Civic Engagement for Older Adults With Functional Limitations: Piloting an Intervention for Adult Day Health Participants

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Purpose: Past research has demonstrated the importance of civic engagement for older adults, yet previous studies have not focused specifically on the potential benefits of civic engagement for older adults with functional limitations. This pilot study explored the feasibility and effectiveness of an intervention designed to promote civic engagement in this growing and often overlooked population. Design and Methods: A convenience sample was recruited from 2 adult day health centers (N = 43). A multi-component intervention was implemented comprising education, service, and recognition phases. Using a nonequivalent switching replications design, researchers compared participants receiving the civic engagement intervention with participants receiving treatment as usual. Results: In terms of feasibility, the intervention was unproblematic and amenable to this population; however, challenges existed in data collection. Participants receiving the intervention reported higher, yet nonsignificant, levels of purpose in life, self-esteem, and perceived physical health when compared with those in the control group. However, 5 weeks following the withdrawal of the intervention, participants reported a significant decrease in self-esteem and perceived physical health. Implications: Civic engagement interventions appear to be quite feasible and possibly beneficial for older adults with physical and cognitive limitations, such as those enrolled in adult day health programs. Future studies should examine the nature and amount of engagement needed to maximize the benefits of such interventions.

Key Words: Adult day care, Volunteerism, Community involvement

Civic engagement involves individual and collective actions designed to identify and address...
community issues and needs. Through service and connections with others, civic engagement is thought to bring about mutual gains for both individuals and society. Civic engagement has received a great deal of attention recently through the expansion of national service and volunteer programs and in publications in leading academic journals. Older adults, in particular, have been targeted in civic engagement research and have been found to benefit greatly from remaining engaged with their communities through such activities as volunteering, intergenerational mentoring, and social and political activism. These benefits include gains in emotional and physical well-being, improved mortality rates, and increased cognitive activity (e.g., Fried et al., 2004; Lum & Lightfoot, 2005; Morrow-Howell, Hinterlong, Rozario, & Tang, 2003). Despite our growing understanding about the benefits of civic engagement for older adults, previous research has focused primarily on healthy older adults. The purpose of this pilot study was to evaluate whether a civic engagement intervention is feasible for older adults with functional limitations and to identify the benefits of participation in such a program.

Previous Research

The majority of studies of civic engagement for older adults have focused on one of the most common forms of civic engagement—volunteerism. Several large-scale studies using longitudinal data from the Americans’ Changing Lives (ACL) study, the Asset and Health Dynamics Among the Oldest Old (AHEAD) study, and the National Survey of Midlife Development in the U.S. (MIDUS) have found the following beneficial effects of volunteering: lower depression levels (Musick & Wilson, 2003), increases in life satisfaction and perceived health (Van Willigen, 2000), higher levels of well-being (Morrow-Howell et al., 2003), slower declines in self-perceived physical and emotional health and lower mortality rates (Lum & Lightfoot, 2005), and a moderating effect on role loss and role-identity absence (Greenfield & Marks, 2004). Other forms of civic engagement, such as intergenerational programs that pair older adults with school children, have also been found to be beneficial in terms of both cognitive and physical well-being (Fried et al., 2004).

Theoretical Support

Several theories can account for the importance of civic engagement for older adults, foremost among them are those focusing on psychosocial development in the latter stages of life. Erikson (1968) suggests that older adults have a desire for generativity or the “need to be needed” (p. 138) and to contribute “to future generations through productive and creative endeavors” (An & Cooney, 2006, p. 411). Erikson theorized that a conflict occurs during adulthood between generativity and stagnation or self-centeredness. Successful resolution of the conflict is reflected in an individual’s capacity for caring and productivity. Generativity in older adults can be expressed in a variety of ways, such as remaining employed into later life, volunteering and staying active in the community, and participating in activities that promote family interaction and intergenerational exchange. Unfortunately, older adults with functional limitations may lack opportunities and social roles that allow them to remain engaged in their communities. By providing opportunities for older adults to assume meaningful and contributing roles, we may effectively increase their social value and sense of generativity and decrease their risk of becoming stagnated in their later years.

Based upon the existing literature and theoretical support for the benefits of civic engagement in the general population of older adults, this pilot study was designed to

1. gain a better understanding of the feasibility of implementing and testing a civic engagement intervention for older adults with functional limitations and
2. examine the effects of a civic engagement intervention on the overall well-being of older adults with functional limitations.

We hypothesized that the civic engagement intervention with adult day participants would be (a) feasible to implement and (b) effective in increasing well-being as measured by sense of purpose in life, usefulness, self-esteem, and self-perceived health. These indices of well-being are thought to be indicative of a sense of generativity, reflective of Erikson’s theory.

Methods

Setting

In the current study, we focused on older adults receiving services through adult day health service (ADS) programs. ADS are community-based programs that provide health and social services to older adults with functional limitations through
full- or partial-day programs. The primary goals of ADS were to increase the well-being of older adults with limitations and to provide respite to caregivers. Specifically, the services offered include social and recreational activities, meals, assistance with activities of daily living (ADLs), rehabilitation therapies, and medication management. There are approximately 4,600 ADS programs operating in the United States (National Adult Day Services Association, 2009). The average age of participants is 72, and it has been estimated that approximately half of ADS attendees have some degree of dementia and almost half are physically frail (Partners in Caregiving, 2002).

Sample

A purposive sampling strategy was used to identify and recruit individuals attending two ADS programs located in a diverse Midwestern city in the United States during September, October, and November 2008. Selection criteria for the present study required that participants (a) express a desire to be a part of the study, (b) attend the adult day program on the designated day of the intervention, (c) have the decision-making capacity to elect to participate in the study, and (d) be 60 years or older. Prior to obtaining informed consent, participants were provided with a verbal overview of the project, the timeline, and weekly schedule by the project staff. Of the 54 individuals initially enrolled in the study, 43 (N = 43) or 80% completed all three waves of data collection. The final sample consisted of 22 participants (n = 22) at Site 1 and 21 participants (n = 21) at Site 2. The two groups were comparable in terms of age, cognitive health, and physical health status. However, Site 1 had more widowed participants (73%) compared with Site 2 (33%) and a higher percentage of participants who lived alone (41% vs. 24%). Overall, the participants were predominantly female (82% at Site 1 and 76% at Site 2) and in their mid- to late-70s (M = 77 at Site 1 and M = 76 at Site 2). The average scores on the Mini-Mental State Examination (MMSE) of the two groups suggest normal cognitive functioning. However, Site 1 had 2 participants with scores below normal range and Site 2 had 7 participants below normal range, suggesting mild-to-moderate cognitive impairment. The level of support needed for ADLs and instrumental activities of daily living (IADLs) at both sites suggests moderate functional impairment. Additional information on the sample characteristics is presented in Table 1.

### Table 1. Demographics

<table>
<thead>
<tr>
<th></th>
<th>Site 1 (N = 22)</th>
<th>Site 2 (N=21)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender, n (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>18 (82)</td>
<td>16 (76)</td>
</tr>
<tr>
<td>Marital status, n (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>3 (14)</td>
<td>5 (24)</td>
</tr>
<tr>
<td>Widow</td>
<td>16 (73)</td>
<td>7 (33)</td>
</tr>
<tr>
<td>Divorce</td>
<td>3 (14)</td>
<td>5 (24)</td>
</tr>
<tr>
<td>Married</td>
<td>—</td>
<td>4 (20)</td>
</tr>
<tr>
<td>Lives with, n (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alone</td>
<td>9 (41)</td>
<td>5 (24)</td>
</tr>
<tr>
<td>Spouse</td>
<td>—</td>
<td>3 (14)</td>
</tr>
<tr>
<td>Children</td>
<td>11 (50)</td>
<td>10 (48)</td>
</tr>
<tr>
<td>Other</td>
<td>2 (9)</td>
<td>3 (14)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Site 1 (n)</th>
<th>Site 2 (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age in years</td>
<td>77 (10.3)</td>
<td>76 (8.5)</td>
</tr>
<tr>
<td>MMSE</td>
<td>25 (4.3)</td>
<td>24 (3.9)</td>
</tr>
<tr>
<td>ADLs</td>
<td>6.9 (6.1)</td>
<td>6.2 (6.9)</td>
</tr>
<tr>
<td>IADLs</td>
<td>13.6 (6.5)</td>
<td>16.3 (8.3)</td>
</tr>
</tbody>
</table>

Note: MMSE = Mini-Mental State Examination; ADLs = activities of daily living; IADLs = instrumental activities of daily living.

Study Design

The study employed a nonequivalent switching replications design. In this design, one site receives the intervention, whereas the second site serves as the comparison group, in this case receiving services as usual in the adult day program. Services as usual include activity programs that involve arts and crafts, physical activity, or intellectual stimulation such as discussion of...
current events. No activities are completed specifically for the benefit of serving other individuals or groups, such as in the civic engagement intervention. The second site then receives the intervention and the intervention is withdrawn from first site for comparison purposes. The design for this study is presented subsequently in scientific notation.

\[
\text{NR}_{\text{site1}} \quad O_1 \quad X \quad O_2 \quad O_3 \\
\text{NR}_{\text{site2}} \quad O_1 \quad O_2 \quad X \quad O_3
\]

The switching replication design was selected as it controls history and testing threats to internal validity and allows for testing of the lasting effects of the intervention. In addition, it allows for the intervention to be provided to the comparison group at a later time (Shadish, Cook, & Campbell, 2001). Data were collected at baseline prior to the intervention (\(O_1\)), at the point at which the intervention was switched from Site 1 to Site 2 (\(O_2\)), and at the completion of the study (\(O_3\)).

**Intervention**

A five-session multicomponent intervention was developed for this study. The intervention consisted of education, service, and recognition phases administered by the research staff and introduced on the following schedule:

1. **Education:** An interactive educational session was presented to participants at the beginning of the intervention. In this phase, participants learned about the community group that they would serve. For instance, participants learned about the needs and challenges faced by soldiers serving overseas and homeless families. Throughout this phase, participants were encouraged to share their own stories about past struggles (e.g., veterans experiences), thereby establishing connections and commonalities with the groups being served.

2. **Service:** The service component involved participants assembling care packages for community groups. This typically included organizing purchased or donated items (e.g., writing supplies, personal care items, books, cds, dvds), placing items into bags, and writing or dictating personal notes to the recipients. The intervention was conducted in a group setting with participants and research staff interacting and assisting each other. Facilitators encouraged discussions that centered on the challenges faced by the groups being served and reinforced the importance of the help that the participants were providing to these groups. Participants were encouraged to reflect upon the meaning and importance of their service to others.

3. **Recognition:** On the fifth week, participants presented the completed care packages to a representative of each community group who personally thanked them for their service. Participants were also presented with certificates of achievement by the research staff followed by a celebration of accomplishment including snacks and beverages.

**Measures**

The measures for this study were selected based upon past literature on the benefits of civic engagement activities, our conceptual framework, and feasibility concerns. The 15-item instrument included the following scales and subscales.

**Purpose in Life.**—The three-item Purpose in Life subscale from the Ryff Psychological Well-Being Scale was used to measure this concept (Ryff, 1989). Although the 20-item parent scale of this measure has been shown to have acceptable reliability (\(\alpha = .70\)), this three-item measure has fairly low reliability (\(\alpha = .33\); Ryff & Keyes, 1995). In consultation with the administrators and staff of the adult day programs, it was decided that the 20-item measure could not be feasibly administered to this group and that the 3-item measure would be more appropriate (see Limitations section for further discussion).

**Usefulness.**—Usefulness was measured using a single statement: “I feel useful to other people.” Past research has found that one-item measures of usefulness had high levels of agreement with longer multidimensional measures of usefulness (e.g., Okamoto & Tanaka, 2004).

**Self-Esteem.**—The 10-item Rosenberg Self-Esteem Scale was used to measure this concept (Rosenberg, 1989). This scale in one of the most widely used self-esteem measures, and reliability has been found to range from acceptable to high (\(\alpha = .77-.88\); Blascovich & Tomaka, 1991).

**Self-Perceived Health.**—Self-perceived health was measured using one question: “How do you rate
Table 2. Emotional Well-being at Baseline (Observation1)

<table>
<thead>
<tr>
<th></th>
<th>Site 1</th>
<th>Site 2</th>
<th>df</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose in life</td>
<td>8.06</td>
<td>8.53</td>
<td>34</td>
<td>-0.66</td>
</tr>
<tr>
<td>Usefulness</td>
<td>2.82</td>
<td>3.68</td>
<td>34</td>
<td>-2.23*</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>25.46</td>
<td>25.11</td>
<td>29</td>
<td>0.37</td>
</tr>
<tr>
<td>Perceived health</td>
<td>2.41</td>
<td>2.39</td>
<td>34</td>
<td>0.19</td>
</tr>
</tbody>
</table>

*p < .05.

Demographic Information.—Basic demographic information including age, gender, marital status, living situation, and mental and physical health status was collected from administrative files. Mental health status was measured using the MMSE, which is a widely employed mental status examination. Cutoff scores for identifying dementia generally range between 21 and 23 depending on age, race, and educational level (Langley, 2000). Functional status was measured by ADLs and IADLs scores. ADLs included dressing/undressing upper and lower body, bathing, grooming, bed mobility, toileting, transferring, mobility, and eating. Scores for each item ranged from 0 to 4 with 0 = no help, 1 = with some supervision, 2 = with some physical help, 3 = with a lot of physical help, and 4 = complete physical help. Scores were added and then divided by the number of items (9) for an average score. IADLs included using the telephone, meal preparation, medication management, equipment management, money management, heavy housework, light housekeeping, shopping, and getting around outside of the home. Individual item scores ranged from 0 to 3 with 0 = no help, 1 = needs some help, 2 = needs a lot of help, and 3 = can’t do at all or always needs assistance. Scores were added and then divided by the number of items (9) for an average score. Higher average scores on each scale indicate higher levels of functional impairment.

Data Analysis

Descriptive statistics including frequencies and means were used to compare the treatment and comparison groups at baseline. The equivalency of the groups on the dependent measures at baseline was examined using independent t tests to address potential assignment bias present in the nonequivalent group design. The differences in the dependent variables between the group receiving the intervention and the comparison group were tested using independent sample t tests. Finally, the lasting effect of the intervention was evaluated using paired sample t tests.

Results

To determine if the two sites were comparable at baseline (O1), the dependent variables were examined using independent t tests. There were no significant differences found between Site 1 and Site 2 in purpose in life (Ms = 8.06, 8.53), self-esteem (Ms = 25.46, 25.11), and self-perceived health (Ms = 2.41, 2.37). However, a significant difference in feelings of usefulness between the two sites was found (p < .05). Participants attending Site 2 had higher average feelings of usefulness (M = 3.68) compared with Site 1 (M = 2.82) at baseline. Because of this difference, usefulness was not included in subsequent analysis (Table 2).

Differences in well-being between the test site and the comparison site were examined using independent t tests (O2). Participants receiving the intervention at Site 1 reported a higher sense of purpose in life and self-perceived health compared with participants receiving usual programming at Site 2 (Ms = 9.43, 8.64 and Ms = 2.60, 2.29). These differences, however, were not significant at the p < .05 level. There was no difference between the test group and comparison group in levels of self-esteem (Table 3). When the civic engagement intervention was then implemented at Site 2 and withdrawn from Site 1, participants receiving the intervention had slightly higher levels of self-esteem (Ms = 27.00, 26.59) and perceived health (Ms = 2.46, 2.26). Again, these differences were not significant at the p < .05 level. There was no difference between the sites in purpose in life (Ms = 8.50, 8.53) (Table 4).
Table 4. Emotional Well-being After Intervention at Site 2
(Observation 2)

<table>
<thead>
<tr>
<th></th>
<th>Site 1 Mean (SD)</th>
<th>Site 2 Mean (SD)</th>
<th>df</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose in life</td>
<td>8.53 (2.95)</td>
<td>8.5 (1.65)</td>
<td>31</td>
<td>0.04</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>26.59 (2.03)</td>
<td>27 (2.4)</td>
<td>29</td>
<td>0.51</td>
</tr>
<tr>
<td>Perceived health</td>
<td>2.26 (0.74)</td>
<td>2.46 (0.59)</td>
<td>28</td>
<td>0.81</td>
</tr>
</tbody>
</table>

A paired sample *t* test was used to examine the lasting effects of the intervention on participants attending Site 1 5 weeks after the civic engagement intervention was withdrawn (O3). The *t* test indicated that there was a significant decrease in self-esteem and self-perceived physical health 5-weeks after the withdrawal of the civic engagement intervention (Ms = 26.65, 25.22 and Ms = 2.5, 2.4). There was a slight nonsignificant decrease in the participants’ sense of purpose in life (Ms = 9.43, 9.29) (Table 5).

**Discussion**

In this pilot study, we hypothesized that a civic engagement intervention for older adults with functional limitations was both feasible to implement and effective in promoting well-being. The findings partially support this hypothesis. In evaluating the findings, we can draw from elements of the Reach, Effectiveness, Adoption, Implementation and Maintenance (RE-AIM) model for planning and developing interventions (www.re-aim.org). This model includes the following elements: reach, efficacy/effectiveness, adoption/implementation, and maintenance. In terms of reach, the population of interest (i.e., older adults with functional limitations attending ADS) was easily accessible, and the adult day centers that we approached were eager to participate in the intervention. We anticipate that the reach of civic engagement interventions could easily be extended to other groups of older adults with functional limitations, such as nursing home residents. The efficacy or effectiveness of the intervention was not fully clear based upon the results of this study. Although the intervention did result in gains in purpose of life, self-esteem, and perceived physical health, these findings did not reach significant levels. This may be related to “dosage rates” for the intervention. The duration of the intervention was largely determined by time, resources, and other practical considerations. However, at this point in time, it has yet to be established whether intensity or “dosage” of civic engagement interventions is related to effectiveness. Our second finding, the statistically significant decrease in self-esteem and self-perceived physical health after the intervention was withdrawn, suggests that the civic engagement intervention may have been effective in maintaining well-being in this population. This is a key finding, as older adults with illness and functional limitations may be at greatest risk of suffering erosions in well-being and a sense of stagnation in life (Lyketsos & Olin, 2002; Robinson, 2003). By promoting activities and opportunities for civic engagement, we may be able to stem these declines in well-being and promote a sense of generativity in the lives of older adults with functional limitations.

The second half of the RE-AIM model focuses on adaptation, implementation, and maintenance. We found that the intervention was readily adapted to the adult day setting and adopted by participants and staff. The enthusiasm of the staff and researchers may partially account for the ease of adaptation and reception of the intervention. The group format may also have been a key, as both staff and participants reported a sense of synergy and solidarity surrounding the project. From a financial standpoint, the cost of the intervention was minimal, with the care packages including many donated items. The implementation of the intervention was also relatively problem free; however, questions remain as to whether the staff of the adult day centers would be able to consistently deliver the intervention in a consistent format. In addition, ongoing data collection may only be feasible with continued collaboration between researchers and adult day providers. This is closely related to the final element in the RE-AIM framework, the maintenance, or continual implementation of the civic engagement intervention.

Following the end of the pilot study, the staff and participants at one adult day center took the initiative to form their own service group, entitled Seniors on Purpose. The other adult day center affiliated with this study reported that they are in
the process of forming similar service groups to promote civic engagement. These germinations of civic engagement suggest that few accommodations are necessary to maintain such programs in adult day settings. It should be noted that additional accommodations may be needed in other settings (e.g., nursing homes), such as the inclusion of family caregivers, which may increase “buy-in” from the older adults and provide support for continuation of such programs.

**Limitations**

It is critical to note that this was a pilot study, and, as such, there are several limitations that must be considered. First, participants were not randomly selected or assigned to the treatment groups. This may have resulted in a degree of selection bias, with those older adults who were most interested and capable choosing to participate in the study. Additionally, the groups served by participants were selected by researchers and the staff in order to maximize feasibility. Future groups should engage older adult participants in determining the nature of the engagement activities. The final sample size was also relatively small. This impacted our ability to conduct more sophisticated analyses and to reach a level of significance in some of our findings. There were also challenges in terms of the measures used in the study. In particular, the three-item Purpose in Life scale has been found to be somewhat unreliable. We chose to use this scale rather than the 20-item parent scale due to the cognitive limitations of many of the participants. It is doubtful that the participants would have had the necessary level of understanding or stamina to complete the longer measure. The two groups of participants also received the intervention in different locations. This impacted our ability to control for the influence of environmental factors. Finally, the intervention was relatively simple and incorporated a single activity. It may be the case that multiactivity interventions are more effective. Interventions in which participants have direct contact with beneficiaries (e.g., bringing school children into the facility) may also have potential. Future studies should take into account these considerations in their designs.

**Conclusions**

This pilot study presents preliminary evidence that older adults with functional limitations have the desire and ability to participate in and the capacity to benefit from civic engagement activities. As anticipated, there appears to be a continued yearning for generativity, productivity, and connectivity in this population. Adult day programs, and possibly other congregate settings, appear to be well suited to provide opportunities for community involvement and engagement for this population. Civic engagement interventions could be integrated into care plans and become a treatment option for increasing participant well-being. Including older adults with functional limitations in civic engagement activities and research studies is an important preliminary step in moving away from a policy of exclusion and in combating the corrosive effects of ageism and disabilitism. In doing so, we present opportunities for older adults with functional limitations not only to gain personally from their contributions but also to remain valuable and engaged members of our society.

**References**


