

ABSTRACT

THE ATTITUDES OF THE YOUNGER AND OLDER GENERATIONS PRIOR TO AND AFTER AN INTERGENERATIONAL PROGRAM

by Mary Ellen Stone

This study assesses older and younger adults' attitudes toward those of other ages and the ability of an intergenerational program to change the attitudes of younger and older adults. The contact hypothesis suggests that positive interaction, while meeting six criteria, may lead to positive attitude changes. Three intergenerational classes and a comparison group that is age-segregated are used to examine attitudes before and after the course. After participation in an intergenerational program, older adults exhibit significantly more positive attitudes toward younger adults than do younger adults about older adults. However, there is not a significant difference between pre- and post-test mean scores for those in the age-integrated and age-segregated courses. Qualitative observations suggest that a significant amount of positive intergenerational interaction occurs in the intergenerational courses, and are used to assess the context of the classes and to explain the findings.

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AFTER AN INTERGENERATIONAL PROGRAM

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Chapter I: Introduction

1. Purpose of this Study

The purpose of this study is to examine attitudes toward those of different ages and to assess how participation in an intergenerational program free from forced interaction may be associated with these attitudes. In particular, I am interested in the attitudes of older adults compared to the attitudes of younger adults. The primary goals of this project are to measure the attitudes that persons have about those of other ages, assess the interactions that take place between the different age groups in an intergenerational program, and to assess whether intergenerational programs that do not force interaction between age groups have the ability to change or improve these attitudes.

2. The Definition of Intergenerational

In order to assess the potential influences of intergenerational programs, the term “intergenerational” first needs to be defined. The terms “age-integrated” and “intergenerational” are often used interchangeably in both literature and conversations (Bressler, Henkin, & Adler, 2007; Davis, 2007; DeSouza, 2007; Hagestad & Uhlenberg, 2006; Oberg, 2007; Riley & Riley, 2000; Uhlenberg, 2000). Age-integrated and intergenerational are both been defined as not restricting participation on the basis of chronological age and in which cross-age interactions take place (Uhlenberg, 2000). Intergenerational programs are designed to engage non-biologically linked older and younger persons (Uhlenberg, 2000). A more specific term, “intergenerational partnerships,” describes interactions between school children and older people (Riley & Riley, 2000). For the purpose of simplicity, only the term intergenerational is used throughout this study, unless referencing the work of other authors. Intergenerational is the best term available to describe the type of interaction between older and younger adults in this study, as, participation is not restricted, cross-age interactions take place, and non-biologically linked older and younger persons are interacting.

For the purpose of this study, the term “intergenerational programs” should be regarded as intergenerational interactions. This distinction is necessary, because the ‘programs’ used in this study do not force interaction between older adults and younger adults. Instead, the programs used in this study allow for natural, organic interactions to take place without people being forced or paired with those of other age groups. Having a program where the interaction is

not forced may allow for natural interactions and attitude changes to take place without the influence of a research moderator. That is, in this study older and younger adults are not placed into groups and they are not asked to work together. This study examines interactions between older and younger adults that take place without the individuals being asked or forced.

3. Why the U.S. Needs Intergenerational Programs

The United States is in need of intergenerational programs. Currently, older adults are the fastest growing segment of the United States population (U.S. Bureau of the Census, 1989). Greater involvement between the older generations and the younger generations may have many positive consequences. Intergenerational programs lead to a lessening in ageist attitudes and the cultural, communicative, functional, and normative barriers that currently exist (Aday et al, 1993; Dellmann-Jenkins et al, 1994; Gierveld & Hagestad, 2006; Oberg, 2007). Social support for both generations is improved, knowledge and other resources are exchanged, and communities are more connected when different generations have positive attitudes towards each other. Research supports the idea that intergenerational relationships have the ability to convey mutual benefits for the old and young, to fight age discrimination and negative attitudes about other age groups, and to lead to social networking (Aday et al, 1993; Barton, 1999; Dellmann-Jenkins et al, 1994; Hagestad & Uhlenberg, 2005; Henkin, Santiago, Sonkowsky, Tunick, 1997; Oberg, 2007; Riley & Riley, 2000).

Intergenerational programs are excellent opportunities to study attitudes and other “age” barriers that may exist (Uhlenberg, 2000). Intergenerational programs are able to create bonds between the young and old and to create opportunities for the transmission of cultural heritage, experiences, resources, and social support (Aday et al, 1993; Dellmann-Jenkins et al, 1994; Henkin, Santiago, Sonkowsky & Tunick, 1997; Riley & Riley, 1994). Age segregation, on the other hand, is evidence of structural lag, or the fact that social structures and changing lives of older adults are not changing at the same rate (Riley & Riley, 1994). Negative attitudes can be nurtured in an environment where age-segregation occurs (Uhlenberg, 2000). Age-integration and intergenerational programs represent opposition to structural lag. Intergenerational programs are able to combat structural lag and to accommodate the changing social structures and the changing roles of older people in our modern society (Riley & Riley, 1994).

4. Theoretical Background

The contact hypothesis can aid in explaining why attitudes may change in a positive direction when two different age groups interact. The contact hypothesis suggests that interactions between segregated groups in which interactions are positive will lead to changes in people's attitudes toward the other group (Allport, 1954). The contact hypothesis proposes that knowledge, on its own, does not cause people to change their prejudices and stereotypes about others. Rather, the contact hypothesis suggests that "true acquaintance" lessens prejudice. That is, contact between two individuals from different groups needs to be for a long duration, and there needs to be real interaction taking place in order to result in attitudinal change (Amichai-Hamburger & McKenna, 2006). The contact hypothesis maintains that "getting to know the other" leads to changing attitudes and stereotypes (Amichai-Hamburger & McKenna, 2006). According to the contact hypothesis, when two individuals from different groups meet and have a positive experience, then a positive attitude change results (Allport, 1954). The individual's attitude change is then extended to that individual's group as a whole, thus changing negative attitudes toward the "other" group (Allport, 1954). Although the contact hypothesis was originally used to assess interethnic and interracial attitudes, it is also applicable in understanding interactions between those of different ages. Similar to the way that those of one racial-ethnic group consider those of different racial-ethnic groups to be the "other" (or not part of their group), those of one age group may see those of different age groups as being the "other." Some researchers studying attitudes of different age groups toward one another support the contact hypothesis in terms of explaining how intergenerational programs are linked with attitude changes regarding those of other ages (Couper, Sheehan, & Thomas, 1991; DeSouza, 2007; Meshel & McGlynn, 2004; McGowan & Blankenship, 1994; Seefeldt, 1987).

Allport (1954) specified four conditions that are necessary for intergroup contact to reduce prejudice: equal status, common goals, cooperative interaction, and institutional support (Allport, 1954). Equal status refers to participants having roles or tasks assigned to them such that they are of equal rank when interacting. For example, no role assigned can be perceived as more prominent than another role; it is key for participants to perceive equal status. Common goals and cooperative interaction refer to the fact that the groups interacting should share similar goals and interact in a supportive manner to achieve these outcomes. Institutional support is also necessary in order to promote positive changes and to show society that commitment to integration and equality is important (Allport, 1954). When these four criteria are met, the

contact hypothesis suggests that attitudes toward the other group are more positive (Amichai-Hamburger & McKenna, 2006). Later work suggests two other conditions are also necessary for positive attitude to change to take place: voluntary participation and intimate contact (Amichai-Hamburger & McKenna, 2006). Voluntary participation refers to the fact that those involved in the interactions are volunteering their participation and want to be involved in the interaction. Hamburger & McKenna (2006) also include intimate contact as a key component, so that the interactions are not merely being in a room together, but interaction takes place through conversation or activity. The more of the above six components that are met simultaneously, the greater the chance of lasting attitudinal change taking place (Amichai-Hamburger & McKenna, 2006).

If the above conditions are met, it is suggested that negative stereotypes, negative attitudes, and prejudices are reduced by way of prolonged contact with the 'other' (DeSouza, 2007; Meshel & McGlynn, 2004). However, the contact hypothesis also suggests that contact may not always result in positive change. If attitudes remain negative or become increasingly negative, there are two possible reasons. First, the interaction may have supported the initial attitudes and stereotypes of the individual. Second, the interaction may not have incorporated the requisite components (Allport, 1954; Meshel & McGlynn, 2004).

Previous studies support the contact hypothesis with respect to intergenerational programs (Couper, Sheehan, & Thomas, 1991; DeSouza, 2007; McGowan & Blankenship, 1994; Meshel & McGlynn, 2004; Seefeldt, 1987). Oberg (2007) finds that attitudes are more positive after an intergenerational program due to interaction, understanding, and the length of interaction. In another study, there is an overall improvement in older adults' attitudes about the young, but the attitudes of the young about the old become more negative, and the authors attribute this to age differences in susceptibility to the contact hypothesis (Meshel & McGlynn, 2004). Others find that attitudes about those of other ages are more positive for both older and younger adults after an intergenerational program and, consistent with the contact hypothesis, attribute this improvement to the fact that the individuals gained knowledge about and understanding of the "other" (Knapp & Stubblefield, 2000).

In order to meet the six conditions necessary for positive attitudinal change described above, several steps must be taken. First, class, race, age, and other stereotypical markers should not be taken into consideration when designing intergenerational programs. Second, all

participants in intergenerational programs should be there for a common reason. Third, the intergenerational programs should require the cooperation of all participants, regardless of age. Fourth, intergenerational programs should have institutional support or sponsorship. Fifth, intergenerational programs should promote intimate contact between those of different ages. Finally, participation in intergenerational programs should be voluntary. If these six criteria are met, the contact hypothesis suggests that positive attitudinal change should result.

5. Previous Research

Past studies on attitudinal changes due to intergenerational programs have disparate findings (Aday et al, 1993; Caspi, 1984; Dellmann-Jenkins et al, 1994; DeSouza, 2007; Hummert, 1990; Kite & Johnson, 1988, Knapp & Stubblefield, 2000; Meshel & McGlynn, 2004; Oberg, 2007). Findings from several studies show that attitudes of older and younger adults toward one another can be both positive and negative (DeSouza, 2007; Knapp & Stubblefield, 2000; Meshel & McGlynn, 2004; Oberg, 2007). A more detailed look at the programs used and the results give insight to these disparities.

One study uses three groups (contact, didactic, and control) to design interactions between older and younger persons at a middle school (Meshel & McGlynn, 2004). The groups met for a total of six weeks, facilitated by an assistant researcher. Two groups allow intergenerational interaction, while the third is a control group. The didactic group created a talent show, the contact group had the choice of taking a part in the talent show and in the activities, and the control group did not participate in any of the activities or in the talent show (Meshel & McGlynn, 2004). The pre-test results show that the attitudes of the young about the old and the old about the young are positive overall in the pre-test (Meshel & McGlynn, 2004). After implementation of the intergenerational program, this study finds that overall, there is an improvement in attitudes for the old about the young, but that attitudes of the young about the old become more negative (Meshel & McGlynn, 2004). To explain these finding, the authors suggest that children hold onto negative stereotypes about the old, while older adults are more susceptible to the contact hypothesis (Meshel & McGlynn, 2004). Meshel & McGlynn (2004) also suggest that methodological choices may explain why previous intergenerational program studies have different results from their own. Meshel & McGlynn (2004) propose that many studies about intergenerational programs lack conceptual clarity. First, the ways in which older persons are characterized in the surveys measuring attitudes vary from sketches to poorly worded

phrases. Second, comparisons between old and young on specific traits in the survey can lead to negative attitudes. Third, the way attitude is measured and operationalized varies from study to study (Meshel & McGlynn, 2004). As such, previous work may not be measuring the same constructs or using the best measures.

Another study using a similar intergenerational program finds that the older adults' initial attitudes about younger adults are more positive than younger adults' attitudes toward older adults (Knapp & Stubblefield, 2000). Further, while the younger adults in the study exhibit overall positive attitudes about older adults, they also have more negative stereotypes about older adults. A possible explanation is that the young are taught, by society, negative thoughts and stereotypes about the older population and about aging in general (Knapp & Stubblefield, 2000). After the intergenerational program, attitudes became more positive for both the young and the old (Knapp & Stubblefield, 2000). This may be because knowledge about the "other" is learned, and with a better understanding about the "other" group, attitudes improve (Knapp & Stubblefield, 2000).

A third study finds negative attitudes among both younger and older adults toward those of the other age group in the pre-test results (DeSouza, 2007). The intergenerational program DeSouza (2007) uses lasted five months and uses multiple types of activities in order to create interaction between the younger and older generations (DeSouza, 2007). This intergenerational program uses a secondary school located in Brazil to house focus groups, reminiscence groups, workshops, and celebrations. Participants were asked to discuss different topics, to discuss life stories, and to take part in both workshops and celebrations where they had to work together to create an end product (DeSouza, 2007). After implementation of the program, the results show that the negative attitudes previously observed in both age groups improved, but especially for women (DeSouza, 2007). Analysis of the results from a focus group suggests that the negative attitudes they find may be attributed to a difference in what is considered normative and respectful behavior. For example, some of the older adults explained their negative attitudes by saying that younger adults don't call them "ma'am" or "sir." The young explain their negative attitudes by citing all of the negative stereotypes that they have learned and are constantly bombarded with in society (DeSouza, 2007).

A similar study finds that both the older and younger adults have negative attitudes toward the other age group prior to an intergenerational program (Oberg, 2007), similar to

DeSouza (2007). Oberg (2007) explains the negative attitudes as attributed to issues with the “old and new ways” of thinking and acting; a lack of understanding about these “new ways and old ways” of thinking leads to older and younger adults to not understand the actions of the other. Like DeSouza (2007), Oberg (2007) finds that attitudes are more positive after the intergenerational program due to interaction, understanding, and the length of interaction.

Barton (1999) finds mixed attitudes for both the young and old adults’ during the pre-test. This study uses a private, not-for-profit residential treatment center for a two month period (Barton, 1999). The younger adults take a total of six classroom sessions, where they study aging curriculum. Also during the two month period, the young adults go on two six-hour visits with older adults at nursing homes and a senior center, where they are instructed to interact with the older adults and to discuss what they have learned in their class about aging (Barton, 1999). After using the intergenerational program as an intervention, the study finds that young adults’ attitudes become stronger in the same direction as their initial attitudes (Barton, 1999). That is, those with negative attitudes initially exhibit even more negative attitudes after the program.

Some studies assess only the attitudes of the young about the old (Aday et al, 1993; Dellmann-Jenkins et al, 1994). Two studies find that after an intergenerational program, the attitudes of younger adults about older adults are more positive (Aday et al, 1993; Dellmann-Jenkins et al, 1994). In these two studies, positive interaction and intimate contact are discussed as the two most likely reasons why attitudes are more positive for younger adults after participating in an intergenerational program. Dellmann-Jenkins et al. (1994) also note that not only did the attitudes of the younger adults toward the older adults change in a positive manner, but the young are also more willing to work with older adults, and to accept them on social and academic levels. This change is explained by the fact that the younger adults experienced a positive interaction with the older adults in the program; therefore, the young feel more positive about older adults in general society.

Overall, each study uses some form of a control and experimental group. In most of the programs, participants interact by way of conversation or through hands-on activities that have been supplied to them by a moderator. The programs last for a long duration of time, which, according to the contact hypothesis, is necessary in order to change attitudes and stereotypes. All of these intergenerational programs use a multitude of settings, but most of the settings are classified as typical age-segregated locations. For example, middle schools and nursing homes

are age-segregated institutions. Most of the participants in the intergenerational programs participated voluntarily, and finally, the types of interactions that took place are considered intimate. As discussed earlier, none of these programs can be labeled as organic or natural settings allowing for intergenerational interactions. Instead, all of these studies create the environment and force participants into groups with other age groups, force participants to interact with other age groups, and finally, they force the different age groups to converse.

6. Limitations of Previous Work

Several studies examine stereotypes and attitudes of the young about the older generations both prior to an intergenerational program and after an intergenerational program (Aday et al, 1993; Barton, 1999; ; Dellmann-Jenkins et al, 1994; DeSouza, 2007; Gierveld & Hagestad, 2006; Hagestad & Uhlenberg, 2006; Knapp & Stubblefield, 2000; Meshel & McGlynn, 2004; Oberg, 2007; Pinguart et al, 2000; Uhlenberg, 2000). However, very few of these studies assess the attitudes of the older generations about the younger generations using an intergenerational program as the intervention. Further, among those that do assess the attitudes of the older generations about the younger generations, incentives or monetary motivations are used to seek out persons interested in intergenerational programs are typically used (Barton, 1999; Knapp & Stubblefield, 2000; Meshel & McGlynn, 2004). One study (Knapp & Stubblefield, 2000) uses a sample that motivates the participants to consent to the study by giving free tuition to those who enroll in the intergenerational class where a study is to be conducted, which is problematic. Using this form of motivation and incentive can cause bias in the sample and in the results of a study. The use of incentives also goes against one of the criterion of the contact hypothesis: voluntary participation. Further, previous studies utilize intergenerational classes that take place in very age stereotypical settings, such as nursing homes and senior centers (Barton, 1999; Meshel & McGlynn, 2004; Pinguart et al, 2000).

Barton (1999) implements an intergenerational program that teaches aging curriculum to the participants and then measures attitude changes after interaction. The idea of teaching aging curriculum to younger adults before interaction is a good idea that few studies implement, but in order to assess the ability of an intergenerational program to change attitudes in a positive direction, no curriculum should be taught to either age group prior to the program. Teaching aging curriculum prior to the interaction may result in attitude changes due to the curriculum more so than the interaction.

Also, very few of the studies available on intergenerational programming examine the context of the interactions. Some researchers use focus groups and discussion groups, but neglect to analyze the context in which the interactions are taking place (Aday et al., 1993; DeSouza, 2007; Oberg, 2007). By neglecting the context, it is unknown if the interactions during the intergenerational programs are positive or negative. Knowing the context of the intergenerational program may shed light on why attitudes do or do not change over the course of the program. Also, knowing if the interactions are forced or exist solely due to the programs' design may give insight as to why attitude changes do or do not occur.

7. Contributions of the Current Study

In this study, I improve upon previous research on attitudes about other age groups over the course of an intergenerational program in several ways. First, I assess the attitudes of both older and younger adults, rather than focusing just on the attitudes of the younger adults about the older adults. Second, participants in the classes did not know about the study until they had already signed up and attended their first class. None of the participants were aware of the study until I introduced it at the first meeting of the class they had enrolled in. This eliminates any bias created by participants self-selecting into the course because they know it is part of an intergenerational study. No coercion is used in this study. Participants pay a class fee that is not reimbursed or reduced if they participate in the study. Third, this study uses both a quantitative survey as well as qualitative observations of the interactions taking place at the class meetings. This provides a context for understanding the quantitative survey results. The context in which interactions take place can be studied to gain insight into the ways in which intergenerational programs may influence attitudes. Fourth, this study assesses intergenerational courses that incorporate the six components identified by the contact hypothesis as necessary for attitude change. Fifth, this study uses an intergenerational program that allows for natural and organic interactions to take place instead of forcing relationships and interactions. By allowing natural and organic relationships and interactions to form, the study is better able to determine if these type of interactions are possible or will occur in settings outside of the research environment. For example, prior research created the settings and forced the interaction between the older and younger adults, but this study only supplies a setting where the younger and older adults have the choice to interact.

8. Hypotheses

Some previous studies on attitudinal changes find positive changes in attitudes after participation in an intergenerational program, whereas others find negative changes in attitudes (Caspi, 1984; Hummert, 1990; Kite & Johnson, 1988; Meshel & McGlynn, 2004). I expect that after participating in an intergenerational class, attitudes towards the opposite age group will become more positive. The contact hypothesis gives insight as to why attitudes may become more positive. The participants in this study will be given an opportunity to interact in a status equal environment where the common goal is the topic of the class. Once the two groups begin to interact and understand each other, attitudes should become more positive to the extent that there is positive interaction with those of other ages. I expect the intergenerational programs I am using to promote intergenerational connections and relationships, causing attitudes to become more positive. I expect that older adults will start with better attitudes about the younger adults than vice versa, because past studies have shown that younger adults are socialized to have negative attitudes about older adults and aging in general (Knapp & Stubblefield, 2000). I expect that there will be no difference between the attitudes of older adults' and younger adults' attitudes after the intergenerational program.

Chapter II: Methods

1. Sample

The sample for this study consists of persons enrolled in three non-credit courses offered through a public university in the Midwest. The university has an office that designs non-credit courses in which any person, regardless of enrollment at the university and geographic location, can participate for a certain fee. The three courses used in this study have been selected due to the intergenerational nature of the class; that is, all three classes are advertised to adults of all ages (at least eighteen) in the community, and do not require the person to be enrolled at the university.

All people in these three classes were invited to participate in the study. Of the 106 people enrolled in the classes, 86 completed the pre-test; of these 86 people, 70 also completed the post-test, for a response rate of 66%. The first class is a Latin ballroom beginners course. This class was located at a community arts center, designed to give community members a place to take acting and art classes, as well as a place to perform plays and concerts. In this one-hour course, a dance instructor teaches basic Latin ballroom dance steps to the class, and over the

course of the class, each couple learns a dance that they have the opportunity to share at the end of the six weeks. There are a total of 46 people enrolled in this course, and 28 have completed both the pre- and post-test surveys.

The second class is a pottery wheel class. The class is six weeks long and meets every Monday for two hours. This class is located at an art center located on the university's campus, and offers students, faculty, and community members a ceramics/pottery studio, a photo lab, woodshop, and metals/jewelry/glass studio. The instructor of this class helps novice potters learn to throw pots, and he also helps experienced potters improve their craft. A total of ten people are enrolled in this course and four have completed both the pre- and post-test surveys.

The third class is a volunteering class. This class meets for one hour twice a week for a total of five weeks. This class holds three out of ten meetings at the local senior center. The other seven class meetings are held at other locations in the Midwest town neighboring the university such as the local resource center, where community members can receive food supplies, clothes, money to pay bills, and other necessary items; a counseling center, where community members can call or make an appointment to seek counseling; and the community hospital. In this class, the instructor lectures about unmet social service needs in the area, and discusses and introduces the organizations in or near the area that are working on these problems. There are twelve people in this class and six people have completed both the pre- and post-test surveys.

A fourth class, which is not intergenerational, is used as the comparison group; this class is an age-specific course and is about later life decision making. This class is sponsored by a retirement learning community (RLC). The RLC offers courses to persons of retirement age (55 or older); as such, this course represents an age-segregated course that can serve as a comparison. These courses are non-credit courses at the university and one must be a member of the RLC to participate in the courses. The RLC class used for this study meets for one hour and fifteen minutes for a duration of five weeks. In this class, the instructor discusses what older adults will face as they age, and the instructor invites panels of professionals to help the participants confront the big decisions they will have to make in life. This class is located on the university's campus. Roughly 38 people are enrolled in the class, and 32 people have completed both the pre- and post-tests surveys. All of these classes were chosen based on the

recommendation of the office sponsoring these classes and because the time period during which they were offered.

This study uses two settings that could be considered age-stereotypical facilities; however, I argue that they are not age-stereotypical in the context of this study. First, the intergenerational group in the volunteering class meets at a senior center only three of the total ten meetings. When the class meets at the senior center, it is after hours, so no senior center members or activities are present. Also, this location is used due to its convenient location in relation to the other locations being visited after the initial meeting at the senior center. Further, this course is focused on volunteer opportunities in the community, and the location is not associated with these. Second, the pottery wheel course met on the college campus of the university. This location should not be considered age-stereotypical due to the fact that the building is open to the entire community in this Midwest town. One does not have to be a student in order to take these classes or to use the art tools or the classroom; this class is not housed in a traditional classroom setting, such as that found in grade school, and not during typical daytime course hours.

The sample consists of persons ranging in ages of 18 to 93. The sample includes both men and women, most of who reside in towns surrounding the university. The sample is limited to those who responded to both the pre- and post-test. The total sample size is 70 respondents. Thirty-two persons are a part of the comparison group (age-segregated), and 38 persons are a part of the intergenerational group.

2. Data Collection

Data collection consists of three steps. First, I conduct a pre-test quantitative survey in each of the four classes. Second, I complete qualitative observations by attending each course and observing the interaction between participants. Finally, I conduct a post-test survey at the end of the course (copies of the surveys are included in Appendix B, p.41, & Appendix C, p.45).

2.1. Pre-Test Survey

The pre-test survey was given to both those enrolled in intergenerational classes and those in the age-segregated class. The pre-test was given at either the first or second class meeting in every class. Every person who agreed to participate completed a survey that corresponded to their age. If the participant was 55 or older, they filled out a survey measuring their attitudes about persons younger than them. If the participant was 54 years old or younger,

they filled out a survey measuring their attitudes about persons older than them. Age 55 was used as the cut-off due to two reasons. First, the RLC requires that their members be at least 55 years of age or older, as the RLC strongly believes that retirement age begins at fifty-five. No person under the age of fifty-five can enroll in the RLC courses. Second, other studies have indicated that 55 is a good cut-off point between the young and old and have used this age to separate age groups (DeSouza, 2007; Knapp & Stubblefield, 2000; Oberg, 2007; Pinquart, Wenzel & Sorensen, 2000; U.S. Social Security Administration, 2004). In the case of the comparison group (those in the age-segregated class), every participant was 55 or older due to the RLC requirements. In this case, all participants completed a survey that measures their attitudes about persons younger than they are. The questions are the same in the surveys given to those over 55 and those 54 or younger, and are changed only to reflect the reference group for age. For example, one statement on the survey given to persons aged 54 or less says, "They are supportive of younger generations," whereas the survey given to persons aged 55 or older says, "They are supportive of the older generations." The surveys took ten to fifteen minutes to complete.

2.2. Observations

The second part of data collection involves unobtrusive observation. I attended all three of the classes to observe the environment of the classes and the way in which participants interacted. The observation portion of data collection began after the pre-test was given. There was no interaction between the participants and myself while observing. I took notes about the interaction of participants with each other and the classroom environment. These observations are used to investigate the amount and type of intergenerational interaction taking place in the classes and to better understand the mechanisms for any attitude changes (or lack thereof) that I might find in the quantitative results. The observations allow for a focus on the context of the classroom settings, not the individuals. No identifying notes or comments were recorded in the observations.

I recorded the interactions that took place and the nature of the interactions. For example, when I observed interactions taking place, I noted the ages of the people participating. I also noted participants' facial and body expressions, what they talked about, how long they interacted, other participants that joined the conversation, the type of interaction (conversation, silent, avoidance, etc) that took place, and whether the conversation was in-depth or superficial.

Further, I recorded information about the environmental factors of each of the interactions as well as the classes themselves. For example, I noted whether interactions took place during class time or afterwards, whether desks and tables in the classroom environment were organized in a manner that allowed for easy communication, and whether the overall classroom comfortable or uncomfortable. After all of the observations and recordings were complete, I read through them to find patterns, anomalies, and key features. This was done by hand, without the use of any software.

2.3. Post-Test Survey

The third part of data collection is the post-test. The post-test surveys are identical to the pre-test surveys, without the demographic questions (to avoid repetition). Those who filled out the pre-test survey completed the post-test survey at the last class meeting. A total of 70 persons completed both the pre- and post-test. Thirty-two of the 70 respondents are in the comparison group, and 38 of the 70 respondents are in the intergenerational group. The post-test was completed at the last class meeting in all four classes. Some participants in the four classes chose to mail their survey to me due to their inability to stay after class for fifteen minutes; in these cases, I provided the stamps and self-addressed envelopes. Those who chose to mail the surveys to me did so within two days of their last class meeting. A total of 86 people completed the pre-test and a total of 70 people completed both the pre- and post-test. The loss of 16 participants is due to some respondents choosing not to continue participating in the study, some participants not attending the last class meeting, and some participants not mailing their completed post-test survey to me.

3. Variables

A combined scale is used to assess the attitudes of the old and of the young about the other age group. The two scales were adapted from Morgan & Bengston's (1976) Likert scale of negative and positive attributes of old age, and Eisdorfer & Altrocchi's (1961) semantic differential attitude scale cited in Mangen & Peterson (1982). These scales have been used by many research entities including the National Council on Aging (Mangen & Peterson, 1982). Aday et al. (1993) also used a semantic differential attitude scale to assess attitudes of younger adults about older adults. The two scales were adapted for this study and combined in order to assess the attitudes. The adaptation of the two scales was necessary in order to update the language of the scales, to shorten the length of the survey, and to delete items that are repetitive.

The two scales used in this study use the same seven-point scale and three-point scale, used by Mangen & Peterson (1982) and Aday et al. (1993).

After collecting data, analyses were conducted to assess the reliability of the attitudinal measures. Correlations between variables were calculated, as was the Cronbach's alpha for the scale. These analyses revealed that some of the questions did not scale with others. As such, the final scale does not include some of these original questions (see Appendix D, p.50). The 25 remaining questions about attitudes toward older adults are each z-scored to standardize the responses. These 25 responses are then added to form the final attitudinal scale ($\alpha=.875$). Nine respondents had missing data for at least one of the attitudinal measures used in the scale, but no respondent was missing data for more than three of these items. For these respondents, the sample mean for that question was imputed.

My original survey also included demographic questions about the respondent's gender, education, and prior experience with an intergenerational class. However, due to the small size of the final sample and divisions of the sample into age groups, further dividing the sample by these variables produced sample sizes too small to detect statistically significant results. Therefore, these variables are not included in the results.

4. Plan of Analysis

First, I calculate the means for the intergenerational group (age-integrated). The pre-test mean for the young and old and the post-test mean for the young and old are calculated separately. Second, I calculate the pre-test mean and post-test mean for the comparison group (age-segregated). Third, I calculate the overall mean for the pre-test and post-test for the intergenerational group, regardless of age. Fourth, I conduct a t-test for the change in means between the pre-test and post-test for the intergenerational group by age. Finally, I conduct a paired t-test comparing the control group (age-segregated) mean with the intergenerational groups mean for both the pre-test and the post-test.

After analyzing the quantitative portion of the results, I then analyze the qualitative portion of the results. This analysis examines the dynamics within each of the three intergenerational classes, with particular attention to the type and amount of interaction between those of different ages. I also evaluate the extent to which each course did or did not facilitate intergenerational interaction. Finally, I also assess the degree to which the six criteria specified by the contact hypothesis as requisite for attitudinal change were met.

Chapter III: Results

1. Quantitative Results

Table 1 shows the characteristics of the age-integrated group (n=38). Table 2 shows the means for the pre- and post-test for the age-integrated course by age group. T-tests were then used to test for significant differences in the means between younger and older adults. In order to show significant differences in a clear manner, subsequent tables show significant differences in mean scores by age and type of course (age-integrated vs. age-segregated). The possible range of scores for the pre-test for the age-integrated courses is (-36.952, 21.055) and (-33.509, 18.893) for the post-test. The negative signs do not indicate negative attitudes; rather, large positive and negative values are evidenced because the values for the attitude measure have been standardized. Table 2 shows that, prior to participating in the intergenerational program, there are no significant differences in attitudes toward the opposite age group for older or younger adults. However, after participating in the intergenerational program, there are significant differences in attitudes between younger and older adults. The standardized post-test mean for older adults is significantly more positive (4.349) than for younger adults (-4.500). It appears that, after participation in an intergenerational program, older adults exhibit significantly more positive attitudes toward younger adults than do younger adults about older adults.

Table 3 shows the mean pre- and post-test attitudes for both younger and older adults. T-tests for differences between pre- and post-test means were not significant. That is, for both older and younger adults, there were no significant changes in mean attitudes after participating in the intergenerational programs.

Table 4 shows pre- and post-test means for those in the age-segregated and age-integrated courses. The pre-test mean is significantly higher ($p < 0.1$ ¹) for the older adults in the age-segregated course (3.103) than for the adults in the age-integrated courses (-2.613). Prior to the courses, older adults in the age-segregated course had more positive attitudes toward the opposite age group than did the adults in the age-integrated courses. However, there is not a significant difference in post-test mean scores for those in the age-integrated and age-segregated courses. Although those in the age-segregated course initially had more positive attitudes toward those of other age groups, there is no longer a significant difference in attitudes after the courses.

¹ I use 0.10 as the alpha value in this study due to the small sample size.

Finally, Table 5 shows t-tests for differences between the pre- and post-test score separately by class type (age-integrated versus age-segregated). There is not a significant difference between the pre-test score and post-test score for those in either the age-segregated or age-integrated courses. That is, it does not appear that there is a significant change in attitudes toward the opposite age group after participating in either an age-integrated or age-segregated course.

In summary, prior to the courses, older adults in the age-segregated course had more positive attitudes toward the opposite age group than did the adults in the age-integrated course. Also, it appears that after participation in an intergenerational program, older adults exhibit significantly more positive attitudes toward younger adults than do younger adults about older adults. No other comparisons were statistically significant ($p < .10$).

2. Qualitative Results

2.1. Context of the Volunteering Class

Most of the participants of the volunteering class did not seem to know each other prior to the course and all seemed very eager to learn about the topic of volunteering. However, there was one group of four individuals who did know each other before beginning the class. Those in this sub-group did not talk to other class participants unless they had to, and they preferred to keep to themselves. It was obvious that one of the women in this group was married to the only man in the group. The man didn't talk much to anyone in this subgroup or in the entire class. All of the subgroup members seemed to be around the same age (sixty) and they seemed to have been coworkers at one point in time. This subgroup was the only exception to any of the following observations.

The rest of the participants in the volunteering class did not seem to know each other prior to the class and they all participated in open conversations with each other. Age did not seem to be a determinant of where people sat or who had conversations. Prior to the class, participants would discuss the prior week's "field trip" to a volunteering location, or they would discuss new local construction projects and the upcoming holidays. Conversation was not forced and everyone seemed to actively participate in the discussions. Once the class began, everyone was very attentive and took notes. Everyone seemed very interested in how to become a volunteer, where to volunteer, and how to become a better volunteer.

At the end of each class, regardless of the location, many of the participants would stand around talking about their past experiences with volunteering, and many discussed the current gaps where volunteers are needed. Sometimes there were guest speakers, and on these occasions, everyone bombarded the speaker with questions and would ask for ways volunteers could make the speaker's organization better. Everyone had a strong bond due to their common interest in volunteering, regardless of age. The younger adults tended to make comments regarding new ways of volunteering or becoming active in the community, while the older adults would comment on what has and has not worked in the past. Everyone appeared to have something to give and to take from this class and, overall, the class seemed to be a positive experience.

The six criteria (i.e., equal status, common goals, cooperative interaction, institutional support, voluntary participation, and intimate contact) that the contact hypothesis specifies are necessary for positive attitude change appeared to be met in this course. Everyone was voluntarily participating in the class, and everyone had a common goal (to learn more about volunteering). All participants were at an equal status; no one was superior or inferior in the group, and there was no hierarchy based on age or any other factor. Interaction among group members was very cooperative. Finally, there was institutional support for this intergenerational class from a vast array of community organizations as well as the university.

2.2. Context of the Pottery Wheel Class

The pottery class was very interesting in terms of age differences and interactions. At the first class, everyone seemed somewhat nervous and worried about where they should sit and who they should talk to. It seemed that no one knew each other and this was intimidating for them. Once the instructor began discussing the goals for the following classes, people seemed to become more relaxed. Some of the participants were very skilled at making pots on the pottery wheel. Those who were not skilled required more direction from the instructor on the first class meeting. Toward the end of the first class, everyone seemed to be more comfortable with each other, but no one was trying to have a conversation.

At the second class that I observed, the original feeling of tension had disappeared. The skilled potters were now giving tips to the novice potters and everyone seemed to be enjoying themselves. Instead of silence, the class participants were always discussing something ranging from politics to recently released movies. Everyone seemed to thoroughly enjoy the class,

especially when the instructor kept his lecture short. There was plenty of time to talk and socialize during the class, and there was hardly a quiet moment during the times that I observed the class. These conversations were with people of different age groups, so the interactions taking place didn't depend on age.

A mother (in her fifties) and a son (in his late teens) were enrolled in this class. At first, they sat together and kept quiet. As the weeks went by, the mother and son started sitting with other class members and interacting without the other at their side. The class setting was so comfortable that the mother and son no longer sat together or "needed" each other for comfort in an awkward setting. The mother was soon sitting with a younger woman, and her son was sitting with an older woman. The mother and son seemed to almost ignore each others' presence and very much enjoyed the company of their new pottery friends. Overall, the pottery class experience seemed very positive for everyone and each participant seemed to one another.

In terms of the criteria the contact hypothesis specifies as necessary for attitude change, my observations show that these criteria appear to have all been met. Everyone in this class participated voluntarily and everyone had the common goal of learning how to work on a pottery wheel. Cooperative interaction was necessary, with more experienced potters often helping the novice potters. Everyone had an equal status, regardless of their abilities as a potter, and regardless of their age. Without the aid of institutional support from the sponsoring office and the university, the class would not have existed.

2.3. Context of the Latin Ballroom Dance Class

This class was perhaps the most interesting in terms of the context in which participants had to interact. Most participants had signed-up for the class with a partner, but some did not. For these few who had no partner, they had to pick one at each class meeting. These participants did not seem to feel awkward or embarrassed about dancing with a complete stranger. Everyone was very accepting of the range of dance talents and everyone seemed very comfortable with dancing in front of almost fifty other people. This class was unique from the other classes I observed in that this was the most intimate interaction expected of any participants in any of the three classes.

The participants tended to converse before each class and at the end of class. Several groups formed, but there didn't appear to be any pattern in how they formed or who was in the groups. Participants of all ages were seen sharing dance tips and helping the more novice

dancers with their routine. I did notice one age difference; the younger participants seemed to be more reserved and quiet during the conversations while the older participants were more loud and outspoken. It is unclear why this happened. The older adults were very interested in having a conversation with the younger adults, but the younger adults seemed shyer about having conversations with strangers. However, toward the end of the class, the younger adults were no longer shy and were conversing with the rest of the participants.

During class, there wasn't a lot of time to talk. Everyone was trying to keep to the beat of the music or listen to the instructor's commands. Though there was a lack of conversation during the class, there was not a lack of laughter, smiling, and short sentences of encouragement. Participants were not being quiet because they didn't want to talk, but because they wanted to succeed at Latin ballroom dancing. The smiles and laughter were enough to indicate that everyone was having fun and that everyone felt connected, regardless of conversation during the class.

As was the case in the other classes, this class also met the six criteria specified by the contact hypothesis as being necessary for attitude change. First, every participant was voluntarily participating in this class. Second, the intimacy of the contact was very high. Third, the participants were all there for a common reason, to learn Latin ballroom dancing, and were very enthusiastic about learning new dances. Fourth, the cooperation between participants was mandatory in order to learn the dances. Fifth, everyone seemed to have an equal status in the class, regardless of age. Finally, there was institutional support for the intergenerational program; without the support of the community center and the sponsoring office, this class would not have taken place.

3. Overall Context of the Intergenerational Courses

Within the context of all intergenerational classes (volunteering, pottery wheel, and Latin ballroom dance), the overall atmosphere was relaxed and conducive to a learning environment. Within these classes, participants had the opportunity to interact through both dialogue and action, such as dancing or learning to make a clay pot. As previously discussed, all of the intergenerational classes had characteristics consistent with those specified by the contact hypothesis as being necessary for attitudinal change.

According to the contact hypothesis, six criteria must be met in order for attitudes to change in a positive manner. All three intergenerational classes met all six of these criteria to

some degree. There is no way to objectively measure to what degree each of the six criteria are met. My observations are the sole basis for stating that the six criteria were met to some degree. Without a valid tool to measure the degree that the six criteria were met, I can only use my interpretation. First, every participant in the study is at an equal status when they enter the classroom. Class, race, age, and other stereotypical markers were not taken into consideration when participants were enrolled in the intergenerational classes. Second, all participants in the intergenerational classes are there for a common reason: to learn how to dance, volunteer, or to throw pots on a pottery wheel. Third, each intergenerational class requires the cooperation of all participants. For example, in the Latin ballroom dance class, everyone is expected to be supportive and helpful in learning the dance moves. Fourth, each intergenerational class is supported by at least one institutional organization; the university or the office sponsoring the classes. Without the support of these institutions, the intergenerational classes would not exist. Fifth, each participant voluntarily enrolled in the class. Finally, some form of intimate contact between the different age groups took place in each class. All three of the classes met the six criteria; the only difference in meeting the criteria was when they were met. For example, in the pottery class, intimate contact was not accomplished on the first class meeting, unlike the ballroom dance class. In following the contact hypothesis, there is no ‘time limit’ as to when the six criteria must be met, so regardless of when the six criteria were met, each class followed the guidelines of the contact hypothesis. However, in the classes where the six criteria were met the soonest, it is possible that this may be more influential in terms of attitude change than in the classes that did not meet the six criteria early in the course. Those classes who met the criteria early on, had a longer period of time to be influenced in term of attitude changes related to the contact hypothesis.

The contact hypothesis suggests that the attitudes of an individual or group will only change if the interaction with the “other” is positive. In the age-integrated classes, the atmosphere was very conducive to having conversations and sharing experiences with other class participants. The interactions that took place between the different age groups seemed very natural and positive. The participants seemed to truly enjoy talking with anyone in the class, regardless of age or any other social marker. The interactions were pleasant and participants left each conversation smiling and ready for the next class. I did not notice any negative interactions when I observed the intergenerational classes.

Within each course, interaction took place both during the structured portion of the class as well as during the unstructured portion of the class. For example, participants in the volunteering class were asked to respond to the instructor's questions about how to promote volunteerism, during which participants engaged in conversations and discussions. However, participants from the volunteering class would also interact both before and after the class. Though interaction took place throughout the course, it was the interaction during the unstructured class time that seemed to be the most energetic. This is most likely due to the fact that the participants were better able to interact without feeling as though they were disrupting the instructor's class.

Chapter IV: Discussion

The goals of this study are to measure the attitudes that persons have about those of other ages, assess the interactions that take place between the different age groups in an intergenerational program, and to assess whether intergenerational programs have the ability to change or improve these attitudes. Using a sample of older and younger adults participating in three intergenerational courses, as well as a sample of older adults participating in an age-segregated course, I compared the attitudes prior to the class and after the class by age (18-54 years and 55 or older) and by class type (age-integrated and age-segregated). I also observed each class multiple times to better understand the context of the interactions taking place.

I find limited support for my hypothesis that attitudes will become more positive after participating in an intergenerational course. It does appear that there may be some attitude change over the course of the intergenerational classes. Analyses of the survey results indicate that, while there are no significant differences in older and younger adults' attitudes toward the other age group prior to an intergenerational class, the attitudes of older adults are more positive than those of younger adults after participating in an intergenerational program. This finding is consistent with the findings of prior research (Meshel & McGlynn, 2004). Further, some of my qualitative observations indicate that the intergenerational courses promoted greater positive interaction between those of different age groups. However, there is no significant difference between the pre-test attitudes and the post-test attitudes for those in the intergenerational courses, and there were also no significant differences in pre- and post-test attitudes by age group. The lack of statistical significance may be due to the small sample size of only 38 participants in the

intergenerational course. Due to a lack of statistical significance, I cannot conclude that these intergenerational programs were able to improve participants' attitudes toward those of other age groups. However, it is notable that participation in intergenerational programs is not associated with an increase in negative attitudes toward those of other age groups, as one previous study has found (Barton, 1999).

It can be argued that two of the criteria for attitudinal change are questionably met due to the nature of the intergenerational classes used. These two criteria -- common goal and intimacy -- are questionable in that this study does not emphasize age-integration in the classes. The classes merely exist for those who have interests in the subject matter of the course; that is, the classes do not necessarily exist because participants want to be in an age-integrated environment. Therefore, although learning a skill (such as pottery) is a common goal among members of the course, intergenerational interaction itself is not the common goal. Second, the classes may not occur for a long enough period of time to allow intimacy to exist. Though I observed intimate contact and exchanges taking place in the classes, the extent of the intimacy, and whether or not the individuals involved in the interaction considered it to be intimate, is not completely clear. The inability of this study to meet these two requirements may be possible reasons as to why the findings did not show a lot of significant changes in attitudes. Regardless of this possibility, according to the contact hypothesis, after experiencing a positive interaction with another group, attitudes should become more positive. As more criteria that are met there is more basis for attitude change, but not all of the criteria need to be met to result in an attitude change. However, in the case of this study, I cannot support the claim that after experiencing a positive interaction with another group, attitudes should become more positive. During observations of the intergenerational classes, I found evidence that the six criteria specified by the contact hypothesis as necessary for attitude change were met and that the interactions between those of different age groups were positive. However, results from this study are not consistent with the contact hypothesis, in that there is not a statistically significant change in attitudes after participation in the intergenerational program.

There are several reasons why results of this study may not be consistent with my hypotheses. First, the sample size of this study is very small compared to other studies that have used the contact hypothesis to examine attitude change after participation in an intergenerational program (Meshel & McGlynn, 2004; Knapp & Stubblefield, 2000; DeSouza, 2007; Oberg,

2007). The 38 participants in the intergenerational classes is not a large sample size when making statistical comparisons. Second, my measure of attitudes toward those of other age groups may not be ideal. Although the attitudinal measure used in this study has been utilized in other work on attitudinal change during the course of involvement with an intergenerational program, other measures have also been used. Some other studies using the “Children's Perceptions of Aging and Elderly” inventory to measure attitude changes have found differences in attitudes, and some argue this measure is a more ‘modern’ instrument (Aday et al., 1993). I did not use this measure because it only applied to part of my sample (young adults) and I wanted a measure that could be applied to both age groups in my sample. Third, I ask respondents about their attitudes regarding those “younger” or “older” than them, and do not specify specific age groups. It is possible that this categorization is too broad and should be further specified. Fourth, these courses were relatively short and may have not allowed enough time or interaction for noticeable attitudinal change.

Fifth, these courses did not specifically mandate any interaction between those of different age groups. For example, in the Latin ballroom dance class, young adults were not required to pair with older adults. The younger and older adults had conversations and shared experiences in the class, but they were not required to share an even more intimate relationship, such as dancing together. I expected that having an intergenerational program that did not require interaction would allow for more natural and organic interactions to take place, and the more natural the interaction, the more genuine individuals’ attitude change would be. Previous research has demonstrated that programs designed to change attitudes in a positive direction actually do this (Aday, et al., 1993; Barton, 1999; Couper, et al., 1991; Oberg, 2007), but this project examines if positive changes in attitudes will occur in an environment that does not force interaction among those of different ages. However, results do not support this hypothesis. Sixth, it is possible that I did not find more statistically significant changes in attitudes because of potential selection effects. A selection effect, in which those who volunteer for an age-integrated program may already have more positive attitudes about older or younger adults, would mean that the room for increased attitudinal change is minimal.

Future studies on intergenerational programs and attitudinal change should employ the use of the contact hypothesis as well as a mixed methods approach. It is important to assess the context of an intergenerational course for two main reasons. First, understanding the context of

the course may help to explain statistical findings. Second, it is necessary, if using the contact hypothesis, to know that all six criteria are being met during the intergenerational program. Without the context of the courses and observing the courses, researchers may be less able to explain their findings.

This study has examined attitudes about other age groups prior to and after involvement with intergenerational programs. I have extended previous research on this topic by examining the attitudes of both younger and older adults, using intergenerational courses that incorporate the six criteria specified by the contact hypothesis as requisite for attitudinal change, using both quantitative measures of attitudinal change as well as qualitative observations of the context of the intergenerational classes, and comparing attitudes of those in age-integrated courses with those in an age-segregated course. Seventy participants completed both a pre- and post-test that measured their attitudes about persons of different age groups. Observations were used to explain the context of the age-integrated courses, and they showed that overall, the age-integrated classes were a positive experience and met the six criteria of the contact hypothesis. However, when examining pre- and post-test attitudes, I find limited support for the contact hypothesis. The attitudes of older adults are more positive than those of younger adults after participating in an intergenerational program. However, there is no difference in attitudes toward those of other age groups before and after participation in the intergenerational program. Qualitative observations suggest that there is substantial intergenerational interaction during the intergenerational classes, and that much of this interaction is informal and not due to the course itself. It appears that intergenerational courses are able to foster intergenerational dialogue, but it is less clear if this translates into lasting attitudinal change.

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Appendices
Appendix A: Tables

Table 1. Description of Age-Integrated participants

Female	60.5%
Male	39.5%
Bachelor's degree	52.6%
Married	60%
Had an intergenerational class before	55%

Note: Sample is limited to those in the age-integrated courses (n=38)

Table 2. Age Differences in Pre- and Post-Test Means for the Age-Integrated Course

	Younger (18-54)	Older (55+)
Pre-Test Mean	-4.997	2.553
Post-Test Mean	-4.500 **	4.349

Significantly different from older (55+) adults: *p < 0.10 **p < 0.05 ***p < 0.01

Note: Sample is limited to those in the age-integrated courses (n=38)

Table 3. Differences in Pre- and Post-Test Scores for the Age-Integrated Course, by Age

	Pre-Test	Post-Test
Younger (18-54)	-4.997	-4.500
Older (55+)	2.553	4.349

Significantly different from post-test score: *p < 0.10 **p < 0.05 ***p < 0.01

Note: Sample is limited to those in the age-integrated courses (n=38)

Table 4. Means for the Age-Segregated and Age-Integrated Courses

	Age-Segregated (55+)	Age-Integrated (All Ages)
Pre-Test Mean	3.103 *	-2.613
Post-Test Mean	2.025	-1.705

Significantly different from the age-integrated: *p < 0.10 **p < 0.05 ***p < 0.01
n=70

Table 5. Differences in Pre- and Post-Test Scores for Age-Segregated and Age-Integrated

	Pre-test Mean	Post-test Mean
Age-Segregated (55+)	3.103	2.025
Age-Integrated (All Ages)	-2.613	-1.705

Significantly different from post-test score: *p < 0.10 **p < 0.05 ***p < 0.01
n=70

Appendix B: Pre-Test

Survey to measure attitudes of younger adults (54 or younger) about older generations (55 or older).

Perceptions of Younger Adults

ID #: _____

Date: _____

Note to Participant: You have the right to choose not to answer any questions.

A. The first section of this survey will ask you some basic background information. Please try to be as accurate as possible.

1.) What is your gender?

_____ Male

_____ Female

2.) What is your age?

_____ years of age

3.) Please identify how much formal education you have **completed** by circling the correct response:

- a. 0-11 years, no diploma
- b. High School graduate
- c. GED or equivalent
- d. Some college with no degree
- e. Associate's degree
- f. Bachelor's degree
- g. Graduate or professional degree
- h. Other _____

4.) What is your marital status? (Please circle the correct response)

- a. Single (never been married)
- b. Married
- c. Partnered, not married
- d. Widowed
- e. Divorced or Separated

5.) What is your employment status?

- a. Employed, either full or part-time
- b. Student
- c. Fully Retired
- d. Partially Retired
- e. Not employed (unemployed or never worked)
- f. Other _____

6.) Please select the range that best fits your household income.

- a. under \$5,000
- b. \$5,000-6,999
- c. \$7,000-9,999
- d. \$10,000-14,999
- e. \$15,000-19,999
- f. \$20,000-24,999
- g. \$25,000-34,999
- h. \$35,000-49,999
- i. \$50,000 or more

B. Section B asks some general questions about your opinions.

1.) The following questions ask you to circle the number 1-7 that best describes older persons in general where 4 is neutral.

1	Pleasant	1	2	3	4	5	6	7	Unpleasant
2	Uncooperative	1	2	3	4	5	6	7	Cooperative
3	Considerate	1	2	3	4	5	6	7	Inconsiderate
4	Flexible	1	2	3	4	5	6	7	Inflexible
5	Open Minded	1	2	3	4	5	6	7	Closed Minded
6	Not Understanding	1	2	3	4	5	6	7	Understanding
7	Unloving	1	2	3	4	5	6	7	Loving
8	Active	1	2	3	4	5	6	7	Passive
9	Weak	1	2	3	4	5	6	7	Strong

10	Enthusiastic	1	2	3	4	5	6	7	Unenthusiastic
11	Slow	1	2	3	4	5	6	7	Fast
12	Alert	1	2	3	4	5	6	7	Not Alert
13	Independent	1	2	3	4	5	6	7	Dependent
14	Lazy	1	2	3	4	5	6	7	Hard Working

3.) The following questions ask you to circle the number 1-7 that best describes older persons in general where 4 is neutral.

1	Progressive	1	2	3	4	5	6	7	Old-Fashioned
2	Consistent	1	2	3	4	5	6	7	Inconsistent
3	Rich	1	2	3	4	5	6	7	Poor
4	Selfish	1	2	3	4	5	6	7	Generous
5	Productive	1	2	3	4	5	6	7	Unproductive
6	Idle	1	2	3	4	5	6	7	Busy
7	Insecure	1	2	3	4	5	6	7	Secure
8	Healthy	1	2	3	4	5	6	7	Unhealthy
9	Ugly	1	2	3	4	5	6	7	Handsome
10	Optimistic	1	2	3	4	5	6	7	Pessimistic
11	Satisfied	1	2	3	4	5	6	7	Dissatisfied
12	Hopeful	1	2	3	4	5	6	7	Dejected
13	Disorganized	1	2	3	4	5	6	7	Organized

14	Sad	1	2	3	4	5	6	7	Happy
15	Friendly	1	2	3	4	5	6	7	Unfriendly
16	Trustful	1	2	3	4	5	6	7	Suspicious
17	Conservative	1	2	3	4	5	6	7	Liberal
18	Tolerant	1	2	3	4	5	6	7	Intolerant
19	Defensive	1	2	3	4	5	6	7	Aggressive
20	Decisive	1	2	3	4	5	6	7	Indecisive

4.) Finally, please identify your opinions of older persons in general by circling the response that completes the sentence.

1	Most are	Very	Somewhat	Hardly at All	Friendly and Warm
2	Most are	Very	Somewhat	Hardly at all	Physically active
3	Most are	Very	Somewhat	Hardly at all	Bright and Alert
4	Most are	Very	Somewhat	Hardly at all	Good at getting things done
5	Most are	Very	Somewhat	Hardly at all	Adaptable
6	Most are	Very	Somewhat	Hardly at all	Sexually Active
7	Most are	Very	Somewhat	Hardly at all	Wise from Experience
8	Most spend	A Lot of time	Some time	Hardly any time	Participating in recreational activities and hobbies
9	Most spend	A Lot of time	Some time	Hardly any time	Participating in fraternal or community organizations or clubs
10	Most spend	A Lot of time	Some time	Hardly any time	Socializing with friends

11	Most spend	A Lot of time	Some time	Hardly any time	Sitting and thinking
12	Most spend	A Lot of time	Some time	Hardly any time	Caring for younger or older members of the family
13	Most spend	A Lot of time	Some time	Hardly any time	Participating in political activities
14	Most spend	A Lot of time	Some time	Hardly any time	Watching television
15	Most spend	A Lot of time	Some time	Hardly any time	Working full-time
16	Most spend	A Lot of time	Some time	Hardly any time	Working part-time
17	Most spend	A Lot of time	Some time	Hardly any time	Doing volunteer work
18	Most spend	A Lot of time	Some time	Hardly any time	Reading
19	Most spend	A Lot of time	Some time	Hardly any time	Going for walks
20	Most spend	A Lot of time	Some time	Hardly any time	Gardening or raising plants

Section C: Please answer these last few questions

1.) Have you ever taken an intergenerational class before? I.E. Have you taken a class with persons that were at least 15 years older and/or younger than you?

- a. yes
- b. no

2.) Please specify the age that comes to mind when you think of an older adult.

Appendix C: Post-test

Survey to measure attitudes of younger adults (54 or younger) about older generations (55 or older).

Perceptions of Younger Adults

ID #: _____

Date: _____

Note to Participant: You have the right to choose not to answer any questions.

A. Section A asks some general questions about your opinions.

1.) The following questions ask you to circle the number 1-7 that best describes older persons in general where 4 is neutral.

1	Pleasant	1	2	3	4	5	6	7	Unpleasant
2	Uncooperative	1	2	3	4	5	6	7	Cooperative
3	Considerate	1	2	3	4	5	6	7	Inconsiderate
4	Flexible	1	2	3	4	5	6	7	Inflexible
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13	Independent	1	2	3	4	5	6	7	Dependent
14	Lazy	1	2	3	4	5	6	7	Hard Working

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3.) The following questions ask you to circle the number 1-7 that best describes older persons in general where 4 is neutral.

1	Progressive	1	2	3	4	5	6	7	Old-Fashioned
2	Consistent	1	2	3	4	5	6	7	Inconsistent
3	Rich	1	2	3	4	5	6	7	Poor
4	Selfish	1	2	3	4	5	6	7	Generous
5	Productive	1	2	3	4	5	6	7	Unproductive
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7	Insecure	1	2	3	4	5	6	7	Secure
8	Healthy	1	2	3	4	5	6	7	Unhealthy
9	Ugly	1	2	3	4	5	6	7	Handsome
10	Optimistic	1	2	3	4	5	6	7	Pessimistic
11	Satisfied	1	2	3	4	5	6	7	Dissatisfied
12	Hopeful	1	2	3	4	5	6	7	Dejected
13	Disorganized	1	2	3	4	5	6	7	Organized
14	Sad	1	2	3	4	5	6	7	Happy
15	Friendly	1	2	3	4	5	6	7	Unfriendly
16	Trustful	1	2	3	4	5	6	7	Suspicious
17	Conservative	1	2	3	4	5	6	7	Liberal

18	Tolerant	1	2	3	4	5	6	7	Intolerant
19	Defensive	1	2	3	4	5	6	7	Aggressive
20	Decisive	1	2	3	4	5	6	7	Indecisive

5.) Finally, please identify your opinions of older persons in general by circling the response that completes the sentence.

1	Most are	Very	Somewhat	Hardly at All	Friendly and Warm
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4	Most are	Very	Somewhat	Hardly at all	Good at getting things done
5	Most are	Very	Somewhat	Hardly at all	Adaptable
6	Most are	Very	Somewhat	Hardly at all	Sexually Active
7	Most are	Very	Somewhat	Hardly at all	Wise from Experience
8	Most spend	A Lot of time	Some time	Hardly any time	Participating in recreational activities and hobbies
9	Most spend	A Lot of time	Some time	Hardly any time	Participating in fraternal or community organizations or clubs
10	Most spend	A Lot of time	Some time	Hardly any time	Socializing with friends
11	Most spend	A Lot of time	Some time	Hardly any time	Sitting and thinking
12	Most spend	A Lot of time	Some time	Hardly any time	Caring for younger or older members of the family
13	Most spend	A Lot of time	Some time	Hardly any time	Participating in political activities
14	Most spend	A Lot of time	Some time	Hardly any time	Watching television
15	Most spend	A Lot of time	Some time	Hardly any time	Working full-time
16	Most spend	A Lot of time	Some time	Hardly any time	Working part-time

17	Most spend	A Lot of time	Some time	Hardly any time	Doing volunteer work
18	Most spend	A Lot of time	Some time	Hardly any time	Reading
19	Most spend	A Lot of time	Some time	Hardly any time	Going for walks
20	Most spend	A Lot of time	Some time	Hardly any time	Gardening or raising plants

Section B: Please answer these last few questions

1.) Have you ever taken an intergenerational class before? I.E. Have you taken a class with persons that were at least 15 years older and/or younger than you?

a. yes

b. no

2.) Please specify the age that comes to mind when you think of an older adult.

Appendix D: Items Deleted from Final Attitudinal Scale

Consistent-Inconsistent
Loving-Unloving
Rich-Poor
Secure-Insecure
Organized-Disorganized
Open Minded-Closed Minded
Understanding-Not Understanding
Aggressive-Defensive
Flexible-Inflexible
Adaptable
Sexually Active
Participating in recreational activities and hobbies
Participate in fraternal or community organizations and clubs
Socializing with friends
Sitting and thinking
Caring for younger or older members of the family
Participating in political activities
Watching television
Working full-time
Working part-time
Doing volunteer work
Reading
Going for walks
Gardening or raising plants