

# Healthy Lifestyles Through an Adaptive Living Program: Promoting Community Inclusion, Education, and Social Supports

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GRADUATE PROGRAMS

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## Abstract

This study, paralleling previously-designed Well-Elderly programs, examined the effects of an Adaptive Living Program on quality of life and life satisfaction of low-income adults living in a city subsidized apartment complex. The researchers used a mixed methods approach involving both quantitative and qualitative methodology. Results obtained from the participants' RAND SF-36 pre-test and post-test scores demonstrated no significant difference in scores prior to and following the 10 week Adaptive Living Program. Qualitative information gathered in a 60 minute semi-structured focus group held on the final day of the program indicated that participants had increased their quality of life and life satisfaction through development of social skills, knowledge of nutrition, interpersonal skills, and fellowship.

Limitations included a small convenience sample, limited ethnic diversity in the population, occasional absences, length of program, administration of the RAND SF-36, administration of non-standardized qualitative assessments, no single or double blinding, and an informal focus group session. Recommendations include a larger sample size of diverse ethnic population with varying ages, an established cut-off date for new evaluations, a lengthened program, a standardized qualitative questionnaire, and alternative quantitative assessment.

## Introduction

### *Statement of the Problem*

One of the responsibilities of occupational therapists is to encourage the awareness of meaningful occupations by providing clients of all ages with opportunities to enhance their quality of life and life satisfaction through community based programs. In such programs common among older adults, "Occupational therapy lifestyle redesign programs seek to provide older adults with strategies and opportunities to increase participation in identified meaningful activities for life satisfaction and to positively impact physical and mental health" (Horowitz & Chang, 2004, p. 46). Such programs, regardless of the clients, focus on their long term needs, helping them build a healthy community (Matuska, Giles-Heinz, Finn, Neighbor, & Bass-Haugen, 2003; Tagliareni & King, 2006). Though there is existing literature and current research on programs for the well-elderly population (Carlson, Fanchian, Zemke, & Clark, 1996; Clark, Azen, Zemke, Jackson, Carlson, Mandel, et al., 1997; Jackson, Carlson, Mandel, Zemke, & Clark, 1998), little is known about the effectiveness of such programs relative to alternative populations, such as young to middle age adults.

Extensive review of the literature by the investigators found no identified studies generalizing the effectiveness of

well-elderly programs to other populations, such as young urban residents, as this study addressed. Databases that were reviewed included Health Reference Center-Academic, Psycjournals, MEDLINE-Internet, OT BibSys, CINAHL Plus with Full Text, and Google Scholar. However, because of the robust evidence regarding the overall effectiveness of lifestyle redesign programs (Mandel, et al., 1999) on the well-elderly, this literature can be used judiciously to guide clinical decisions by generalizing this evidence to low-income adults or other non-traditional populations.

### *Rationale for Study*

The purpose of this study was to evaluate the effectiveness of a lifestyle redesign program (Mandel, et al., 1999) on a population other than the well-elderly. The Adaptive Living Program (ALP) in this study provided the participants with knowledge and opportunities to increase their independence, quality of life, and life satisfaction. The researchers' goal was to measure the usefulness of such a program for young to middle aged urban adults living in a subsidized housing community. Through the 10 week ALP, the researchers aimed to identify the effects of this program on quality of life and life satisfaction for urban dwellers in a low-income subsidized apartment complex.

The research was implemented using a mixed methods approach, both quantitative and qualitative. "Quantitative research involves measurement of outcomes using numerical data under standardized conditions" (Portney & Watkins, 2000, p. 15). Qualitative research is another strategy used for data collection. In order to obtain subjective information, this method of data collection relies on interviews and observations (Portney & Watkins, 2000). In this study, the researchers quantitatively measured the effects of the ALP on the participants' quality of life using scores from the RAND SF-36 (Ware, Snow, Kosinski, & Gandek, 1993). This standardized assessment "is a self report measure of health related quality of life that was designed to measure the health status efficiently from the consumer's perspective" (Mandel, et al., 1999, p. 57).

Secondly, the researchers qualitatively analyzed effects of the program on participants through a pre- and post-test questionnaire as well as a three month follow up survey (see Appendices A & B). The independent variable, the 10 week ALP, is defined by the researchers as a community-based program to educate and encourage these adult urban individuals to engage in meaningful occupations to enhance their quality of life and life satisfaction. The dependent variables, quality of life and life satisfaction, are defined by the use of pre-program and post-program surveys pertaining to the participants' opinions regarding quality of life and the success of the program. Prior to the program, the researchers

hypothesized that a 10 week ALP would have a positive effect on quality of life and life satisfaction for young urban dwellers residing in a low-income subsidized apartment complex.

## Literature Review

Existing literature supports the positive outcomes of well-elderly health and wellness programs; various researchers have focused on this population (Horowitz & Chang, 2004; Matuska, et al., 2003; Li, 2004), concluding that engagement in an occupational therapy wellness program can reduce the need for placement in a nursing home (Horowitz & Chang). There is a lack of literature surrounding other populations; therefore, the researchers felt it necessary to generalize an ALP to other target populations. Because the emphasis of the ALP was placed on young to middle age urban participants, the researchers suggest that this study is a valuable contribution to existing occupational therapy literature regarding lifestyle redesign programs.

### *Lifestyle Redesign Programs*

The well-elderly population has been studied extensively in regards to health promotion and the way in which lifestyle redesign programs can then improve quality of life: "Older adults have an increased risk for a variety of physical and functional limitations, which can threaten their ability to lead independent and fulfilling lives" (Clark, Carlson, Zemke, Frank, Patterson, Ennevor, et al., 1996, p. 99). Therefore, such individuals may require assistance when trying to achieve increased independence and quality of life.

A recent study in Taipei, Taiwan, noted the effectiveness of a health promotion program for a low-income well-elderly population. This study included 60 participants ages 65 and older who were living independently and receiving governmental assistance. These participants engaged in an eight month health promotion program and were given pre-test and post-test surveys to determine the effects of this program. Although statistically the results of this study were not significant, the participants showed improvement in areas including sleep, speech, appearance, and sight: "Indicators of the effectiveness of this program included improvement in physical health, psychosocial health and functional status including activities of daily living (ADL) and instrumental activities of daily living (IADL), as well as changes in perceived health promotion needs" (Li, 2004, p. 511). The results of this study demonstrated that the health promotion program was effective for the health status of a low-income well-elderly population in other cultures other than the USA.

Another study in the United States by Matuska, et al., (2003), evaluated a pilot occupational therapy wellness pro-

gram for older adults. The purpose of the wellness program was to educate older adults about the importance of meaningful occupations in their life. The grant-funded program, delivered during an 18 month period, focused on teaching the importance of meaningful occupations and of removing barriers that prevent participation in occupations. The researchers addressed topics including transportation, aging, safety and falls prevention, stress, lifestyle balance, and communication. Community outings took place one time per month and replaced class meetings. This pilot study provides support for prevention efforts for elders, and concluded that wellness programs for seniors may be most beneficial to those who are older and are non-drivers (Matuska, et al., 2003).

Clark, et al. (1996) performed a qualitative study with low-income well-elderly adults in the United States, examining life domains and adaptive strategies. Ten life domains were identified through participant interviews: activities of daily living, adaptation to a multicultural environment, free time usage, grave illness and death/spirituality, health maintenance, mobility maintenance, personal finances, personal safety, psychological well-being/happiness, and relationships with others. "Because this study primarily used a qualitative research methodology, the findings are not intended to be generalized to other settings and older adults, but they can be used selectively and judiciously for program development" (Clark, et al., 1996, p. 106).

Another such research study by Jackson, Carlson, Mandel, Zemke, & Clark (1998) is the Well-Elderly Treatment Program, a preventive occupational therapy program designed to help an elderly population improve the balance in their occupations and achieve health through occupation, both of which contribute to well-being. The nine month program incorporated both individual and group sessions and the authors included the following topics throughout: the power of occupations; aging, health, and occupation; transportation; safety; social relationships; cultural awareness; finances; and a lifestyle redesign journal. A therapist first educated the participants on one of these topics each session and then asked participants to share their own personal experiences. Participants then applied these educational modules during community outings. The treatment emphasized the therapeutic process of lifestyle redesign and allowed the participants to select "personally satisfying and health-promoting occupations" (Jackson, et al., 1998, p. 326). The effectiveness of the program supports occupational therapy's emphasis on occupation in affecting health, as well as the implementation of preventive interventions (Jackson, et al., 1998).

A randomized controlled trial completed by Clark, Azen, Zemke, Jackson, Carlson, & Mandel, et al. (1997)

was the well-elderly study conducted in the United States between 1994 and 1996 to evaluate the effectiveness of preventive occupational therapy specifically targeted for urban, multi-ethnic, independent-living older adults. This first study of Lifestyle Redesign, pioneered by Florence Clark, was "the largest study ever conducted in the field of occupational therapy" (Mandel, et al., 1999, p. 5). This study hypothesized that participation in a solely social activity program "does not affect the physical health, daily functioning, or psychosocial well-being of well-elderly individuals" (Clark, et al., 1997, p. 1322). However, the authors determined that participation in a preventative occupational therapy program regardless of social participation will positively affect the physical health, daily functioning, and psychological well-being of well-elderly individuals (Clark, et al., 1997).

The theme of Clark's occupational therapy program was health through occupation. Occupation was defined "broadly as regularly performed activities such as grooming, exercising, and shopping" (Clark, et al., 1997, p. 1322). The goal of treatment was to help the participants identify meaningful activities in their lives, as well as to "convey specific knowledge about how to select or perform activities so as to achieve a healthy and satisfying lifestyle" (Clark, et al., 1997, p. 1322). Clark's study reflects the most inclusive research to date measuring the effectiveness of occupational therapy, in that it included a large sample size, a wide range of outcomes, and greater experimental control (Clark, et al., 1997).

The results of the study suggest that preventive occupational therapy programs may reduce the health risks of older adults. According to Florence Clark, "These findings are exciting because they demonstrate occupational therapy as an effective way to promote health and increase quality of life for America's rapidly growing elderly population. Our research results show promise for helping senior citizens maintain their independence" (as cited in Mandel, et al., 1999, p. 5).

### *Effectiveness of Occupational Therapy*

The previous studies of Lifestyle Redesign Programs are corroborated by studies of the outcomes of occupational therapy. Carlson, Fanchian, Zemke, and Clark (1996) performed a study to address the question of occupational therapy's effectiveness in treating older persons. To answer this question, a meta-analysis was generated to determine the effectiveness of occupational therapy on older persons' psychosocial well-being, daily functioning, and physical health. The authors conducted a manual search of journals as well as a computerized search of online databases to locate studies that addressed the effects of occupational therapy in

treating older persons. Fourteen studies were gathered and the results of this investigation concluded that occupational therapy services produced positive results within an older adult population. These findings provide strong justification for the need to incorporate occupational therapy as part of a holistic care plan for older adults (Carlson, et al., 1996).

Farnworth (2000) has found that occupational therapy can help individuals balance their time to create more meaningful lives. A lack of balance of occupations can lead to social problems because "humans need a balance of daily occupations to maintain their health and well-being" (p. 317). This study examined how 37 probationary young offenders from ages 13-18 years of age spent their waking hours during a one week period. A combination of Experience Sampling Method and interviewing was used to determine the occupations which the participants engaged in. The Experience Sampling Method required the participants to carry a pager as well as a questionnaire. The participants were paged at random throughout the day and were asked to complete the questionnaire regarding what they were currently doing, including the social and physical environments and their subjective comments about their experience at that moment. The participants report participating in a productive occupation such as education or employment only 10% of the times beeped. Results from this study showed that young offenders have more passive leisure activities and do not engage in as many productive occupations as do their peers who are non-offenders.

## **Methods**

### *Participants*

The purpose of our study was to determine the effectiveness of the ALP on our young to middle adult urban participants, specifically in the areas of quality of life and life satisfaction. The researchers observed and evaluated 19 participants throughout the course of the study (7 males and 12 females). On average the attendance for each session was nine participants. The criteria to be a participant in this study included the following: participants were residents of the subsidized apartment complex at which the program was held, their ages ranged between 25 to 59 years, participants were both male and female, and they lived independently. All members of this community were encouraged to participate, and those who met the above criteria were eligible to participate in this study. The researchers' goal for this study was to include 10 to 15 participants, chosen by using a convenience sampling method. Once the initial participants were recruited and evaluated, the researchers were hopeful that snowball sampling would also occur, that initial participants would identify others who would qualify to be participants in the study (Portney & Watkins, 2000).

### *Program Content*

The participants attended two 90-minute sessions per week over an eight-week period. The program consisted of 12 educational modules adapted from previous programs, including occupations, stress management, relationships, energy conservation/time management, exercise (2), joint protection/body mechanics, transportation/low cost activities, nutrition, spirituality/aging, safety, and low vision. Also included in the program were three outings, which consisted of visits to a sculpture museum, a picnic at a local recreation area, and a visit to a bowling alley. The public bus system and a van from the local Housing Commission were used to travel to the designated outing locations. A fourth outing was scheduled for the participants to attend a computer educational module at a local University, but was canceled due to lack of participant attendance. On the final day of the program, we held a graduation ceremony and awarded the participants with certificates of completion from the ALP.

### *Meeting Format*

Each educational module followed a similar format. First, the researchers presented information to the participants regarding the specific topic. The topics were then supplemented with an interactive activity related to that session's module. Each session concluded with a discussion in which the participants were encouraged to share their personal understanding of, and feedback about, the module.

### *Research Design*

The research design for this study involved a quasi-experimental, mixed methods approach, including quantitative and qualitative data occurring sequentially or concurrently (Creswell, 2003). This mixed methods design allowed the researchers not only to obtain statistical data, but also to acquire information regarding the participants' personal experiences, values, and lifestyles. Research was generally descriptive and qualitative. The researchers identified an overall research problem and hypothesis to determine the effectiveness of an ALP.

### *Instrumentation*

To gather and measure the quantitative data obtained in this study, the researchers used the RAND SF-36. As described previously, this standardized assessment "is a self report measure of health related quality of life that was designed to measure the health status efficiently from the consumer's perspective" (Mandel, et al., 1999, p. 57). This tool measures eight domains: "general health, mental health, physical functioning, social functioning, role limitations attributable to physical health problems, role limitations at-

tributable to emotional problems, bodily pain, and vitality" (Mandel, et al., 1999, p. 58). The RAND SF-36 was designed for research and clinical application and has proved to be a valid and reliable measure of health related quality of life in research, especially for comparing groups (Mandel, et al., 1999).

To obtain qualitative data, the researchers of the ALP included specific research questions that were part of the initial evaluation. This non-standardized tool was used to assess the participants' engagement in occupations and to identify the limitations and support systems that hindered or contributed to their success in occupational performance.

### *Procedure*

*Study sites.* The primary study site was a low-income city subsidized apartment complex in the state of Michigan. Biweekly sessions were held in the activities room at this location. Three of the sessions were held off site at other locations within the community, including a sculpture museum at a local University, a beach, and a bowling alley.

*Programming.* Through their involvement in the ALP, it was anticipated that the participants in the program would have developed a sense of community by building social relationships. "Implementing community-based health promotion programs becomes increasingly important in enabling health care professionals to improve the quality of life for the older adult" (Shellman, 2000, p. 257); thus it was expected that the educational tools that were made available to the participants would provide these adults with the means to become active members of their community. These educational tools included the 12 modules and three outings that made up the ALP.

The researchers' goal was to help participants establish more meaningful daily routines. This same goal was applied to the participants of the ALP, and the structure and format was based upon the Out and About Program in Midland County, a community-based program for the well-elderly in partnership with Easter Seals (Krueger, Herlache, & Earley, 2004). The inspiration to form the Out and About Program stemmed from the results of the University of Southern California Well-Elderly Study in 1996 (Clark, et al., 1997). The program met two times each week for 12 weeks and every session lasted 1 ½ hours. Each session focused on different topics relevant to the elderly. Some of these included occupations, aging, active mind, low vision, joint protection, body mechanics, etc.

*Recruitment.* The researchers in this study visited the low-income, city-subsidized housing complex twice during the week prior to beginning the program to give residents an overview of the ALP. A slideshow of a similar program gave information on modules that had been covered. The

residents were informed of the dates the program would be running, the modules to be covered, and outings that were anticipated to pique the residents' interest in joining the program. The researchers had residents sign up for an evaluation date and also addressed any questions and concerns.

*Assessment.* The first two sessions of the ALP were reserved for the initial evaluations of each participant. The evaluations, which were administered one-on-one by the researchers, were administered during May of 2007. Participants were provided with verbal directions for completion of the evaluation, which obtained information regarding the participant's past medical history, personal information and current occupational performance. Standardized and non-standardized methods were also used to gain a perspective on participants' limitations with daily occupations and their satisfaction with their current daily routines. Use of the RAND SF-36 allowed participants to rate their perception of current and recent health status. A non-standardized quality of life questionnaire helped to identify current occupations in which participants engage, their current support systems, and hindrances to participating in other occupations.

*Focus Group.* During the final week of the 10 week program, the researchers held a 60 minute informal focus group session which 11 of 20 total participants attended. The intent of this session was to obtain feedback from the participants regarding the 12 educational modules, the three community outings, their perceptions of the success of the ALP, and how applicable they found the content to their everyday lives. The participants were informed that for research purposes, audio recording and written notes of the discussion would be taken. At the beginning of the session, the researchers initiated the discussion with open-ended questions and then encouraged participants to express their opinions.

*Data Collection.* Data was gathered at the initial evaluation, throughout the 10 week program, and during the concluding focus group. The researchers gathered quantitative data using the RAND SF-36 as discussed previously. Qualitative data was obtained throughout the program by using information gathered from the participant personal journals, progress notes, and the focus group discussions. This information was transcribed and organized as the first step of qualitative data collection. Next, the researchers read through the data collected and developed an understanding of the participants' perceptions about the program, the educational modules, and the researchers themselves. The third step of qualitative data collection involved organizing the information that was gathered into relative sections. This process involved placing information into categories based on similar participant responses which were then labeled

using language of the participants, using in vivo terms. These in vivo terms generated the five themes that summarized the qualitative data (Creswell, 2003).

*Data Analysis.* To analyze the quantitative data, the RAND SF-36 was administered both pre-and post-intervention. The participants' pre-test and post-test scores were added and averaged and then compared using a dependent t-test statistical analysis (Portney & Watkins, 2000) to analyze the scores from each of the eight domains. The researchers determined an alpha level of .05 to be appropriate; at this level, studies are determined to be statistically significant (Portney & Watkins, 2000). Table 1 illustrates P values ( $T \leq t$ ), which shows no significant difference between the pre-test and post-test scores of the RAND SF-36 in any of the eight domains. Scores for the mean and SD pre and post-test are shown in Table 2. Graph 1 shows the average pre-test and post-test scores from each of the eight domains of the RAND SF-36.

**TABLE 1: Subtest p-values**

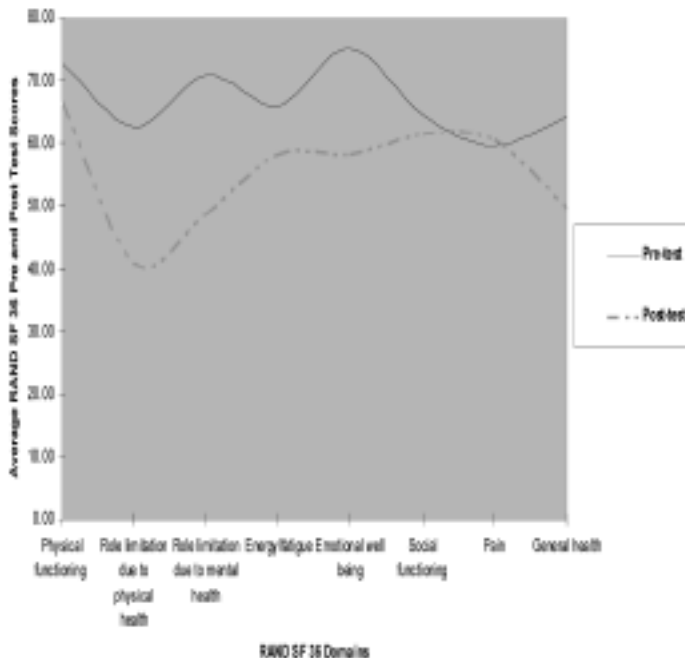
RAND SF 36 subtest	P ( $T \leq t$ )
Role limitation due to mental health	0.32
Role limitation due to physical health	0.14
Pain	0.83
General health	0.08
Social functioning	0.47
Energy and fatigue	0.19
Physical functioning	0.26
Emotional well being	0.14

**TABLE 2: Difference of Means and Standard Deviations**

	Mean pre-test	SD pre-test	Mean post-test	SD post-test
Physical functioning	75	22.11	66.5	28.09
Role limitation due to physical health	67.50	33.43	42.5	39.17
General Health	60	18.77	63	15.10
Pain	65.50	30.23	51.50	31.96
Social functioning	70.75	27.88	61.25	30.87
Energy/fatigue	71	47.79	59.5	14.8
Emotional well-being	74.80	21.33	58	27.14
Role limitation due to mental health	69.9	39.91	50	47.79

**GRAPH 1:**

**Comparison of Pre and Post Test Scores and the Domains of the RAND SF 36**



After reviewing the qualitative information gathered, the researchers categorized the data by coding, using the constant comparison method. According to Portney & Watkins (2002), the constant comparison method is defined as “an inductive process in qualitative research that calls for continual testing of a theory as data are examined” (p. 274). The constant comparison method involves open, axial, and selective coding. For this study, the researchers chose the selective coding process to describe the perceptions of the participants (Earley, 2006).

*Trustworthiness.* “Trustworthiness is the extent to which the findings of a study can be viewed as worthy of confidence” (Earley, 2006). Within qualitative research, the foundation of trustworthiness depends on the following criteria: credibility, transferability, dependability and confirmability (Krefting, 1991). To establish credibility, member checking took place during the educational modules as well as the focus group discussion. The student researchers repeated participant responses back to the participants for clarification. Triangulation of data in this study has been examined against other evidence researched for common module topics in similar populations. The researchers naturally had a bias towards the participants who regularly attended the sessions and initiated discussion; however, equal support was intended, and no one was disregarded. The researchers administered all of the evaluations and assessments before and after the ALP, so no blinding occurred during this study. As a result, this could have limited positive and negative feedback from the participants during the evaluation process. The descriptive data, discussed in the Methods and Results sections, illustrate the accomplishments of the researchers and the participants throughout the ALP to improve the participants’ quality of life.

Within quantitative research, validity was established through the administration of the RAND SF-36, as described previously. “The RAND SF-36 has proved to be a valid and a reliable measure of the HRQL in research, especially for comparing groups, as was done in the USC Well Elderly Study” (Mandel, et al., 1999, p. 58).

## Results

### *Quantitative Data Results*

The average RAND SF-36 score for the pre-test was 533; the post-test average was 443.4. The t-test was performed at an .05 alpha level for each domain on the RAND SF-36. Because our p-values for the eight domains shown above are higher than 0.05, our results were not significant (see Table 1).

## Qualitative Data Results

During qualitative data analysis of the focus group discussion, four themes were identified: (1) Social Skills; (2) Nutrition; (3) Interpersonal Skills; and (4) Fellowship. These themes will be discussed in further detail.

*Social Skills.* One of the goals of the program was the development or improvement of participants' social skills. Social skills were identified as a theme from the first focus group discussion, which asked, "What have you seen change in your life since you began the ALP?" One participant expressed a perception of improvement in social skills, stating, "I am getting out more and I am more willing to speak to others."

*Nutrition.* One of the program modules focused on nutrition. A guest speaker, a health education teacher, came to the study site and educated the participants on the importance of nutrition and maintaining a healthy lifestyle. The researchers provided informational packets as well as a healthy, low-calorie lunch. All of the participants expressed their appreciation for educating them about nutrition and healthy lifestyles. One participant in particular stated, "I have been eating better and have lost weight. I eat more salad and fruit and eat [smaller] portion sizes." Another participant stated, "I learned that I am overeating. I eat more vegetables now and switched to canola oil. I bake and boil my foods now instead of [frying] them."

*Interpersonal Skills.* Within the relationships module, we discussed different techniques related to interpersonal skills, including body language, communication, listening skills, and relationship building. The researchers obtained positive feedback regarding this module; one participant stated, "I learned the way you sit in front of a person and talk to them and use eye contact."

*Fellowship.* Another goal of the program concerned the development of fellowship and friendships. During the program, the researchers focused on encouraging the participants to build relationships within their community in hopes that they would maintain these relationships upon completion of the program. When participants were asked the question, "Do you think you have established friendships that will continue after the ALP is over?" seven out of the eight participants who answered this question responded, "Yes."

## Discussion

In this study, the researchers examined the effectiveness of the ALP on low-income adults living in a city subsidized apartment complex. The researchers hypothesized that a 10 week ALP would enhance participants' quality of life and life satisfaction. The effectiveness of this program was measured quantitatively through the use of the RAND

SF-36. Qualitatively, the researchers assessed the effectiveness of the program via research questions, a focus group discussion, and a three month follow up questionnaire. Quantitatively our results showed no significant change in quality of life or life satisfaction. However, our qualitative results indicate that participants did experience improvements in both of these areas. The ALP could be viewed as a treatment approach for a variety of populations and our qualitative data indicate that this was an effective intervention for our low-income adult participants. Therefore, the success of this program allows the researchers to contribute this study to the existing literature on Lifestyle Redesign Programs (Mandel, et al., 1999).

In regards to the quantitative research, there was no significant difference found between the mean pre-test and post-test RAND SF-36 scores. There were no notable increases in average pre-test and post-test scores in each domain of the RAND SF-36 with the exception of the pain domain. This domain had an increase of 30 points, which was not significant.

Qualitative data obtained during the focus group discussion indicated that the ALP had a significant impact on the participants' quality of life and life satisfaction. The development of new skills as well as the application of learning was evident throughout the program. According to participant responses, the following themes were identified: social skills, nutrition, interpersonal skills, and fellowship. Several participants stated that if this program was available again in the future, they would indeed participate. One participant stated, "Yes, I would participate because it is important to get out and socialize and get active. Because we are truly getting older and we need something to do once or twice a year. I look forward to next year." Through researchers' observations, it was noted that participants were establishing new relationships and communicating with each other and the researchers. Regardless of the results found during statistical analysis of the quantitative data, this feedback suggests that the ALP was indeed beneficial and positively impacted the lives of the participants.

Several limitations were identified in this study. First, our study was limited due to the small convenience sample of low-income adults in an urban population. The participants of the study were not of a diverse ethnic population; the majority of participants were African American. Due to occasional absences, not all participants received the same intensity of the program, which presented as a major limitation to this study. Since the ALP occurred over only a 10 week period, this limited data collection.

Another limitation included initially administering the RAND SF-36 on a one-to-one basis during the pre-test; the post-test was administered in a group format (with re-



searchers assisting participants when needed). Furthermore, this study's quantitative portion relied on participants to complete both pre-test and post-test evaluations using the RAND SF-36. Twenty participants were evaluated using the RAND SF-36; however, only 10 attended the last day for qualitative and quantitative re-evaluation. Therefore, nine RAND SF-36 pre-tests were omitted and could not be used to calculate results.

The qualitative assessments used in this program were not standardized, leading to another limitation of this study. During the initial evaluation, participants were asked a series of research questions to obtain information on current quality of life and life satisfaction. This information gathered during the initial evaluation was used to establish a baseline, to which future data could be compared. The informal focus group held upon completion of the program was also a limitation to this study, due to the fact that a standardized questionnaire was not used. There was no single or double blinding used in this study because the researchers both evaluated the participants and calculated the outcomes; this led to the potential for a research bias, which presented another limitation to this study. Lastly, the three month follow-up questionnaire that was developed by the researchers to assess whether or not participants have applied the ALP modules into their daily lives was not standardized.

## Conclusions

From this study, the researchers determined that there was no statistical significance in the quantitative results of the study. However, the researchers observed notable differences in the participants, and through the data obtained qualitatively, the researchers determined that this program was effective in enhancing quality of life and life satisfaction. Three months after the ALP was finished, the researchers went back to the study site to complete a three month follow-up with nine prior participants of the ALP. This 12-question questionnaire was able to obtain data on how the participants applied the information they had received throughout the ALP into their lives, and if they had any ideas how to improve this program in the future. A common theme for the most well-liked modules was exercise and nutrition. Many of the participants learned how to communicate better because of the ALP. Seven of the nine participants believe they have personally grown in the course of the program; the other two participants did not respond to this question. Based on the results from the three month follow up, the researchers would recommend this as a judiciously selected program when making clinical decisions for alternative or non-traditional patient populations.

Recommendations for further research on community programs, such as the ALP, include (a) gathering a larger

sample size of more diverse populations in varying age ranges, (b) establishing a cut-off date for evaluation of new participants, (c) extending the length of the program, (d) utilizing a standardized questionnaire to assess qualitative results, and (e) using an alternative quantitative assessment to the RAND SF-36. This assessment was lengthy and there were multiple choices for each question, which the participants felt were hard to distinguish.

Based upon the qualitative data, the researchers determined that the ALP was effective with a population other than the well-elderly and could be viewed as a significant contribution to the existing literature on Lifestyle Redesign Programs.

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## **APPENDIX A**

### *Research Questions for the PC Program*

What are the activities you engage in now?

1. Why do you engage in these activities?
2. How often do you engage in activities?
3. With whom do you participate?
4. What are the positive and negative outcomes of the activity?

What occupations are meaningful to you?

1. How do they make you feel?
2. How do they affect your quality of life?
3. What things affect the meaning of the activity to you?

Are there occupations you would like to participate in but cannot?

1. Is it because of transportation?
2. Do social skills play a role?
3. Is money a factor?
4. Are there any other limitations to your participation?

Do relationships with others influence your occupational performance?

1. What are the positive influences?
2. What are the negative influences?

What are the support systems that you have, if any?

1. When do you use them?
2. In what ways do your support systems help you in occupational participation?
3. Are there times when your support systems can be a negative influence, yet you still use them?
4. How would you feel if you did not have these support systems?

## **APPENDIX B**

### *Post Program: A Three Month Follow-Up Survey*

*Questions for Survey: Post-program (from the Out and About questionnaire)*

1. What was your favorite thing about the lifestyle re-design program?
2. Have you made any new friendships through the lifestyle re-design program?
3. Have you personally grown during this program?
4. What are a few things that you learned during the program?
5. What is your favorite memory about the lifestyle re-design program?
6. What topic did you enjoy learning about the most?
7. What topic did you enjoy learning about the least?
8. How have you applied the concepts you learned through the lifestyle re-design program to your everyday life and daily routines?
9. Do you have any suggestions for new topics?
10. Do you have any suggestions for different outing destinations?
11. Do you have any suggestions for different guest speakers?
12. Do you have any suggestions for improvement for the group leaders?