**BRIEF REPORT**

**Outcomes of a Pilot Occupational Therapy Wellness Program for Older Adults**

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**KEY WORDS**
- community participation
- prevention
- quality of life and older adults

**OBJECTIVE.** The purpose of this study was to evaluate a pilot occupational therapy wellness program designed to teach elders the importance of participation in meaningful social and community occupations to their quality of life.

**METHOD.** Sixty-five older adults participated in this pilot wellness program held at each of three senior apartment complexes. Measures of health-related quality of life using the SF-36 Health Survey and frequencies of social and community participation from a program-specific intake form were completed by 39 participants before and after the 6-month program. Participants also evaluated components of the program through a satisfaction survey.

**RESULTS.** Scores on the SF-36 Health Survey were significantly higher in vitality, social functioning, and the mental health summary scores following participation in the program. Participants reported an increased frequency of socialization and community participation with an average of 55% participating in at least three or more activities per week before the program to an average of 66% participating after the program. Participants who benefited the most attended more classes, were older, and were nondrivers. Eighty percent of those polled rated the pilot program as good or excellent.

**CONCLUSION.** This pilot study provides additional support for prevention efforts for elders in the community. Wellness programs for seniors may be most effective if targeted to those who are older and non-drivers.

Department of Health and Human Services, 2000), clearly support primary and secondary prevention efforts to increase the well-being of older adults.

Although many older adults are independent, happy, socially active, in good health, and contributors to their communities (Grams & Albee, 1995), others are moderately or severely limited in their ability to participate in meaningful activities due to personal or environmental constraints. When faced with these constraints, older adults often respond by limiting what they do (Kelly, Steinkamp, & Kelly, 1986; McGuire, 1984). This increases their risk for isolation and increased dependence, which can lead to depression and deteriorating physical health (Ostir, Markides, Black, & Goodwin, 2000).

Lack of transportation is a major environmental constraint for older adults and increases their risk for isolation. According to a 1997 American Association of Retired Persons study, one-fourth of the 75-plus age group does not drive, and this proportion is expected to rise (Straight, 1997).

Participation in meaningful occupations positively influences health and well-being, and withdrawal or changes in occupation reduces self-perceived health and well-being (Law, LeClair, & Steinwender, 1998; Wilcock et al., 1998). Therefore, primary prevention efforts aimed at maintaining or increasing opportunities to participate in meaningful social and community activities may have the effect of improving individuals’ quality of life through improved self-perceived health and well-being.

Occupational therapists have a long history of service to older persons and have demonstrated positive results across a wide range of treatment contexts. (Carlson, Fanchiang, Zemke, & Clark, 1996). Recently, the well-elderly study demonstrated that preventative occupational therapy services in an inner city senior high rise effectively improved perceived quality of life for older residents and had a lasting impact (Clark et al., 2001). The Designing a Life of Wellness Program was modeled after this pioneering work, but the target population was middle to upper class older adults living in senior apartments. This study describes the outcomes of the program evaluation, answering four questions: (1) Do quality-of-life scores change after participating in the program? (2) Does the frequency of social and community participation increase following participation in the program? (3) What are the characteristics of participants who reported the most and least benefit from the program? (4) How satisfied are the participants with the components of the program?

Method

Participants

Participants in the Designing a Life of Wellness Program were 65 older adults (ages 70–92 years) from Midwestern urban and suburban communities. The programs were held in community rooms at three different senior apartment complexes. Individuals living in their own homes in the surrounding areas were welcome to participate and referred by a local Block Nurse Program, while those living in the apartment complexes were recruited through flyers posted in their buildings. Those who participated were self-selected and therefore receptive to education and group or social activities. Since this program was funded by a service grant, participants were under no obligation to attend consistently, and could enter or leave the program at any time.

Description of Program

The Designing a Life of Wellness Program was a grant and contract-funded program that was delivered in three different senior apartment complexes during an 18-month time period. In each apartment complex, the program included 6 months of weekly 1 1/2 hour educational classes taught by at least two occupational therapy faculty out of a trained team of three faculty, and assisted by occupational therapy students during their Level II fieldwork experience. The program focused on teaching the importance of participation in meaningful occupations for better quality of life and strategies to remove personal and environmental barriers that prevent participation. A program syllabus for the three sites that outlined the topics and activities for each week in the 6-month period was distributed to the participants. Weekly topics such as transportation, aging, safety and falls prevention, stress, lifestyle balance, and communication were discussed in terms of how these issues affected opportunities to participate in meaningful occupations. Participants discussed how barriers or supports in these areas influenced their occupations and problem-solved solutions to specific barriers. Topics, handouts, and discussion questions were the same for each of the three groups. Participants were also given “homework” such as keeping track of daily routines, energy levels, stressful events, etc. that allowed them to explore how the topic affected their own lives more directly. Generally, time was allowed at the end of the sessions for spontaneous socialization. Approximately once a month, the group arranged a community outing to a location of their choice in place of a weekly class, which allowed them to practice some ideas learned in class.

Measurement Tools

The SF-36 Health Survey is considered a generic measure of perceived health-related quality of life and is used widely in clinical outcome studies. It consists of eight subscales: physical functioning, role-physical, bodily pain, general health, vitality, social functioning, role-emotional, and mental health (Ware et al., 1993). The internal consistency (.80–.92), test–retest reliability (.60–.81), and validity of the scales have been tested and deemed acceptable (Ware et al., 1993; Ware & Sherbourne, 1992). We expected that the vitality, social functioning, role emotional, and mental health domains would be most likely to change because of the focus of the program.

An intake form was developed for the Designing a Life of Wellness Program to get demographic and quantitative information about the frequency of weekly communication, and monthly socialization and community participation among the participants of the program. Participants were encouraged to think of the past 2 months as the guideline for their answers. On a five-point scale (1 = 0 times/month, 2 = 1–2 times/month, 3 = 3–4 times/month, 4 = 5–6 times/month, 5 = 7+ times/month), participants rated their frequency of

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monthly social and community activities. Community activities rated were church-related activities, outdoor activities (going to parks, walks, etc.), shopping (grocery, malls, etc.), community events (music, sports, etc.), community resources (libraries, restaurants, community centers, recreation facilities, etc.), and social groups. A similar Likert scale was used for weekly communication with family members, friends, and support persons (clergy, visiting nurses, nonmedical service providers, etc.).

The program satisfaction survey was developed specifically for the Designing a Life of Wellness Program. Participants were asked to rate various aspects of the program anonymously. The components of the program (teachers, students, discussions, homework, handouts, outings, and opportunities for socialization) and nine primary topic areas were rated as poor, fair, good, or excellent. Participants also rated their overall satisfaction with the program using the same scale.

**Procedures**

Two outcome measures were used for evaluating the program, the SF-36 Health Survey and the intake form. These measures were collected at the beginning of the program and at the end of the program 6 months later. Participants were told the measures were for program evaluation and that completion of them was voluntary. If they were willing to allow their data to be used for future research, they signed a release along with the assessments. For further analysis and publication, an ethics review from the college Institutional Review Committee was completed. We were approved to use the data secondarily after removing all identifying information from the measures before analyzing them. We attempted to collect completed assessments after 6 months from all participants by mail, even if their attendance was minimal. Participants were also given a program satisfaction survey that they completed voluntarily and anonymously at the end of the program.

**Data Analysis**

Paired t tests were calculated for the SF-36 Health Survey scores before and after the program for the total group, drivers only, and nondrivers only. No corrections for multiple t tests were used because the study was exploratory in nature and the comparisons made consisted only of subsets and summary scores on one instrument, the SF-36. Data from the intake form were analyzed separately for the total group, drivers compared to nondrivers and high attenders compared to low attenders. Participants considered high attenders came to over 50% of the classes and low attenders came to less than 50% of the classes. A 50% attendance rate cut-off was chosen for comparison because it appeared to be a natural break in the attendance patterns. Driving status and attendance appeared to be associated, thus a chi-square analysis was completed. Frequency percentages were calculated from the responses for each item on the intake form and reported according to driving and attendance status. The data from the program satisfaction surveys were compiled in aggregate and analyzed descriptively.

**Results**

**Participants**

Sixty-five older adults completed at least one part of the initial data collection and attended at least five or more of 24 classes throughout a 6-month program. Complete pre- and post-intake and SF-36 Health Survey data were collected on 39 participants. Thirty-one participants also completed the program satisfaction survey. Ninety-five percent of the participants were female. The 26 participants with incomplete data either did not return one of the forms (n = 9), refused to fill them out (n = 1), or returned incomplete forms (n = 16).

**Characteristics of Drivers/Nondrivers and High Attenders/Low Attenders**

Chi-square was used to examine the association between driving status and attendance (χ² = 13.099, df = 1, p < .001). There was a high association between driving and attendance, with nondrivers more likely to have high attendance than drivers. Since the association between driving and attendance was high, subsequent comparisons will be made between nondrivers/high attenders and drivers/low attenders. Nondrivers were older (mean age 85.2 years) than drivers (mean age 9.9 years).

**Quality of Life**

Quality of life improved significantly in vitality (p < .05), social functioning (p < .01), and the mental health summary score (p < .05) as measured by the SF-36 Health Survey pre- and post-program. Overall the mean standard scores show an upward trend in all eight subscales (see Table 1).

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### Table 1. Descriptive Data, Results of Paired t Tests for the Eight Subscales and Summary Scales of the SF-36 Health Survey Scale, Total Group (N = 39)

<table>
<thead>
<tr>
<th>SF-36 Subscales</th>
<th>Pre X (SD)</th>
<th>Post X (SD)</th>
<th>#38</th>
<th>Effect Sizes (d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Functioning</td>
<td>49.49 (25.25)</td>
<td>50.13 (26.84)</td>
<td>-2.22</td>
<td>.04</td>
</tr>
<tr>
<td>Role-Physical</td>
<td>33.97 (34.17)</td>
<td>46.79 (39.39)</td>
<td>-1.80</td>
<td>.39</td>
</tr>
<tr>
<td>Bodily Pain</td>
<td>61.56 (25.66)</td>
<td>62.59 (23.29)</td>
<td>-3.0</td>
<td>.06</td>
</tr>
<tr>
<td>General Health</td>
<td>57.26 (18.83)</td>
<td>60.87 (20.11)</td>
<td>-1.86</td>
<td>.42</td>
</tr>
<tr>
<td>Vitality</td>
<td>50.00 (23.25)</td>
<td>54.49 (19.08)</td>
<td>-2.04*</td>
<td>.46</td>
</tr>
<tr>
<td>Social Functioning</td>
<td>69.55 (30.32)</td>
<td>77.24 (24.81)</td>
<td>-2.51**</td>
<td>.56</td>
</tr>
<tr>
<td>Role-Emotional</td>
<td>58.97 (40.80)</td>
<td>71.79 (41.56)</td>
<td>-1.89</td>
<td>.43</td>
</tr>
<tr>
<td>Mental Health</td>
<td>72.31 (16.68)</td>
<td>74.67 (12.68)</td>
<td>-1.06</td>
<td>.23</td>
</tr>
<tr>
<td>Mental Health Summary Score</td>
<td>49.39 (11.57)</td>
<td>52.54 (8.88)</td>
<td>-2.24*</td>
<td>.50</td>
</tr>
<tr>
<td>Physical Health Summary Score</td>
<td>36.39 (8.55)</td>
<td>37.42 (10.57)</td>
<td>-0.91</td>
<td>.20</td>
</tr>
</tbody>
</table>

Higher scores reflect better quality of life. * = p ≤ .05, ** = p ≤ .01

X = Mean

SD = Standard Deviation
There were medium effect sizes for role-physical, general health, vitality, social function, role-emotional, and the mental health summary scores. There were no statistically significant differences found between drivers and nondrivers on quality-of-life measures.

Community and Social Participation Rates

The average number of the participants who communicated with family, friends, or support persons at least 3 times per week increased from 47% to 56%. The average number of participants who participated in social or community activities increased from 56% to 66%. Participation in outdoor, social, and community activities increased the most and church related activities changed the least. Activities with family members increased for the drivers/low attenders but did not change for the nondriver/high attenders (see Table 2).

The nondrivers/high attenders increased their average communication and participation rates more than the drivers/low attenders. The average number of nondrivers/high attenders who communicated with friends and support persons at least three times per week increased from 43% to 75% with no increase in communication with family members. Conversely, the percentage of drivers/low attenders who communicated at least 3 times per week with family members and friends changed from an average of 59% pre-program to 72% post-program with no reported communication with support persons. Nondrivers/high attenders increased overall social activities and activities with friends or support persons, whereas drivers/low attenders decreased overall social activities and activities with friends and support persons.

Participant Satisfaction With the Program

Overall satisfaction with the program was high with 87 percent of the 31 respondents rating it good or excellent. Most components of the program were also highly rated, particularly the instructors, students, length of the sessions (1 1/2 hours), group discussions, and socialization. Class topics rated the highest were managing stress, aging and health, and effective communication. All participants left some items on the surveys unanswered with a range from 1 to 14 responses missing.

Discussion

The first research question addressed whether the program made a difference in the quality of life of participants who were well-elderly. The SF-36 scores increased significantly in three domains (vitality, social functioning, and mental health) and an upward trend is evident in all the mean scores. This differs from the well-elderly study (Clark et al., 1997) where both the experimental and control groups showed an overall decline in scores on the SF-36 with the experimental group declining significantly less in seven of the eight domains. The medium effect sizes in the three domains also indicate that the changes between the testing periods were clinically significant. The socialization and group discussions were rated highly by the participants and likely contributed to the improvements seen in the social domain.

The improved perceived vitality and mental health may be related to the predictable schedule of weekly classes and monthly outings that added activity to the participants’ lives and something to look forward to.

Drivers and nondrivers were analyzed separately because we suspected that nondrivers would have fewer opportunities for socialization and participation in the community, and perhaps respond more favorably to the program. The mean scores on the SF-36 Health Survey were higher for the nondrivers than the drivers following the program but the difference between the groups did not reach statistical significance. This may be because of the small sample size or because other variables may have equal or greater impact.

The second research question asked whether or not the program made a difference in frequency of participation in social and community activities. Participants did report increased frequency of activity post-program yet it remains unclear if the reported increase is a result of attending the classes themselves or if participants attempted to increase these activities based on information learned in class, or both, or neither.

Communication and socialization with family members changed the least for all groups, perhaps because of satisfaction with current family activity frequency or limited control over changing the frequency of contact. Nondrivers in particular would be more likely to rely heavily on communication with family members by phone, e-mail, or letter since their options are limited. Their increase in communication with friends and support persons with virtually no change in communication patterns with family members suggests they may have maximized their family support options. Edwards and Klemmack (1973) found that for older adults, activities with family members did not predict life satisfaction but informal participation in activities with friends or support persons did. The fact that participants’ perceived quality of life changed without a change in communication and socialization with family members lends some support to their findings.

The third research question was whether there were differences in the characteristics of participants who reported the most and least benefit from the program.
Participants were not obligated to attend, therefore we are assuming that those who attended the most found it meaningful in some way or at least enjoyed it. We also assumed that participants with low attendance either did not find it meaningful or enjoyable, or were more selective in the aspects of the program they chose to participate in. High attenders were more likely to be nondrivers and the oldest of the participants. There does appear to be a relationship between high attendance, nondriving, and increased communication with friends and support persons, and participation in social and community activities. We suggest, therefore, that our wellness program was most beneficial to the older-old, nondrivers and that perhaps similar programs should target these groups. A critical component for this group would be offering the program in their building so that driving would not be an issue.

The fourth research question addressed the participants’ overall satisfaction with the program itself. Those who responded were clearly a biased group since they were still attending the program at the 6-month administration of the surveys. Although we cannot generalize the high level of program satisfaction to everyone who participated, it does indicate that this type of program was considered to be beneficial by those who participated through the end of the program. The components of the program rated the highest were those related to social relationships and active learning such as relationships with the instructors and students, group discussion, and opportunities for socialization. Student involvement in the program appears to have been well received by the elders. This finding is consistent with Bonder and Wagner’s (2001) assertion that intergenerational activities are valued by elders.

Several limitations should be noted in this study. The Designing a Life of Wellness Program is primarily a service project to the community and secondarily a research project. This primary purpose accounts for several uncontrolled variables in the program evaluation such as varied participation rates and incomplete data. The lack of a control group and the one-group, pretest–posttest design are clearly limitations to this pilot study. Some statisticians recommend corrections when multiple *t* tests are used because of the increased likelihood of Type I errors. In this study, corrections were not made and thus, the results need to be viewed with caution. Additionally, the raters were teachers or students involved in the program and were not blind to the purposes of the study, another factor that could have influenced the results. Finally, the study did not determine which parts of the program were most likely to be contributors to the outcomes. Although changes in some aspects of quality of life and social and community participation rates changed following the program, the reason for the change is speculative. Additional studies are recommended that control for compounding variables.

This pilot study provides additional support for prevention efforts for elders in urban and suburban communities. Evaluation outcomes suggest that wellness programs in senior apartments may be most effective if targeted to those who are older and nondrivers. Intergenerational activities, active learning activities, and opportunities for socialization seem to be key components to an effective program for these groups.

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**References**


