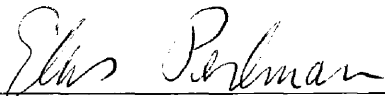


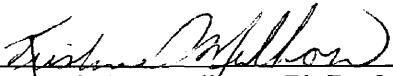
Intergenerational Exchange: Effects on Attitude  
of Deaf Youth Participating in a Program  
with Deaf Older Adults

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## ABSTRACT

### INTERGENERATIONAL EXCHANGE: EFFECTS ON DEAF YOUTH PARTICIPATING IN A PROGRAM WITH DEAF OLDER ADULTS

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Intergenerational relationships have been important aspects of individual and family development in the hearing society. Social science research indicates multiple benefits of intergenerational programs in the hearing society. However, an earnest examination of the literature located no documented studies on intergenerational programs within the deaf society.

More than 90% of all deaf individuals are born into hearing families. Developmental researchers demonstrate that deaf children with deaf parents have superior social function, compared to deaf children of hearing parents. These findings prompted investigation of the effects of intergenerational relationships within the deaf community.

A pilot study testing the effects on attitude of deaf youth (ages 13 through 19) participating in an intergenerational summer program with deaf older adults is described.

A quasi-experimental, pretest/posttest comparison group design was performed involving deaf adolescents (ages 13 through 19) and deaf older adults (over 65). The adolescents' attitude toward older adults was measured using Stremmel, Travis and Kelly-Harrison's "Intergenerational Exchanges Attitude Scale" (IEAS), which was modified for the deaf.

For the experimental group a positive relationship exists for four variables coded as kind, play, fun and hobbies. Higher scores were noted from respondents with the following attributes: male, 15 years old, born in USA, and never having attended camp. None of the respondents reported having an existing relationship with a deaf older adult. Analysis with the comparison group was not possible due to several methodological issues. Proposal to resolve these issues is discussed.

Generalizations are impeded by methodological issues such as dropout rate, size of groups, modification of instrument and length of program. Nevertheless, the exploratory investigation provides a springboard for further research; it alerts program developers for the need to pilot intergenerational programs in the deaf community. In addition, the contributions of this pilot project will stimulate others to examine the effects of intergenerational programs on developmental, educational and gerontological issues, paralleling studies in the hearing community.

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**May this work pave the way for a deeper  
understanding of deafness and deaf culture.**

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## GLOSSARY

1. **American Sign Language**....A gestural language spoken by the Deaf. The language has its own form, syntax, modals and grammar.
2. **Deaf**.....A group of peoples who are unable to hear, are members of a distinct culture, communicate by using the gestural language known as American Sign Language.
3. **deaf**.....an individual who is unable to hear.
4. **Gerontology**.....Study of the elderly.
5. **Intergenerational Program**...A program providing organized activities designed to bring together two or more generations for the purpose of change.
6. **Intergenerational**.....Relationship between two or more persons of different generations or cohort groups.
7. **Postlingually deaf**...An individual who becomes deaf after the age of language acquisition. These individuals are more likely able to develop voicing and lip reading skills because they have already been exposed to the language.
8. **Prelingually deaf**...An individual who becomes deaf before the age of language acquisition, which usually occurs between the ages of two and three. These individuals usually have difficulty learning the English language or developing voicing or lip reading skills because they have never been exposed to hearing the language.

9. **Total Communication**.....A method of communicating with a deaf individual using a variety of methods such as American Sign Language, Mime, Signed English, Pigeon Sign, or gestures.

## INTRODUCTION

Currently, over 90% of all deaf individuals are born into hearing families (Padden & Humphries, 1988). One issue that stands out in the literature that deals with raising a deaf child is the effect that communication has on both family and child development. When considering the implications that raising a deaf child has on a family's development, the relationships can be seen from multiple viewpoints. The relationships can be seen from the parent's experience, the child's experience, the experience of the other immediate family members and extended family observers. In addition, society's view can include observations from various social institutions such as the church, the school, the neighborhood, the criminal justice system, and so forth.

In hearing families, grandparent figures provide children with opportunities for emotional, psychological and social development through special intergenerational exchanges (Strom & Strom, 1994). The deaf child is disadvantaged from birth because of limited opportunities to develop relationships with deaf older adults. Intergenerational programs including deaf children and deaf older adults may be beneficial in reversing some of these disadvantages.

A lengthy literature search produced no existing studies of intergenerational programs in the deaf community. Therefore, this study investigates the perceived benefits of intergenerational exchanges between deaf children or youth and deaf older adults based on a newly developed program.

Specific attention is given to the effect on attitude changes resulting from intergenerational contacts.

Chapter 1 explains the problem that is hypothesized because of a lack of intergenerational relationships between old and young deaf. In addition, a discussion of the importance of the need for intergenerational contacts is described, based on studies of the hearing population. Finally, the theoretical framework for this study is briefly discussed.

Chapter 2 focuses on attitudes, followed by a discussion on attitudes toward aging and summarizes the implications this has on development of the hearing child. These findings have may have equally important implications on development of a deaf child.

Chapter 3 discusses methodology of the study, including research method, design, instrumentation, sampling and experimental procedures and other methodological issues. There are several methodological issues which need to be resolved for future research. Proposals to resolve these limitations are discussed in the final chapter, Chapter 4.

The Appendices give examples of a sample time line for future research, in addition to several sample letters necessary for this work to take place. It is the hope of the investigator that this study will provide an interest in pursuing further research on intergenerational relationships in the deaf community.

# CHAPTER I

## STATEMENT OF THE PROBLEM

Of the estimated 22 million deaf individuals, the US Census (1990) estimates that 481,000 are over 65 and 754,000 are over 75 years old. There are no data available providing the number of deaf youth; however, calculations based on the above findings indicate that there are more than 10 million deaf individuals who are not elderly. So what difference does it make?

Becoming aware of other age groups than our own is vital for a broad outlook and for becoming responsive to other's needs. This view of life only comes about if we adopt a perspective that takes into account the ideas of other age groups as well as our own. In addition, developing a positive attitude about aging at an early age affects self-perception related to one's own aging (Levy, 1994).

Robert Butler is generally credited with coining the term "ageism" in 1969 to describe a societal pattern of attitudes and stereotypes that devalue aging and old people. Butler writes, "Ageism can be seen as a systematic stereotyping of and discrimination against people because they are old, just as racism and sexism discriminate against skin color and gender" (Cook, 292). Attitudes such as ageism predispose the individual to act and react in a consistent way that may be learned through experiences in interactions with family, parents, neighbors, teachers and peers. In his research on attitudes toward elderly, Zandi (1990) finds children as young as three years of age have an aversion to old age. Ageism is central to the construction of identity. We will all encounter it, should we live long enough.

Review of the literature by deaf and hearing authors identifies the importance of intergenerational relationships between young and older deaf adults within the Deaf community. There is a bond between the generations that one sees in any culture that has the same language (Padden, 1988; Vickrey, 1993). No documentation was found on the effects of intergenerational programs or intergenerational exchanges between deaf child or adolescent and deaf older adult. This finding has prompted investigation of intergenerational relationships in the Deaf community. Specifically, this exploratory work investigates differences in the intergenerational attitude exchanges scores (IAES) of deaf youth who participate in an intergenerational program with deaf older adults, to a similar group of deaf youth who are not involved in an intergenerational program.

### **IMPORTANCE OF THE PROBLEM**

More than 90% of all deaf individuals are born into hearing families. Few deaf children have the opportunity to experience a relationship with deaf grandparents or deaf older adults (Padden, 1988). Intergenerational relationships of the same cultural background are an important source of investigation in the hearing culture.

In a study on the effects of intergenerational experiences on adolescents and older adults, Chapman (1990) finds that in the hearing world, intergenerational relationships have been instrumental in developing social and emotional maturity. These relationships are also believed to be instrumental in increasing academic understanding, enabling learning opportunities about culture

and traditions, and changing attributes such as negative attitudes about aging (Chapman, 1990; Newman, 1997).

The importance of studying this problem in the deaf community has several implications. First is the implication for communication. There has been ongoing controversy between educators of the deaf on which type of communication, oral or manual, is better. Padden (1988), a highly respected author and member of the Deaf community, points out the importance of communication between deaf individuals. Research on emotional support of deaf adolescents indicated that relationships involving all adolescents produced more effective outcomes than did relationships of the deaf adolescents with hearing adolescents the same age (Bonham, 1981). As in any culture, the signed language of the Deaf is their common bond. Some (VanCleve, 1990) believe the hearing world is attempting to eliminate this beautiful gestural, artlike language. For a culture which depends on intergenerational communication to survive, are modern trends causing a breakdown in intergenerational relations for the deaf? This investigation offers an opportunity to study the effects an intergenerational program has on the attitude of deaf adolescents toward deaf older adults communicating in the same language, American Sign Language.

Second, this investigation provides a springboard for considering the effects on the developmental process of a deaf child participating in an intergenerational program starting in early childhood. These considerations are based on developmental benefits attributed to grandparent/grandchild relationships in the hearing community.



Third, the research provides a framework for other investigations on intergenerational exchanges in the deaf community. Assuming the benefits from intergenerational exchanges for deaf participants are similar to those received by hearing participants, this research provides a framework for initiating significant changes in deaf education and intergenerational programs within the deaf community.

The results of this investigation also have implications for the family of a deaf child and the community within which they live. Many barriers inhibiting success for deaf individuals are based on problems with communication, self-esteem and emotional development (Neisser, 1990). Intergenerational exchanges through planned intergenerational programs starting at an early age may be beneficial in breaking down some of these barriers.

The research takes place in a summer camp setting. The researcher chose this setting because she was aware of the involvement of older deaf adults volunteering at the time of the youth sessions. She has worked at the camp as Health Director for many years and has observed a unique bonding that takes place between the young and old deaf. Therefore, the three week camping session at Camp Mark Seven was chosen for this investigation.

### **THEORETICAL MODEL**

Two conceptual frameworks provide a foundation for this study. First, symbolic interaction theory (Cooley, 1902; Mead, 1934; Rose, 1962) focuses on social psychological processes of socialization and personality development. It

identifies the need for an individual to interact in his or her particular culture. The interactionist is concerned with meanings that human beings attach to things such as age, body appearance, behavior, social class and values. The self develops out of interactions and experiences with others. The individual learns in an interactive process which is mediated by specific social relationships within a common culture; interaction involves either spoken or unspoken language (Ames, 1998). The symbolic interaction model provides a framework for the importance of same culture individuals benefiting from role-modeling, role-taking and role-making relationships. The deaf child is unable to share in this interactive process within the family, especially when he or she is young and the family has not yet learned to communicate using the gestural language of signs.

Second, the developmental model (Hill, 1964; Duvall, 1967) examines stages of human development, child psychology and language development. Developmentalists (Charles, 1987; Morris, 1990) identify the importance for early language and stage development. Most deaf children are not born into families with other deaf individuals; therefore, focus on developmental tasks may be hindered by communication breakdown within the family.

It is through these approaches that the theoretical orientation for this study derives focus. It should be noted however, that two studies of intergenerational contact (Hernandez, 1995; Auerbaack & Levenson, 1997), found that contact can cause negative rather than positive attitude change in young adult participants toward older adult participants. Most studies agree that intergenerational contact most likely leads to positive change when two groups are of equal socioeconomic

status, when contact is pleasant and at an intimate level, and when the interaction is over time (Chapman, 1990; Newman, 1989).

### **IMPLICATIONS FOR SYMBOLIC INTERACTION THEORY**

Symbolic interactionist George Herbert Mead believed two basic concepts that underlie symbolic interactions are the "self" and the "mind" (Winton, 1995).

He believed that a great deal of what people know about themselves they internalize from the appraisals of others (Winton, 1995). The development of "self" is the result of a social process, arising from interactions (Ames, 1998).

A lifelong process of socialization is an important element of symbolic interaction theory (Winton, 1997). Moreover, the developmental process of socialization and personality development is based on action and interaction of the family, resulting from communication processes (Winton, 1997).

For the average deaf child born into a hearing home, interaction within the family is often stressful, unpredictable and grounded in mixed emotions and stages of grief (Supalla & Bahan, 1994). The child translates actions of others and internalizes them. Further, communication and socialization processes become progressively more difficult when the parents do not learn the natural gestural language of their child.

This poses an important question regarding the emotional and social development of the deaf. Where does the typical deaf child have the opportunity to develop socially when there are limited opportunities to experience role taking, role playing or role making from an older individual speaking his or her own language?

## **IMPLICATIONS FOR DEVELOPMENTAL THEORY**

Developmental theorists examine the stages of family formation and individual development. This field grew out of human development, child psychology and rural sociology; they are concerned with both biological and psychological changes. Each family and child experience different developmental tasks as they progress from infancy to childhood to adulthood (Winton, 1995). Developmental theorists recognize the importance of seven developmental tasks: reproduction, physical maintenance, protection, education and socialization, recreation, status conferring and affection giving. Successful completion or unsuccessful completion of a task at an earlier stage influences the ability to perform tasks at later stages of development (Winton, 1995).

Formation of the family with a deaf child comes with many challenges. The parents must adjust to having a child who is different from the rest of the family. Societal pressures of raising a child with deafness causes interfamilial stress. Dreams and goals are altered and family relationships change. These challenges cause emotional and physical exhaustion of the parents, which often leads to isolation and withholding attention to the child. Therefore, for the family of a deaf child, some developmental stages are prolonged, some completely broken.

The next chapter reviews some of the literature which identifies implications that deafness has on child development. It also discusses how planned intergenerational exchanges between young deaf and old deaf may be beneficial.

# CHAPTER II

## LITERATURE REVIEW

### DEAFNESS: IMPLICATIONS ON DEVELOPMENT

In order to assess the implications of deafness for the deaf child in various types of social relationships, it is necessary to understand dominant factors which influence and shape behavior.

Deaf people are more than just people with an inability to hear. They make up a unique culture with stories, jokes, expressions and a distinctive language that includes grammar, syntax and form (Padden, 1994). Much controversy has occurred over the years regarding the deaf and their language. As early as the Roman Empire, deafness has carried a stigma among families. Deaf children were not even allowed to be heirs to their parents' estates (Van Cleve, 1993). In the early 1800s, sign language was prohibited from schools. It was felt that if the deaf were allowed to speak in sign language, they would never learn English. However, deaf educators soon realized that students' understanding increased when communication took place using sign language. Pioneer educator for the Deaf, Laurent Clerc, found that a formal sign language existed in France. Subsequently, he visited France, learned the basics of the language and brought it back to the United States (Panara & Panara, 1981). From early 1817 until the late 1800s, sign language was established and considered indispensable by deaf educators (Van Cleve, 1993). Controversy between two camps of deaf educators developed in the early 1900s. The older "manualist" educators defended their use of sign language and their younger "oralist" adversaries advocated speech and lip reading (Van Cleve, 1993). This controversy still prevails.

In the 1960s and 1970s, professionals such as Emerton (1990) began to question the social dimensions of deafness. He studied the development of social maturity in deaf adolescents and adults.

Similar research conducted over the past two decades suggests that children with prelingual (before speech) hearing impairments are at a greater risk for social-emotional maladjustment than their normally hearing peers (Cates, 1990).

Mathis (1975) presented a paper on the social aspects of deafness. He concluded that the most significant influence in a deaf child's emotional life is the attitude of his parents. Approximately 85-95% of deaf offspring have hearing parents, a fact which explains in large measure the trauma which ensues when the existence of irreversible hearing loss has been established (Mathis, 1975). This pilot writing does not attempt to discuss the psychological and sociological implications of deafness at length, but social skills, attitude and maturity are examined in the theoretical context of self concept, socialization and identity (Emerton, 1990).

To be deaf in a hearing society primarily affects communication. In a project where group therapy was provided for a group of deaf adolescents, Bonham (1981) studied the effects of deaf youth meeting together with peers and discussing issues at hand. He notes the results were remarkable. Special education staff commented that students showed increased interest in one another and parents commented on experiencing better relationships in the home (Bonham, 1981).

From a developmental standpoint, breakdown of the immediate family communication system affects every stage of development. For example, consider Maslow's hierarchy of needs, which underlies the developmental theory. The hearing baby has his **food and safety** needs met by communicating through crying. He likewise receives **comfort** by the sounds of his parents. Similarly, the young hearing child learns **social skills** through play and communication with other children. The child learns through actions and words of explanations spoken by adults, such as parents, teachers, friends and relatives. With these rules of life as a foundation, the youngster also learns many lessons by simply overhearing conversations between others. The sound of one's voice inflects joy or anger, pride or embarrassment. As the child grows and matures, many social skills such as respect, self-control and trust are learned by observation and listening. According to Maslow's hierarchy of needs, accomplishment of these skills brings a sense of **self-actualization**, which is the highest form of need.

Bonham (1981) illustrates that communication pervades every fundamental need. He explains that communication has different functions and is used in different ways. Persons use verbal, manual and social communication in order to exchange information and meet needs. Verbal communication is the tool which most children have available to them, but understandably, the deaf individual in the hearing world is cut off from these tools (Bonham, 1981).

Many deaf youth are alienated from other deaf people since they live in hearing families. Public Law 94-142, The Education for All Handicapped Children Act was passed in 1975 and revised in early 1980. This law declares



that deaf children are entitled to an education in their local school districts. The idea of "integrating the handicapped" with the general population has an inherent attraction, but the mainstreaming movement may have caused disruptions in the education of deaf children (Van Cleve, 1993). By providing "equal" education to all children, deaf students are mainstreamed into hearing schools. At times, this phenomenon isolates the deaf student even more from peers who share the same method of communication. Within a decade under this law, residential schools that once enrolled as many as five hundred children find themselves with as few as one hundred fifty (Van Cleve, 1993). Therefore, peer support, communication, and the opportunity to develop socially has been minimal; now, instead of introducing new worlds to deaf children the new social order may actually be leading them into a new kind of social isolation (VanCleve, 1993). Because of these language barriers, communicating abstract ideas such as values, roles, moral codes and religious beliefs can be difficult.

Social skills, attitudes and maturity are recurring topics of research, discussion and frustration among educators of deaf children. The purpose of this pilot research is to investigate perceived attitudes of deaf youth toward deaf older adults. Although several avenues for investigation could be taken, the choice of this focus is based on research within the hearing society that describes how our attitude toward the aged and aging has become more negative over the generations. The hearing world has been counteracting a negative attitude toward the elderly by implementing intergenerational programs involving young and old. It is important to realize what position attitude plays in the organization of this

study. If intergenerational relationships are important in the development of the hearing population, a logical assumption is that they would be beneficial within the deaf community as well.

## **ATTITUDES**

Gregory Maio studied relations between values, attitudes and behavioral intentions, and discovered many important functions of attitudes. Two important functions are that they give meaning to the self, and they allow a person to understand relations to objects in the environment (Maio, 1995). Both are important functions that help shape value and develop self-concept.

Children develop negative attitudes about old age as young as three years of age. They mimic the behavior of their parents and peers and acquire attitudes even when no one is trying to influence their beliefs. In addition, childhood exposure to the negative images of old age present in fairy tales, television and everyday conversation can actually influence their perceptions of becoming old themselves (Zandi, 1990). Consequently, negative attitudes about aging held by children today not only have immediate effects on the elderly, but also affect their own aging. Findings such as these prompted researchers (Chapman, 1990; Newman, 1989) to study intergenerational exchange and develop intergenerational programs in the hearing society.

## ATTITUDES TOWARD AGING

Attitudes towards aging and the aged have become more negative since before modernization (Van Tassel, 1992). Historically, old people held a central position in the traditional American family. However, a shift has taken place. Researchers (Cook, 1992) find that increasingly negative attitudes toward old people are a result of structural changes coming out of rapid technological, economic and social changes occurring in the nineteenth and twentieth centuries (Cook, 1992). Cultural and ideological changes destroyed the hierarchical support reverencing old age, and substituted an emphasis on childhood and youth.

Kenneth Ferraro analyzed data from two surveys for the National Council on Aging. He examined how images of older people have changed and concludes that society is fundamentally ageist and carries negative attitudes about older people (Cook, 1992).

Not all ageism is negative. Some (Cook, 1992) show examples of positive ageism exaggerated in stereotypes of the elderly who are healthy, active, quick witted, admired and physically, socially and mentally active, although these viewpoints are rare. Ageism, like racism and sexism, is a form of prejudice, a form of oppression. It not only limits people who are the object of the oppression, but also shapes perceptions of people, both old and young, who hold ageist attitudes (Laws, 1995).

Levy and Langer (1994) explored negative stereotypes about aging. They discovered that children develop negative attitudes about old age as young as six

years of age. Childhood exposure to the negative images of old age present in fairy tales, television and everyday conversation can actually influence their level of activity and alertness when they become old themselves. Consequently, negative stereotypes about aging not only affect the elderly of today; in addition, they influence how individuals will see themselves in the future. Negative attitudes toward older people cut across all ages, educational levels, geographic locations, social classes and occupations (Katz, 1990). Nancy Falchikov (1990), a researcher from Scotland, analyzed youthful ideas of old age by means of analyses of children's drawings of young and old people. She found that physical aspects of aging seem to dominate the stereotypes held. In addition, lack of frequent contact with older people contributes to children's tendencies to stereotype. Falchovic (1990) also found that others (Storey, 1977) identified many stereotypic and negative images of older people in children's literature. She analyzed different drawings of older people from 28 children in a Primary 7 class. She concluded that there were consistent differences between children's drawings of old and young people, with pictures of old people receiving lower standard scores than those of young people. Although her target population was small, her research suggests that negative attitudes of aging and the elderly are present in young populations.

Levy (1994) found two cultures that share positive views toward aging; Mainland Chinese and American Deaf still seem to hold their aged members in high esteem. Others (Levy, 1994; Collins, 1994; Stahl, 1993) agree that hearing Americans hold negative attitudes toward aging, while attitudes within the deaf

community may not be as negative. Perhaps the inability to overhear society's ageist attitudes allows the deaf to maintain respect for their elders. However limited research was found on attitudes of aging or the aged in the deaf community.

Society is faced with a dilemma of how to reduce the incidence of negative attitudes toward aging and the aged and to appreciate and use our ever-growing elderly population. In the hearing population, intergenerational programs are used to close the gap between the generations. Developmental researchers (Winton, 1991) indicate that there are many benefits that come from developing relationships with our older generation. However, these benefits may not be occurring in the deaf community. Researchers such as Sally Newman (1989; 1997) and Nancy Chapman (1990) are among the pioneers in developing intergenerational programs to help combat some of these negative images and to optimize intergenerational relationships.

Public views of the elderly have changed. Society carries negative images of aging. Moreover, a variety of other cultures have taken on this Western viewpoint (Falchikov, 1990). Falchikov (1990) studied children from five different cultures (Aleutian Islands, Australia, United States, Paraguay, and Thailand). In each of these different cultures, people held more positive attitudes toward young than old (Falchikov, 1990). Several others (Strom, 1995; Katz, 1990; Falchikov, 1990; Stahl, 1993) conclude the same findings; there is a breakdown of intergenerational exchanges and an acquisition of negative attitudes toward aging and the aged.

## INTERGENERATIONAL PROGRAMS

Intergenerational programs (programs between two or more generations designed to bring about change) began to sprout when declining student enrollment, coupled with increasing economic pressures, forced schools to look at non-traditional approaches to education. During the late 1960s, more students were enrolled in schools; however, cutbacks decreased the number of educators in the workforce and increased the student to teacher ratio. Researchers such as Chapman and Neal (1990) realized that intergenerational programs might help the situation. They found that the older adults were instrumental in teaching the adolescents life skills. Others (Stowell, 1989) discovered that intergenerational programs encourage more efficient use of resources and enrich the lives of the participants. Newman (1989) reiterates that intergenerational relationships, such as those developed in intergenerational programs, offer a more comprehensive view of the world than those provided by any peer group.

Grandparent/grandchild type relationships provide unique exchanges that benefit both young and old, and as society continues to change, these programs can be used to promote social balance. In this way, children and older adults mutually benefit from shared experiences and daily contact (Chapman, 1990).

Intergenerational experiences involve sharing of skills, knowledge, or experiences between young and old. For programs to be most beneficial, intergenerational programs should be structured to promote opportunities to develop intimate relationships over time. Therefore, increasing the amount of

contact between the generations will build understanding and more positive attitudes (Chapman, 1990).

Robert and Shirley Strom examined aging and development with an emphasis on grandparenting issues. Recently they evaluated the effectiveness of grandparenting relationships in several cultures (Strom&Strom, 1995; 1996). They found that significant lessons for the youth evolved from intergenerational contacts. These lessons include caring how others feel, communicating what is expected of a younger person, showing good manners, and developing a sense of right and wrong. Benefits for the elders include providing opportunities for life long learning, sharing stories about culture and traditions, identifying ways of creating and maintaining identity, and developing personal and social relationships.

Intergenerational relationships have been important aspects of reducing ageism in the hearing society. In 1963, Sally Newman pioneered the first intergenerational program. The initial intent of this program was to match older adults with under-privileged children (Chapman, 1990; Newman, 1989). Thereafter, intergenerational programs have been effectively producing many outcomes, including positively changing attitudes of youth towards elderly and of elderly towards youth.

## **PROBLEMS WITH INTERGENERATIONAL PROGRAMS**

Stremmel, Travis and Kelly-Harrison (1994), professors in the department of Family and Child Development at Virginia Polytechnic Institute in Virginia, studied perceived benefits and problems associated with intergenerational exchanges in day care settings. Some of the problems they identified concentrated on program design issues such as cost, transportation and activities geared for both generations. Specifically, three themes focusing on sociocultural, generational and organizational or service delivery issues emerged from the data (Stremmel, 1994). The results showed that cultural and organizational benefits are counterbalanced by generational differences. Important issues face child and adult care administrators, such as training and supervision of staff members, planning and directing of intergenerational activities and designing curricula appropriate for intergenerational programming (Stremmel, 1994). They found that these dual-dependent partners (youth and elders) are dependent on others to plan and develop opportunities for intergenerational exchanges. They also concluded that professional providers play pivotal roles in the success or failure, benefits and consequences of these programs (Stremmel, 1994).

For more than twenty-five years there has been a rise in the number of programs that bring young children and elders of the hearing world together for planned intergenerational activities. If these types of intergenerational exchanges benefit those participants in the hearing population, will they have the same effects for the Deaf?



## IMPLICATIONS FOR SOCIALIZATION

In the next two decades, the proportion of adults over the age of 65 is predicted to double. The US census indicates that by 2035 at least 23% of the population is projected to be over 65 (Gilford, 1989). Estimates also indicate that there will be more than 15 million dependent youth between the ages of 14 and 17 (US Census, 1990). Of the 22 million deaf individuals, the US census projects that 481,000 will be over 65 and 754,000 will be over 75 years old. There are no available data on the number of deaf youth; however, calculations based on the above findings indicate there will be more than 10 million deaf individuals who are not elderly. Considering the adolescent to older adult ratio in the deaf community, opportunities to have intergenerational contact should be pursued.

Works such as those done by Cates (1990) and Emerton (1979) demonstrate that social and emotional development is positively related to interactions between individuals of the same cultural background and communicate using the same language. Developmental theorists and symbolic interactionists believe that role modeling, handing down traditions and communicating in the same language is instrumental in normal development of the child and healthy family relationships. Further, studies on social development of deaf children confirm that children with deaf parents have superior social, academic and emotional development compared to deaf children of hearing parents (Cates, 1990; Emerton, 1979). These findings are primarily attributed to communication.

## THE SIGNIFICANCE OF ROLE MODELS

Deaf adolescents face the same tasks of adolescent growth and development as their hearing counterparts. The deaf child seems to resolve each stage of development only partially or with delay (Bonham, 1981). Today, more deaf children receive their education in hearing settings and face complex patterns of interaction. Bonham (1981) believes that this social transition coincides with a time of heightened physical and emotional adjustments of adolescents.

School programs are taking into consideration these factors in curriculum planning so that the transitions through development can be as smooth as possible. It remains unclear if group experience can be used successfully to treat the significant lags of normal growth and development. But, in the hearing world, youth are being positively affected by such programs as mentoring programs, role modeling classes and other intergenerational exchanges (Newman, 1997).

Deaf youth are not regularly exposed to older deaf role models in a way that would provide first hand knowledge of deafness in relation to aging. This may be an important element leading to developmental lags of deaf children.

In his study on deaf children, Cates (1990), suggests that problems in social behavior and emotional adjustment reflect delay in the development of social cognitive processes (Cates, 1990). He believed that role taking has been delayed in deaf children because of the reductions in both quantity and quality of communication which frequently characterizes their social experience.

Grandparent figures are important role models for children. Many children are separated from their own grandparents through death, divorce or distance

(Wallerstein, 1983). Intergenerational programs are one way of providing intergenerational exchanges with surrogate grandparents for all children.

Limited documentation investigating intergenerational studies within the deaf community makes it difficult to evaluate intergenerational influence within that community. Moreover, an extensive literature search produced only a few studies on intergenerational relationships between young and old deaf adults. These findings prompted an interest in studying whether intergenerational relationships within the deaf community produce similar results as found in the hearing culture.

In the hearing culture, the need for these types of programs is based on three common assumptions. First, older people and youth have negative attitudes toward each other (Chapman, 1990). Second, in our mobile society, youth and elderly have little contact (Sussman & Pfeifer, 1988). Third, increasing the amount of contact between the generations will build understanding and more positive attitudes toward each other (Chapman, 1990). This paper will not attempt to analyze the literature review which underlies these assumptions, but the trend is that most researchers have found them to be valid (Strom, 1996; Newman, 1989; Chapman, 1990; Stremmel, 1994). The preceding assumptions are based on research from the hearing population; however, for the purpose of this study, the same assumptions will be held for the deaf community.

## SUMMARY

Society is changing. Family relationships are changing. Researchers have noted a breakdown of intergenerational relationships within the hearing families, and studies indicate a need to develop and maintain intergenerational exchanges between young and old (Chapman, 1990).

Intergenerational contact influences emotional, social and psychological development. The deaf youth lacks developmental skills compared to her or his hearing counterpart. Communication is believed to be one of the major causes that leads to these delays. Some believe that intergenerational programs are an avenue for deaf youth to experience some of the normal communication experiences that naturally occur in hearing families

As noted, there are many hypotheses to explain breakdowns in communication and respect for the elderly; and, there are assumptions that defend the need for establishing intergenerational programs to counter these breakdowns. Considering positive effects of programs on hearing populations, this study investigates the effects that intergenerational programs have on the attitude that deaf adolescents have toward deaf older adults.

No secondary data are found about intergenerational attitude exchange within the deaf community; therefore, the researcher received permission to evaluate a program, which is run as a summer camp for deaf adolescents.

The length of the program is three weeks, which limits potential impact, but for this pilot study, the findings provide foundational information to provide a framework within which to develop future efforts.

The researcher serves as Health Director at the camp. She has observed relationships between many deaf youth and deaf elders over the years. This experience has prompted a decision to study the intergenerational exchanges that occur between the deaf adolescents and deaf older adults who participate in the summer program. An intergenerational focus is not the mission of the camp, neither is it described as one of its goals or objectives. However, based on observations of intergenerational relationships in the past, the researcher received permission from the camp Board of Directors and performed her study with the participants of the 1997 summer youth session.

The following chapter discusses the methodology and findings that were obtained in the exploratory study.

# CHAPTER III

## **RESEARCH OBJECTIVES**

The overall purpose of this project is to investigate the effects an intergenerational program has on attitude of deaf adolescents toward deaf older adults. The objectives of this exploratory work are met by addressing the following questions. What are the attitudes of deaf adolescents toward older adults, as measured by the intergenerational attitude exchange score, before they become participants in the program? What is the intergenerational attitude exchange score after the participants complete the program? Is there change in attitude of deaf adolescents toward deaf older adults participating in an intergenerational program compared to a similar group not participating in such a program? Are there gender differences? Are there age differences?

## **RESEARCH QUESTIONS**

In order to accomplish the stated objectives, several specific research questions are addressed. Because there is not sufficient literature to support an investigation on attitude of deaf adolescents toward deaf older adults, one question to be investigated is whether deaf adolescents have a negative attitude toward deaf older adults.

Building on the first question, this study investigates whether participation in an intergenerational program causes either a positive or negative effect on attitude of deaf adolescents toward deaf older adults.

Another question is whether young deaf adolescents (ages 13 through 15) and older deaf adolescents (ages 16 through 19) differ in their attitudes toward

older deaf adults. Fourth, is there a difference between deaf male adolescents and deaf female adolescents in their attitudes toward deaf older adults.

A final research question is whether deaf adolescents have existing relationships with older adults or older deaf adults. The investigator realizes that the sample size is too small to perform a factorial design study, however the questions are discussed based on descriptive observations.

### **RESEARCH HYPOTHESES**

For this study, ten hypotheses are considered:

1.  $H_0-1$  There is no difference in the Intergenerational Exchanges Attitude Scale (IEAS) score of deaf adolescents toward deaf older adults after participating in an intergenerational program with deaf older adults compared with a similar group who does not participate in a program.
2.  $H_a-1$  The IEAS of deaf adolescents who participate in the intergenerational program will be significantly more positive as compared to a similar group who do not participate in a program.
3.  $H_0-2$  There is no difference in the IEAS score of young adolescents (13 through 15 years) toward deaf older adults after participating in an intergenerational program with deaf older adults compared with a similar group of older adolescents (16 through 19 years) who participate in the same program.



4.  $H_a$ -2 The IEAS score of the young adolescents will be higher than the IAES of older adolescents (16 through 19) who participate in the same program.
5.  $H_o$ -3 There is no difference in the IEAS score based on gender.
6.  $H_a$ -3 Female adolescents participating in an intergenerational program with deaf older adults will have higher IEAS compared with male adolescents participating in the same program.
7.  $H_o$ -4 Deaf adolescents do not have intergenerational relationships with older adults.
8.  $H_a$ -4 Deaf adolescents do have intergenerational relationships with older adults.
9.  $H_o$ -5 Deaf adolescents do not have intergenerational relationships with deaf older adults.
10.  $H_a$ -5 Deaf adolescents do have intergenerational relationships with deaf older adults.

**Decision Rule:**

A chance probability of .05 or less ( $p \leq .05$ ) is required to reject the null hypotheses.

## DEFINITIONS

### **Dependent Variable:**

**Conceptual definition:** Conceptually, the dependent variable is the effect that the intergenerational program has on the attitude of deaf adolescents towards deaf older adults.

**Operational definition:** Operationally, the dependent variable is measured by asking the respondent to answer the Intergenerational Exchanges Attitude Scale questionnaire. This data is translated into numerical code and translated into categories most useful for this study.

### **Independent Variable:**

**Conceptual definition:** Conceptually, the independent variable is the intergenerational program.

**Operational definition:** Operationally, the independent variable is a three-week summer program involving participants of two groups. One group is deaf adolescents (ages 13 through 19). The other group consists of deaf older adults (over age 65).

### **Intergenerational Attitude:**

**Conceptual Definition:** Conceptually, intergenerational attitude refers to the respondents' subjective feeling of satisfaction with their relationship to an older adult.

**Operational Definition:** Operationally, the intergenerational attitude exchange is measured by the Intergenerational Exchanges Attitude Scale which is

based on a five point Likert Scale ranging from 1 (strongly disagree) to 5 (strongly agree). For sample of Intergenerational Attitude Exchange Scale see Appendix F.

**Adolescent:** Conceptually, adolescent refers to youth aged 13 to 19.

**Intergenerational Exchanges:** Conceptually, an intergenerational exchange refers to a relationship between two or more generations with an emphasis on communication between the groups.

**Intergenerational Programs:** Conceptually, intergenerational programs refer to a program involving two or more generations for the purpose of change.

**Instrument:** The Intergenerational Exchanges Attitude Scale.

## RESEARCH ASSUMPTIONS

This study is based on four research assumptions. First, it is assumed that the generalizability of this study will be difficult due to the sampling frame and time span. However, accessibility of the sample provides an opportunity to perform the investigation.

Second, because most deaf individuals are raised in hearing homes, it is assumed that deaf adolescents are not often exposed to deaf older adults on a regular basis. Third, research indicates that communication may be limited with the extended family of a deaf child, therefore, it is assumed that deaf adolescents are not exposed to older adults either. Fourth, due to limited documentation, it is assumed that deaf adolescents are not generally involved in intergenerational programs.

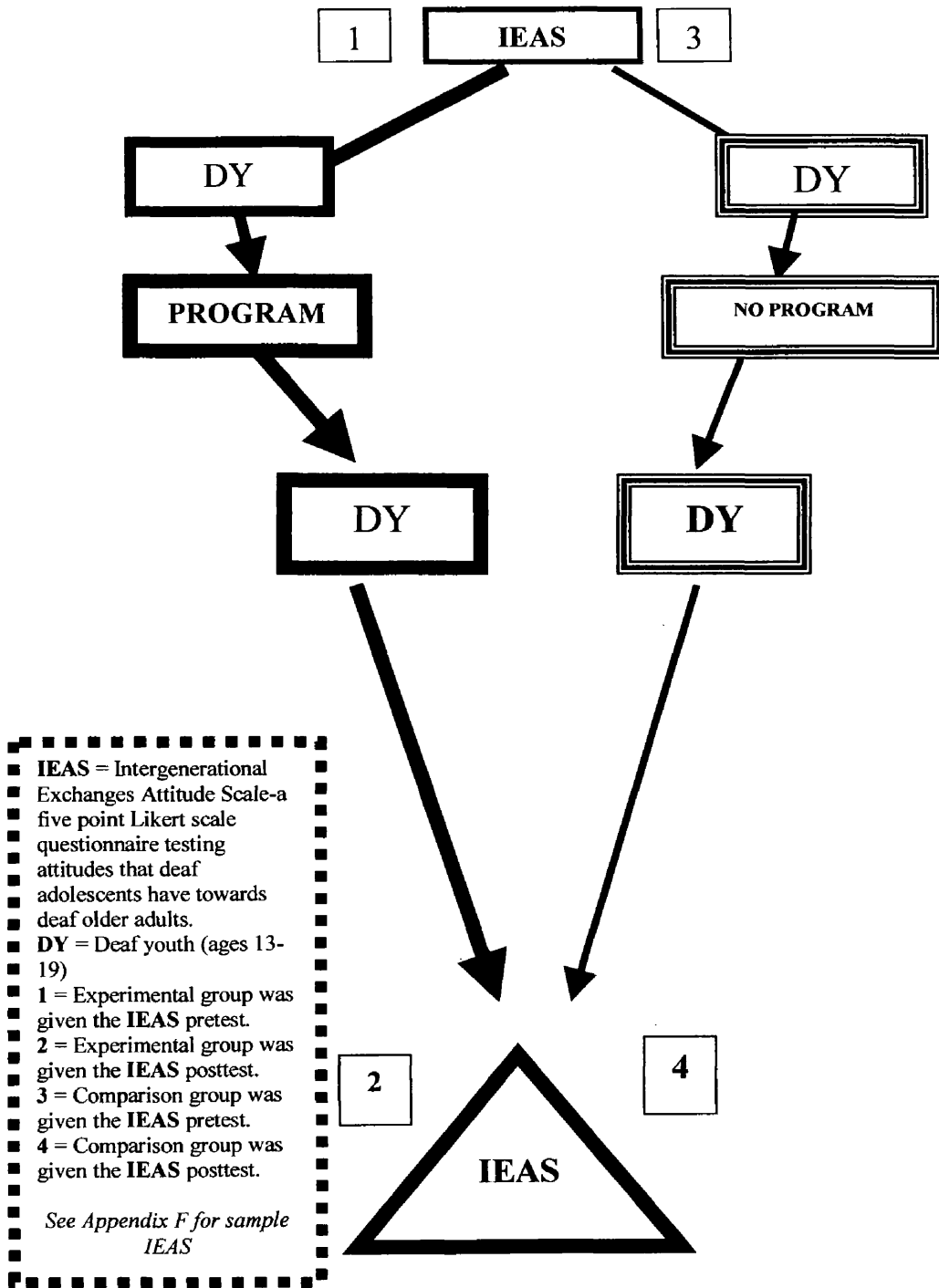
## RESEARCH DESIGN

In order to carry out the research objectives most effectively, a pretest/posttest, quasi experimental, comparison group design was performed. It involved a treatment group of deaf youth participating in an intergenerational program with deaf older adults, and a comparison group (deaf youth not involved in any program).

The major purpose of doing this research is exploratory. The experiment is a longitudinal study lasting for three weeks. The settings are natural and the unit of analysis is adolescents age 13 through 19, who are deaf and communicate using American Sign Language. The number of adolescents studied is 55, which is the number of participants for the summer youth session. The research is done in a New York State, mountainous, coed camp for the deaf.

In preparation for the study, the Intergenerational Exchanges Attitude Scale was modified to provide better understanding for the target and comparison populations. There was no preparation or formal observation of the experimental group. The dependent variables are the campers' scores of the Modified Intergenerational Exchanges Attitude Scale score before participating in the program. The independent variable is the intergenerational program involving deaf youth and deaf older adults. (See Figure one for Conceptual Map of the Experimental Design.)

**Figure 1. Conceptual Map of Experiment**



## INSTRUMENTATION

The five-subscale (24 item) Intergenerational Exchanges Attitude Scale (IEAS) is used. The IEAS is used to measure this variable. A series of 24 statements are listed for the respondent to agree or disagree, using a 5 point Likert scale as a way to measure degree of attitudes toward intergenerational exchanges. Each statement is translated into a code and is given a value of 1, 2, 3, 4 or 5 points, depending on the respondents' selection. A score of 1 indicates a negative attitude toward the older adult; a score of 5 indicates a positive attitude toward the older adult. The scores are then added for each section to get a total score ranging from 20 to 120 points with 120 points representing the maximum positive score.

The IEAS measures attitude toward intergenerational exchanges of deaf adolescents and deaf older adults. Stremmel, Travis and Kelly-Harrison developed the scale in 1996.

Reliability data suggest that the IEAS and its subscales have reasonable internal consistency; moderate intercorrelations among the subscales indicate they are independent of one another.

The authors give a word of caution. Because no pre-existing measure of intergenerational attitude exists, an analysis to determine convergent validity (e.g., a multitrait-multimethod analysis of whether the IEAS correlates with another scale) was not possible (Stremmel, Travis, Kelly-Harrison, 1996).

Internal consistencies for each subscale were well above the .50 minimum suggested by Nunnally (1978), ranging from .60 (power-control) to .86 (relationships between children and older adults). Overall, internal consistency

reliability for the total scale was .89. Intercorrelations among the subscales were small to moderate as was expected (from .31 to .55). Use of the measurement has not been documented; however, the relationship between intergenerational attitude and the likelihood of providing intergenerational programming provided a measure of predictive validity. The IEAS was significantly and positively related to the likelihood of providing intergenerational programming.

The developers recognize that data from respondents constituting much larger samples are necessary before definitive statements about the reliability and validity of the scale can be made (Stremmel, Travis, Kelly-Harrison, 1996).

### **SAMPLING PROCEDURES**

The sampling frame is deaf adolescents attending a summer camp with deaf older adults. The adolescents are between the ages of 13 and 19 years of age. They are all from the United States, deaf (confirmed by medical report) and communicate using American Sign Language.

The sample is a non-probability occasional sample. A random sample cannot be obtained for the purpose of this study. Campers from the summer youth camp are chosen because they are easily accessible and convenient to the investigator.

The sample is selected by obtaining consent (see Appendix A for sample letter) from the parents/guardians of the respondents who are not of legal age. The respondents are selected on a voluntary basis. Those respondents who are presently living with an older adult or who have attended an intergenerational program in the past are excluded. The number of subjects selected from the

sampling frame is 53, which is the total population of deaf adolescents who attend the summer youth session.

Permission to conduct this study was obtained from the University of Michigan-Flint, Human Subjects Review Board. Permission has also been obtained from the Board of Directors from Camp Mark Seven, the Principal from Michigan School for the Deaf, and parental consents from students attending both the school and the camp.

Parents of the comparison group were informed of the study through letters that were taken home by students. Parents of campers were informed of the study by letters sent to campers who were accepted to the camping program. There is no discrimination against campers based on socioeconomic status, race, gender or location. They are accepted on a first come first serve basis. Camperships (scholarships) are provided by a variety of churches, individual donors and residential schools for the deaf for campers with insufficient funds.

The generalizability of the findings are difficult because of the short time period and small sample size. Because this study is an exploratory study, it is used as a pilot project to begin investigation of intergenerational relationships within the deaf community.

The older adult participants are volunteers at the camp. They are selected based on the following requirements: deafness, willingness to volunteer at camp, minimal physical, mental or emotional handicaps. All older adults participated in the summer program; however, the older adults were not tested for this work.



Fifty-three subjects took the pretest. There were twenty-nine males and twenty-four females. Their age range was thirteen to eighteen years, with a mean age of 14.5 years (See Table 1 section 1.). There was a dropout of thirty-one subjects, leaving twenty-two subjects in the experimental group who participated in both pretest and posttest (Table 1 section 2). For the posttest, there were sixteen male and five female subjects. There was one participant who did not indicate sex and one who wrote age "1". The mean age of the experimental group taking the posttest was 13.7 years.

The comparison group was selected from a Michigan school for the Deaf and Blind. The students were randomly selected based on similar criteria as the experimental group. Their age ranged between 13 and 19, deaf (confirmed by medical history), minimal physical, mental, or emotional handicaps. Informed consent was obtained for participation in the pretest-posttest questionnaire and the participants volunteered to participate. For the pretest, there were twelve subjects, three males and eight females. Their mean age was fifteen (See Table 1 section 3.). Five comparison subjects took the posttest. Their ages ranged from fifteen to eighteen (See Table 1 section 4.).

The pretest was given to the experimental group upon their arrival to camp and the posttest was given three weeks later on the last day of camp. The comparison group was given the pre-test in February, but did not take the posttest until April.

**TABLE 1**

**Frequency table for age.**

<b>1. Pretest Experimental Group</b>		<b>2. Posttest Experimental</b>	
<u>Age</u>	<u>Frequency</u>	<u>Age</u>	<u>Frequency</u>
12	1	1	1
13	13	13	8
14	10	13.5	2
14.5	1	14	2
14.75	1	15	6
15	17	17	2
16	5	18	1
17	4		
18	1		
<b>Total</b>	<b>53</b>	<b>Total</b>	<b>22</b>

<b>3. Pretest Comparison Group</b>		<b>4. Posttest Comparison Group</b>	
<u>Age</u>	<u>Frequency</u>	<u>Age</u>	<u>Frequency</u>
13	3	15	2
14	1	16	2
15	4	18	1
16	1		
17	1		
18	1		
19	1		
<b>Total</b>	<b>12</b>	<b>Total</b>	<b>5</b>

## DATA COLLECTION PROCEDURES

Data collection began during orientation day. The investigator met with campers and distributed the questionnaires. An interpreter for the deaf was available to interpret or translate the questionnaire for those with limited English skills.

The data was obtained from the scores of the pretests and posttests of the experimental and comparison groups. The investigator gave the pretest the first day of camp session. After the pretest, the respondents participated in the summer program with no attempt to control the relationships between adolescents and older adults.

On the last day of the session (three weeks after the pretest) the posttest was given. A designated tester gave the posttest and a skilled interpreter for the deaf was available to translate the questionnaire for those who were not fluent in English. The data from the treatment group was obtained at the summer camp.

The comparison group also received the pretest. However, the posttest was not given in three weeks. An interpreter was also available to translate the questionnaire for those who were not proficient in the English language. The data from the comparison group was obtained from The Michigan School for the Deaf, the hometown of the investigator.

With permission from Dr. Shirley Travis, a modified version of the Intergenerational Exchanges Attitude Scale (IEAS) was used to collect data (See Appendix G for a sample copy of the instrument). The instrument was initially designed to test the hearing population; therefore, modification for the deaf youth

was necessary. For those with limited English skills, the questionnaire was translated, using a qualified interpreter who spoke American Sign Language. The categories of the subscales follows: response between older adults and children, children's perceptions of older adults, attributes of children, attributes of older adults, and power/control. A sixth subscale is a fill-in-the-blank and circle yes or no. These questions specifically ask questions such as age, sex, have you been to CM7 before, were you raised in the USA, do you live with deaf older adults and do you live with older adults. There was no attempt made to match the groups by race, gender, nationality, socioeconomic, or academic status. All participants were diagnosed with some degree of deafness and without any major physical, mental or emotional handicap. Both groups were selected because of availability.

### **SITE AND DESCRIPTION OF PROGRAM**

The study was piloted at Camp Mark Seven (CM7) a summer camp for deaf youth, located in a New York State mountain resort area. Father Thomas Coughlin, the first deaf man to become an ordained priest, founded CM7 in 1981. The camp is a non-profit organization, administered by Mark Seven Deaf Foundation. The camp is non-sectarian and serves deaf youth and adults who come from all parts of the world.

The summer program is not intended to focus on intergenerational relationships. Rather, the aim of the summer program is to provide a non-threatening atmosphere, which introduces and guides deaf youth in participating in leadership, wilderness, waterfront and team-building activities.

The church does not have a major influence on the camp except that Coughlin had a vision to provide a nurturing environment for deaf youth. Coughlin provides Mass on a regular basis for those who wish to attend; however, this is not a mandatory activity. He also leads evening song and prayer which allow the youth to think about right and wrong and to pray for their loved ones if they wish. In spite of Father Coughlin's Catholic ordination, the camp is run as a non-denominational camp. However, much of the financial support comes from the Catholic community.

Though the program is not overtly intergenerational, there is a variety of activities and opportunities for the youth to communicate with the older adults in both organized and unorganized activities. There are opportunities for the youth to develop relationships with the older adults during task focused activities, such as washing dishes or cleaning the kitchen, as well as entertainment focused activities, such as attending a play. The objectives of CM7 are to provide youth with opportunities for leadership development, team building skills and wilderness activities. To achieve these goals, the youth are divided into four groups of boys and four groups of girls. Each group consists of six to eight young people. They participate in a variety of activities, which do not always include the deaf older adults, but several times a day the adults are involved in one or more activities with the youth.

Three times a day the youth and adults are together for meals. Following the meals, the two generations work together during clean up. At least two nights of the week the generations come together for entertainment such as skits, story

telling and a mock “Dating Game” or “Price is Right.” In addition, every Sunday the generations are together for a time of worship. The intergenerational exchanges last on an average of one to three hours per day. During the other hours, the generations separate and participate in activities within their own groups.

The intergenerational exchanges are not directed. The youth and adults are allowed to be spontaneous and self motivated. The summer youth program lasts three weeks, which is the time designated for youth campers to attend their specific session. The remaining weeks during the summer are scheduled for different age groups and different programs.

A brief description of a typical day of activities where the generations are together follows: All youth meet in the dining hall after early morning exercises and showers. All members of the camp community go to the dining room for breakfast. Traditionally, the elders prepare and serve breakfast. During this time it is noted that the elders take on a mentoring role where they encourage and discipline the youth in such areas as eating well balanced meals, using etiquette, not wasting food and cleaning up after themselves.

Following breakfast, the groups begin their designated Kapers (chores) such as washing dishes, putting breakfast supplies away, or dusting, sweeping and vacuuming. Youth and older adults work together cleaning the lodge before the youth go to different areas for leadership training, outdoor training, arts and crafts activities, or sports activities of their choice. This pattern is repeated three times a day following each meal. Evening activities, such as story telling by the older

adults, dances for the youth, movie time or skits, conclude a busy day. The intergenerational contact is staggered depending on the activities scheduled in any given day. Following is a sample schedule of daily activities.

### **SAMPLE SCHEDULE OF CAMPER ACTIVITIES**

7:30 a.m.	Awake for morning exercises.
8:00 a.m.	Showers
8:30 a.m.	*Breakfast
9:00 a.m.	*Clean up and Kapers
9:30 a.m.	Leadership activity
10:30 a.m.	Outdoor activity
11:45 a.m.	Free Choice
12:30 p.m.	*Lunch
1:00 p.m.	*Clean up
1:15 p.m.	Rest – Camper choice of quiet in room activities
2:00 p.m.	Outdoor activity
3:00 p.m.	Waterfront activity
4:00 p.m.	Mountain activity
5:00 p.m.	*Chapel time
5:30 p.m.	*Dinner
6:00 p.m.	Clean up
7:00 p.m.	Night activity
8:00 p.m.	Snack
8:30 p.m.	*Games
9:00 p.m.	Choosing next day activities
9:45 p.m.	Chapel time – reflections on the day
10:15 p.m.	Bedtime
10:30 p.m.	Lights out

\* Activities involving older adults.

## RESULTS

For this pilot study, the project researcher hypothesized that deaf youth would demonstrate a change in attitude toward deaf elderly after participating in an intergenerational program. To test this hypothesis the overall scores of the pretest and posttest are compared.

The scores are calculated by totaling the scores for each subsection and dividing by the number of participants. The higher numbers (4.0-5.00) indicated positive attitudes toward the older adult and lower scores (1.0-2.0) indicated less positive attitudes. Scores range from one to five. The most significant differences were found in the areas coded as "friends, hobbies, playing and kind." These variables had the highest scores (an average of over 4.0).

The total scores range from 24 to 120 with the lower scores indicating less positive attitude and higher scores indicating more positive attitude. Four statements about interaction between children and older adults received the highest scores. The statements are classified in the subsection "Response Between Older Adults and Children." The four variables that show positive relationships are listed in Table 2.

To explain further, the questions asked the children were as follows:

1. Children and older adults make good friends (coded "friends"). For the experimental group the pretest mean score was 4.04, posttest mean score 4.14. Comparison group pretest mean was 4.36, posttest mean 4.80.



2. Older adults enjoy hobbies more with children around (coded "hobbies"). The experimental group pretest mean score was 3.54, posttest mean score 4.10; the comparison group pretest mean 4.09, posttest mean 4.20.
3. Older adults enjoy playing with children (coded "playing"). The experimental group pretest mean score was 3.64, posttest mean score was 4.09. For the comparison group, the pretest mean score was 4.18, posttest mean score was 4.40.
4. Older adults are gentle and kind to children (coded "kind"). The experimental group pretest mean score was 3.53, posttest mean score was 3.82. The comparison group pretest mean score was 4.18, posttest mean score was 4.40.

The four smaller subsections of the IEAS are categorized as Children's perceptions of Older Adults, Attributes of Children, Attributes of Older Adults, and Power/Control. See Appendix G for a sample IEAS questionnaire.

The expected findings were that the IEAS scores would increase for the experimental group posttest score. Four variables showed a positive effect as previously discussed. In addition, it was expected that the scores for the comparison group would either decrease or stay the same. Actually, these scores increased. However, because of the high dropout rate the variance was too great to analyze the data accurately.

In spite of insufficient data to provide accurate statistical measurements, the exploratory findings give sufficient information to provoke further

investigation in the area of intergenerational relationships between deaf adolescents and deaf older adults.

**TABLE 2**

Pre – and Posttest Results on Characteristics with Highest Scores

	Experimental Group				Comparison Group			
	Pretest		Posttest		Pretest		Posttest	
	*N=53	^sd	N=22	^sd	N=11	^sd	N=5	^sd
Friend	4.04	1.0	4.14	1.25	4.36	.81	4.80	.45
Hobby	3.54	1.28	4.10	1.02	4.09	.83	4.20	.84
Playing	3.64	1.06	4.09	1.02	4.18	.87	4.40	1.34
Kind	3.53	1.10	3.82	.96	4.18	.87	4.40	1.34

\*n = The number of students participating in the test

^sd = The standard deviation

Demographic comparisons indicated that the highest scores came from those with an average age of 15 (mean 88.18, sd =12.22), male (mean 83.01, sd =16.05), have never been to CM7 before (mean 82.16, sd=14.03), do not live with older adults (mean 83.87, sd=16.18), do not live with *deaf* older adults (mean 80.21 sd=14.77), and live in the USA (mean 83.4, sd=11.09). Therefore, a pattern exists that indicates 15 year old males, who do not live with older adults (neither

deaf or hearing), who have never been to CM7 before, who live in the United States, and have never participated in an intergenerational program before, showed the greatest increase in scores.

The demographic information was obtained by scoring one for “yes” and two for a “no” response. The scores were tabulated for each of the demographics (average age, sex, been to CM7 before, live with older adult, live with a deaf older adult or born in the USA). The scores were obtained by adding the total number of points given for each demographic variable.

Potential overall scores ranged from 24 (indicating attitude between older adults and children is poor) to 120 (indicating the attitude is very positive), with a mean of 72. Scores of over 72 were in the “above average” percentile which indicated that the attitudes were more positive towards the elderly. In other words, as indicated in Table 3, the comparison group who had not been exposed to the intergenerational program had a more positive attitude toward older adults, in both pre and posttest. It should be noted however, that an accurate comparative analysis between the experimental and comparison group is not possible given the small sample size.

**TABLE 3**

Mean Scores of Experimental (E) and Comparison (C) Groups

Group	Test	Mean	sd	P = .035
E	Pre	81.018	13.651	
E	Post	75.636	15.438	
C	Pre	88.181	12.221	
C	Post	91.800	16.422	

Since the comparison group is so small, conclusions cannot be drawn from this information. Furthermore, other research indicates that intergenerational programs are most effective when the groups interact in functionally important activities **over time** (Chapman, 1990). Neither the program nor the intergenerational interaction during the summer camping session met these criteria. Thus one might have expected to see limited change over the brief three week interaction.

## DISCUSSION

Some of the methodological problems were anticipated. Based on research standards (Fitz-Gibbon, 1987), correlations are very unstable on samples smaller than 50; sample sizes greater than 30 are preferred for research. Nonetheless, descriptive statistics indicated some interesting patterns.

The pretest, posttest comparison of the experimental group indicated that a positive correlation occurred in the four variables friends, hobby, playing and kind. The pretest scores for the comparison group were higher than the experimental group, but since there were only 5 comparison respondents for the posttest, conclusions must be cautiously considered based on the low sample size.

Several reservations should be noted regarding in this study. The first relates to the small sample size, especially of the comparison group. This finding makes quantitative analysis difficult. (See Table 4 for the number of subjects and dropout rate). Small sample sizes have been used in other studies (Glass, McGaw & Smith, 1981), but the methods for summarizing findings for smaller samples

are done more accurately using Meta Analyses of several studies (Fitz-Gibbon, 1987).

Second, the testing procedures were not consistent between groups. In other words, tests were not given within the same period to the comparison group as it was to the experimental group. Third, English comprehension was found to be at a variety of levels, making understanding of the questionnaire more difficult for some participants. Fourth, in spite of modifying the questionnaire, there was still some confusion regarding English terminology and scoring instructions that were printed on the questionnaire.

Given the nature of this population, and the lack of contact between deaf youth and deaf older adults, more studies in this field should be encouraged to determine the true effect of intergenerational exchanges over a planned period of time.

**TABLE 4**

Number of Subjects Dropped from Analysis

From Experimental Group

From Comparison Group

Pre test	N=53	N=11
Post test	N=22	N=5
Total # drop	N=31	N=6

## SUMMARY

In summary, the results of this study did not obtain sufficient data to either reject or accept the null hypothesis which stated that the IEAS of the experimental group will be significantly different than the comparison group after participating in an intergenerational program. The findings did indicate however, that of those subjects tested, there were some patterns to be noted.

First, male youth 15 years of age scored higher mean values on four variables as discussed in the section on "results." These four variables were found in the areas which involved a friendship relationship, having fun or playing (as shown in table 2). Other studies done on the outcome of intergenerational activities indicate that there are better effects when the activities are related to recreation or leisure (Ames, 1994). However, these studies did not specify differences between male and female. It should not be assumed however, that youths' and older participants' capabilities and interests only evolve around being entertained (Ames, 1994).

A second pattern was the relationship between age and attitude. It appeared that the older youth had higher scores in general, compared to the younger youth. Limited sample size did not allow for comparisons between young adolescents (13 through 15) and older adolescents (16 through 18).

Third, the assumption that deaf adolescents do not have relationships with older adults or deaf older adults was found true. Of the 55 campers who took the

pretest, 50 stated they did not have relationships with older adults. All 55 circled "no," indicating they did not have relationships with deaf older adults. It must be mentioned, however, that during the pretest some of the campers who answered yes to the questions about relationships with older adults stated to the interpreter, "I put yes because my parents are older adults." Although validity was challenged and methodology issues existed, several implications for practice should be considered.

### **IMPLICATIONS FOR PRACTICE**

Qualitative analyses were not included in this study; however, the project researcher has been working at CM7 for seven years and has observed many positive results of the intergenerational exchanges between deaf youth and deaf older adults. For example, more than 80% of the campers who attend CM7 do not come from generationally deaf families (i.e., deafness found in several generations of the same family). For the most part, the youth are **not** exposed to deaf older adults. The researcher has interviewed several youth prior to this study. She asked them how they felt about deaf older adults. The youth responded with answers such as "I didn't know a deaf person could have such a good job" or "you mean a deaf person can really be a priest or nurse?" Deaf youth are frequently observed to gather around "Father Tom" and they seem to thrive on his wisdom, encouragement, experiences and sense of humor. In addition, during the evening sing along and discussion time, the youth swarm around him for hugs or pats on the head.

Several years before the pilot study the researcher interviewed a few older deaf adults and asked if they felt it made a difference for them to talk to the younger generation. One deaf older woman stated, "some of the kids will go out of their way to sit down and talk to me about how it was growing up deaf." Another adult shared that a youth asked, "how did you handle being the only deaf person in your family?" It should not be assumed that all intergenerational exchanges were positive, however. As in any close family style setting where the individuals live together for a length of time, there have been arguments and confrontations between young and old. But even opportunities for conflict expression and resolution are samples of normal family interaction which might not take place with a great deal of understanding in the child's own home.

The desire is that this study will lay the groundwork for more research in intergenerational exchanges and programming in the deaf community. Other areas of focus might include such topics as deaf older adults' attitude on intergenerational exchanges, evaluations of self-esteem of both cohorts, and effects of intergenerational programs focusing on role modeling, role taking and mentoring or tutoring.

The most important outcome of this study is that intergenerational programs are designed, implemented and evaluated within the deaf community. How the research is replicated will be of major importance in regards to social, emotional and psychological development of the deaf. Experience from this project reveals several methodological issues, which are discussed in the following chapter.



# CHAPTER 1V

## METHODOLOGICAL ISSUES

Several methodological problems were discovered during the pilot study, all of which warrant procedural changes for future research. In this section, the problems will be outlined and later will be discussed. Suggestions for resolving methodological issues follows.

First, there was difficulty obtaining the permission consents in a timely fashion. Coordinating schedules with educators, school calendar, parents and work schedules made contact with parents difficult. Second, there were insufficient numbers of participants to accommodate the high dropout rate. Third, there was an extremely small sample size for the comparison group.

Fourth, the length of program was too short to produce good quantitative data. The program which was evaluated lasted only three weeks.

Fifth, there were many inconsistencies in the testing procedures between the experimental and comparison groups. For example, training of the testers was insufficient. Explanation of the test to the participants was insufficient and inconsistent between groups.

Sixth, modification of the testing instrument still did not accommodate the variety of English proficiency skills. Some of the English words were not understood. In addition, although all of the respondents were raised in the United States, some were from Spanish speaking homes and used Spanish as their first language.

Seventh, instructions for coding the scoring were left on the questionnaire which baffled the participants, thereby leading to confusion about the Likert scale ratings.

Finally, some participants thought older adult meant the age of “mom” or “dad.” Several possible avenues for resolution can be taken concerning the methodological issues. The next section discusses these proposals.

### **PROPOSAL TO RESOLVE METHODOLOGICAL ISSUES**

First, concerning permission consents, signed consents need to be obtained months before the subjects participate in the program. Select subjects and begin sending letters and forms to be signed at least six months to a year before the beginning of the experiment. If possible, meet with the parents at a parent-teacher meeting and explain the experiment in person. Be prepared to send self-addressed stamped envelopes for parents or guardians to return the permission slip.

Second, the number of experimental subjects was insufficient to do a reliable factorial design study. For a design such as qualitative research, the sample might have been sufficient, but for a quantitative study, larger groups would give more data that are significant. Future works might consider providing remuneration to insure more participation and reduce the drop out rate. It may be necessary to use several samples to provide enough data for generalization. Qualitative analyses could also be considered in addition to the quantitative data collection.

Third, the number of comparison participants was insufficient. To obtain samples large enough for meaningful comparisons with the experimental group

the researcher should begin recruiting participants at least a year in advance of the study. Match the groups as closely as possible to make a better comparison of demographics such as age, sex, socioeconomic status and first language.

Fourth, the length of the program was only three weeks. A more useful evaluation would be over an academic year, to accommodate for seasonal changes and holidays. An intergenerational program could be implemented as a weekly class involving paid and trained leaders and deaf older adults. If the three-week session were to be replicated, however, a program with an intended focus and taking place on a daily basis for longer periods would provide exchanges that are more intimate.

The fifth limitation concerns the testing procedures. It would be best to replicate the setting for both groups as closely as possible. The optimal method of testing is to test each group in a group setting so they all hear (see) the same instructions. Videotaped instructions and signed interpretation would provide better consistency for understanding the questionnaire. At least two training sessions should be provided for the testers and interpreters. Written instructions should also be provided for the testers and interpreters to review before giving the test. Give the tests to the groups in the same time interval and the same season.

Sixth, there was difficulty in the respondents' understanding of the instrument. Clarification and another modification of the instructions is necessary. In addition, the use of more visual pictures would be beneficial, such as for indicating the Likert scale. For example “☺” for strongly agree or “☹” for strongly disagree. Other recommendations include omit the tester’s instructions from the instrument

and omit scoring instructions from the instrument. List specific ages of youth in the instructions. For example, put the ages of youth and older adults in parentheses. Make sure the accuracy of the scale is maintained during modification. (See timeline for future research guidelines.)

### **LIMITATIONS OF THE RESEARCH**

There were several limitations of the research. Success of an investigation is dependent upon the sample size and length of time, which made generalizations of this work difficult. Reflecting the exploratory nature of this investigation, there are no secondary data for comparison. In addition, a factorial design would be the preferred method to obtain statistics, but sample size prohibits this type of design for a small group. For a group this size, more data could be obtained by doing a qualitative study in conjunction with obtaining the other data.

Other limitations involve variables such as national origin, socioeconomic status, academic status, and place of residence that cannot be controlled for due to the small sample size. In addition, limited information is available for comparing the use of the instrument on other groups, therefore it is difficult to generalize the reliability of the instrument.

Finally, the instrument had to be modified for the respondents because of their different levels of English competency. Consequently, there may be some confounding due to interpreter translation or participant interpretation. Issues such as these will need to be tested and modified as necessary for future research.

Still and all, this work is a good springboard for future research for issues such as understanding the Intergenerational Exchanges Attitude Scale.

### **IMPLICATIONS FOR THE FUTURE**

There are multiple social issues concerning families of deaf children. Parents still talk of the difficulty getting their suspicion of deafness taken seriously (Frederickson, 1985; Gregory, 1995). Diagnosis and early support are needed to assist parents in the grieving process and to help them learn the language that will enhance the parent/child relationship.

Studies (Gregory, 1995) indicate that screening practices usually come after seven months, and language and developmental assessments not until 18 months to 3 years. Parents have lost the majority of the early childhood bonding and training years while waiting for the "system." Diagnostic procedures and development for testing newborn babies are not employed as a matter of course. Therefore, intergenerational programming can be a useful tool for support during this confusing time.

Socially and bureaucratically, higher technical communications devices need to be mandated as standard services in places such as child and day care settings, schools, recreational facilities, community service buildings, department stores, airports and bus stations. For example TTY's (special telephones for the deaf) should be *as accessible* to the deaf as are telephones for the hearing. In addition, telephone rates for families with deaf members should be competitive with services and devices that are provided for hearing customers. Currently, a

TTY costs between \$200.00 and \$500.00, depending on its accessories.

Telephone bills are not competitive. For instance, they do not take into consideration deaf individuals who communicate with their hearing family member must type their conversation; writing is much slower than speaking.

Vibrating beepers are available, but, in spite of advanced technology, portable "cell type" telephones have not been designed for the deaf.

Other services need to be provided using *visual aids* methods rather than sound devices. For example, families with deaf children should be provided with lighting system devices for telephone ringers, doorbells, and fire and emergency alarms. Lighted alarms should be installed on items such as vacuum cleaners, air conditioners, blow dryers, automobile engines and all items that hearing persons routinely depend on their ears to troubleshoot problems. Not only should these services be provided for the homeowner, they should be taught about in schools and installed in all areas frequented by people. Deaf older adults have experienced many frustrations in the hearing world and intergenerational programs involving deaf older adults would be beneficial for counseling in such areas of need.

Finally, the bureaucracy of special education has been mystifying for parents, particularly for the painful process of learning that their children have a disability. After all, few have knowledge of a system that they never imagined they would have to utilize (Cantor and Cantor, 1995). There are no road maps provided for families raising deaf children to guide them in understanding relevant bureaucracies and legislation, especially concerning issues dealing with

the medical or educational system. The effects of disability on a family are clearly a topic with many implications for public policy and public administration. Moreover, the wise policymaker will involve experienced deaf individuals in this domain.

## CONCLUSION

In conclusion, this exploratory work challenges social science research with the need to do further studies on intergenerational exchanges and intergenerational programming in the deaf community. Future research efforts should include replication of this pilot study using a larger sample size. Other areas of focus might include testing the deaf older adults' attitude changes or testing effects on self-esteem. In addition, other studies might examine the effects of intergenerational programming, which focuses on specific intergenerational activities, such as life-skill building or role modeling. These additional variables will provide researchers with more accurate data to analyze the effectiveness of intergenerational programs within the deaf community.

Historically, public administrators (Weber, 1992; Krislov, 1974; Mosher, 1974) discovered that making policy and implementing programs are entirely different. However, studies of political bureaucracies dealing with interdependence of policy and implementation should constitute an avenue for fruitful research (Shafritz & Hyde, 1992). This pilot work has only begun to study the need for interdependency of programming with policy making for the deaf community.



Intergenerational programming within the deaf community is only recently being investigated. However, society needs to be attentive to the need for maintaining cultural and linguistic needs of the Deaf community.

Intergenerational programming may be one of the fundamental avenues for providing understanding and advocacy for this underrepresented community.

**APPENDIX A**

**TIME LINE FOR FUTURE RESEARCH**

<b>TASK/ACTIVITY</b>	<b>MONTH</b>	<b>COMPLETION</b>
	<b>J A S O N D J F M A M J</b>	
Letter of introduction and intent to Principal/Director of school/residential institute.		May 1 <sup>st</sup> .
Call Director/Principal to make appointment to discuss plans.		May 15 <sup>th</sup> .
Design letter of explanation and introduction to parent/guardian.		May 15 <sup>th</sup> .
Meeting with Director/Principal. Copy of letter to parents for approval.		May 25 <sup>th</sup> .
Mail Introductory letter and consent form to parent/guardian.		May 30 <sup>th</sup> .
Choose intergenerational program		June through August. Should be confirmed by August 1 <sup>st</sup> .
Recruit testers/aides/interpreters.		Should be confirmed by August 1 <sup>st</sup> .
Written instruction of pre/posttest.		August 1 <sup>st</sup> .
1 <sup>st</sup> meeting with testers		August 15 <sup>th</sup> .
School opens		September 1 <sup>st</sup> .
Confirm Intergenerational program.		September 1 <sup>st</sup> .
Letter of plans to Director/Principal		September 1 <sup>st</sup> .
Letter of explanation and consent forms to go out in first news letter from institution.		September 8 <sup>th</sup> .
Attend 1 <sup>st</sup> parent teacher meeting and introduce the project. Have consent forms available for parents who attend.		September 15 <sup>th</sup> .
Meet with testers/aides/interpreters		September 30 <sup>th</sup> .
Consent forms sent in SASE for those who still have not signed them.		October 1 <sup>st</sup> .

TASK/ACTIVITIES	MONTH												COMPLETION
	J	A	S	O	N	D	J	F	M	A	M	J	
Give Pre test to Experimental Group.													October 15 <sup>th</sup>
Give Pre test to Comparison Group.													October 15 <sup>th</sup> .
Start intervention for experimental group.													October 30 through May 15 <sup>th</sup> .
Meet with testers/interpreters and review posttest													May 1 <sup>st</sup> .
Give posttest to both groups.													May 15 <sup>th</sup> .
Letter of thanks to Director/Principal and school newsletter.													May 30 <sup>th</sup> .
Data analysis.													June – August. Complete by August 15 <sup>th</sup> .
Summary report to institution.													August 30 <sup>th</sup> .
Final report													September 5 <sup>th</sup> .
Final summary report to parent/teacher group													September 15 <sup>th</sup> .

**APPENDIX B**

**SAMPLE LETTER TO PARENTS OF CAMPERS**

Dear parent or guardian,

We are evaluating a program this year at Camp Mark Seven. We have always had senior citizens participate with the campers on a daily basis. We want to evaluate to see if this interaction changes the attitude the campers have towards older people. In order to evaluate a change we will be giving the campers a questionnaire to fill out on orientation day, and again on the last day of camp. Filling out the questionnaire will be voluntary.

The questionnaire that will be given to your child asks questions about how they feel about relationships between older adults and children. A sample question looks like this: "Older adults enjoy activities with children." The kids will circle a number representing how they feel about the statements.

Because of the age of the campers, we need your permission to fill out the questionnaire. You will receive a letter telling you how the evaluation turned out. In addition, any parent who would like a copy of the evaluation can contact Camp Mark Seven to the attention of the Health Director.

Please sign the form on the appropriate line whether you will or will not allow your child to participate.

I \_\_\_\_\_ **allow** \_\_\_\_\_ to fill out the  
Parent/guardian camper's name  
questionnaire.

I \_\_\_\_\_ **do not want** \_\_\_\_\_ to fill out  
the Parent/guardian camper's name  
questionnaire.

Please return the form in the enclosed envelope.

Thank you,

Luayne Smith

Health Director CM7

## APPENDIX C

### SAMPLE LETTER TO CM7 BOARD OF DIRECTORS

Dear Members of the Board,

I am writing this letter to request your permission to do a research project at Camp Mark Seven. As you know I have been investigating intergenerational relationships within the deaf community. This year I would like to give the campers a questionnaire testing if there is any attitude change towards older adults following their camping experience.

With this research, I hope to obtain information about intergenerational exchanges between deaf adolescents and deaf older adults. I have obtained a questionnaire to test the assumption that adolescents' attitude toward older adults will improve after participating in a program with the older adults.

After receiving permission from you, I have to receive approval from the Human Subjects Committee from the college. They will approve all tests, letters to the parents and follow-up tests that will be performed. I will keep you informed of the plans and progress of this project.

Thank you,

Sincerely,

Luayne Smith RN  
Health Director

**APPENDIX D**

**SAMPLE LETTER TO PARENTS OF  
YOUTH AT MICHIGAN SCHOOL FOR THE DEAF**

Dear Parent/guardian,

I am a student at The University of Michigan - Flint and am doing an investigation about intergenerational relationships between adolescents and older adults in the deaf community. This project is being done at a camp for the deaf in New York. I need a group of adolescents who are not participating at the camp to compare the results of a questionnaire that will be given to the campers.

The students at Michigan School for the Deaf will be given a questionnaire asking them about their attitude toward older adults.

I would like your permission to give your son/daughter the questionnaire to fill out their attitude. This questionnaire will be strictly confidential and voluntary.

You will be informed of the results of the study when it is completed.

Please sign on the appropriate line to either give or refuse permission for your child to participate in this study.

I \_\_\_\_\_ **give my permission** for \_\_\_\_\_  
Parent/guardian student's name

to fill out the questionnaire.

I \_\_\_\_\_ **do not give my permission** for \_\_\_\_\_  
Parent/ guardian student's name

to fill out the questionnaire.

Please return the signed permission slip in the enclosed envelope.

Sincerely,

## APPENDIX E

### SAMPLE LETTER TO PRINCIPAL AT MICHIGAN SCHOOL FOR THE DEAF

Dear \_\_\_\_\_,

I am writing this letter to request your permission to do a research project including students from Michigan School for the Deaf and Blind. I have been investigating intergenerational relationships within the deaf community. I would like to give your students between the ages of 13 and 19 a questionnaire testing their attitude towards older adults.

With this research, I hope to obtain information about intergenerational exchanges between deaf adolescents and deaf older adults. I have obtained a questionnaire to test the assumption that adolescents' attitude toward older adults will improve after participating in a program with the older adults.

The scores obtained from your students will be used as a comparison with students who are participating in an intergenerational program for the summer.

Approval from the Human Subjects Committee has been obtained and they will approve all tests, letters to the parents and follow-up tests that will be performed. I will keep you informed of the plans and progress of this project.

I will contact you in seven days for your response.

Sincerely,

**APPENDIX F**  
**ARTICLE ABOUT INTERGENERATIONAL**  
**EXCHANGES ATTITUDE SCALE**



and elderly participants. *Journal of Children in Contemporary Society*, 20(3-4), 195-203.

Ralston, P. A. (1985). *Secondary students' knowledge of, attitudes toward, and experiences of older adults* (ED271711). Ames: Iowa State University of Science and Technology, Department of Home Economics Education. ED271711.

## DEVELOPMENT OF THE INTERGENERATIONAL EXCHANGES ATTITUDE SCALE

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*The psychometric adequacy of the Intergenerational Exchanges Attitude Scale (IEAS), a five-subscale (24-item) measure of attitudes toward intergenerational exchanges between young children and dependent older adults, is described. Tests for internal consistency and validity, including correlational analyses indicating a significant positive relationship between attitudes toward intergenerational exchanges and the likelihood of providing intergenerational activities, provided viable evidence for the reliability and validity of the IEAS.*

Over the past 20 years, there has been a rise in the number of programs that bring young children and dependent elders together for planned intergenerational activities (Newman, 1989; Travis, Stremmel, & Duprey, 1993). Many times, these very special exchanges between dual-dependent partners (young children and elders) occur in nursing homes (Paul, 1988; Ziemba, Roop, & Wittenberg, 1988) or adult day care settings (Stremmel, Travis, Kelly-Harrison, & Hensley, 1994; Watts, 1990). Because both partners are dependent on others to plan and develop opportunities for intergenerational exchanges, professional providers play pivotal roles in the success or failure and the benefits and consequences of these programs. Despite ample (though often anecdotal) literature on the benefits of intergenerational pro-

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gramming from the perspectives of young children, adolescents, and older adults (e.g., see New York State Office for the Aging, 1989; Re-Ville, 1989; Ventura-Merkel, Liederman, & Ossofsky, 1989), there is limited evidence that professional providers think these intergenerational exchanges between young children and dependent elders are appropriate (see Stremmel et al., 1994). The attitudes of professional providers toward intergenerational exchanges may have a significant influence on the likelihood that (a) high-quality, well-designed programs will be offered, (b) thoughtful and appropriate methods of evaluation will be used, or (c) resources will be allocated to sustain the programs over the long term.

Although instruments exist that examine attitudes toward children and older adults, there are no existing instruments that measure attitudes toward intergenerational exchanges. To address this methodological limitation, we developed the Intergenerational Exchanges Attitude Scale (IEAS), a five-subscale (24-item) measure of attitudes toward intergenerational exchanges. In this article, we discuss the development of the IEAS, including evidence for reliability and validity, and summarize correlations of attitudes toward intergenerational exchanges with the likelihood of providing intergenerational activities.

### IDENTIFYING AND SELECTING ITEMS FOR THE IEAS

Because a measure of attitudes toward intergenerational exchanges did not exist, development of the items for the IEAS drew from the available attitudinal research on children and older adults. The development of the IEAS progressed through three stages. First, two members of the research team (authors Stremmel and Travis, with expertise in child development, gerontology, and child and adult day care) completed a comprehensive review of the child development and gerontology attitudinal literature. The search yielded six measures of attitudes toward older adults and one measure of attitudes toward children that seemed best suited for a study of attitudes toward intergenerational exchanges between young children and dependent elders. Brief descriptions of these attitude measures follow. Interested readers are also directed to discussions on attitude measurement by Green (1981), Palmore (1982), and Lutsky (1980).

One of the earliest and most widely used instruments for measuring attitudes toward old people is the Kogan Old People Scale (Kogan, 1961). The 34 items in the scale are 17 pairs of logically opposite statements. It appears that the negative scale items have greater reliability. Odd-even Spearman-Brown reliability coefficients for the negative scale, for three different samples, ranged from .73 to .83. Conversely, coefficients for the positive scale for the same three sam-

ples ranged from .66 to .77. Interscale correlations were reported in the range of .46 to .52. Though more recent work on attitudes toward older adults has helped to uncover the multidimensional nature of human attitudes, Kogan's scale is still used because it is convenient to administer and score, has been used with a variety of adult samples, and has demonstrated reliability.

Beginning in the 1970s, a great deal of effort went into trying to understand young children's and adolescents' attitudes toward older adults. In an effort to understand school-age children's attitudes toward age, Thomas and Yamamoto (1975) developed a 12-item semantic differential rating scale. One thousand children rated three concepts (young person, middle-aged person, and old person) on 7-point bipolar scales. Three factors (Evaluation, Affect, and Activity-Potency) were identified by Thomas and Yamamoto, accounting for 14%, 20%, and 27%, respectively, of the common variance.

Citing the ground-breaking conceptual work of Thomas and Yamamoto (1975), as part of a comprehensive assessment of children's (age 3 to 11 years) attitudes toward elderly people Jantz, Seefeldt, Galper, and Serock (1977) developed another semantic differential measure consisting of 10 items rated on a 5-point bipolar scale. The children were asked to rate two concepts, young people and old people, on such items as wrong-right, bad-good, ugly-pretty, and happy-sad. Validity and reliability data were not reported.

Taking a somewhat different look at the attitudinal research, Mitchell, Wilson, Revicki, and Parker (1985) explored 255 elementary school children's perceptions (a behavioral manifestation of an attitude) of aging. Their research used a 25-item index with a yes-no response format containing three perception factors: Personality Characteristics, Affective Relations, and Physical Abilities. Internal consistencies for the three factors were .88, .84, and .75 respectively.

Forty-nine seventh and eighth graders enrolled in programs for gifted students were the focus of research on attitudes toward elderly people completed by Allen, Allen, and Weekly (1986). Their 13-item semantic differential bipolar scale was constructed to encompass four domains of functioning (cognitive-intellectual, social, emotional, and physical). Items were included to measure assets (e.g., wisdom) as well as potential problems (e.g., health). Each dimension was rated on a 7-point scale. Validity and reliability data were not reported.

Studying college-age students, Sanders, Montgomery, Pittman, and Balkwell (1984) constructed a 20-item semantic differential scale to assess students' attitudes toward six groups of elderly persons. Respondents rated each of six groups (three age groups of men and three age groups of women) on all 20 items. The scale reliability was evidenced by an internal consistency reliability coefficient of .90 for the

overall scale. Similar to previously cited work, sample items reflected many of the traditional stereotypes of aging: flexible-inflexible, wise-foolish, and optimistic-pessimistic.

The last instrument we selected was the seminal attitudinal research by Seefeldt, Jantiz, Serock, and Bredekamp (1982) describing elderly persons' attitudes toward children. Their 20-item, 5-point Likert scale has a reported internal consistency of .53, and test-retest reliability for the overall scale is .83. Moreover, discriminant validity purports to discriminate between populations of persons with differing educational and experiential backgrounds. A factor analysis of the scale items yielded three factors for feelings toward children in the areas of discipline, children's rights, and personality characteristics of children. In addition to considering the scale items for the present research, we also found the format of the scale items to be particularly valuable during the construction of the intergenerational items for the IEAS.

The major shortcomings of the attitudinal research reported above were that (a) very little, if any, psychometric data were reported for the instruments and (b) most of the instruments were at least 10 years old. Nevertheless, in Stage 2 of item development, the research team was able to develop a list of 60 possible attitude items. At that time, no attempt was made to eliminate similar or duplicated concepts.

The third and final stage called for careful review of each item, the addition of new items by members of the research team, and elimination of duplicated concepts from the final set of items that constituted the IEAS. During this stage, the items were also worded in an intergenerational exchanges format. Table 1 cross-lists the final 34 items with the measures described below. As can be seen, the ideas for several IEAS items were gleaned from or suggested by more than one of the existing child or older adult attitude measures. Six items did not have any direct ties to an existing measure. In developing this handful of items, we were probably influenced as much by the review of existing instruments as we were by our own firsthand, professional experiences with young children and older adults. For the convenience of the reader, the critical concept in each item listed in the table is italicized.

## METHOD

### Data Collection Procedures

The IEAS was part of a comprehensive survey mailed to child and adult day care center administrators and was designed to learn more about intergenerational exchanges in day care settings across the

TABLE 1 Origins of Intergenerational Exchanges Attitude Scale (IEAS) Items

Original items	Concept source
Children and older adults readily <i>accept</i> each other as equals.	5
Older adults are not <i>tolerant</i> of messy children.	6
Older adults are <i>responsive</i> to the needs of young children.	—
Older adults share <i>wisdom</i> with children.	1, 2, 5, 6
Children and older adults <i>communicate</i> easily with each other.	—
Children are <i>too selfish</i> to be around older adults.	6
Older adults are <i>gentle and kind</i> to children.	4, 6
Older adults are <i>too protective</i> of children.	—
Children can be <i>mean</i> to older adults.	4
Children <i>stimulate</i> older adults' interest.	2
Children <i>ask too many questions</i> to be around older adults.	7
Older adults are <i>too lenient</i> with children when they misbehave.	—
Children <i>cheat</i> older adults at games.	7
Older adults have difficulty earning a child's <i>respect</i> .	—
Children make older adults <i>nervous</i> .	3
Older adults and children <i>help</i> each other.	1
Older adults and children have <i>warm relationships</i> .	1, 2, 5
Children feel <i>insecure</i> around older adults.	1
Older adults <i>don't like</i> children.	1, 5, 6
Children think older adults are <i>boring</i> .	7
Older adults <i>enjoy activities</i> with children.	—
Children and older adults naturally feel <i>affection</i> toward one another.	4
Children <i>don't appreciate</i> older adults.	4, 7
Children <i>don't respect the privacy</i> of an older adult.	1, 7
Children and older adults <i>make good companions</i> .	7
Children and older adults have <i>fun</i> together.	4, 7
<i>Sexually active</i> older adults shouldn't be allowed around children.	—
Older adults get <i>sick</i> around children.	2, 3, 4, 6
Children think older adults are <i>ugly</i> .	3, 4
Children are <i>too active</i> for older adults.	2, 5, 6
Older adults are <i>too frail</i> to be around young children.	2, 4, 5
Older adults think children are <i>cute</i> .	4
Children and older adults <i>don't dwell</i> on each other's <i>physical limitations</i> .	2, 5
Children think older adults are <i>dumb</i> .	2, 5, 6

Note. The critical concept in each item is italicized. Source key:

1 = Kogan (1961); 2 = Thomas and Yanamoto (1975); 3 = Jantiz et al. (1977); 4 = Mitchell et al. (1985); 5 = Allen et al. (1986); 6 = Sanders et al. (1984); 7 = Seefeldt et al. (1982).

state. Thirty-six adult day care administrators and 300 child care administrators (for a total of 336 potential respondents) were selected to participate in the study. This sample was drawn from lists of all licensed child and adult day care centers in Virginia as of December 1991. In the case of adult day care, all licensed centers were initially included in the sample. However, if an adult day care center functioned as a satellite center and shared staff with a primary site, the administrator of the two sites was asked to complete only one survey. Thus, although 38 adult day care centers were licensed in the state during the study period, only 36 center administrators were included in the sample. The child care sample was selected by means of a stratified random sampling procedure, using guidelines established by Krojcie and Morgan (1970), and stratified by Virginia Department of Social Services' Licensing Regions. The sampling frame consisted of all child care centers licensed in Virginia ( $n =$  approximately 1,100).

We used a multistep mail survey design by Dillman (1978). Six weeks after the initial survey instrument was mailed, two reminder letters, at 2-week intervals, and a repeat mailing of the survey instrument were sent to nonrespondents. As a result of these procedures, approximately 68% of the administrators ( $n = 227$ ) responded to the survey. This response rate represented 94% of the adult care group and 64% of the child care group.

### Respondents

Consistent with the rural-urban distribution of centers in the state, the vast majority of the respondents' centers (68%) were located in large or mid-size cities. The majority of the respondents were female (90%) and White (83%). Child care respondents ranged between 20 and 74 years of age, with an average age of 41 ( $Mdn = 39$ ). They had been in their current positions between 2 months and 42 years, with an average tenure of approximately 6 years ( $Mdn = 4.5$ ). Adult day care administrators were between the ages of 28 and 65, with an average age of 44 ( $Mdn = 41$ ). These administrators reported having been in their positions between 3 months and 18 years and averaged about 4.5 years in their positions ( $Mdn = 2.8$ ). The difference in job tenure probably reflects the relative newness of adult day care in the state of Virginia.

### Measures

#### *Intergenerational Attitudes Scale*

Thirty-four nonduplicative attitudinal items were selected for the IEAS from the lists of attitudes generated by the review of the litera-

ture. The scale items were evaluative statements representing either a positive or a negative attitude about intergenerational exchanges. Items were formatted with Likert-type response categories scored from 7 (*strongly agree*) to 1 (*strongly disagree*). Approximately half of the items were stated in a negative direction and were reverse-scored for the analyses so that higher scores represented more positive intergenerational attitudes. Theoretical scores on the IEAS ranged from 34 to 238.

#### *Likelihood of Providing Intergenerational Programming*

Respondents were asked to indicate how likely they would be to incorporate intergenerational activities into their existing program, using a 10-point verbally anchored scale ranging from 10 (*very likely*) to 1 (*not very likely*). This variable was used as a criterion measure in a correlational analysis aimed at examining the degree of correspondence between scores on the IEAS and the likelihood of providing intergenerational activities.

### RESULTS

The adult day care group averaged 180 on intergenerational attitudes compared with an average of 174 for the child care respondents, a nonstatistically significant comparison, indicating rather positive attitudes toward interactions between young children and older adults. Both groups were combined for tests of the psychometric adequacy of the IEAS.

We factor analyzed the original 34 items of the IEAS by means of a principal-components analysis with varimax rotation. Five interpretable factors emerged, consisting of 24 items. Ten items loading on the first factor all related to relationships or interactions between children and older adults. Four items loading on the second factor related to children's perceptions of older adults. Three items relating to attributes of children and 4 items relating to attributes of older adults loaded on the third and fourth factors, respectively. Finally, 3 items related to issues of power or control during intergenerational exchanges loaded on the fifth factor. On the basis of patterns of factor loadings, five subscales were constructed by summing the items. These subscales and the corresponding items are presented in Table 2.

Means and standard deviations, mean interitem correlations, and internal consistency reliabilities for each subscale are presented in Table 3. Internal consistencies (coefficient  $\alpha$ ) for each subscale were well above the .50 minimum suggested by Nunnally (1978), ranging from .60 (Power-Control) to .86 (Relationships Between Children and

**TABLE 2** Rotated Factor Loadings for Intergenerational Exchanges Attitude Scale Subscales

Scale items	Factor loading (varimax)
<b>Relationships Between Older Adults and Children</b>	
OA and C help each other.	.76
C and OA have fun together.	.74
OA and C have warm relationships.	.71
C and OA make good companions.	.67
OA share wisdom with C.	.65
C stimulate OA' interests.	.63
OA enjoy activities with C.	.61
OA are responsive to needs of C.	.56
OA are gentle and kind to C.	.52
OA and C feel affection toward one another.	.49
<b>Children's Perceptions of Older Adults</b>	
C think OA are ugly.	.72
C think OA are dumb.	.69
C feel insecure around OA.	.51
C think OA are boring.	.49
<b>Attributes of Children</b>	
C ask too many questions to be around OA.	.68
C are too selfish to be around OA.	.64
OA have difficulty earning C's respect.	.52
<b>Attributes of Older Adults</b>	
OA are nervous around C.	.75
C are too active for OA.	.52
OA are not tolerant of messy C.	.50
OA are too protective of C.	.49
<b>Power-Control</b>	
OA are too lenient when C misbehave.	.78
C cheat OA at games.	.54
OA are too frail to be around C.	.50

Note. OA = older adults; C = children.

Older Adults). Overall internal consistency reliability for the total (24-item) scale was .89.

We computed correlations among subscales to determine discriminant validity. If the IEAS did measure conceptually distinct facets of intergenerational attitudes, one would expect small to moderate cor-

**TABLE 3** Means and Standard Deviations, Mean Interitem Correlations, and Reliabilities for the Intergenerational Exchanges Attitude Scale (IEAS)

Subscale	M	SD	Interitem $r$	$\alpha$
Relationships Between Older Adults and Children <sup>a</sup>	53.58	6.78	.38	.86
Children's Perceptions of Older Adults <sup>b</sup>	20.23	3.61	.37	.70
Attributes of Children <sup>c</sup>	16.23	3.17	.38	.65
Attributes of Older Adults <sup>b</sup>	16.84	4.37	.33	.66
Power-Control <sup>d</sup>	14.33	2.71	.33	.60
Total IEAS <sup>d</sup>	124.27	12.94	.25	.89

Note. Mean scores are derived from a 7-point scale (7 = *strongly agree*, 1 = *strongly disagree*).

<sup>a</sup>Theoretical scores ranged from 10 to 70. <sup>b</sup>Theoretical scores ranged from 4 to 28. <sup>c</sup>Theoretical scores ranged from 3 to 21. <sup>d</sup>Theoretical scores ranged from 34 to 168.

relations among the subscales. As Table 4 indicates, this was the case. Intercorrelations among subscales ranged from .31 to .55. Because the subscales were highly reliable (internally consistent) and independent of one another, evidence of the IEAS's validity was provided.

On average, respondents indicated that they were likely to provide intergenerational activities, given adequate resources ( $M = 6.73$ ,  $SD = 3.06$ ). Thus, finally, the relationship between intergenerational attitudes and the likelihood of providing intergenerational programming was examined. Beyond the practical implications of such a relation-

**TABLE 4** Intercorrelations Among Variables

Variable	1	2	3	4	5	6	7
1. Relationships between older adults and children	—						
2. Children's perceptions of older adults	.49	—					
3. Attributes of children	.40	.55	—				
4. Attributes of older adults	.37	.31	.43	—			
5. Power-control	.35	.41	.44	.45	—		
6. Total IEAS	.58	.73	.77	.69	.72	—	
7. Likelihood of providing intergenerational activities	.33	.25	.31	.25	.29	.36	—

Note. All correlations are significant at  $p < .01$ . IEAS = Intergenerational Exchanges Attitude Scale.

ship, the correlation of these variables provided a measure of predictive validity. The IEAS was significantly and positively related to the likelihood of providing intergenerational programming ( $r = .36, p < .01$ ), accounting for approximately 13% of the variance. Correlations among the five subscales and likelihood of providing intergenerational programming are shown in Table 4.

## DISCUSSION

The IEAS was developed and tested among child and adult day care center administrators in an attempt to examine their attitudes toward intergenerational exchanges in dependent care situations. Through a content analysis of the existing literature and a factor analysis designed to determine the internal statistical structure of the resulting variables making up the IEAS, we created five subscales that were conceptually meaningful to us to represent the domain of attitudes toward intergenerational exchanges. Reliability data suggest that the IEAS and its subscales have reasonable internal consistency, and the moderate intercorrelations among the subscales indicate that they are independent of one another. The significant and moderate correlation between the IEAS and a measure of the likelihood of providing intergenerational activities provided evidence of predictive validity, or the degree of correspondence between the two measures (Nunnally, 1978). It should be pointed out that this relationship is correlational and represents the extent to which one can generalize from scores on the IEAS to scores on the likelihood measure; it does not provide evidence of a causative relationship, nor does it predict whether providers will actually provide intergenerational programming. However, taken together, the statistical procedures performed here do provide viable evidence for the reliability and validity of the IEAS.

A word of caution is in order. Given that no existing measure of intergenerational attitudes exists, an analysis to determine the convergent validity of the IEAS (e.g., a multitrait-multimethod analysis of whether the IEAS correlates with another scale that purportedly measures intergenerational attitudes) was not possible. Furthermore, although we had a respectable sample, data from respondents constituting much larger and more varied samples are necessary before more definitive statements about the scale's reliability and validity can be made. Finally, although the IEAS was significantly and positively related to the likelihood that these respondents would provide intergenerational activities in their current programs, our results suggest that there are obviously other factors that contribute to this likelihood, and research is needed that examines the predictors of both intentions to

provide intergenerational activities and the actual provision of these activities. Nevertheless, our results help to illuminate the importance of examining the attitudes of caregiving professionals who are most likely to make decisions about new curricula and programming. As mentioned earlier, the continued proliferation and support of intergenerational programs will greatly depend on the attitudes and perceptions of current and future professionals who plan, implement, and direct such programs. The IEAS brings researchers one step closer to understanding the attitude-behavior relationship among child and adult day care center administrators.

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**APPENDIX G**  
**SAMPLE MODIFIED INTERGENERATIONAL**  
**EXCHANGES ATTITUDE SCALE**

## MODIFIED INTERGENERATIONAL EXCHANGES ATTITUDE SCALE

The following statements are about the interaction of children and older adults. Please circle whether you strongly agree (5), somewhat agree (4), agree (3), disagree (2), strongly disagree (1) with each statement.

### RESPONSE BETWEEN OLDER ADULTS AND CHILDREN

		SA	SoA	A	Da	SD
1.	Older adults and children help each other.	5	4	3	2	1
2.	Children and older adults have fun together.	5	4	3	2	1
3.	Most older adults and children have good relationships.	5	4	3	2	1
4.	Children and older adults make good friends.	5	4	3	2	1
5.	Older adults share wisdom with children.	5	4	3	2	1
6.	Older adults enjoy hobbies more with children around.	5	4	3	2	1
7.	Older adults enjoy playing with children.	5	4	3	2	1
8.	Older adults see what children need and help them.	5	4	3	2	1
9.	Older adults are gentle and kind to children.	5	4	3	2	1
10.	Older adults and children like each other.	5	4	3	2	1

### CHILDREN'S PERCEPTIONS OF OLDER ADULTS

1.	Children think older adults are ugly.	5	4	3	2	1
2.	Children think older adults are dumb.	5	4	3	2	1
3.	Children feel uncomfortable around older adults.	5	4	3	2	1
4.	Children think older adults are boring.	5	4	3	2	1



### ATTRIBUTES OF CHILDREN

	(circle one)	SA	SoA	A	Da	SD
1. Children ask too many questions so older adults don't want them around.		5	4	3	2	1
2. Children are too selfish so they can't be around older adults.		5	4	3	2	1
3. Children have a hard time respecting older adults.		5	4	3	2	1

### ATTRIBUTES OF OLDER ADULTS

1. Children make older adults nervous.		5	4	3	2	1
2. Children are too active for older adults.		5	4	3	2	1
3. Older adults are not patient with children when they are messy.		5	4	3	2	1
4. Older adults supervise children too much.		5	4	3	2	1

### POWER/CONTROL

1. Older adults are not hard enough on children when children do something wrong.		5	4	3	2	1
2. When children play games with older adults, the children cheat.		5	4	3	2	1
3. Older adults are too weak to be around children.		5	4	3	2	1

### DEMOGRAPHICS

- How old are you? 13, 14, 15, 16, 17, 18, 19 (circle)
- Do you presently live with an older adult? Yes No (circle)
- Do you presently live with an older deaf adult? Yes No (circle)
- Have you been to Camp Mark Seven before? Yes No (circle)
- Are you male or female? Male Female (circle)
- Were you raised in the United States? Yes No (circle)

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