information, changes in research designs, or a combination of these remains unanswered.

Stereotypes of the Elderly

Study of attitudes and stereotypes toward the elderly was facilitated by the Tuckman-Lorge Attitude Scale (TLAS) (Tuckman & Lorge, 1952). Tuckman & Lorge (1952) found that older people tended to stereotype themselves negatively and that older persons less able to function independently were significantly more likely to accept TLAS stereotypes than were independently functioning older persons. Tuckman & Lorge (1953) also studied stereotypes of older people held by adults age 20-59. They found a substantial acceptance of stereotypes and myths about old people by their participants, even though most participants were well educated and informed about psychology. Tuckman & Lorge concluded that responses indicated a limited understanding of aging, were based more upon personal experience than education and training, and reflected cultural expectations about aging and older people. It is of interest that in comparing the two studies, elderly subjects stereotyped old people more than did non-elderly subjects.
Butler (1969) coined the term "ageism" to describe prejudiced attitudes toward the elderly. According to Butler, ageism is a revulsion to the aging process and its accompanying disease and disability. It stems from fears of helplessness, uselessness, and death which are often associated with aging. His study of the treatment of older persons and the effects of stereotyping older persons was reported in Why Survive? Being Old in America (Butler, 1975). He found that Americans treat older people harshly and stereotype them as silly, senile, inflexible and unproductive. He argued that the stereotypes do not reflect the realities of aging, and concluded that older persons are ignored as a result.

Palmore (1969b) reported stereotypes of the elderly similar to those described by Butler (1969, 1975). Palmore found that older people were pictured as unhappy, unproductive, frequently ill, sexually inactive, alone, and isolated, despite research indicating that older persons exhibited little decline in potential for physical activity, no significant decline in sexual activity, slowed but accurate response patterns, and lifestyles which left few of them isolated or alone. Palmore argued that prevalent negative stereotypes increased the difficulty of older persons in adjusting to their aging and indirectly shortened their longevity.

Negative effects of these stereotypes on the self-image of older persons, the attitudes of other age groups toward older persons, and the interactions between younger and older people, are frequently reported. For example, Philips (1961) studied the relationship of role change and subjective age. He found that role changes such as retirement can lead
to people describing themselves as "old". In a related study, Ward (1977) found that older persons who stated they were "old" reported significantly less self-esteem than older persons labelling themselves as "middle-aged" or "young". Those with negative attitudes toward other older people also exhibited significantly less self-esteem. Finally, Bultena & Powers (1978) found that 1/3 of the participants in their study, all over age seventy, continued to think of themselves as "middle-aged" and tended to see themselves favorably in comparison to their peers. Bultena & Powers concluded that this was a healthy reaction to aging in a society where acceptance of the label "old" might be dysfunctional and lead to social and psychological disorders.

Linn (1979) tested 150 subjects, all over age sixty-five, as to whether they felt older or younger than their age in terms of seven dependent variables of psychological functioning. Those who reported feeling younger than their biological age displayed better overall functioning on the seven psychological measures. This relationship was consistent across race, sex, social class, and amount of disability or impairment.

Locke-Connor & Walsh (1980) studied undergraduate students' attitudes toward older job applicants based upon job interview transcripts. Students were asked to evaluate job applicants on the basis of questionnaire responses and interview transcripts. All students were given identical sets of responses and transcripts, but half were told that the interviewee was age twenty-five while the other half were told that the interviewee was age 65. Results indicated significant differences in expected hiring of the applicant based upon age. The
older applicant was viewed as less active, and responses from all subjects were similar, indicating substantial generalizability from college student data on this issue.

Professional people have also been found to hold negative stereotypes. Ginsberg & Goldstein (1974) found that physicians refer a greater number of younger patients for psychological treatment than older patients, regardless of the degree of abnormality indicated by MMPI scores. Kucharski, White, & Schratz (1979) gave 60 physicians questionnaires about eight patients with obvious psychiatric disorders. Ages of the patients were reversed on alternate forms of the test. In all cases, young patients were referred significantly more often than were older patients. This was particularly true when the symptoms emphasized were confusion, disorientation, and hallucinations. Kucharski et. al. concluded that this bias reflects inaccurate expectations about aging and contributes to the neglect of mental health problems among older persons.

Kaas (1978) found that even persons working regularly with the elderly, who profess open non-stereotypic attitudes toward them may be engaging in self-deception. Although nursing home staff members stated they were accepting of sexual expression by residents, their reactions to specific examples of sexual behavior by elderly residents were much less accepting than their initial statements indicated. Most staff responded that at the very least they would report the behavior to their supervisors. Sexually active older people were described as "dirty old men" and "dirty old women".
Crockett studied the effects of deviations from stereotyped expectations upon college students' attitudes toward old people. Subjects were asked to read an interview with a woman described as either 36 or 76 years old. Interestingly, they rated the older woman significantly more favorably than the younger woman, even when her behavior corresponded to negative stereotypes about older persons. Subjects rated her more favorably because she was seen as exceptionally young and active for her age. Crockett conjectured that a more passive older woman would have been viewed less positively.

Schweibert (1978) examined the relationship between negative stereotypes of older persons and death anxiety of subjects. Death anxiety was found to be positively correlated with negative stereotyping of older persons. Schweibert inferred that older persons are a symbol of death to many people and are avoided by those most anxious about their own mortality. The presence of close, intimate relationships with elderly relatives was found to be significantly correlated with reduced stereotyping of older persons.

Studies examining the effects of media on attitudes toward older persons have yielded mixed results, depending on the medium being investigated. Hart & Husband (1971) examined the impact of television on children's social attitudes. They found that when children lack first-hand experience, they turn to television as their major source of acceptable attitudes toward society, groups, and persons. The authors expressed concern over this finding due to the superficial, stereotypic portrayals of minority groups on television.
Gerbner & Gross (1974) investigated children's stereotyping as a function of the amount of television viewing. Children viewing several hours of television per day were significantly more apt to stereotype persons and groups than children who were sporadic viewers. Stereotypes expressed by extensive viewers tended to match stereotypes presented on television. Some black children who watched television for large amounts of time perceived whites more positively than blacks, which the authors concluded was largely due to stereotypic portrayals of blacks on television.

Recently, Gerbner, Gross, Signorielli, & Morgan (1980) examined the portrayal of older persons on television. They collected data on 1,365 programs and 16,688 characters over a nine-year period, 1969-1978. They studied both daytime drama and prime-time programming. They found that older persons comprised only 2-3% of television characters compared to 11% of the U.S. population. Elderly women were described as "old" at younger ages than were men, and 90% of female television characters over age 65 were cast simply as "old women" compared to 72% of male characters. The remaining 28% of elderly male characters were portrayed as settled adults with jobs or some characteristic other than age to identify them. Men were portrayed as becoming more successful as they age whereas women became less successful. However, older men were more likely to be cast in comic roles in which they were viewed as silly, senile, or eccentric. Overall, older characters were treated with disrespect more than any other group. Nearly 70% of the men and 80% of the women were treated discourteously or held in low esteem. Approximately 2/3 of older women and 1/2 of older men were presented as
lacking common sense, acting silly, and being eccentric.

Survey research by Harris and Associates (1974) revealed a significant correlation between amount of television watching and beliefs that older persons are a rapidly declining segment of the U.S. population. This correlation was consistent across education, sex, and was twice as strong among young viewers. Heavy television viewers responded that women were "old" at earlier ages than men; older people were not adaptable; were not open minded; were not bright and alert; and were not good at getting things done.

Several studies not involving television viewing report results similar to those of Harris & Associates (1974). Neugarten & Peterson (1957) found that working-class people tend to believe that old-age begins near age 60, whereas more affluent socio-economic groups believe old-age begins near age 70. Rosow (1970) obtained similar results. Shanas (1962) found that people see women age 65 to be "old" significantly more often than men. McTavish (1971) found women to hold more negative attitudes toward aging than men. Finally, Busse (1957), while finding no sex differences in attitudes toward aging, found that blacks view themselves as old at younger ages than whites.

Korzenny & Nuendorf (1980) studied television's impact on older people and their self-concept. The more time older persons spent watching television, the more likely they watched for fantasy content and perceived elderly television characters to be a hindrance to society. Also the more older persons watched television for fantasy or escape, the lower was their self-concept. Conversely, older persons who watched television for reality content and information were less
likely to watch it for escape and were found to have better self-concepts. They were also more likely to perceive elderly characters as humorous. Overall, Korzenny & Nuendorf found that television viewing by older persons was associated with a lowered self-concept. They suggested that more positive portrayals of older persons on television might help promote more positive self-concepts in older persons and their integration into society.

Investigations of other media coverage of the elderly have been less condemning television's impact. Buchholz & Bynum (1982) examined 1,703 stories about older persons in the New York Times and the Daily Oklahoman over a two-year period, 1976-1978. They found that 56% of the stories were neutral, 30% were positive, and 14% were negative in viewpoint. Articles focusing on positive aspects of aging and older persons were given larger headlines and more highlighting. In contrast to the stereotypes, older persons were presented as active 44% of the time. Only 30% of the articles presented the elderly as passive, with the remaining 26% of the stories presenting neither an active or passive image. The authors stated that the major deficit in coverage of older persons was that the newspapers' articles tended to be too superficial.

Kent (1980) studied Time magazine's portrayal of the elderly over a one-year period. He uncovered little evidence of stereotyping older persons and found that the most numerous stereotyped references to aging dealt with younger people, such as athletes, growing old. Kent noted, however, that women were more likely to have their age mentioned than men.
Finally, several researchers (Palmore, 1971; Sheppard, 1981; Smith, 1979) studied cartoons about aging and their impact on people's attitudes about older persons. Despite findings that the aged are stereotyped in cartoons, there was no evidence of a relationship between acceptance of stereotyped cartoons and negative attitudes toward older persons. Sheppard (1981) concluded that stereotyping is basic to humor; the wilder the stereotype, the funnier the joke because the stereotype is so removed from reality.

In summary, there has been speculation and research concerning negative stereotypes of older people. It appears that stereotypes are well-established by college age and found in all age groups. Elderly people who do not fit the stereotypes are viewed as exceptions, despite statistical evidence to the contrary. Although factual knowledge might mediate belief in negative stereotypes, experimental support for this possibility is lacking. Further inquiry into effective methods of reducing negative stereotyping of older persons is often recommended.

Counseling the Elderly

In reviewing the literature on counseling older persons, Piggrem & Schmidt (1982) found several problems of concern to counselors of the elderly. One problem may be countering the stereotypes held by counselors, lay persons, and older people themselves about aging. Other problems appear to be:

1. Shortages of trained personnel to work with older persons on psychological issues.
2. Inadequate knowledge of the physiology of aging by counselors, physicians, and lay persons.
3. Drug misuse by older persons.
4. Inadequate and improper nutrition among older persons.
5. Learned dependence by older clients.

Birren & Woodruff (1973) found that older persons had less access to psychological services than other age groups. In 1973, only one psychologist qualified to work with older persons was available for every 76,000 older persons in the U.S. This compared to one psychologist per 3,400 persons in the general population. Viewing this statistic in regard to studies indicating that older persons are less likely to be referred for psychological services (Ginsberg & Goldstein, 1974; Kucharski, et al., 1979) raises questions of the adequacy of mental-health care available to the elderly. Sue's (1976) study on the quality of care older persons receive at community mental health centers lends further support to these questions.

Knowledge of the physiology of aging is important to counselors. Despite the fact that deterioration accompanies aging, norms are lacking for the amount or rapidity of deterioration. It may vary widely depending on the life-style and heredity of individual older persons. Klisz (1981) cited evidence that many brain structures are redundant and even large losses of brain tissue may have minute effects on daily functioning. Klisz concluded that most psychological problems in older people are unrelated to physiological deterioration of the brain, but because many older persons believe their impairment is due to irreversible brain damage, they make few attempts to improve their
functioning. Professionals often hold similar biases.

Levy, Derogotis, Gallagher, & Gatz (1981) reported approximately 100 reversible disorders with symptoms mimicking irreversible brain damage. They cited evidence indicating that up to 1/3 of all nursing home residents diagnosed as having age-related irreversible brain damage, in fact had reversible conditions resulting from drug misuse, malnutrition, and severe depression. Levy, et. al. believe this situation arises from people expecting older persons to deteriorate and failing to search for reversible conditions as comprehensively as they would with younger patients. As a result, many treatable older persons go untreated.

Drug misuse is often a contributor to the misdiagnosis of older persons. Physicians, untrained in treating the elderly, may be quick to prescribe drugs to combat symptoms without searching for the causes of the symptoms. This may be complicated by older persons who combine prescribed drugs with over-the-counter medications as well as with prescriptions from other physicians. Levy, et. al. (1981) reported that multiple drug use is common among older persons, and the effects of combining various over-the-counter and prescription drugs is unknown.

Even when older persons take only prescribed drugs according to their physician's directions, they may suffer side-effects beyond what would normally be expected. Piland, Prentice, & Gallub (1979) concluded that because of differences in their physiology, a dosage of a drug proper for a younger person may constitute an overdose for an elderly person. Older people tend to be more sensitive to the effects of most drugs, and their bodies do not cope with overdose effects as readily as
do younger persons' bodies. Since many older persons already suffer from malnutrition due to inadequate dietary habits, their bodies are in a weakened state and are not able to handle drug induced disorders effectively.

Several approaches have been suggested as useful to counseling older persons. Sinick (1977) has suggested a "life-planning" approach in which counseling about aging, older persons, and death begins during childhood and progresses throughout maturation and adulthood. Sinick asserts that this developmental approach negates unfavorable aging stereotypes before they become deeply entrenched and helps people deal with aging relatives as well as their own aging. However, research is reported supporting Sinick's proposals.

Herr & Weakland (1979) have suggested that most counseling with older persons involve their families. Herr & Weakland propose that this is necessary to prevent gains made in counseling from being reversed by family members ignorant of the realities of aging and the goals of the counseling process. It also allows family members to cope with their own fears of aging and grow accustomed to the counseling process.

Piggrem & Schmidt (1982) cautioned that no conclusive evidence exists supporting any counseling approach as best for all older persons. For a group as heterogenous as the elderly, counselors need to be familiar with many approaches and adapt them to the needs of individual older clients. Piggrem & Schmidt propose several considerations in counseling older persons:

1. Counselors must be flexible in setting times and places for counseling older persons due to the limited mobility of many
elderly clients.

2. Special care in establishing appropriate relationships with elderly clients is essential given the reservations many older persons have about psychology and being counseled.

3. Special attention to listening carefully to older persons and being alert for limitations in hearing and vision is needed.

4. Involving family members of elderly clients may be necessary when counseling issues are embedded within the older person's relationship with family members.

5. Special care must be taken by counselors to avoid accepting unnecessary responsibility for older clients who have learned to appear helpless even when they are capable of doing things for themselves.

6. Counselors need to be familiar with community resources so they can direct elderly clients to appropriate sources of assistance.

Schmidt & Piggrem (in press) also listed several roles which counselors might assume in their work with older persons:

1. Support - in coping with transitions, losses, role reversals, and physical decline.

2. Planning - for retirement, deaths of loved ones, and their own decline and eventual death.

3. Education and Guidance - about aging, community services, decision making, and problem solving.

4. Therapeutic - for older persons experiencing crises, losses, mental health problems, etc. This may often involve working
in tandem with other health-care professionals (i.e. social workers; physicians).

5. Advocacy - acting on behalf of older persons to obtain services and influence social and political systems for the benefit of elderly people.

6. Outreach - going outside traditional counseling settings to contact older people unable to initiate counseling in traditional ways.

Overall, the literature on counseling the elderly is in an elementary stage. Although some differences may exist between counseling older persons and counseling younger people, most differences remain speculative. The majority of the literature is rhetorical, not empirical, and many conclusions have been drawn from little evidence. More research is needed before counselors can have much confidence in their work with older persons.
Method

Sample: The sample consisted of students from two school systems in the Columbus, Ohio metropolitan area. Two-hundred eighty four students (97 sixth graders, 99 ninth graders, and 88 twelfth graders) completed questionnaires. The sample included 126 males and 158 females. Use of samples from sixth, ninth, and twelfth grades allowed for assessment of differences across a six-year span, and kept the collection and analysis of data within manageable limits.

Instruments: Two questionnaires were used: The Tuckman-Lorge Attitude Scale (TLAS; Tuckman & Lorge, 1952) and the Palmore Facts on Aging Quiz (FAQ; Palmore, 1977). Demographic data were also collected.

The Tuckman-Lorge Attitude Scale (TLAS; see Appendix A) was devised in 1951 to measure the degree of stereotypic generalization in respondents' perceptions of elderly people. It consists of 137 statements about older people, classified into 13 categories: Physical, Financial, Conservatism, Family, Attitude Toward Future, Insecurity, Mental Deterioration, Activities and Interests, Personality Traits, Best Time of Life, Sex, Cleanliness, and Interference. Statements in the questionnaire were derived from interviews with adults ranging in age from 21 to 65 years; discussions with social workers and directors of institutions for the aged; case records of elderly clients under the
care of a family agency; and a thorough review of pertinent literature. Though some statements may be true for some old people, the majority of statements have no empirical support. The commonality among statements is that they reflect a generalization about all older persons which is inaccurate.

On the TLAS, subjects are asked to indicate whether they believe statements are true or not true for the majority of elderly people. Scores are the number of "true" responses on the test as a whole. The higher a score, the more a subject tends to view older people in terms of stereotypic generalizations, rather than as individuals.

The TLAS has been used with adults from age 18 to 85 and has been found to differentiate extent of stereotypic beliefs about older persons (Tuckman & Lorge, 1952, 1953; Bekker & Taylor, 1966). It has been used as a research instrument as well as for generating discussions about aging and older persons. While there are no data indicating how widely the TLAS has been used, numerous citations in the literature and the fact that new instruments measuring stereotypes of older persons are often compared with it (Golde & Kogan, 1959; Kogan, 1961; Palmore, 1977) suggest that it is the most commonly used measure of stereotypes about older persons.

The Facts on Aging Quiz (FAQ; see Appendix B) was developed as an alternative to attitude scales about older people (Palmore, 1977). Palmore (1977) criticized previously developed attitude scales as being too long, confusing factual with attitudinal statements, and not providing empirical support for the statements they purport to be factual. The FAQ was developed in response to these criticisms. It is
short, consisting of 25 statements which respondents must judge as true or false about the majority of older persons, and the veracity of each statement is based upon empirical data.

The validity of the FAQ is based upon two types of evidence. First, all statements included in the quiz were derived from statistical facts about older persons so each statement has an empirical base. Second, the FAQ was designed so respondents with training in gerontology should score higher than respondents without such training, and studies using the FAQ supported this intent (Palmore, 1978, 1980).

Reliability for the FAQ appears adequate. Palmore (1980) compared data from 26 studies using the FAQ and found consistent differences in mean score due to educational level, and satisfactory test-retest reliability (Laner, in Palmore, 1980). Item-to-total reliability is low. Palmore (1980) suggests that it could be improved by removing certain items, but that if "these items were omitted from the quiz, the test's item reliability would be improved, but then some of the most basic facts and most frequent misconceptions would be omitted" (p. 671).

Palmore (1977) designed the FAQ so it could be used with a variety of age groups of varying economic and educational background. He recommended that it be used with younger and older age groups to measure their knowledge of aging and older people. Thus far, the FAQ has been used with subjects 18-60, including undergraduates, graduate students, and faculty members at various universities.

Palmore's (1977) findings that level of education is related to knowledge about aging conflicts with Tuckman & Lorge's (1953) negative findings about the relation between the stereotyping of older persons
and education. If stereotyping decreases as knowledge of the stereotyped group increases, both stereotyping and knowledge of older people should change as education level changes. By employing the FAQ and the TLAS in the same study, one may be able to better identify relations between knowledge and stereotyping of elderly people.

Since neither of these instruments has been designed solely for use with adolescents, an important consideration is that the reading level of the questionnaires be appropriate to subjects in the study. Both the FAQ and TLAS contain some words requiring a twelfth grade reading level, as measured by the Living Word Vocabulary (Dale & O'Rourke, 1981). The Living Word Vocabulary is a compilation of 44,000 words listing the reading skill necessary for students to understand them. A minimum grade-level of reading skill is listed for each of several contextual usages per word. For example the word "conservative" might require eighth grade reading skills when used as a label for a set of political beliefs, whereas its use in defining someone who opposes change might require fourth grade reading skills. Each word was tested on a random sample of at least 200 students per contextual usage, from a nationwide sample of school systems. Testing began in 1954 and continues.

All words in each statement of the FAQ and TLAS were examined and revised, if necessary, so that none would require more than a sixth grade reading level. The lone exception to this standard was the word "constipation" in item #72 on the TLAS. This word requires an eighth grade reading level, but no suitable substitute was found so it was not changed. several subjects asked about the meaning of
constipation and the experimenter explained its meaning to those participants who asked. Choice of the sixth grade reading level was based on Dale & O'Rourke (1981) who state that words at a sixth grade level may be used without definition by people who have a fifth grade reading vocabulary. Thus, it provides a small margin of safety for respondents who may be in sixth grade, but have reading skills less than those of sixth graders. Care was taken in revising the wording to ensure minimal changes in the meaning of both words and statements. In a few cases (i.e., items 45 and 80 of the TLAS) both the original wording and the revised wording (in parentheses) were provided to add to the clarity of meaning.

A pilot study was conducted on fifth and sixth graders from Columbus, Ohio to assess the readability of the revised FAQ and TLAS by sixth graders. Subjects were given the questionnaires and asked to complete them, circling words that they did not understand. When subjects had completed questionnaires, they discussed problems they encountered in filling them out. No more than one subject failed to understand any word; however, several had difficulty understanding colloquialisms such as "at loose ends" (TLAS item #102). In those cases, changes were discussed which reworded the colloquialisms into phrases the participants could understand.

Rewording of phrases and substitution of simpler words were the only adjustments to the TLAS (see Appendix C). There were two additional adjustments to the FAQ (see Appendix D). First, a "?" column was added providing an option for respondents when they did not know whether statements were true or false. This revision, suggested by Miller &
Dodder (1980) and supported by Palmore (1981), is intended to reduce guessing by respondents and increase the accuracy of their scores. Second, item 3, "Most old people have no interest in or capacity for sexual relations" was deleted. Because this study was conducted in group settings within public schools, this statement might have been judged improper by some parents or school officials, creating an atmosphere of silliness or discomfort for participants. Eliminating the item was decided to be preferable to leaving it in.

Self-reported demographic information was obtained on age, sex, health of elderly relatives, contact with older persons, amount of time spent in watching television, types of programs watched, whether the movie "On Golden Pond" had been seen, perceived sources of information about older persons, and the age of an elderly person (see appendix E). Two questions in the demographic questionnaire focused on participants' abilities to understand the questions and their ideas of what the research was about. These questions were included to ensure that items were understood and to reveal bias in response attributable to misconceptions in the purpose of the study.

Procedure. Officials of schools in the Columbus, Ohio metropolitan area were approached to obtain permission for students to participate in the study. Schools agreeing to participate set up times for students to complete the questionnaires in group settings. Students participating in the study were given a general briefing about the research; what was expected of them; that participation was voluntary and that information given was confidential; that they could withdraw at any time; and that
their questions regarding the research would be answered after they completed the questionnaires.

Participants were given the demographic information sheet first, the Facts on Aging Quiz second, and the Tuckman-Lorge Attitude Scale third. This order was arbitrary, based upon participants' reactions in the pilot study and my belief that the demographic data were most susceptible to contamination from information contained in the other questionnaires. The TLAS was assumed to be least susceptible because of its length and redundancy. After completing the questionnaires, participants were thanked for their assistance and questions were answered. For schools that requested it, a discussion about aging and older people was conducted. Discussions were held only with sixth grade students, because time limitations in scheduling ninth and twelfth graders prevented much discussion following completion of the questionnaires.

**Data Analysis:** TLAS score, FAQ score, television viewing time, and perceived age to be elderly were compared across grade-levels and sex by analysis of variance. A Chi-square procedure analyzed variance in perceived health across grade levels. Duncan's procedures were used to measure significance of change across grade levels for FAQ score, TLAS score, television viewing time, and perceived age to be elderly. A Pearson Product Moment correlation coefficient measured relations among TLAS score, FAQ score, television viewing time, perceived age to be elderly, perceived health of elderly relatives, and reported contact with older persons. Finally, correlations were obtained between
Hypotheses: Evidence from previous studies of youths' knowledge or stereotyping of older persons was insufficient to warrant directional hypotheses. Therefore, all hypotheses were stated in the null form. It was hypothesized that:

1. TLAS scores do not vary across sixth, ninth and twelfth grade levels.
2. TLAS scores do not differ for males and females.
3. TLAS scores do not correlate with FAQ scores.
4. TLAS scores do not correlate with reported amounts of television viewing.
5. TLAS scores do not correlate with reported contact between youths and older persons.
6. TLAS scores do not correlate with youths' perceptions of the age at which one is to be identified as elderly.
7. TLAS scores do not correlate with reported health of youths' elderly relatives.
8. TLAS scores do not correlate with viewing or not viewing the movie "On Golden Pond".
9. FAQ scores do not vary across sixth, ninth, and twelfth grade levels.
10. FAQ scores do not differ between males and females.
11. FAQ scores do not correlate with reported amounts of television viewing.
12. FAQ scores do not correlate with reported contact between youths and older persons.

13. FAQ scores do not correlate with youths' perceptions of the age at which one is to be identified as elderly.

14. FAQ scores do not correlate with reported health of youths' elderly relatives.

15. FAQ scores do not correlate with viewing or not viewing the movie "On Golden Pond".
Results

The Tuckman-Lorge Attitude Scale. The mean Tuckman-Lorge Attitude Scale (TLAS) score for all participants was 48.37, with a standard deviation of 22.07. The median was 48, and responses were distributed bimodally with modes of 35 and 49. Data from TLAS scores were compared by analysis of variance (ANOVA), with TLAS total as the dependent variable and grade-level and sex as independent variables. Results of this analysis, presented in Table 1, indicated a significant increase in TLAS scores across grade levels \((p < .01)\), with sixth graders scoring lowest and twelfth graders scoring highest. The data support the rejection of Hypothesis 1, regarding TLAS scores and grade-level. A Duncan's

\[ \text{Table 1. Tuckman-Lorge Attitude Scale analysis of variance by grade-level and sex.} \]

<table>
<thead>
<tr>
<th>Source of variance</th>
<th>Sums of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>P</th>
<th>r^2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Effects</td>
<td>10,287.55</td>
<td>3</td>
<td>3,429.18</td>
<td>7.61</td>
<td>0.000</td>
<td>.075</td>
</tr>
<tr>
<td>Grade-Level</td>
<td>5,213.10</td>
<td>2</td>
<td>2,606.55</td>
<td>5.79</td>
<td>0.003</td>
<td>.038</td>
</tr>
<tr>
<td>Sex</td>
<td>5,675.02</td>
<td>1</td>
<td>5,675.02</td>
<td>12.61</td>
<td>0.000</td>
<td>.041</td>
</tr>
<tr>
<td>2-way interaction</td>
<td>2,463.20</td>
<td>2</td>
<td>1,231.60</td>
<td>2.74</td>
<td>0.067</td>
<td>.018</td>
</tr>
<tr>
<td>Explained</td>
<td>12,750.81</td>
<td>5</td>
<td>2,550.16</td>
<td>5.66</td>
<td>0.000</td>
<td>.092</td>
</tr>
<tr>
<td>Residual</td>
<td>125,141.00</td>
<td>278</td>
<td>450.15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>137,891.81</td>
<td>283</td>
<td>487.25</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
procedure indicated that the increase in TLAS scores was not significant between sixth and ninth graders, nor ninth and twelfth graders, but was significant between sixth and twelfth graders ($p<.01$).

TLAS scores were significantly higher for males than for females ($p<.001$), supporting the rejection of Hypothesis 2, regarding TLAS scores and sex. Also, the pattern of increase in mean scores across grade levels differed for males and females. Duncan's procedures indicated that sixth and ninth grade males' TLAS scores were not significantly different, but twelfth grade males scored significantly higher ($p<.01$) than either sixth or ninth graders. For females, TLAS scores did not differ significantly between ninth and twelfth graders, but both ninth and twelfth graders scored significantly higher ($p<.01$) than sixth graders. An ANOVA (Table 1) indicated that the grade-level by sex interaction for TLAS score was not significant. Figure 1 illustrates the pattern of increase in TLAS scores across grade levels for males, females, and combined sex totals. Table 2 presents TLAS mean scores by grade level and sex.

Relationships between TLAS scores, FAQ scores, and the demographic variables were determined by Pearson Product Moment Correlation Coefficients (Table 3). TLAS scores were inversely related to FAQ scores ($r=-.15$; $p<.05$), indicating that as TLAS scores increased, FAQ scores declined. Thus, the data support the rejection of Hypothesis 3, regarding TLAS scores and FAQ scores. Although TLAS scores correlated positively with the scores of reported contact between the participants and older persons ($r=.15$; $p<.05$), the method of coding data was such that higher numbers indicated less contact and lower numbers.
Figure 1. Tuckman-Lorge Attitude Scale scores by grade-level and sex.

Table 2. Tuckman-Lorge Attitude Scale mean scores and standard deviations by grade-level and sex.

<table>
<thead>
<tr>
<th>Combined</th>
<th>6th</th>
<th>9th</th>
<th>12th</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>97</td>
<td>99</td>
<td>88</td>
<td>284</td>
</tr>
<tr>
<td>Mn</td>
<td>43.32</td>
<td>48.94</td>
<td>53.27</td>
<td>48.37</td>
</tr>
<tr>
<td>SD</td>
<td>22.60</td>
<td>17.98</td>
<td>24.57</td>
<td>22.07</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Males</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>48</td>
<td>40</td>
<td>38</td>
<td>126</td>
</tr>
<tr>
<td>Mn</td>
<td>50.66</td>
<td>49.50</td>
<td>59.97</td>
<td>53.10</td>
</tr>
<tr>
<td>SD</td>
<td>23.41</td>
<td>16.47</td>
<td>25.98</td>
<td>21.98</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Females</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>49</td>
<td>59</td>
<td>50</td>
<td>158</td>
</tr>
<tr>
<td>Mn</td>
<td>36.14</td>
<td>48.57</td>
<td>48.18</td>
<td>44.59</td>
</tr>
<tr>
<td>SD</td>
<td>19.46</td>
<td>19.06</td>
<td>22.38</td>
<td>20.23</td>
</tr>
</tbody>
</table>
indicate more contact. Because of this reversal, a positive correlation indicates an inverse relation between TLAS scores and reported contact. Therefore, as TLAS scores increased, reported contact decreased. The data support rejection of Hypothesis 5 regarding TLAS scores and reported contact.

TLAS scores were inversely related to participants' perceived age for a person to be considered elderly ($r = -0.23; p < .001$), indicating that as TLAS scores increased, the perceived age for being elderly decreased.

<table>
<thead>
<tr>
<th>Table 3. Pearson Product Moment Correlation Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Perceived</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>TLAS</strong></td>
</tr>
<tr>
<td><strong>FAQ</strong></td>
</tr>
<tr>
<td><strong>TV Time</strong></td>
</tr>
<tr>
<td><strong>Perceived Age</strong></td>
</tr>
<tr>
<td><strong>Contact</strong></td>
</tr>
<tr>
<td><strong>Health</strong></td>
</tr>
<tr>
<td><strong>Movie</strong></td>
</tr>
</tbody>
</table>
Thus, Hypothesis 6, regarding TLAS scores and perceived age to be elderly, was rejected. TLAS scores were also inversely related to reported health of elderly relatives ($r=-.12; p<.05$), indicating that as TLAS scores increased, perceived health of elderly relatives declined. The data support the rejection of Hypothesis 7, regarding TLAS scores and perceived health of participants' elderly relatives.

TLAS scores were not significantly related to either the time reportedly spent watching television, or the viewing of the movie "On Golden Pond". Therefore, neither Hypothesis 4, regarding TLAS scores and television viewing time, nor Hypothesis 8, regarding TLAS scores and viewing of the movie "On Golden Pond", could be rejected.

Among individual TLAS items, 32 items were answered "true" by at least 50% of participants, while 11 items were answered "true" by fewer than 10% of participants. These percentages were arbitrarily chosen to indicate stereotypes more and less readily accepted by participants. Table 4 lists items marked "true" by 50% or more and Table 5 lists items marked "true" by 10% or fewer participants. The 32 items marked "true" by a majority of participants were from the thirteen sub-groupings of TLAS items delineated by Tuckman & Lorge (1952) as follows:

1. Physical: 6
2. Personality: 6
3. Conservatism: 6
4. Family: 5
5. Best Time of Life: 3
6. Interests: 2
7. Financial: 2
8. Insecurity: 1
9. Mental Deterioration: 1

A frequency count of responses to individual items by grade level and sex revealed that similar percentages of participants tended to respond "true" to items regardless of grade-level or sex. No differences in TLAS response patterns other than the increase in scores across grade levels, discussed previously, were revealed.

Table 4. Tuckman-Lorge Attitude Scale items marked "true" by 50% or more participants.

<table>
<thead>
<tr>
<th>Item #</th>
<th>Item</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Old people need glasses to read</td>
<td>147</td>
</tr>
<tr>
<td>5.</td>
<td>They spoil their grandchildren</td>
<td>204</td>
</tr>
<tr>
<td>6.</td>
<td>They are kind</td>
<td>204</td>
</tr>
<tr>
<td>13.</td>
<td>They have to be careful of what they eat and drink</td>
<td>207</td>
</tr>
<tr>
<td>14.</td>
<td>They are proud of their children</td>
<td>256</td>
</tr>
<tr>
<td>15.</td>
<td>They are set in their ways</td>
<td>152</td>
</tr>
<tr>
<td>26.</td>
<td>They are very interested in religion</td>
<td>185</td>
</tr>
<tr>
<td>28.</td>
<td>They are old fashioned</td>
<td>173</td>
</tr>
<tr>
<td>33.</td>
<td>They are calm</td>
<td>213</td>
</tr>
<tr>
<td>43.</td>
<td>They are very talkative</td>
<td>195</td>
</tr>
<tr>
<td>44.</td>
<td>They do not hear very well</td>
<td>160</td>
</tr>
<tr>
<td>46.</td>
<td>They like old songs on the radio</td>
<td>225</td>
</tr>
<tr>
<td>53.</td>
<td>They like to give advice</td>
<td>241</td>
</tr>
<tr>
<td>54.</td>
<td>They make friends easily</td>
<td>223</td>
</tr>
<tr>
<td>57.</td>
<td>They worry about their health</td>
<td>212</td>
</tr>
<tr>
<td>59.</td>
<td>They would like to be young again</td>
<td>218</td>
</tr>
<tr>
<td>63.</td>
<td>They are good to their children</td>
<td>257</td>
</tr>
<tr>
<td>64.</td>
<td>They have lost most of their teeth</td>
<td>150</td>
</tr>
<tr>
<td>65.</td>
<td>They like religious programs on the radio</td>
<td>149</td>
</tr>
<tr>
<td>66.</td>
<td>They respect tradition</td>
<td>243</td>
</tr>
<tr>
<td>67.</td>
<td>They walk slowly</td>
<td>184</td>
</tr>
<tr>
<td>85.</td>
<td>They like to doze in a rocking chair</td>
<td>149</td>
</tr>
<tr>
<td>86.</td>
<td>They like to think about the &quot;good old days&quot;</td>
<td>230</td>
</tr>
<tr>
<td>95.</td>
<td>They love life</td>
<td>227</td>
</tr>
<tr>
<td>97.</td>
<td>They would like to live their lives over again</td>
<td>150</td>
</tr>
<tr>
<td>99.</td>
<td>They try not to go out in bad weather</td>
<td>193</td>
</tr>
<tr>
<td>105.</td>
<td>They worry about having enough money to live on</td>
<td>154</td>
</tr>
<tr>
<td>109.</td>
<td>They are usually taken care of by their children or old-age pensions</td>
<td>153</td>
</tr>
<tr>
<td>116.</td>
<td>They expect their children and grandchildren to obey them</td>
<td>213</td>
</tr>
<tr>
<td>123.</td>
<td>They get love and affection from their children</td>
<td>228</td>
</tr>
<tr>
<td>124.</td>
<td>They like to gossip</td>
<td>164</td>
</tr>
<tr>
<td>137.</td>
<td>They have a chance to do all the things they always wanted to do</td>
<td>154</td>
</tr>
</tbody>
</table>
Table 5. Tuckman-Lorge Attitude Scale items marked "true" by 10% or fewer participants.

<table>
<thead>
<tr>
<th>Item #</th>
<th>Item</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.</td>
<td>They cannot learn new things</td>
<td>14</td>
</tr>
<tr>
<td>12.</td>
<td>They prefer to be alone</td>
<td>20</td>
</tr>
<tr>
<td>17.</td>
<td>They aren't important in family matters</td>
<td>26</td>
</tr>
<tr>
<td>34.</td>
<td>They are hard to get along with</td>
<td>24</td>
</tr>
<tr>
<td>36.</td>
<td>They are useless</td>
<td>21</td>
</tr>
<tr>
<td>38.</td>
<td>They become insane</td>
<td>14</td>
</tr>
<tr>
<td>39.</td>
<td>They never take a bath</td>
<td>11</td>
</tr>
<tr>
<td>69.</td>
<td>They are selfish</td>
<td>27</td>
</tr>
<tr>
<td>132.</td>
<td>They are a nuisance to others</td>
<td>20</td>
</tr>
<tr>
<td>133.</td>
<td>They are helpless</td>
<td>23</td>
</tr>
<tr>
<td>136.</td>
<td>They are useless to themselves or others</td>
<td>25</td>
</tr>
</tbody>
</table>

The Facts on Aging Quiz. The mean Facts on Aging Quiz (FAQ) score for all participants was 11.72, with a standard deviation of 3.28. The median and mode were 12. Data from FAQ scores were analyzed using an ANOVA with FAQ total as the dependent variable and grade-level and sex as independent variables. Results, presented in Table 6, revealed no significant differences in FAQ scores because of grade level or sex. Together they accounted for less than 1% of the observed variance in FAQ scores. However, there was a significant two-way interaction between grade-level and sex, accounting for 2.3% of the observed variance in FAQ scores. This interaction resulted from a nearly 2 point drop in mean scores between ninth and twelfth males compared to a .48 point increase in mean scores between ninth and twelfth grade females (see Figure 2). Hence, the data do not support the rejection of either Hypothesis 9, regarding FAQ scores and grade levels, or Hypothesis 10, regarding FAQ scores and sex. However, males and females do differ in
Table 6. Facts on Aging Quiz Analysis of variance by grade-level and sex.

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sums of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>P</th>
<th>r²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Effects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade-level</td>
<td>19.05</td>
<td>2</td>
<td>9.52</td>
<td>0.90</td>
<td>0.41</td>
<td>.01</td>
</tr>
<tr>
<td>Sex</td>
<td>0.30</td>
<td>1</td>
<td>0.30</td>
<td>0.03</td>
<td>0.87</td>
<td>.00</td>
</tr>
<tr>
<td>2-way interaction</td>
<td>70.37</td>
<td>2</td>
<td>35.19</td>
<td>3.31</td>
<td>0.03</td>
<td>.02</td>
</tr>
<tr>
<td>Explained</td>
<td>90.04</td>
<td>5</td>
<td>18.01</td>
<td>1.69</td>
<td>0.14</td>
<td>.03</td>
</tr>
<tr>
<td>Residual</td>
<td>2.955.50</td>
<td>278</td>
<td>10.63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3,045.54</td>
<td>283</td>
<td>10.76</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 2. Facts on Aging Quiz mean scores by grade-level and sex.
terms of how their FAQ scores change across grade-levels. Table 7 lists FAQ mean scores and standard deviations by grade level and sex.

Relationships between FAQ scores, TLAS scores, and the demographic variables were determined by means of Pearson Product Moment Correlation Coefficients (see Table 3). FAQ scores were significantly related to TLAS scores (discussed previously), but were not significantly related to the remaining demographic variables. Therefore, the following Hypotheses could not be rejected: Hypothesis 11, regarding FAQ scores and television viewing; Hypothesis 12, regarding FAQ scores and contact between youths and older people; Hypothesis 13, regarding FAQ scores and perceived age to be elderly; Hypothesis 14, regarding FAQ scores and reported health of youths' elderly relatives; and Hypothesis 15, regarding FAQ scores and viewing of the movie "On Golden Pond".

Table 7. Facts on Aging Quiz mean scores and standard deviations by grade level and sex.

<table>
<thead>
<tr>
<th></th>
<th>Combined</th>
<th>6th</th>
<th>9th</th>
<th>12th</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>97</td>
<td>99</td>
<td>88</td>
<td></td>
<td>284</td>
</tr>
<tr>
<td>Mn</td>
<td>11.60</td>
<td>12.13</td>
<td>11.56</td>
<td></td>
<td>11.72</td>
</tr>
<tr>
<td>SD</td>
<td>3.53</td>
<td>3.37</td>
<td>2.85</td>
<td></td>
<td>3.28</td>
</tr>
<tr>
<td>Males</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>48</td>
<td>40</td>
<td>38</td>
<td></td>
<td>126</td>
</tr>
<tr>
<td>Mn</td>
<td>11.72</td>
<td>12.67</td>
<td>10.71</td>
<td></td>
<td>11.62</td>
</tr>
<tr>
<td>SD</td>
<td>3.20</td>
<td>3.14</td>
<td>3.08</td>
<td></td>
<td>3.14</td>
</tr>
<tr>
<td>Females</td>
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<td></td>
</tr>
<tr>
<td>N</td>
<td>49</td>
<td>59</td>
<td>50</td>
<td></td>
<td>158</td>
</tr>
<tr>
<td>Mn</td>
<td>11.46</td>
<td>11.76</td>
<td>12.22</td>
<td></td>
<td>11.81</td>
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<td>SD</td>
<td>3.81</td>
<td>3.49</td>
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</tbody>
</table>
Facts on Aging Quiz response frequencies are presented by item and response in Table 8. The percentage of correct responses to individual items ranged from 11% (item # 18) to 87% (item # 12). A mean of 44 participants used the "?" response for each item. The number of "?" responses declined slightly but steadily across the three grade

<table>
<thead>
<tr>
<th>Item</th>
<th>Correct</th>
<th>Correct</th>
<th>Incorrect</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. They are forgetful</td>
<td>184 (F) 65%</td>
<td>79</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>2. The five senses become less sensitive</td>
<td>164 (T) 57%</td>
<td>95</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>3. Lung capacity decreases</td>
<td>104 (T) 37%</td>
<td>76</td>
<td>104</td>
<td></td>
</tr>
<tr>
<td>4. They feel miserable most times</td>
<td>229 (F) 81%</td>
<td>35</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>5. Physical strength decreases</td>
<td>221 (T) 78%</td>
<td>42</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>6. One-tenth are in homes, etc.</td>
<td>61 (F) 21%</td>
<td>152</td>
<td>171</td>
<td></td>
</tr>
<tr>
<td>7. They have fewer accidents (auto)</td>
<td>139 (T) 49%</td>
<td>83</td>
<td>62</td>
<td></td>
</tr>
<tr>
<td>8. Not as effective as younger workers</td>
<td>142 (F) 50%</td>
<td>106</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>9. 80% healthy enough for normal activities</td>
<td>191 (T) 67%</td>
<td>48</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>10. Most are set in their ways</td>
<td>96 (F) 34%</td>
<td>151</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>11. They take longer to learn something new</td>
<td>97 (T) 34%</td>
<td>140</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>12. Impossible for them to learn</td>
<td>247 (F) 87%</td>
<td>18</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>13. Respond more slowly than younger people</td>
<td>154 (T) 54%</td>
<td>96</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>14. They are pretty much alike</td>
<td>212 (F) 75%</td>
<td>57</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>15. They are seldom bored</td>
<td>66 (T) 23%</td>
<td>172</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>16. They are isolated and lonely</td>
<td>146 (F) 51%</td>
<td>100</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>17. They have fewer accidents than younger workers</td>
<td>92 (T) 32%</td>
<td>94</td>
<td>98</td>
<td></td>
</tr>
<tr>
<td>18. 15% of pop. now 65 or over</td>
<td>32 (F) 11%</td>
<td>125</td>
<td>127</td>
<td></td>
</tr>
<tr>
<td>19. Doctors prefer young people</td>
<td>53 (T) 19%</td>
<td>112</td>
<td>119</td>
<td></td>
</tr>
<tr>
<td>20. Most are poor</td>
<td>214 (F) 75%</td>
<td>31</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>21. Most are working or wish to</td>
<td>239 (T) 84%</td>
<td>19</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>22. They become more religious</td>
<td>64 (F) 22%</td>
<td>154</td>
<td>66</td>
<td></td>
</tr>
<tr>
<td>23. They are seldom angry</td>
<td>76 (T) 27%</td>
<td>155</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td>24. Will have same health in year 2,000 as now</td>
<td>121 (F) 43%</td>
<td>50</td>
<td>113</td>
<td></td>
</tr>
</tbody>
</table>

( ) correct answer  T true  F false
levels, with a mean of 4.93 for sixth graders, of 4.38 for ninth graders, and of 4.24 for twelfth graders. This decline was not significant.

**Television viewing time.** Participants reported viewing a mean of 18.58 hours of television per week, with a standard deviation of 16.09 hours. The median viewing time was 13 hours per week. The mode was 20 hours per week and the range was 0-70 hours per week (3 subjects reported 0 hours per week because they did not have television sets in their homes). The data suggest a positively skewed distribution of responses. Table 9 presents reported viewing times by grade-level and sex. An ANOVA indicated that viewing times decreased significantly across grade levels (p < .001). A Duncan's procedure found that while sixth and ninth graders did not differ significantly in reported viewing times, twelfth graders reported viewing significantly less television per week (p < .001) than either sixth or ninth graders. Males' and females' viewing times did not differ significantly.

Reported television viewing time was significantly related to perceived age to be elderly (r = -.20; p < .001), indicating that as television viewing increased, the age at which a person is considered to be elderly decreased. Television viewing time was not correlated with any of the remaining variables.

**Types of television programming.** The types of television programming participants listed as "most often watched" were classified into eleven categories: Comedy, Drama, Action-Adventure, Soap-Opera,
Table 9. Reported television viewing time by grade-level and sex.

<table>
<thead>
<tr>
<th>Combined</th>
<th>6th</th>
<th>9th</th>
<th>12th</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>96</td>
<td>96</td>
<td>86</td>
<td>278</td>
</tr>
<tr>
<td>Mn</td>
<td>22.60</td>
<td>21.41</td>
<td>10.89</td>
<td>18.58</td>
</tr>
<tr>
<td>Sd</td>
<td>16.46</td>
<td>18.12</td>
<td>9.31</td>
<td>16.09</td>
</tr>
</tbody>
</table>

**Males**

| N        | 47    | 38    | 37    | 122   |
| Mn       | 22.89 | 22.39 | 14.37 | 20.15 |
| Sd       | 17.33 | 17.74 | 11.38 | 15.65 |

**Females**

| N        | 49    | 58    | 49    | 156   |
| Mn       | 22.32 | 20.77 | 8.26  | 17.32 |
| Sd       | 15.75 | 18.50 | 6.33  | 13.81 |

Cartoons; Sports; News; Movies; Game Shows; Educational; and Multiple (for participants listing more than one type of program). Table 10 presents the types of programs in order of response frequency. Comedy shows were viewed by 42.6% of the participants, followed by the multiple category (15.1%), movies (12.7%), and soap operas (11.3%). It was not possible to differentiate types of programs within categories to examine differences in their content. Nor was it possible to specify how much time participants viewed the types of programs listed as compared to other types of programs they viewed.

**Amount of contact with elderly persons.** Responses to this item were coded as follow: 1 represented daily contact; 2 represented contact several times per week; 3 represented weekly contact; 4 represented contact every two weeks; 5 represented contact once per month; and 6 represented
Table 10. Types of television programs reported as "most often watched".

<table>
<thead>
<tr>
<th>Type</th>
<th># subjects</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Comedy</td>
<td>121</td>
<td>42.6</td>
</tr>
<tr>
<td>2. Multiple</td>
<td>43</td>
<td>15.1</td>
</tr>
<tr>
<td>3. Movies</td>
<td>36</td>
<td>12.7</td>
</tr>
<tr>
<td>4. Soap operas</td>
<td>32</td>
<td>11.3</td>
</tr>
<tr>
<td>5. Action-adventure</td>
<td>16</td>
<td>5.6</td>
</tr>
<tr>
<td>6. Sports</td>
<td>9</td>
<td>3.2</td>
</tr>
<tr>
<td>7. Cartoons</td>
<td>8</td>
<td>2.8</td>
</tr>
<tr>
<td>8. News</td>
<td>6</td>
<td>2.1</td>
</tr>
<tr>
<td>9. Game shows</td>
<td>6</td>
<td>2.1</td>
</tr>
<tr>
<td>10. Educational programs</td>
<td>5</td>
<td>1.8</td>
</tr>
<tr>
<td>11. No response</td>
<td>2</td>
<td>.7</td>
</tr>
</tbody>
</table>

contact less than once a month. The mean response was 3.96 (once every two weeks) with a standard deviation of 1.74. The median was 4 (once every two weeks) and the mode was 6 (less than once a month). Table 11 presents amount of contact by grade level and sex. Amount of contact between participants and older persons was inversely related to TLAS scores (discussed previously), but did not correlate with other measured variables (see Table 3).

Perceived age to be elderly. The mean response to "How old must a person be before you feel he or she is elderly?" was 64.95, with a standard deviation of 8.67. The median and mode were 65 and the range was 21 - 100 years. An ANOVA revealed no significant differences in response across grade-level or sex.

Perceived age to be elderly was significantly related to TLAS scores and television viewing time (discussed previously) as well as to
Table 11. Reported contact between participants and older persons by grade-level and sex.

<table>
<thead>
<tr>
<th></th>
<th>Combined</th>
<th>6th</th>
<th>9th</th>
<th>12th</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>95</td>
<td>99</td>
<td>88</td>
<td>282</td>
<td></td>
</tr>
<tr>
<td>Mn</td>
<td>3.37</td>
<td>4.32</td>
<td>4.18</td>
<td>3.96</td>
<td></td>
</tr>
<tr>
<td>Sd</td>
<td>1.65</td>
<td>1.58</td>
<td>1.85</td>
<td>1.74</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>46</td>
<td>40</td>
<td>38</td>
<td>124</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>3.50</td>
<td>4.37</td>
<td>4.31</td>
<td>4.02</td>
<td></td>
</tr>
<tr>
<td>Mn</td>
<td>1.72</td>
<td>1.65</td>
<td>1.78</td>
<td>1.71</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>49</td>
<td>59</td>
<td>50</td>
<td>158</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>3.26</td>
<td>4.28</td>
<td>4.08</td>
<td>3.90</td>
<td></td>
</tr>
<tr>
<td>Mn</td>
<td>1.60</td>
<td>1.54</td>
<td>1.91</td>
<td>1.67</td>
<td></td>
</tr>
</tbody>
</table>

perceived health of elderly relatives ($r = .46; p < .001$), indicating that as perceived age to be elderly increased, elderly relatives were perceived as healthier. Perceived age to be elderly was not significantly related to other measured variables (see Table 3).

**Health of elderly relatives.** Responses to the two questions regarding health of elderly relatives were coded as follows: 1 represented no living elderly relatives; 2 represented living but unhealthy elderly relatives; 3 represented living, healthy elderly relatives; and 4 represented living elderly relatives with unknown health. Response frequencies were as follows: 42 participants reported no living elderly relatives; 26 reported living, unhealthy elderly relatives, 190 reported living, healthy elderly relatives; and 26 reported elderly relatives
with unknown health. Males and females did not differ significantly in reported health of elderly relatives. However, a chi-square test revealed a significant association between reported health and grade levels, with twelfth graders reporting significantly more elderly relatives as "dead" or in "poor health" than sixth graders. Table 12 presents responses by grade level and category.

"On Golden Pond". To the question "Have you seen the movie 'On Golden Pond'?", 72 participants responded "yes" and 212 participants responded "no". Viewing the movie "On Golden Pond" did not correlate with either FAQ or TLAS scores, and it was not compared to other measured variables.

Sources of information. This question was included to obtain some indication of the participants' sources of information about older people. Participants listed their sources of information about the elderly as follows: 150 reported that elderly people were their primary source of information about the elderly; 78 listed parents; 26 listed more than one source; 21 listed television; 7 listed teachers; and 2 listed books.

Table 12. Health of elderly relatives by response and grade level.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Dead</th>
<th>Unhealthy</th>
<th>Healthy</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>6th</td>
<td>7 (2.5%)</td>
<td>4 (1.4%)</td>
<td>71 (25%)</td>
<td>15 (5.3%)</td>
</tr>
<tr>
<td>9th</td>
<td>15 (5.3%)</td>
<td>10 (3.5%)</td>
<td>60 (24%)</td>
<td>6 (2.1%)</td>
</tr>
<tr>
<td>12th</td>
<td>20 (7.0%)</td>
<td>12 (4.2%)</td>
<td>51 (18%)</td>
<td>5 (1.8%)</td>
</tr>
</tbody>
</table>
Discussion

Stereotypes of older persons. The degree to which participants stereotyped older people was measured by scores on the Tuckman-Lorge Attitude Scale (TLAS). High scores on the TLAS indicated more stereotyping of older persons, while low scores indicated a tendency to view older persons as individuals rather than stereotype them.

Stereotyping of older people was found to increase significantly (p<.01) between grades six and twelve. The increase was not significant between sixth and ninth graders or between ninth and twelfth graders. Since causal relations were not assumed a priori in this study, it is impossible to state what conditions may have influenced the increase in stereotyping across grade levels. Several conditions that were found to be related to stereotyping are discussed below.

Males were found to stereotype older persons more than females, based on TLAS scores. Since other researchers have not reported differences in TLAS scores related to gender, the finding that males stereotype older people more than females was unexpected. As with differences in grade level, the reasons for greater stereotyping by male than female participants can not be determined from data obtained here.

Stereotyping (based on TLAS scores) varied inversely with knowledge about aging, indicated by Facts on Aging Quiz (FAQ) scores.
(r = -0.15; p < 0.05). When knowledge about aging is low, more stereotyping of older people was found and vice versa. Palmore (1977, 1980) contended that stereotyping of older people can be reduced by increasing factual knowledge. Although the inverse relationship found between stereotyping and knowledge of older people is of interest in this connection, only an experimental design would permit testing of his assertions.

Stereotyping of the elderly was not associated with reported time spent viewing television. However, limitations in the measurement of television viewing raise doubts about the extent to which this relationship has been explored. Evidence of a relation between the two variables in adults was reported by Gerbner et. al. (1974, 1980), but none was revealed in the present investigation.

Stereotyping of older persons was inversely related to the frequency of contact youths reported with older people (r = -0.15; p < 0.05). As the frequency of contact youths reported with older people increased, stereotyping of older people tended to decrease, and vice versa. Whether changing the amount of contact between elderly people and youths would change youths' stereotypes of older people can not be determined from the present investigation. However, Wallach, et. al. (1979) reported that youths' increased contact with older people lowered their misconceptions about them.

Stereotyping was also inversely related to participants' perceived age for a person to be considered elderly (r = -0.23; p < 0.001). As participants' stereotyping increased, they tended to identify people as elderly at younger ages. The relation found between youths'
perceived age to be elderly and their stereotyping of older people may have implications for their treatment of older persons and expectations for their own aging. Several studies have reported negative connotations associated with the terms "old" and "elderly". Being considered "old" or "elderly" has reportedly had negative effects on the behavior and self-image of elderly people as well as the behavior and attitudes of adults toward elderly people (Philips, 1961; Ward, 1977; Bultena & Powers, 1978; Locke-Connor & Walsh, 1980). When people view themselves as "old", their self-image tends to decline and they tend to behave more consistently with the negative stereotypes about old people. Adults who view people as "old" tend to treat them as helpless, declining people unable to take care of themselves. If youths who stereotype older persons more are more likely to see people as elderly at younger ages than youths who do not stereotype older persons, they may be more apt to distort their expectations of aging for themselves and their elderly relatives and acquaintances.

Stereotyping was significantly related to the reported health of youths' elderly relatives ($r = -.12; p < .05$). Participants with higher levels of stereotyping older people tended to report their elderly relatives as "dead" or "unhealthy" more frequently than youths with lower levels of stereotypes. It can not be determined whether negative stereotypes about older people influenced youths to perceive their elderly relatives as "unhealthy" or whether a lack of healthy elderly relatives influenced participants to accept more of the stereotypes about older people. However, Bekker & Taylor (1966) reported that attitudes toward older people by youths depended on their
contact with living, healthy grandparents and great-grandparents.

Among individual TLAS items, the stereotypes held by a majority of respondents from the physical category describe older people as physically frail, with their sensory capabilities declining, worried about their health and having to be careful to protect it. The physical stereotypes were perhaps the most negative stereotypes held by participants toward older people. The stereotypes from the personality category describe older people more positively, labelling them as kind, calm, gentle, likeable, talkative, giving advice, but enjoying gossip. The stereotypes from the conservatism category portray older people as set in their ways, resistant to change and tradition-oriented. Stereotypes participants accepted from the family category described older people as loving their children and grandchildren and getting love and respect in return, as well as being involved in their families. The accepted stereotypes from the remaining categories describe older people as interested in religion, enjoying their old age, but worried about their finances, and spending time "dozing in a chair".

Overall, the stereotypes of older people endorsed by a majority of participants were not as unfavorable as indicated in previous research (Butler, 1969, 1975; Bunzel, 1972). Although the majority of participants tended to accept stereotypes of older people as physically frail, conservative, and religious (which concur with stereotypes reported by Butler and Bunzel), many of the 32 stereotypes accepted by a majority of participants describe older people somewhat favorably. Yet the number of favorable stereotypes can not be accurately determined because of the variety of possible interpretations of what is favorable.
The tendency to accept stereotypes favorable to the elderly is of interest in that it is rarely mentioned in the literature (Ivester & King, 1977). Also, stereotypes describing older people as useless and unproductive are frequently mentioned as prevalent among adults. But less than 10% of youths in the present investigation endorsed stereotypes describing older people as useless, helpless, incompetent, a nuisance, or insane. Whether the acceptance of stereotypes favorable to the elderly and non-acceptance of unfavorable stereotypes represent a change of attitude toward older people by youths or an artifact of adolescence which disappears in adulthood cannot be determined from the present investigation.

The consistency of belief in certain stereotypes in the TLAS is of interest. Sixth graders tended to accept the same stereotypes as ninth and twelfth graders, as did males and females. If 40% of sixth graders believed a TLAS item to be true, 40% of ninth and twelfth graders tended to believe that the same TLAS item were true. There were few exceptions to this response consistency.

Finally, the mean TLAS score for participants in the present study was 48.37, indicating that participants accepted slightly more than 1/3 of the 137 stereotypes comprising the TLAS. Tuckman & Lorge (1952, 1953) reported mean TLAS scores of 58.54 for adults aged 20-59, and 77.40 for adults aged 60-80. Differences in these means could not be tested because the original data were unavailable. Still, the magnitude of these differences suggests that youths in the present study may stereotype older people less than did adults in Tuckman & Lorge's studies. The lack of data on youth's stereotyping of older
persons in 1952 and 1953 also makes it impossible to determine how stereotyping by youths in the present study may have compared to that of youths at the time of Tuckman & Lorge's (1952, 1953) studies. Two possibilities may be considered. First, the obtained lower level of stereotyping may reflect an age difference in the stereotyping of older people that has not yet been reported. If so, the level of stereotyping older people may increase to that of adults when youths themselves reach adulthood. Second, perhaps the lower level of stereotyping by youths in the present investigation represents a decline in stereotyping older people by all age groups during the thirty years since Tuckman & Lorge's studies. Further research is needed in this area.

**Facts on Aging.** Participants' knowledge of aging and older people was measured with the Facts on Aging Quiz (FAQ). Higher scores indicated greater knowledge about old people. Knowledge did not vary significantly across grade-levels, indicating that sixth graders know as much about aging and older people as do ninth or twelfth graders. The lack of an increase in knowledge across grade-levels is not consistent with Palmore's (1977, 1980) contention that education is a predictor of knowledge about aging and the evidence he reports for this among college undergraduates, graduate students, and faculty members (1980). The relationship between education level and knowledge about aging does not appear to extend to sixth, ninth, and twelfth graders.

Knowledge of older people did not vary significantly between sexes. However, a significant sex by grade level interaction was obtained. While females knowledge of aging increased steadily, but not
significantly between sixth, ninth, and twelfth grades, males' knowledge of aging, after increasing between sixth and ninth grade, declined to a level in twelfth grade that was lower than either sixth or ninth graders' levels. This was an unexpected result, not mentioned in previous reports, which remains unexplained. If sixth and ninth graders have been exposed to information which twelfth graders have not, then scores for twelfth grade males and females should be lower. If twelfth grade males are rejecting facts about older people which twelfth grade females are accepting, an unknown maturational or attitudinal factor may be responsible. Given the significant inverse relationship between knowledge and stereotyping of older people mentioned earlier, a maturational or attitudinal condition is possible, but the identity of that condition is unknown.

Knowledge about older people was not significantly related to any of the demographic variables measured in the present study. The apparent lack of a relationship between FAQ scores and the demographic variables is not surprising in the previous researchers using the FAQ (Palmore, 1977, 1980; Dodder & Miller, 1980) have not reported correlations between the FAQ and any demographic variables except education level.

The mean FAQ score was 11.72 or 48.8% of the questions correctly answered, compared to FAQ means reported by Palmore (1980) of 62% correct for undergraduates, 68% correct for graduate students, and 84% correct for college faculty. While these figures appear to support Palmore's (1977, 1980) assertion that knowledge of aging increases with education, it must be considered that the "?" column was added to
the FAQ in this investigation for the purpose of reducing the number of guesses by respondents, and it was not used in the studies reported by Palmore (1980). Since participants used the "?" column more than four times per questionnaire (Mn = 4.53), and could be expected, by chance, to correctly guess at least two of the items, the use of the "?" column by participants in the present study may have lowered the mean number of correct responses by as much as four, and could be expected by chance to have lowered the mean by two. Therefore, comparison between the mean FAQ score obtained in the present study with FAQ mean scores from other investigations must be interpreted cautiously.

**Limitations.** Several limitations to the present study must be considered in interpreting the data. First, the study made use of self-report, paper and pencil inventories, rather than observed behavior. Subjects may have responded in a socially desirable manner rather than indicating how they actually felt about older people. Unfortunately the monitoring of other behavior and the influence of attitudes from observed performance were beyond the scope of this study. More extensive longitudinal investigations may be appropriate for clarifying further questions raised by the present study.

Though data from the large number of subjects in this study yielded significant relationships, these indicated small portions of common variance. Standard deviations tended to be larger than many of the significant mean differences, indicating a large amount of overlap between groups. Both the power of the significance tests and the large standard deviations suggest the need for caution in
interpreting the meaning of significant differences revealed in the study.

Third, a response bias may have accounted for some of the data. Since all participants received the questionnaires in the same order, the ordering of the questionnaires may have affected their responses. However, several subjects complained about the length of the TLAS and rearranging the instruments might have been even more biasing to the results. A shorter version of the TLAS seems appropriate, especially for sixth graders, who appeared to have the greatest difficulty in completing it.

Conclusions. In this study, stereotypes of older people are shown to have been accepted by many youths. The number of stereotypes tended to increase between sixth, ninth, and twelfth graders, and males tended to accept more stereotypes of older persons than did females. Youths increasingly stereotyped older people as their knowledge of older people decreased, as the health of their elderly relatives worsened, as their contact with older people decreased, and as the age at which youths perceived a person to be elderly decreased. The type of stereotypes accepted by youths appeared to be more favorable than stereotypes reported to be prevalent among adult participants of previous investigations, although the meaning of the differences is not clear.

Knowledge of aging and elderly people did not vary significantly across grade-level or sex, nor did it correlate with any of the demographic variables measured in the study. As knowledge of aging increased, stereotyping of older people decreased, but the nature and
meaning of this relationship remain unclear.

Suggestions for further research. Further research will be necessary to clarify the meaning and nature of several of the relationships revealed by the present investigation. A longitudinal study, following youths from sixth through twelfth grade might identify the meaning of the increase in stereotyping observed across grade-levels. Research focusing on the differences in males' and females' stereotyping and knowledge of the elderly could reveal currently unknown reasons for those differences. An experimental study, testing Palmore's assertions about the effects of knowledge of aging on stereotyping of older persons might be useful in defining the inverse relationship observed between knowledge and stereotyping. The effects of demographic variables (i.e. television viewing) deserve further investigation involving research designs which allow for determining causality. The research on the types of stereotypes accepted by youths may be useful in determining whether the more favorable stereotypes accepted by youths in the present study were the result of changes in attitude brought about by more and accurate information about older people, a maturational artifact which disappears in adulthood, or some other unknown factor. Finally, development of a shorter version of the TLAS would be helpful in further investigations of stereotyping older people, especially in research involving younger children. Given the redundancy of the instrument, a shorter version should be able to obtain results similar to those obtained in the current version, in less time and effort.
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These consist of pages:

- The Tuckman-Lorge Attitude Scale p. 74-79
- The Facts on Aging Quiz p. 80-81
- The Tuckman-Lorge Attitude Scale (revised format) p. 82-88
- The Facts on Aging Quiz (revised form) p. 89-90
Appendix E

Demographic information.

Please answer the following questions to the best of your knowledge. Try to answer all of the questions. If you are not sure of an answer, make your best guess. If you are not sure what a word means, please circle the word.

1. Grade level: 6  9  12  other (circle one)
2. Sex: Male  Female (circle one)
3. How much television do you usually watch in a week?
   ____________________ hours
4. What type of programs do you watch most often?
   ______________________________
5. Do you have any living elderly relatives (over age 65)?
   Yes  No  (circle one)
6. Are they in good health?
   Yes  No  Don't know  (circle one)
7. How old must a person be before you feel he or she is elderly?
   ____________________ years old
8. About how often do you get to visit your elderly relatives or visit with any other old people? (check the one which applies most for you)

_____ every day
_____ several times a week
_____ once a week
_____ once every two weeks
_____ once a month
_____ less than once a month

9. Have you seen the movie "On Golden Pond"?

10. How have you learned about older people? (check the one which applies most for you)

_____ parents
_____ teachers
_____ books
_____ television
_____ older people
Appendix F

THE OHIO STATE UNIVERSITY                                  PROTOCOL No.______________

CONSENT FOR PARTICIPATION IN
SOCIAL AND BEHAVIORAL RESEARCH

I consent to participating in (or my child's participation in) research entitled:

_____________Attitudes and Knowledge of youth about the Elderly_____________

__________________________
Gary W. Piggrem or his/her authorized representative has explained the purpose of the study, the procedures to be followed, and the expected duration of my (my child's) participation. Possible benefits of the study have been described as have alternative procedures, if such procedures are applicable and available.

I acknowledge that I have had the opportunity to obtain additional information regarding the study and that any questions I have raised have been answered to my full satisfaction. Further, I understand that I am (my child is) free to withdraw consent at any time and to discontinue participation in the study without prejudice to me (my child). The information obtained from me (my child) will remain confidential unless
I specifically agree otherwise by placing my initials here ___________.

Finally, I acknowledge that I have read and fully understand the consent form. I sign it freely and voluntarily. A copy has been given to me.

Date:_________________________ Signed:_______________________________
       (participant)

Signed:_________________________ Signed:_______________________________
       (principle investigator or    (person authorized to consent
       authorized representative) for participant - if required)

Witness: _____________________________

HS-027 (Rev. 12-81) -- To be used only in connection with social and behavioral research.
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