THE EFFECTS OF INTERGENERATIONAL RECREATION PROGRAMS ON ELDERS AND COLLEGE STUDENTS

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by
Jalissa Lee
Spring 2014
THE EFFECTS OF INTERGENERATIONAL RECREATION PROGRAMS ON ELDERS AND COLLEGE STUDENTS

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DEDICATION

I dedicate this work to God and my family.

I give a very special thank you to my parents for their never ending support and for being my biggest cheerleaders.
ACKNOWLEDGMENTS

I wish to thank my committee members for their expertise and giving their time. A special feeling of gratitude to my committee chairman, Dr. Michael J. Leitner, for his faith in me, encouragement, and the time spent guiding me through this process, and most of all for being a great mentor and friend through it all. Thank you Dr. Sarah Richardson and Dr. Laura McLachlin for agreeing to serve on my committee.

Finally, I would like to thank Lynette Dorenzo, the owner of Country Village assisted living facility for allowing me to conduct my study at her facility, and I’d like to thank the staff of Country Village for their support and assistance with residents when the study was taking place.
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ABSTRACT

THE EFFECTS OF INTERGENERATIONAL RECREATION PROGRAMS ON ELDERS AND COLLEGE STUDENTS

by

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Master of Arts in Recreation Administration

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The purpose of the study was to examine how intergenerational programs have an effect on the quality of life of older adults, and its implications for college students’ participation in future service learning opportunities. The participants included 103 students, and six older adults’. The program ranged from November 6, 2013 to December 15, 2013 and included fourteen scheduled sessions. The program included one hour of three recreational activities, and interviews. Measures included two surveys for the students and the Satisfaction With Life Scale and interviews for the older adults. The study was conducted in a general living space of an assisted living facility. Comparing the pretest results, there were no significant differences of the responses of the students with prior service learning experience and students with no prior service learning experience. Comparing the pretest to the posttest, the results showed that students had an increased desire to work with elders in the future and of the four older adults who
completed the Satisfaction With Life Scale, two of their scores increased and two stayed the same.
CHAPTER I

INTRODUCTION

Intergenerational programs have been bringing together older and younger generations since the introduction of the first widespread program in 1963 (Generations United, 2007). For younger adults, interacting with older adults enhances their social skills, widens their social network, and aids in developing a positive attitude towards older adults (Generations United, 2007). The study by Dorfman, Murty, Ingram, Evans, and Power (2004), found that college students in an intergenerational service-learning course that their overall attitudes towards aging and the elderly were positively impacted. In another study where college students participated in a service-learning course, the college students had more positive attitudes towards the elderly and an increased knowledge about the process of aging (Knapp & Stubblefield, 2000).

Intergenerational programs are not only beneficial to the individual but for the community as well. In America the percentage of older adults doing volunteer work are steadily increasing at a rate at 23.9% for 2009. In addition, many older adults volunteer at different types of organizations, such as hospitals, educational organizations, and religious institutions. Through their time spent volunteering, older adults are able to stay active in their communities. However, there are many older adults who live in nursing homes, assisted living facilities, or other residential facilities for older adults, and are not able to volunteer their time in the same way usually due to a lack of resources and
opportunities. Therefore, intergenerational programs are particularly beneficial to older adults in those types of settings.

Statement of the Problem

For many older adults who live in a nursing home or assisted living facility, a lot of their time is spent sedentary, demonstrated by irregular physical or recreational activity. Due to a lack of or small amount of socialization for older adults in these settings their quality of life may decrease. Bear (1990), Cutchin (2003), and Windriver (1993) state that some attributing factors for this decrease in their quality of life are loneliness and isolation, as many of them have separated from former relationships and the outside community (as cited in Park, Zimmerman, Kinslow, Shin, & Roff, 2012). In addition, many older adults become depressed in their old age which is commonly accompanied by a decrease in social and physical activities (Fiske, Wetherell, & Gatz, 2009).

Background and Need

For the purpose of this study, the mediators for loneliness, depression, and a lack of socialization for older adults are participation in physical activity, leisure, and intergenerational programs. Elavsky et al. (2005) found that older adults who participated in some sort of physical activity had a positive effect on their self-esteem among other things. In another study that assessed older adults who participated in physical activity, it was found that these older adults had higher levels of perceived well-being over time (Achour et al., 2011). In a study conducted by Tsai, Liu, and Wu (2012), they found that older adults who had a positive perception of their leisure were related to positive outlook
on their spiritual wellness. Older adults who participate in intergenerational programs have a social need filled (Chonody & Wang, 2013), and younger adults serve as a companion. Younger adults gain a better understanding of aging and gain an improved self-esteem as well (Generations United, 2007).

Recreation provides a wide range of benefits to the elderly. The benefits included are mental, physical, and psychosocial. A number of studies have shown that recreation is an important facet to older adults due to the positive impact it has on their quality of life. Nimrod and Adoni (2006) found that older adults had a higher satisfaction with life when they were more involved in active leisure (as cited in Leitner & Leitner, 2012). Cardenas, Henderson, and Wilson (2009) found that older adults who participated in recreation programs with other older adults increased their opportunity for socialization. The research done by John’s Hopkins (2006) found that people who frequently participated in leisure activities such as reading, playing board games, or dancing were less likely to develop dementia up to five or more years later (as cited in Leitner & Leitner, 2012).

Purpose Statement

The purpose of this study is to examine how intergenerational programs have a positive effect on the quality of life of older adults, and its implications for college students’ participation in future service learning opportunities.

Null Hypotheses

1. Based on the pretest there will be no significant differences in the students’ attitudes that do have prior service learning experience compared to the students’
attitudes that do not have prior service learning toward volunteer work with elders in the future.

2. Based on the pretest there will be no significant differences in the students’ attitudes that do have prior service learning experience compared to the students’ attitudes that do not have prior service learning toward participation in future service learning experiences in the future.

3. Based on the pretest there will be no significant differences in the students’ attitudes that do have prior service learning experience compared to the students’ attitudes that do not have prior service learning toward enjoyment being around older adults.

4. Based on the pretest there will be no significant differences in the students’ attitudes that do have prior service learning experience compared to the students’ attitudes that do not have prior service learning toward the idea that it is boring working with older adults.

5. Based on the pretest there will be no significant differences in the students’ attitudes that do have prior service learning experience compared to the students’ attitudes that do not have prior service learning toward the idea that it is depressing to be with older adults.

6. Based on the pretest there will be no significant differences in the students’ attitudes that do have prior service learning experience compared to the students’ attitudes that do not have prior service learning toward the idea that it is fun being with older adults.
7. Comparing the pretest to the posttest, there will be no significant differences in the students’ attitudes toward volunteer work with elders in the future.

8. Comparing the pretest to the posttest there will be no difference in the students’ attitudes toward participation in future service learning experiences in the future.

9. Comparing the pretest to the posttest there will be no difference in the students’ attitudes toward enjoyment being around older adults.

10. Comparing the pretest to the posttest there will be no difference in the students’ attitudes toward the idea that it is boring working with older adults.

11. Comparing the pretest to the posttest there will be no difference in the students’ attitudes toward the idea that it is depressing to be with older adults.

12. Comparing the pretest to the posttest there will be no difference in the students’ attitudes toward the idea that it is fun being with older adults.

13. There will be no significant change in the older adults’ life satisfaction.

Significance to the Field

Through the research and use of how intergenerational programs will affect older adults and college students’ alike will first off, allow for a positive exchange between the two generations which will serve in both groups working together for any future cause.
Definitions

For the purpose of this study the following definitions are:

**College Student**

Chico State student enrolled in RECR 180.

**Intergenerational Programs**

Social vehicles that offer younger and older generations the opportunities to interact and become engaged in issues concerning our society.

**Leisure**

Free or unobligated time.

**Life Satisfaction**

The cognitive dimension of subjective well-being.

**Loneliness**

An enduring condition of emotional state that arises when a person feels estranged from, is misunderstood or rejected by others, and/or lacks appropriate social partners for desired activity, particularly activities that provide a sense of social integration and opportunities for emotional intimacy.

**Older Adults**

A person age 65 years or older.

**Recreation**

Activity conducted during leisure, usually for the purpose of enjoyment.

**Self-esteem**

How one feels about oneself concept in comparison to an ideal.
Social Engagement

Making social and emotional connections with people and the community.

Limitations

1. All subjects are geographically stationed in the Northern California area.
2. Grade incentive for students’ participation.

Ethical Considerations

1. To ensure that the elders are not put in any physical or psychological risk by participating in the activities.
2. Recognizing that the students are not “true volunteers” because they are receiving extra credit points toward their final grade in a course.
3. Ensuring that the students conduct themselves in a respectful and helpful way toward the elders.
CHAPTER II

LITERATURE REVIEW

This literature review is comprised of three sections. These sections are related to the study of relations via intergenerational programs that utilize adapted exercise and recreation activities. The first section will address research related to physical activity and life satisfaction. The second section will focus on intergenerational programs. Finally, the third section will discuss the effects that leisure activities have on older adults.

Physical Activity and Life Satisfaction

Elavsky et al. (2005) conducted a study that examined physical activity has an effective means of enhancing the quality of life (QOL) of older adults over a period of 5 years (p. 138). Three psychological variables, positive effect, self-esteem, and self-efficacy, were examined as indicating factors in the relationship between physical activity and global QOL. Affect (happiness level) was also measured. The participants included 174 older adults aged 66.7 on average that were considered sedentary; defined by “a lack of regular involvement in exercise during the previous six months” (Elavsky et al., 2005, p. 139). The participants were evaluated at one and five years beyond baseline. The participants completed an inventory that provided demographic information details of their medical history and lifestyle/exercise habits. The participants were randomized to a
six-month walking or stretching intervention with a six-month follow-up at which all measurement materials were sent to the participants with instructions to complete and return by mail; four years later the same procedures were used except participants graded exercise was only scheduled after medical clearance. In addition, participants were paid $45 for their involvement in the follow-up testing.

To measure physical activity the Physical Activity Survey for the Elderly (PASE) was used and involves a 10-item instrument designed to assess physical activity levels over one week. QOL was assessed by the Satisfaction With Life Scale (SWLS), a 5-item scale, and each scale item is rated on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree) of the importance of aspects of one’s life in accordance with their values. The Physical Self-Worth (PSW) was used to assess self-esteem related to the physical self. The PSW is composed of six items where participants indicated a 4-point scale how true a characteristic was of them. Self efficacy was assessed using the Exercise Self Efficacy Scale, which assesses a person’s beliefs in their ability to exercise three times a week at moderate intensity for forty or more minutes a session in the future. Finally, to measure affect, the Memorial University of Newfounded Scale of Happiness (MUNSH), a 24-item measure consisting of four subscales: Positive Affect (PE), Negative Affect (NA), Positive Experience (PE) and Negative Experiences (NE), all used as a measure of happiness in older adults.

After the one-year assessment it was shown that physical activity had a direct effect on self-efficacy, physical self-esteem, and affect; also, self-efficacy and affect had direct effects on satisfaction with life (pp.141, 142). Active individuals had higher self-efficacy which, in turn, related to their QOL. However, it should be noted that according
to Elavsky et al. (2005), the involvement in any type of physical activity is not necessarily enough to influence one’s QOL. Some limitations are the study did not include measures of physical function or fitness, and only one measurement was used to assess physical activity.

Achour et al. conducted a study that assessed how physical activity predicts successful aging that was demonstrated by older adults perceived health and well-being. There were 1,011 participants aged 65 years at the start of the study in the year 2001, and 988 participants left at the end of the study in 2008. The Population Physical Activity Questionnaire (POPAQ) was used to assess the level of physical activity that contained 82 questions related to physical activity. The data from the POPAQ calculated daily energy expenditure (DEE), total physical activity energy expenditure (PAEE), and energy expended in low, high, and very high activity (MET’s), and oxygen uptake (VO2). In addition, a 17-item questionnaire composed of four parts was issued in 2001 and again in 2008. The first part addressed the socioeconomic and descriptive characteristics of the participants, part two assessed the degree of their involvement in cultural and sporting activities, part three examined the difficulties in everyday living, and the fourth part evaluated the impact and suitability of locally organized projects geared at senior citizens.

From the 686 questionnaires that were returned and analyzed, 85.6% stated that they were involved in “any kind of activity at least once a week, followed by cultural, sporting, DIY/gardening, and then volunteer work” (Achour et al., 2011, p. 218). The results showed that sporting activities and a good night’s rest were the most frequently chosen as being essential to successful aging, followed by having a social life.
The biggest indicator that physical activity correlated to life satisfaction and health status was from the increase in VO2, which was estimated from DEE and activity index. The results also showed that people who were the most active at the start of the study in 2001 had a higher level of perceived well-being years later. The study’s limitations were that only healthy persons living in their own were covered and had an unhealthy population been examined this could have made a difference in the responses and results of self-rated health and life satisfaction.

Blace examined the functional ability of older adults via participation in different categories of activities as well as their levels of life satisfaction. The premise for this study was activity theory which asserts that a high level of activity enhances personal satisfaction in old age (Blace, 2012). 780 older adults from Southern Mindanao, Philippines, aged 60 years and above were the respondents. To measure functional ability the Lawton Instrumental Activities of Daily Living (IADL) scale was used and adapted to use on older adults. The scoring for functional ability ranged from 0 to 9, the lowest score being 0 and 9 the highest. The categories for the scale were ability to use a phone, shopping, food preparation, housekeeping, laundry, mode of transportation, responsibility for own medications, ability to handle finances, and finally self care or personal hygiene.

A researcher-made survey interview schedule was administered to measure the levels of participation in the various activities. The activities included personal activities, physical activities, and activities with informal and formal support networks. The scale for the levels of participation in the activities ranged from 1= Never to 5= Always. To measure life satisfaction the Life Satisfaction Index for the Third Age (LSITA) scale was adapted and used. LSITA measured five factors of life satisfaction: 1)
Zest versus apathy, which relates to enthusiasm of response to life in general; 2) Resolution and fortitude, which measured the respondents’ acceptance of personal responsibility for their lives; 3) Congruence of goals, which measured the relative difference between desired and achieved goals; 4) Self-concept, which was based on one’s present emotional, physical, and intellectual factors, and finally; 5) Mood tone, relating to optimism and happiness and other positive affective responses.

The results showed that 207 respondents (26.64 %) had experienced difficulty in one or more IADL activities, but that most of the older adults have the capacity to perform the instrumental IADL’s. In addition, the results showed that the respondents had moderate levels of participation in personal activities but was not significantly related to their life satisfaction. The older adults’ participation in physical activities and activities with formal support networks had a positive relationship with functional ability; however, it should be noted that respondents had a low level of participation in physical activities. Respondents overall life satisfaction measured out to be fair or to some extent satisfied with their lives and this is attributed to their low levels of participation in physical activities as well as informal networks. This study is limited in that the population for the study only included persons who lived in the Philippines.

Intergenerational Programs

Knapp and Stubblefield (2000) observed the effectiveness of an intergenerational service-learning program by providing the opportunity for traditional-age college students to engage in a community service project while “witnessing examples of successful aging” (Knapp & Stubblefield, 2000, p. 612). To do this, an
intergenerational service-learning course was offered at Southeastern Oklahoma State University. Ten older adults over the age of 55 were awarded scholarships as an incentive to enroll in the course and were expected to participate in all of the course activities and contribute to classroom discussions through personal observations and experiences. Learning Partner Groups (LPGs) were created so that students could organize and complete a service project within the community during the semester. The LPGs consisted of 2 to 3 traditional-age students and at least one senior adult student.

To assess the individuals’ knowledge and perceptions of aging Palmore’s Facts on Aging Quiz (FAQ) I and II were used. The quizzes included 25 short true or false items (a total of 50 questions) designed to cover the basic physical, mental, and social facts about aging. To assess the instructional effectiveness of the intergenerational service-learning course, a pretest-posttest format was employed with a control group and experimental group, a total of 44 people. Undergraduate students enrolled in a criminal justice course ($N = 22$) were the control group, and the experimental group was made up of undergraduate students enrolled in the Psychology of Aging course that was modified to include the intergenerational and service learning portion ($N = 22$).

Both groups completed the FAQ I and II at the beginning of the semester and again near the end of the semester. For each correct answer, 1 point was given, and a wrong answer .5 was subtracted. A mean net score was completed as well as a net bias score for each group. A mean and net bias score was also calculated from the posttest results. Quantitative analysis was utilized to assess the effectiveness of the intergenerational service-learning course. The pretest and posttest scores for the experimental and control group were assigned t-tests. The mean net score of the
experimental group went from 19.2 at the Time 1 to 22.2 at Time 2. The control group scores did not differ much from Time 1 to Time 2; in fact, there was a negative change from 16.55 down to 16.18. The quantitative analysis also showed that traditional age students in the experimental group were impacted the most by the course, represented by the mean net score of 16.96 to 20.86 from t-tests comparing the age groups. Additionally students were asked open-ended questions about their experience in the intergenerational course at the end of the semester and students replied more positively than anything. Students discussed the bonds they had formed with the older adults, and how, for some of the students, it changed the way they thought about their own aging in a positive way. Limitations that should be taken into account are the small size of the control and experimental group, justifying the need for more empirical data.

Dorfman et al. (2004) conducted a study that compared attitude change of students enrolled in a gerontology course that included intergenerational service. Five successive cohorts of students were the participants in the study. Fifty students enrolled in the course each semester and 59 students enrolled in the service-learning option over the five semesters. Students were given an extra one semester hour credit for opting to participate in the intergenerational service-learning experience. The service-learning experience took place in Iowa at a nursing home, an assisted living facility, a semi-independent apartment site, and a local congregate meal site.

The students visited the field sites four times in the semester for 4 hours, which provided the opportunity for one-on-one student-elder relationships. The students paired up with the elders to do friendly visiting, reminiscing, or to conduct oral histories. The older adults in the program were selected by the nursing staff based on “adequate
cognitive and physical function” (Dorfman et al., 2004). Students’ attitudes were assessed at the beginning and end of the service-learning experience by the two attitudinal scales that included 9 and 7 items. The items on the scales were scored from 1 to 4 (1=strongly disagree to 4=strongly agree). In addition, the students answered open-ended questions at the beginning and end of the experiment to gain greater insight about their attitudes.

To examine the pre and posttest attitudinal change the Statistical and Service Solutions (SPSS) software was used. In addition, two-tailed paired sample t-tests was used, and analysis of variance was used to test for mean differences among the students at pre and posttest. The general attitudes toward the elderly of all five cohorts had an increased mean of 2.93 to 3.16. Based on the open-ended questions, a majority of the students stated that they had increased their understanding of older people and gained a greater respect for them. Students in the cohorts also showed a more positive attitude about their own aging.

Chonody and Wang (2013) based their study on reminiscence, which they describe as “recalling memories or stories to facilitate adaptation in current circumstance (Jones & Beck-Little, 2002, as cited in Chonody & Wang, 2013). The study was an intergenerational reminiscence program that incorporated up to date technology to provide qualitative analysis of stories by older adults. The aim of the study was to:

Empower people age fifty and older by providing a platform for them to share their stories and perspectives on life and lead social services into the digital age by bridging traditional roundtable interaction and modern digital communication. (Chonody & Wang, 2013, p. 81)

The program also aimed to connect seniors to younger generations. The program was conducted at a senior center located in northeastern United States in an urban area.
Twenty-six older adults participated in the program with an age range of 65 to 85 year, but only 11 of them were core members of the group who participated every week. The program consisted of a storytelling class that was open to anyone. The class was held once a week and class meetings were usually one and half hours and there were sometimes occasional community outings. The stories (that talked about anything they wanted) were first handwritten and then read aloud. The stories were the basis for a blog that included photographs and news from the class. The blog was used to memorialize the writings of the older adults and to provide their friends and family and the general public the opportunity to read the stories. A total of 203 stories were generated from all 26 participants but only 182 stories were used for the content analysis.

To analyze the content of the writings, the stories were read as a whole to gain an overall picture of content. To facilitate analysis of each story a code of key words and phrases was assigned to each story. Additionally themes and subthemes were generated for each story. To validate the finding, focus groups were held at the senior center to gather the participants’ perspectives on the project. The focus groups were conducted using “semi-structured, open-ended questions to assess what the perceived benefits of the program were for the participants. The content from the blog and the social networking site, Facebook, was analyzed to gain an understanding of how blog readers were responding to the stories. The comments and some of the emails from the sites were sent to the organizer of the program. It was found that the blog was utilized locally as well as across the country and internationally with hits from 60 countries.

The content analysis created results that yielded a categorization of the stories. The first one being a developmental time period, the second, reflections on the present,
and the third, other reflections on the past. The most prominent category was a developmental time period, with a total of 79 stories that discussed childhood, adolescence, and young/middle/late adulthood. The second category most frequented was reflections on the present, with 76 stories, and the third category included 27 stories. The focus groups also produced three main categories or themes which were: The opportunity to express oneself, appreciation for the class, and appreciation for the context to share stories.

The participants felt that the writing class helped them to express themselves through their writing. The participants gained an appreciation for the class through their appreciation for the group leader and the volunteers, the participants expressed how much they cared about the group members. Finally, the participants enjoyed the fact that other people read their stories and saw the group as a way to have conversation with others, and they liked that the blog existed to share with others. The results showed the benefits of reminiscence groups by personal expression and group bonding. The stories allowed for socialization and created intergenerational connections. It should be noted that there was a generalizability due to the sample size but that one of the biggest outcomes of this study was it “demonstrates to the greater community that the goal of healthy, positive aging is reachable” (Chonody & Wang, 2013, p. 92).

Leisure Activities and Older Adults

The study by Simone and Haas (2013) examined the different leisure activity engagement depending on the frailty of older adults, and tested a model evaluating the connection between functional status and functional well-being. The participants of the
study included 95 older adults with a mean age of 74. Participants were recruited from the Santa Clara community. After recruitment, the participants were sent a packet that contained a questionnaire that assessed demographics, life satisfaction, frailty status, and health status, and also, the participants were given a checklist of common leisure activities of older adults and told to mark which ones they participated in regularly.

The Groningen Frailty Indicator (GFI) was used to determine the participants’ level of frailty. The Satisfaction With Life Scale (SWLS) was used to assess the participants overall satisfaction with life. To assess the levels of positive and negative affect the Positive and Negative Affect Scale (PANAS) was used, which asked participants to vote how they feel on a scale from 1 (very slightly) to 5 (extremely), given a list of adjectives. Participants were also given a Leisure Activity Checklist, which was used to reflect social activities and solitary activities. The information gathered from the questionnaires was entered into a computerized database and analyzed. The statistical program SPSS was used for analyses.

The participants were categorized into “frail” and “not frail” groups, and the groups were shown to have no differences in regards to age, ethnicity, marital status, having family live nearby, or number of years of formal education (Simone & Hass, 2013). The frail group had low sensory capabilities such as problems with hearing and /or vision. The results indicated a strong relationship between functional status and subjective well-being. Also, high frailty and low social engagement was associated with a lower subjective well-being.

Tsai et al. (2012) conducted a study to determine the relationships between leisure satisfaction, self-esteem, and spiritual wellness. Tsai et al. defined leisure as “time
to do something without obligation or duty, and doing what an individual desires”, leisure satisfaction is the “positive perception or feeling that an individual forms, elicits, or even gains as a result of engaging in leisure and choice”, spiritual wellness “is a personal matter involving values, faith, and belief that provide an individual’s [want] to create and discover meaning and purpose of human existence”, and lastly, self-esteem is defined as “how one feels about oneself concept in comparison to an ideal” (p. 1228).

The participants included 334 people at least 60 years old and retired from Tainan City, Taiwan. The participants were involved in a series of locations, such as parks, churches, temples, senior centers, and school playground. Leisure satisfaction was measured using the Leisure Satisfactions Scale (LSS), spiritual wellness was measured by the Spirituality Assessment Scale (SAS), and self-esteem was measured by the Self-Esteem Scale (SES). The data analysis was done by the SPSS 12.0. A total of 400 surveys were administered, but only 334 were usable. The alpha coefficient for the leisure satisfaction scale was .96, for the spirituality Assessment Scale was .97, and it was .93 for the self-esteem scale. A correlation was shown between leisure satisfaction and spiritual wellness with a coefficient ($p < .001$). There was a positive correlation between leisure satisfaction and self-esteem with coefficients between .40 and .69. The results indicate that an active leisurely lifestyle will likely increase one’s overall well-being, particularly older adults.

Heo, Stebbins, Kim, and Lee (2013) explored the relationships among serious leisure, life satisfaction, and health. More specifically the study explored the relationships “between the levels of an individual’s senior games involvement and that person’s associated life satisfaction and health” (p. 20). The study consisted of 459 older adults
from the 2008 Indiana Senior Olympic Games and the 2008 Colorado Senior Olympic Games. The Indiana sample participants were asked to complete a survey that was returned by mail ($n = 207$). Surveys were mailed to 496 individuals from the Colorado sample and 252 were used. The age of the respondents ranged from 50 to 95 years old.

The Satisfaction With Life Scale (SWLS) was used to assess global life satisfaction. A SF-12 health survey by Ware, Konski, and Keller (1996, as cited in Heo et al., 2013) was used to examine physical and mental health. Serious leisure was measured by Gould et al.’s (2008) Serious Leisure Inventory Measure (SLIM). In addition, cluster analytic procedures were utilized, which “provided a method for grouping participants based on similarities and difference on the SLIM” (as cited in Heo et al., 2013, p. 20). The first cluster was termed the High involvement group ($n = 166$), which in relation to the other clusters, this group reported the highest scores on perseverance, significant effort, and career programs among other things. The second cluster was categorized as the Medium involvement group ($n = 171$), and the last cluster was labeled the low involvement group ($n = 122$), which compared to the other groups had the lowest level of participation in serious leisure. The highest mean for life satisfaction, physical health, and mental health were found in the High involvement group. The results demonstrate that the involvement in serious leisure can lead to an increased quality of life and is positively associated with life satisfaction, physical health, and mental health (Heo et al., 2013).
CHAPTER III

METHODS

The research questions of this study included the following:

1. Will older adults’ satisfaction with life improve after spending time with college students’?

2. Will the attitudes of college students’ towards participating in service learning with older adults change?

This study was both qualitative and quantitative and included a pretest and posttest design and describes the views or feelings of older adults participating in intergenerational recreation activities. Questionnaires were used to assess the college students’ attitudes toward older adults and observations. The pre and posttest questionnaires were collected using surveymonkey.com. Interviews were conducted to assess the older adults’ satisfaction with life and their disposition after participating in recreational activities. The responses to the interviews were transcribed.

Setting

The study took place at the Country House, a section of Country Village, an assisted living facility located in Northern California (see Appendix A). The study took place in the common area where the residents usually sit to watch television and mingle amongst one another.
Sample/Participants

The sampling procedure for the college students was a convenience sample, and the older adults selected were a convenience sample as well. The majority of the college students were Caucasian and their ages ranged from 18 to 23 years old with almost an even ratio of male to female. All of the older adults were Caucasian except one male who is Cuban. Many of the older adults were 85 years or older. Additionally, many of the older adults had first stage dementia.

Intervention and Materials

The study began on November 6, 2013 and fourteen sessions were scheduled for the students at the facility to participate for one hour, one time, until December 15, 2013. To encourage socialization among older adults and service learning between the college students and older adults I utilized three recreation activities: 1) A “Get to know you” activity, where the students asked the older adults non-evasive, general questions about themselves; 2) An adapted dance activity, where the students taught one to two dances to the elders and danced along with them; and 3) A relay activity where the students were in two groups with the older adults and had various relay competitions (see Appendix A). In addition, a research assistant observed the mood of the older adults, and after the activities, the students conducted a short 10-minute interview with the elders about their experience or feelings regarding the activities and time spent with the students.

The materials included an IPod and speaker for the adapted dance portion of the activities.
Measurements

Pre and posttest questionnaires were administered to the college students through surveymonkey.com. The pretest included a Yes or No question about whether they have worked with older adults prior to the study and included six statements:

1. Would they like to do volunteer work with elders in the future?
2. I am likely to participate in future service learning experiences in the future.
3. I enjoy being with older adults.
4. Is it boring working with older adults?
5. Is it depressing to be with older adults?
6. It is fun being with older adults.

The questions were answered on a 5-point scale from 1-Strongly Agree to 5-Strongly disagree. Based on the students’ answers regarding prior experience working with older adults, two groups were formed with those that have and those that have not for a comparison.

The Satisfaction With Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) was used to assess the overall life satisfaction of the older adults (see Appendix A). Additionally, the college students interviewed the older adults for 10 minutes and asked three questions:

1. How did these activities make you feel at present?
2. How did you like the activities?
3. How did you like spending time with college students?
Data Collection/Instruments

Data Collection

The data was collected through questionnaires, observations, and interviews. The pretest questionnaires were administered via a link that led to surveymonkey.com to the students before the actual study, and the posttest was administered in the same way. The observations were observed by a non-participant observer who took notes without any interference from a corner in the common area where the study took place. The interviews were conducted on-site at the assisted living facility without interruption to the participants’ daily living activities. The process for the data collection took place from November 6, 2013, to December 15, 2013.

Instruments

1. Students’ answered a Yes or No question that asked if they have prior service learning experience.

2. Students’ answered a Yes or No question that asked if they have prior experience working with older adult.

Data Analysis

All hypothesis testing is utilizing the .05 level for significance testing.

Hypothesis H1-Hypothesis H6:

The data used for testing this hypothesis was the pretest from the students. The responses from students who have had prior experiences working with elders were compared to those who have no experience. Additionally the Median Test (a non-parametric alternative to the t-test) was used to test for significance of differences
between the group of students who had prior service learning experience and those that did not.

- Hypothesis H7-Hypothesis H12

Pre and posttest data for students desire to be involved in service learning were compared. Median scores for the pre- and post-tests were computed. “The Median Test” was used to test for significance of differences between the pre and posttest.

- Hypothesis H13

All of the items were positively coded with higher scores indicating a higher satisfaction with life. The qualitative data was transcribed and categorized into similar themes.
CHAPTER IV

RESULTS

A total of 168 students signed up to participate in the study. Before the study began, the students completed an informed consent (see Appendix A). 133 students completed the pretest, and 103 students completed the posttest. There were a total of 57 students who had prior experience working with older adults, and 76 students who had no prior experience working with older adults. An informed consent was given to the older adults’ (see Appendix A) and a total of six older adults’ signed up to participate in the study on the initial sign-up day; however, an additional three participated in the study once it began. There was one day where only two students attended the service learning session. Additionally, on one of the scheduled dates, zero students showed up, due to this, at later times there was an influx in student participation, and instead of 10 students per visit, there were 17 to 19. The students were separated into two groups, each group participating for only thirty minutes. Below is an outline of the results per each hypothesis.

Hypothesis 1

*Based on the pretest there will be no significant differences in the students’ attitudes that have prior service learning experience compared to the students’ attitudes that do not have prior service learning toward volunteer work with elders in the future.*
Of the students who had prior service learning experience, 59.65% either agreed or strongly agreed that they would do volunteer work with elders in the future, compared to 42.1% of the students who had no prior service learning experience (see Table 1).

Table 1

College Students’ Pretest Survey Responses: Question 1

<table>
<thead>
<tr>
<th>Responses</th>
<th>Prior Experience</th>
<th>No prior experience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( n = 57 )</td>
<td>( n = 76 )</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Disagree</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Unsure</td>
<td>20</td>
<td>31</td>
</tr>
<tr>
<td>Agree</td>
<td>25 (43.86%)</td>
<td>26 (34.21%)</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>9 (15.79%)</td>
<td>6 (7.89%)</td>
</tr>
</tbody>
</table>

The combined median scores of the responses of the students who had prior experience compared to those who had no prior experience were 4. At a chi-square value of 0.29 and a critical chi-square of 3.84 the null hypothesis should be accepted with no differences between the populations.

Hypothesis 2

*Based on the pretest there will be no significant differences in the students’ attitudes that do have prior service learning experience compared to the students’ attitudes that do not have prior service learning toward participation in future service learning experiences in the future.*

Of the students who had prior service learning experience, 80.7% agreed or strongly agreed that they would participate in additional service learning experiences in
the future, compared to 48.68% of the students who had no prior service learning experience (see Table 2).

Table 2

*College Students’ Pretest Survey Responses: Question 2*

<table>
<thead>
<tr>
<th>Responses</th>
<th>Prior Experience</th>
<th>No prior experience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( n = 57 )</td>
<td>( n = 76 )</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Disagree</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Unsure</td>
<td>9</td>
<td>29</td>
</tr>
<tr>
<td>Agree</td>
<td>35 (61.40%)</td>
<td>30 (39.47%)</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>11 (19.3%)</td>
<td>7 (9.21%)</td>
</tr>
</tbody>
</table>

The combined median scores of the responses of the students who had prior experience compared to those who had no prior experience were 4. At a chi-square value of 3.79 and a critical chi-square of 3.84 the null hypothesis should be accepted with no differences between the populations.

Hypothesis 3

*Based on the pretest there will be no significant differences in the students’ attitudes that do have prior service learning experience compared to the students’ attitudes that do not have prior service learning toward enjoyment being around older adults.*

Of the students who had prior service learning experience, 78.95% agreed or strongly agreed that they enjoyed being with older adults, compared to 70.27% of the students who had no prior service learning experience (see Table 3).
Table 3

**College Students’ Pretest Survey Responses: Question 3**

<table>
<thead>
<tr>
<th>Responses</th>
<th>Prior Experience $n = 57$</th>
<th>No prior experience $n = 76$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Disagree</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Unsure</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>Agree</td>
<td>36 (63.16%)</td>
<td>42 (56.76%)</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>9 (15.79)</td>
<td>10 (13.51)</td>
</tr>
</tbody>
</table>

The combined median scores of the responses of the students who had prior experience compared to those who had no prior experience were 4. At a chi-square value of 0 and a critical chi-square of 3.84 the null hypothesis should be accepted with no differences between the populations.

**Hypothesis 4**

*Based on the pretest there will be no significant differences in the students’ attitudes that do have prior service learning experience compared to the students’ attitudes that do not have prior service learning toward the idea that it is boring working with older adults.*

A total of 75.43% of the students who had prior service learning experience disagreed or strongly disagreed that it was boring being with older adults, compared to 60% of the students who had no prior service learning experience (see Table 4).

The combined median scores of the responses of the students who had prior experience compared to those who had no prior experience were 4. At a chi-square value of 0 and a critical chi-square of 3.84 the null hypothesis should be accepted with no differences between the populations.
Table 4

College Students’ Pretest Survey Responses: Question 4

<table>
<thead>
<tr>
<th>Responses</th>
<th>Prior Experience</th>
<th>No prior experience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 57</td>
<td>n = 76</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>10 (17.54%)</td>
<td>6 (8%)</td>
</tr>
<tr>
<td>Disagree</td>
<td>33 (57.89%)</td>
<td>39 (52%)</td>
</tr>
<tr>
<td>Unsure</td>
<td>11</td>
<td>24</td>
</tr>
<tr>
<td>Agree</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Hypothesis 5

Based on the pretest there will be no significant differences in the students’ attitudes that do have prior service learning experience compared to the students’ attitudes that do not have prior service learning toward the idea that it is depressing to be with older adults.

Of the students who had prior service learning experience, 70.18% disagreed or strongly disagreed that it was depressing being with older adults, compared to 69.74% of the students who had no prior service learning experience (see Table 5).

Table 5

College Students’ Pretest Survey Responses: Question 5

<table>
<thead>
<tr>
<th>Responses</th>
<th>Prior Experience</th>
<th>No prior experience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 57</td>
<td>n = 76</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>8 (14.04%)</td>
<td>8 (10.53%)</td>
</tr>
<tr>
<td>Disagree</td>
<td>32 (56.14%)</td>
<td>45 (59.21%)</td>
</tr>
<tr>
<td>Unsure</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td>Agree</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>
The combined median scores of the responses of the students who had prior experience compared to those who had no prior experience were 4. At a chi-square value of 0 and a critical chi-square of 3.84 the null hypothesis should be accepted with no differences between the populations.

Hypothesis 6

Based on the pretest there will be no significant differences in the students’ attitudes that do have prior service learning experience compared to the students’ attitudes that do not have prior service learning toward the idea that it is fun being with older adults.

Of the students who had prior service learning experience, 73.68% agreed or strongly agreed that it was fun being with older adults, compared to 52.63% of the students who had no prior service learning experience (see Table 6).

Table 6

<table>
<thead>
<tr>
<th>College Students’ Pretest Survey Responses: Question 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responses</td>
</tr>
<tr>
<td>Prior Experience</td>
</tr>
<tr>
<td>n = 57</td>
</tr>
<tr>
<td>No prior experience</td>
</tr>
<tr>
<td>n = 76</td>
</tr>
<tr>
<td>Strongly disagree</td>
</tr>
<tr>
<td>Disagree</td>
</tr>
<tr>
<td>Unsure</td>
</tr>
<tr>
<td>Agree</td>
</tr>
<tr>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

The combined median scores of the responses of the students who had prior experience compared to those who had no prior experience were 4. At a chi-square value
of 0 and a critical chi-square of 3.84 the null hypothesis should be accepted with no
differences between the populations.

Hypothesis 7

Comparing the pretest to the posttest, there will be no significant differences
in the students’ attitudes toward volunteer work with elders in the future.

Table 7 shows given number of responses for each test.

Table 7

College Students’ Pre and Posttest Responses: Question 1

<table>
<thead>
<tr>
<th>Responses</th>
<th>Prior experience n = 57</th>
<th>No prior experience n = 76</th>
<th>Posttest n = 103</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Disagree</td>
<td>0</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Unsure</td>
<td>20</td>
<td>31</td>
<td>20</td>
</tr>
<tr>
<td>Agree</td>
<td>25</td>
<td>26</td>
<td>49</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>9</td>
<td>6</td>
<td>25</td>
</tr>
</tbody>
</table>

For Question 1 the combined median for the pre and posttest scores was 4.

Table 8 shows the distribution of pre and posttest scores above and below the combined
median.

Table 8

Question 1 Median Distribution

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td># above median</td>
<td>57</td>
<td>49</td>
</tr>
<tr>
<td># below median</td>
<td>31</td>
<td>26</td>
</tr>
</tbody>
</table>
As shown in Table 8, there were more posttest scores above the combined median 4. The median test was performed on this data to see if the difference was significant. The results showed a chi-square value of 17.42 and the critical chi-square at 3.84 with a significance level at .05. Therefore, there was a significant difference among the medians of the populations, the null hypothesis is rejected and the alternative hypothesis that there is a change in students’ attitudes toward working with elders in the future is accepted.

Hypothesis 8

Comparing the pretest to the posttest there will be no difference in the students’ attitudes toward participation in future service learning experiences in the future.

The combined median scores of the responses (see Table 9) of the students who had prior experience compared to those who had no prior experience were 4. At a chi-square value of 0 and a critical chi-square of 3.84 the null hypothesis should be retained with no differences between the populations.

Table 9

College Students’ Pre and Posttest Responses: Question 2

<table>
<thead>
<tr>
<th>Responses</th>
<th>Prior experience</th>
<th>No prior experience</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 57</td>
<td>n = 76</td>
<td>n = 103</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Disagree</td>
<td>0</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Unsure</td>
<td>9</td>
<td>29</td>
<td>15</td>
</tr>
<tr>
<td>Agree</td>
<td>35</td>
<td>30</td>
<td>53</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>11</td>
<td>7</td>
<td>24</td>
</tr>
</tbody>
</table>
Hypothesis 9

Comparing the pretest to the posttest there will be no difference in the students’ attitudes toward enjoyment being around older adults.

The combined median scores of the responses (see Table 10) of the students who had prior experience compared to those who had no prior experience were 4. At a chi-square value of 0 and a critical chi-square of 3.84 the null hypothesis should be retained with no differences between the populations.

Table 10

College Students’ Pre and Posttest Responses: Question 3

<table>
<thead>
<tr>
<th>Responses</th>
<th>Prior experience</th>
<th>No prior experience</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 57</td>
<td>n = 76</td>
<td>n = 103</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Disagree</td>
<td>2</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Unsure</td>
<td>8</td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td>Agree</td>
<td>36</td>
<td>42</td>
<td>57</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>9</td>
<td>10</td>
<td>23</td>
</tr>
</tbody>
</table>

Hypothesis 10

Comparing the pretest to the posttest there will be no difference in the students’ attitudes toward the idea that it is boring working with older adults.

The combined median scores of the responses (see Table 11) of the students who had prior experience compared to those who had no prior experience were 4. At a chi-square value of 0 and a critical chi-square of 3.84 the null hypothesis should be retained with no differences between the populations.
Hypothesis 11

Comparing the pretest to the posttest there will be no difference in the students’ attitudes toward the idea that it is depressing to be with older adults.

Table 11

College Students’ Pre and Posttest Responses: Question 4

<table>
<thead>
<tr>
<th>Responses</th>
<th>Prior experience</th>
<th>No prior experience</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$n = 57$</td>
<td>$n = 76$</td>
<td>$n = 103$</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>10</td>
<td>6</td>
<td>26</td>
</tr>
<tr>
<td>Disagree</td>
<td>33</td>
<td>39</td>
<td>56</td>
</tr>
<tr>
<td>Unsure</td>
<td>11</td>
<td>24</td>
<td>6</td>
</tr>
<tr>
<td>Agree</td>
<td>3</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

The combined median scores of the responses (see Table 12) of the students who had prior experience compared to those who had no prior experience were 4. At a chi-square value of 0 and a critical chi-square of 3.84 the null hypothesis should be retained with no differences between the populations.

Table 12

College Students’ Pre and Posttest Responses: Question 5

<table>
<thead>
<tr>
<th>Responses</th>
<th>Prior experience</th>
<th>No prior experience</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$n = 57$</td>
<td>$n = 76$</td>
<td>$n = 103$</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>8</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>Disagree</td>
<td>32</td>
<td>45</td>
<td>37</td>
</tr>
<tr>
<td>Unsure</td>
<td>14</td>
<td>17</td>
<td>31</td>
</tr>
<tr>
<td>Agree</td>
<td>3</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>
Hypothesis 12

Comparing the pretest to the posttest there will be no difference in the students’ attitudes toward the idea that it is fun being with older adults.

The combined median scores of the responses (see Table 13) of the students who had prior experience compared to those who had no prior experience were 4. At a chi-square value of 0 and a critical chi-square of 3.84 the null hypothesis should be retained with no differences between the populations.

Table 13

**College Students’ Pre and Posttest Responses: Question 6**

<table>
<thead>
<tr>
<th>Responses</th>
<th>Prior experience</th>
<th>No prior experience</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( n=57 )</td>
<td>( n=76 )</td>
<td>( n=103 )</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Disagree</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Unsure</td>
<td>14</td>
<td>32</td>
<td>13</td>
</tr>
<tr>
<td>Agree</td>
<td>33</td>
<td>36</td>
<td>66</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>9</td>
<td>4</td>
<td>16</td>
</tr>
</tbody>
</table>

Hypothesis 13

There will be no significant change in the older adults’ life satisfaction.

There were six older adults that completed the satisfaction with life survey pre study, and four of the same group that completed the satisfaction with life survey post study. For the sake of confidentiality each older adult will be addressed as a number starting with ‘one’ to report their scores pre and post study.

**Older Adult 1**

- Pre study overall life satisfaction score: 26 - satisfied.
- Post study overall life satisfaction score: 29 - satisfied.
Older Adult 2
- Pre study overall life satisfaction score: 27 - satisfied
- Post study overall life satisfaction score: 27 - satisfied.

Older Adult 3
- Pre study overall life satisfaction score: 22 - slightly satisfied
- Post study overall life satisfaction score: 22 - slightly satisfied

Older Adult 4
- Pre study overall life satisfaction score: 14 - dissatisfied
- Post study overall life satisfaction score: 18 - slightly dissatisfied

Two of the older adults’ life satisfaction score stayed the same, and two of the older adults’ life satisfaction scored improved. Based on the small sample size of the older adults and the given results, the null hypothesis is accepted. To get an idea of what happened during the study, below I will discuss what occurred on each scheduled session.

Over the course of the study from November 6, 2013, to December 15, 2013, with the exception of a one-week break for the Thanksgiving holiday, there were a total of fourteen dates available that allotted 12 students to sign up to participate in the service learning session for that day. In addition to the older adults who agreed to participate in the study there were other older adults from the facility who partook in the activities with the students but were not considered a part of the study. Here is what occurred on each date:

November 6

All 12 students showed up on this date and nine older adults participated that included the older adults who did sign up for the service learning and some who did not.
The activities that day included people bingo (a get to know you activity), two adapted dances, and musical chairs. After the activities, the students’ conducted a three-question interview that asked the residents to describe their overall experience.

November 7

There were seven students who signed up for this date, and all of them showed up. Each student was paired with an older adult and they played people bingo and participated in a adapted dance activity, and a relay race (the musical chairs activity was scrapped due to residence lack of full engagement). The students conducted a three-question interview that asked the residents to describe their overall experience. Due to the smaller group of people, the service learning for this day lasted forty minutes compared to the usual hour.

November 13

Eight students signed up for this date, however only two students actually attended the service learning for that day. The students were paired with an older adult who had signed up for the study. They played people bingo and did one adapted dance together. The students’ interviewed the residents about their overall experience. This service learning session lasted for thirty minutes.

November 14

Twelve students signed up for this date and eight students actually attended the service learning session. There were nine older adults that participated on this day. At this point the activities were consistent of people bingo, a relay race, and an adapted dance, and the three-question interview was given at the end.
November 17

All twelve students who signed up for this date attended the service learning session. They participated in the usual activities and were finished by the given hour.

November 20

On this date, eleven students participated in the service learning session, and eight residents participated. The interviews were conducted for the last time at this point due to time constraint.

November 24

Despite the sign-ups, there were zero students that attended the service learning session on this date, as it was the weekend before Thanksgiving break. For this reason, there was no service learning session was held on this day.

December 5

Due to the lack of a service learning session on the prior date, there was an increase in the amount of students that attended the service learning session on this date, there were 15 students. Some of the students were paired in twos with another student to one older adult. Even with the increased amount of students, the activities went accordingly without feeling rushed or too crowded in the given space.

December 8

There was an even ratio of students to older adults, 9:9. The participants played people bingo, had a relay dance and starting on this date, in order to avoid redundancy, the students played a “get to know you” game that was called the ‘name game’ where they wrote their name down on a piece of paper and three adjectives to
describe themselves using the first letter of their name, and then they discussed why these adjectives described them to the older adults.

**December 11**

There were thirteen students that attended this service learning session, and eight older adults. On this day, some of the students were paired in twos with another student to one older adult. People bingo was played, the relay race, and the name game.

**December 12**

Of the thirteen students to sign-up on this date, eleven attended the service learning session, and nine older adults. The students and older adults participated in the set activities.

**December 15**

This was the last date of the service learning and eighteen students signed up and attended the session compared to nine older adults. As a result of the large amount of students, the group was split in half, making nine to a group. Only having one hour, each group of students was given thirty minutes to participate in the activities. For the sake of small amount of time, only two activities were participated in. The first group played people bingo and a relay race, and the second group played people bingo and the name game.

**Qualitative Data Results**

For the first six service learning sessions, the students conducted interviews with the older adults, comprised of three questions. The following are the questions and some of the responses.
1. How did these activities make you feel at present?
   - Happy and perfect.
   - I enjoy visitors.
   - The activities made feel very good to communicate with a different type of group.
   - I loved the hugs!
   - They made me laugh.
   - It’s wonderful that elders and young ones can communicate.

2. Did you enjoy the activities?
   - It was something different, I enjoy the hugs, and not everyone gives hugs.
   - I enjoyed the activities, they reminded me of home.
   - I enjoyed talking.
   - I enjoyed the exercises and the fun of dancing.

3. How did you like spending time with college students?
   - The kids were very nice. I enjoyed the company and conversation.
   - I enjoy younger people.
   - I love it because it shows me that college students of today were just as interesting as they were in my day!
   - I like the visits and having people [around]. I have trouble feeling alone in my life.
CHAPTER V

CONCLUSION

The aim of this study was to examine if intergenerational programs between college students and older adults have a positive effect on the quality of life of older adults and its impact on college students participation in future service learning opportunities with older adults.

Discussion

The median test was used to analyze the data of the survey responses between the students who did have prior service learning experience and the students that did not. The results of the median test for Hypotheses 1 - 6 showed no significant difference among the medians of the populations. However, Hypotheses 1 - 6 showed positive percentage differences between the students who had prior service learning experience compared to the students that had no prior service learning experience. There was an inclination for the students that did have prior service learning experience to positively respond to the given statements on the survey.

The median test was also used to analyze the data of the survey responses between the pre and posttest. The results of the median test for Hypothesis 7 showed a significant difference between the pre and posttest in regard to the students’ attitudes toward volunteer work with the elderly in the future. Based on observation, the change in
students’ attitude may have been related to older adults’ open reception of the students’, and there was a lot of laughter between the students’ and the older adults’. The median test showed no significant difference among the medians for Hypotheses 8 - 12. This may be for the reason that students’ were allowed to skip any questions on the survey; therefore, the actual amount of responses were not accounted for. Moreover, the survey responses show that the students positively agreed or disagreed with the given statements.

Limitations

The first limitation was related to the monitoring of the survey responses. There were 168 students who signed up for the study, 133 completed the pretest and 103 completed the posttest. Students were given 40 participation points for the class once they completed the service learning and all of the surveys. The students were told to send an email stating that they completed these surveys, however, due to the anonymity of the survey responses there was no way to monitor who had actually attended the service learning and completed the survey to those who did not actually attend the service learning but completed the pre and post survey anyway. This creates a generalizability issue in the study as the results make it difficult to generalize to other students who might participate in service learning with older adults.

Another limitation related to the survey was that the questions could be skipped if a respondent did not want to answer it. Due to this, the amount of responses was less than the actual amount of students’ who responded to the survey as a whole and this impinged on the results of the median tests that were conducted for each question on the pre and posttest. A third limitation was the unexpected absences of students on two of
the scheduled service learning dates. For this reason the session for those dates were either shortened or did not occur. This diminished the impact or possible impact the session could have had on the older adults who were ready to participate on these dates. Had the service learning sessions been consistent and the survey responses including the skipped ones had been accounted for, the results may have more accurately reflected the impact of the study.

Lastly, due to the decline of the older adults over time, two of the older adults who signed up for the study were not able to answer the post satisfaction with life survey which decreased the amount of material for the results. Additionally, the space available for the activities during the service learning was limited and caused slight crowding of the given area.

Recommendations

Future Research

In order to minimize some of the limitations an attendance sheet can be used to verify which students’ had actually attended the service learning session and can be compared to the students’ emails stating that they completed the survey in order to reduce or moderate students falsely completing a survey without having actually gone to a session. Additionally it can be let known that students’ participation points can be reduced if they failed to show up for a service learning session but signed up for another later date. Furthermore, increasing the number of older adult subjects could help maintain the consistency of subject material for the study. Lastly, a larger space would help to reduce crowding and allow for better flow of the activities.
Future Programs

During the course of the study, the activities that worked well included the “people bingo,” “relay race,” and the name game. According to the residents, the “people bingo” game allowed them to talk about themselves and have the students’ “get to know them” and they were happy to talk about their past experiences. The relay race created movement and laughter for the residents and students’ alike.

Significance of the Study

Based on the results and observation, the study showed that interaction between college students and older adults can be positive and both groups enjoy spending time with each other. The activities helped to increase socialization among the older adults’ and even mediate loneliness for one. Furthermore, the students gained a greater insight into what it is like to spend time with the elderly and find it enjoyable to the point that they would spend time with them beyond the range of the study. Lastly, there is a need for more volunteers and workers with older adults because they are the fastest growing segment of the population and this study shows that interest in doing this kind of work can be increased by giving college students positive experiences with older adults.

Conclusion

Several conclusions can be made from this study. Based on the results, the first is that college students’ are more inclined to participate in volunteer work with older adults after having spent time with them. Another conclusion that can be made is that based on the older adults’ comments about the activities and their time spent with college students’ is that it made them feel happy, they had fun, and it added to their socialization.
Moreover the older adult who had the lowest satisfaction with life score before the study, satisfaction with life score increased the most after the study. This could indicate that that older adults that are the least satisfied with their life benefit the most from recreational activities and time spent with others.
REFERENCES
REFERENCES


1. During the course of the study the students were instructed and monitored under my supervision with the permission of the owner Lynette Dorenzo.

2. For the activities portion of the study the older adults will be sitting at all times and the students’ will sit side by side with the older adult they are assigned to. For the adapted dance part, I will instruct the students’ to demonstrate at least two adapted chair dances that involve limited leg and arm movements and some clapping.

3. Satisfaction With Life Scale:

Below are five statements that you may agree or disagree with. Using the 1 - 7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

- 7 - Strongly agree
- 6 - Agree
- 5 - Slightly agree
- 4 - Neither agree nor disagree
- 3 - Slightly disagree
- 2 - Disagree
- 1 - Strongly disagree

____ In most ways my life is close to my ideal.
____ The conditions of my life are excellent.
____ I am satisfied with my life.
____ So far I have gotten the important things I want in life.
____ If I could live my life over, I would change almost nothing.

- 31 - 35 Extremely satisfied
- 26 - 30 Satisfied
- 21 - 25 Slightly satisfied
- 20 Neutral
- 15 - 19 Slightly dissatisfied
- 10 - 14 Dissatisfied
- 5 - 9 Extremely dissatisfied
Students’ Informed Consent

You are invited to participate in a research study that will include an intergenerational program that will utilize a recreation activity.

This study is being conducted by Jalissa Lee and Michael Leitner.

The purpose of this study is to examine how intergenerational programs have a positive effect on the quality of life of older adults, and its implications for college students’ participation in future service learning opportunities.

Participation in this study is voluntary and there is no penalty for non-participation. If you agree to participate in this study you would be administered a questionnaire before the study that includes questions about your prior experience working with older adults and your attitude towards older adults. In addition, you would be administered a questionnaire after the study that includes questions about working with older adults in the future, inclination of future service learning, and whether you enjoyed the experiment or not.

Procedures:

Students’ should arrive 15 minutes early to the facility to be debriefed on their conduct whilst at the facility and to become acquainted with the older adults.

After introductions between the students’ and older adults, students will be instructed to began the first activity and so forth with the successive portions of the study (experimental portion).

Before the hour is over, the students will be instructed to give a short, 10-minute interview that asks the older adults three questions: 1. How did these activities make you feel at present? 2. How did you like the activities? 3. How did you like spending time with college students?

Students may leave after the interviews.

A post-study questionnaire will be administered the next class day.

There are no risks to this study. You may skip any questions you do not want to answer and may end your participation at any time without penalty or reprisal.

If you participate in this study the information you share with us will be kept confidential (codes?)

If you have any questions about this study, please contact Jalissa Lee, primary investigator, leejanie75@gmail.com or Michael Leitner, secondary investigator, 530-898-6774.

[Signature]
Older Adults Informed Consent

You are invited to participate in a research study that will include an intergenerational program that will utilize a recreation activity.

This study is being conducted by Jalissa Lee and Michael Leitner.

The purpose of this study is to examine how intergenerational programs have a positive effect on the quality of life of older adults, and its implications for college students’ participation in future service learning opportunities.

Participation in this study is voluntary and there is no penalty for non-participation. If you agree to participate in this study you would be administered the Satisfaction With Life Scale that lists five statements that you agree or disagree with on a 1 to 5-point scale before and after the study. In addition you will be asked to participate in a non-evasive 10-minute interview that will ask questions regarding the activities you would participate in.

Procedures:

Students’ should arrive 15 minutes early to the facility to be debriefed and introductions between the students’ and older adults will take place.

After introductions between the students’ and older adults, students will be instructed to began the first activity and so forth with the successive portions of the study (experimental portion).

Before the hour is over, the students will be instructed to give a short, 10-minute interview that asks you three questions: 1. How did these activities make you feel at present? 2. How did you like the activities? 3. How did you like spending time with college students?

Post-study, the Satisfaction With Life Scale will be administered in addition to the interview by primary investigator.

Students may leave after the interviews and older adults may go about their usual daily activities.

There are no risks to this study. You may skip any questions you do not want to answer and may end your participation at any time without penalty or reprisal.

If you participate in this study the information you share with us will be kept confidential.

If you have any questions about this study, please contact Jalissa Lee, primary investigator, leejanie75@gmail.com or Michael Leitner, secondary investigator, 530-898-6774.

Signature