The Relationship between Activities of Daily Living and Life Satisfaction in the Elderly: Active Engagement as Compared to Passive Participation.

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Daily activities and social contact were studied as influences on the life satisfaction of elderly people. It was considered that all activities might not be equal and that individuals who participate in more active activities and who have more active social contacts would score higher in life satisfaction than those who engage in inactive activities and who have fewer, less engaged social contacts. Data for a sub-sample of 1,835 men and women were extracted from a survey conducted for the National Council on Aging. Participants were aged 65 or older. Questions that related to daily activities and a life satisfaction scale were selected from the questionnaire. Independent t-tests indicated that individuals who engage in active versus inactive activities reported higher life satisfaction; however, any social contact contributed to reported life satisfaction. The findings can be used to educate the caretakers of the elderly and to design effective institutional programs. (Author/KC)
The Relationship between Activities of Daily Living and Life Satisfaction in the Elderly:
Active Engagement as Compared to Passive Participation

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Prepared June 5, 2000
Abstract

Daily activities and social contact influence the life satisfaction of elderly people. It might be that all activities are not equal and that individuals who participate in more active activities and who have more active social contacts would score higher in life satisfaction than those who engage in inactive activities and who have fewer, less engaged social contacts. Data for a sub-sample of men and women were extracted from a survey conducted for the National Council on Aging. Participants were age 65 or older. Questions that related to daily activities and a life satisfaction scale were selected from the questionnaire. Independent t-tests indicated that individuals who engage in active verses inactive activities reported higher life satisfaction; however, any social contact contributed to reported life satisfaction. The findings can be used to educate the caretakers of the elderly and to design effective institutional programs.
The Relationship between Activities of Daily Living and Life Satisfaction in the Elderly: Active Engagement as Compared to Passive Participation

As people age there are many factors that contribute to their overall sense of well-being and life-satisfaction. These factors range from the kind of and number of activities they participate in to the presence of and types of relationships in their lives. It is important to identify the specific factors that contribute to higher life-satisfaction because several studies show a link between happiness and mortality (e.g., Sabin, 1993). In addition, alternative living arrangements such as nursing homes, retirement homes, assisted living facilities, and home-care must be designed with attention to the well-being and satisfaction of the residents. Living arrangements must be designed to promote the continuing participation in the kinds of activities that have been demonstrated to benefit the elderly.

It might be important to differentiate between activities which lead to increased life satisfaction and those which do not. Horgas, Wilms, and Baltes (1998) asserted that successful aging is related to participation in activities beyond self-maintenance. More specifically, self-enriching activities that include leisure activities and social interaction are related to well being. However, in their research participants reported spending time either reading or watching television. Although reading or watching TV are leisure activities, they do not lead to active engagement. Therefore, although a variety of kinds of activities qualify as being beyond self-maintenance, only some leisure activities tend to require active participation. Others are inactive in that they require very little engagement, and still others are passive in that the action takes place independent of the person. The present study was designed to investigate life satisfaction as a function of
active, inactive and passive activities. It was expected that elderly people who participate in active recreational activities will demonstrate a higher life-satisfaction than those who participate in inactive or passive activities.

Social interaction also is related to sense of well-being (Horgas, et al., 1998). It has been shown that when people do not participate in social activities, they may feel lonely and view life more negatively (Peterson, Smith, & England, 1997). However, some social activities lead to interaction with other people whereas others do not. For example, shopping may or may not be done alone. On the other hand, participation in recreational clubs, dining out, and visiting with friends are all related to the maintenance of social contact. Further, marital status is also related to social interaction because having a spouse leads to daily contact with another person. In the present study, it was expected that those who participated in activities that require social interaction would report higher life satisfaction than those who spend less time in those kinds of activities.

It is also important to stay mentally and physically active. Research on the mental capacities of the elderly has shown that those adults who continue to use their minds show almost no intellectual decline as compared to those who spend considerable time doing nothing or just thinking alone (Bee, 2000). Activities such as voting and volunteering require an active mind. Therefore, it is likely that older people who vote and volunteer their services will report higher life satisfaction than those who do not.

Method

Respondents

Data for this study were obtained from ICPSR, the Inter-university Consortium for Political and Social Research. The consortium headquarters, located at the University
of Michigan, serves as a collection point for major research projects from across the United States. The specific survey used in the present study is titled "Aging in the Eighties: American in Transition." It was conducted by Louis Harris and Associates (Harris Polls) for the National Council on Aging. The data were collected in 1981 from 3,452 adults, from age 18 to 96, from the United States. For the present study, the 1835 respondents who were between ages 65 and 96 were selected. The average age of these respondents was 73.0 (SD = 6.39).

The Survey

The full survey consists of 286 questions, but only selected items that related to participants' activities and social interactions were used for the present study. Survey items were selected that asked about participation in recreational activities (see Table 1), that asked about respondents' social activities (see Table 2), and asked about respondents' voting and volunteer activities (see Table 3).

Imbedded in the survey was a scale measuring life satisfaction. The Life Satisfaction Scale was shortened for the current study from 18 questions to 12 questions so as to measure only current life satisfaction rather than overall lifecourse or past satisfaction (see Appendix). The correlation between the scores on the shortened scale and scores on the full scale was $r = .96$, indicating that removing the six items referring to past satisfaction did not damage the integrity of the scale.

Results

Respondents' scores on the revised life-satisfaction scale were calculated. Respondents either agreed or disagreed with items on the Life Satisfaction scale. For positive items, agree received a score of 2, and disagree received a score of 0. Items for
which respondents were not sure or gave no answer received scores of 1. Scores for agree and disagree on negative items were reversed. Items were summed to obtain life satisfaction scores for each respondent. Scores could range from a low of 0 to a high of 24. Respondents’ scores ranged from one to 24 (M = 14.59).

Active, Inactive, and Passive Activities

There were seven items in which respondents were asked how much time they spent in different recreational activities (see Table 1). Respondents were asked to give general estimates of time spent in the activity, and their answers were coded 1 = a lot, 2 = some but not a lot, 3 = hardly any at all, 4 = not sure, and 5 = no answer. For the present study, respondents who said they participated a lot in the activity were compared to respondents who said they participated hardly any at all. Respondents who gave any of the other responses were not included in these analyses. The dependent variable was respondents’ scores on the life satisfaction scale. Independent-sample t-tests were conducted. To adjust for multiple analyses, an alpha level of .01 was used.

Three questions inquired about active activities (see Table 1), and it was expected that those who spent more time in these activities would score higher in life satisfaction than those respondents who spent less time engaged in them. First, respondents were asked how much time they spent in recreational activities and hobbies. The independent-sample t-test was significant t(1831) = 13.99, p < .0001, and the means indicated that respondents who spent a lot of time in these activities scored as significantly more satisfied with their lives than respondents who spent very little time. Second, respondents were asked how much time they spent socializing. The independent-sample t-test was significant t(535) = 9.85, p < .0001, and the means indicated that respondents
who spent a lot of time socializing scored as more satisfied with their lives than those who spent little time socializing. Third, respondents were asked how much time they spent exercising. Again, the independent-sample t-test was significant \( t(1763) = 10.68, p < .0001 \), and respondents who spent a lot of time exercising scored as more satisfied with their lives than those who exercised hardly at all.

Two questions asked about time spent inactively (see Table 1). It was expected that those who spent a lot of time in inactive activities would be less satisfied than those who spent less time in those activities. First, respondents were asked how much time they spent sitting and thinking. The independent-sample t-test was significant \( t(1364) = -11.21, p < .0001 \). The means indicated that those who spent a lot of time sitting and thinking scored lower in life satisfaction than those who spent hardly any time in these activities. Second, respondents were asked how much time was spent doing nothing. The t-test was significant \( t(1413) = -13.66, p < .0001 \); those who spent a lot of time doing nothing scored lower in life satisfaction than those who spent little time doing nothing.

Finally, two questions were related to the passive activities of watching TV and listening to the radio. It was not clear what the impact of these activities would be on life satisfaction, and therefore no prediction's were made. The comparison between groups was not significant for either the question about watching TV \( t(548) = .41, p > .05 \); or for listening to the radio \( t(1299) = 1.79, p > .05 \), indicating that these activities did not contribute to nor detract from participants’ life satisfaction. In support of this interpretation, the means were moderate (see Table 1).

**Social Activities**

The Harris questionnaire contained nine questions concerned with specific social
activities that bring people in contact with other people (see Table 2). Some activities require ongoing interaction with other people while other activities might give minimal opportunity to engage another person. It was expected that those who recently had participated in activities requiring social interaction between people would score higher on the life satisfaction scale than those who had not been so engaged recently.

Respondents were asked to indicate how recently they had attended various activities. Responses were coded 1 = within last day or two, 2 = within last week or two, 3 = a month ago, 4 = two to three months ago, 5 = longer than three months ago, 6 = never, 7 = not sure, and 8 = no answer. For the present study, respondents who said they had attended the activities within the last week or two or within the last day or two were compared to respondents who said they had attended longer ago than two months, that is, those who responded two to three months ago, longer than three months ago, or never.

The dependent variable was respondent scores on the life satisfaction scale. To account for multiple analyses, an alpha of .01 was used.

Participants who reported recent participation in three of the four activities requiring ongoing interaction scored as significantly more satisfied with their lives than those who reported they had not recently participated (see Table 2). The results were: went to a restaurant, $t(1431) = 13.65, p < .0001$; attended a community center, $t(342) = 5.34, p < .0001$; and visited a relative or neighbor, $t(1665) = 11.08, p < .0001$. Only attended a senior citizens club was not significant using the conservative alpha level of .01. However, responses to that item were borderline significant, $t(1557) = 2.41, p < .02$;

Contrary to predictions, the independent-sample t-tests for four of the five
activities that might require only a little social interaction also showed between group
differences; respondents who had participated recently scored higher in life satisfaction
than those for whom it had been some time since they had participated. For the three
items, going shopping, \( t(1708) = 9.75, \ p < .0001 \), attending church or synagogue
\( t(1349) = 7.19, \ p < .0001 \), and gone to a library, \( t(206) = 6.09, \ p < .0001 \) the results
were significant. For these three items, the means indicated that respondents who had
recently participated in the activity scored as more satisfied with their lives than those
who had not. Only attending a movie did not reach the .01 alpha level, and that item was
borderline significant: \( t(1713) = 12, \ p < .03 \). The means indicated that although
respondents who had recently attended a movie scored as more satisfied on the life
satisfaction scale than those who had not, the results were not significant.

Responses to the question about when they had visited a doctor’s office or clinic,
showed a different pattern. The means indicated that respondents who had recently gone
to a doctor’s office or clinic scored as less satisfied on the life satisfaction scale than
those who had not. \( t(1394) = -5.46, \ p < .0001 \).

Marital Status

Respondents were asked about their marital status. Following are the statuses and
the mean life satisfaction score for individuals in that status. Statuses are arranged from
the status with highest average score to the lowest average score: Single (\( M = 14.90, \ SD
= 6.03, \ n = 98 \)), Married (\( M = 14.66, \ SD = 5.04, \ n = 1884 \)), Widowed (\( M = 13.28, \ SD
= 5.57, \ n = 894 \)), Divorced (\( M = 13.18, \ SD = 4.40, \ n = 190 \)), and Separated (\( M = 11.47, \ SD
= 4.32, \ n = 76 \)). A oneway analysis of variance was significant, \( F(4, 3137) = 18.22, \ p < .0001 \). Contrary to expectations, married and single people did not differ in their life
satisfaction scores; and in fact, single people score slightly higher than marrieds. Both
groups scored significantly higher than both widowed and separated respondents.
However, the means for all groups were near the population mean indicating that marital
status was not an important factor in life satisfaction.

**Voting**

Respondents were asked whether or not they had voted in the last presidential
election. The life satisfaction scores of those who voted (M = 15.57, SD = 5.69) were
significantly higher than the scores of those who did not vote (M = 12.06, SD = 5.90),
t(1819) = 11.64, p < .0001.

**Volunteer Work**

Respondents were asked if they participated in volunteer work, and they answered
whether or not they did. Life satisfaction scores were compared between those who did
volunteer and those who did not (see Table 3). The independent t-test was significant,
t(716) = 10.78, p < .0001. Respondents who volunteered scored as significantly more
satisfied with their lives than those who did not. Respondents who said that they
volunteered were also asked on average, “about how many hours a week do you do
volunteer work?” Possible answers ranged from less than 7 hours per week to more than
35 hours per week. There were no significant differences regardless of whether the
respondents volunteered less than 7 hours or up to 35 hours per week. The means were
high, ranging from a low of 16.17 to a high of 17.45, indicating a high level of life
satisfaction for all volunteers.

Respondents were asked whether or not they had volunteered in the past. The t-
test between responses of those who had volunteered in the past and those who had not
were borderline significant, $t(1418) = 2.20, p < .028$, with those who had volunteered scoring higher than those who had not. Finally, respondents were asked if they would like to volunteer. Those who would like to volunteer did not score higher in life satisfaction than those who would not like to, $t(923) = 1.91, p < .06$.

Discussion

The results indicate that there is a strong relationship between the kind of activities that the elderly participate in and their satisfaction with their lives. The results indicate that it is the actual active and current participation that leads to a positive attitudes about life. For example, those who participated in active activities, for example had a hobby or exercised, were more satisfied with their lives than those who did not.

The findings on volunteer activities provide strong support for this conclusion. Volunteering requires active engagement, and people who volunteered scored as more satisfied with their current situation than those who did not. However, it did not matter how much time they spent in volunteer activities. People who spent fewer than seven hours per week did not differ from those who spent as much as 35 hours a week volunteering. On the other hand, volunteer work done in the past was not associated with higher scores in life satisfaction nor was the present desire to volunteer. It might be that the amount of activity is not critical, but it is critical whether or not the participation is ongoing.

It is also relevant that going to the movies, although weakly, was related to higher satisfaction whereas watching television was not. Both appear to be the same activity because they involve an active visual display. In fact, television programming provides a wider variety of shows and therefore more choices for the viewer than going to a movie
Neither the amount of time spent watching TV nor listening to the radio appeared to influence life satisfaction because scores in those passive activities were only slightly above scores for the inactive activities such as sitting and thinking or doing nothing. The higher level of satisfaction that is associated with movie going might be related to the fact that the activity requires going out of the house, and therefore, the respondents feel actively engaged with the outside world.

The second finding of this study was that those who participated in any kind of social activity were more satisfied with their lives than those who had infrequent social contacts. This was true whether the activity required a lot or only a little social interaction. For example, respondents reported higher life satisfaction if they had recently visited a relative, which would provide an opportunity for conversation, or if they had been to the library, which presumably would offer less opportunity for conversation. These findings support the notion that social activities improve overall mental well being (Bee, 2000). Here also, the amount of interaction does not appear to be important. However, it should be noted that although the authors of the survey label the questions as social, they also involve being out of the personal residence, and therefore, require some engagement.

On the surface, the results of this study appear to contradict the work of Griffen and McKenna (1998). They report that life satisfaction was not related to participation in leisure activities. However, in their study all respondents had participated in a variety of activities. In light of the present findings, it is not surprising then that all their participants also reported high life satisfaction.

The information provided by this study will be useful for caretakers of the elderly
and for educators of those caretakers. It is evident from this study that simply providing television and radios is not sufficient to actively engage the elderly. Caretakers must plan regular outings to shopping centers, restaurants, movie theaters, and even libraries in order for the elderly in their charge to experience engagement. Further contact with other people must be included in their routine.

Respondents in this study resided in their own homes or with family. It is expected that for the elderly who live in institutions that the same kinds of activities would be related to their life satisfaction. However, according to Horgas et al, (1998), opportunities to participate in some types of activities are, on average, fewer in institutions than in the community. Further, people who have few social contacts while living in their personal residence are particularly at risk when they enter institutions because they tend to have even fewer contacts after entering an institution (Winter, 1999). A further challenge to operators of institutions is that they must cater to the special needs of residents because they exhibit more physical and mental limitations and, therefore, might need to be assisted in numerous ways. Even so, facilities should include areas for active participation in a variety of activities, both social and physical so that the institution can offer regular activities to occupy residents that go beyond television.

Common sense tells us that people who lead full and active lives will be happier, but all activities are not equally engaging. Therefore, careful attention must be given to how the elderly spend their days.
Appendix

Complete Life Satisfaction Scale*

1. As I grow older, things seem better than I thought they would be.
2. *I have gotten more breaks in life than most of the people I know.
3. This is the dreariest time of my life.
4. I am just as happy as when I was younger.
5. My life could be happier than it is now.
6. These are the best years of my life.
7. Most of the things I do are boring or monotonous.
8. I expect some interesting and pleasant things to happen to me.
9. The things I do are as interesting to me as they ever were.
10. I feel old and somewhat tired.
11. *As I look back on my life, I am fairly well satisfied.
12. *I would not change my past life even if I could.
13. Compared to other people my age, I make a good appearance.
14. *I have made plans for things I’ll be doing a month or a year from now.
15. *When I think back over my life, I didn’t get most of the important things I wanted.
16. Compared to other people, I get down in the dumps too often.
17. *I’ve gotten pretty much what I expected out of life.
18. In spite of what some people say, the lot of the average person is getting worse, not better.

Note: An * signifies an item which was dropped for respondents’ scores.
References


Table 1

Mean life satisfaction scores of participants who engaged in active, inactive, and passive activities as a function of amount of time reported.

<table>
<thead>
<tr>
<th>Activity</th>
<th>a lot of time</th>
<th>hardly any time</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Active</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>recreation and hobbies</td>
<td>M 17.64</td>
<td>13.68</td>
</tr>
<tr>
<td></td>
<td>SD 5.84</td>
<td>6.33</td>
</tr>
<tr>
<td>socializing</td>
<td>M 16.34</td>
<td>12.62</td>
</tr>
<tr>
<td></td>
<td>SD 6.11</td>
<td>6.58</td>
</tr>
<tr>
<td>exercising</td>
<td>M 17.06</td>
<td>13.96</td>
</tr>
<tr>
<td></td>
<td>SD 5.96</td>
<td>6.43</td>
</tr>
<tr>
<td><strong>Inactive</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sitting and thinking</td>
<td>M 14.53</td>
<td>17.79</td>
</tr>
<tr>
<td></td>
<td>SD 6.53</td>
<td>5.44</td>
</tr>
<tr>
<td>doing nothing</td>
<td>M 13.14</td>
<td>17.21</td>
</tr>
<tr>
<td></td>
<td>SD 6.42</td>
<td>5.83</td>
</tr>
<tr>
<td><strong>Passive</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>watching TV</td>
<td>M 15.63</td>
<td>15.48</td>
</tr>
<tr>
<td></td>
<td>SD 6.35</td>
<td>6.53</td>
</tr>
<tr>
<td>listening to radio</td>
<td>M 15.81</td>
<td>15.48</td>
</tr>
<tr>
<td></td>
<td>SD 6.30</td>
<td>6.51</td>
</tr>
</tbody>
</table>
Table 2

Mean life satisfaction scores of participants who engaged in social activities that either did or did not require ongoing social interaction

<table>
<thead>
<tr>
<th>Activity</th>
<th>Frequent</th>
<th>Infrequent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ongoing Interaction</td>
<td></td>
</tr>
<tr>
<td>Senior citizens club</td>
<td>M 16.69</td>
<td>15.59</td>
</tr>
<tr>
<td></td>
<td>SD (6.25)</td>
<td>(6.36)</td>
</tr>
<tr>
<td>Going to a restaurant</td>
<td>M 17.50</td>
<td>13.27</td>
</tr>
<tr>
<td></td>
<td>SD (5.84)</td>
<td>(6.33)</td>
</tr>
<tr>
<td>Attending a community center</td>
<td>M 17.47</td>
<td>15.23</td>
</tr>
<tr>
<td></td>
<td>SD (6.00)</td>
<td>(6.41)</td>
</tr>
<tr>
<td>Visiting relative or neighbor</td>
<td>M 16.50</td>
<td>11.87</td>
</tr>
<tr>
<td></td>
<td>SD (6.13)</td>
<td>(6.58)</td>
</tr>
<tr>
<td></td>
<td>Little Social Interaction</td>
<td></td>
</tr>
<tr>
<td>Attending movie</td>
<td>M 17.21</td>
<td>15.51</td>
</tr>
<tr>
<td></td>
<td>SD (6.53)</td>
<td>(6.39)</td>
</tr>
<tr>
<td>Going shopping</td>
<td>M 16.44</td>
<td>12.64</td>
</tr>
<tr>
<td></td>
<td>SD (6.11)</td>
<td>(6.47)</td>
</tr>
<tr>
<td>Attending church/synagogue</td>
<td>M 16.60</td>
<td>14.30</td>
</tr>
<tr>
<td></td>
<td>SD (6.04)</td>
<td>(6.60)</td>
</tr>
</tbody>
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Table continues
<table>
<thead>
<tr>
<th>Location</th>
<th>Mean (M)</th>
<th>SD (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library</td>
<td>18.11</td>
<td>5.58</td>
</tr>
<tr>
<td>Doctor's Office</td>
<td>14.47</td>
<td>6.45</td>
</tr>
</tbody>
</table>

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### Table 3

**Respondents Life Satisfaction scores as a function of their volunteering.**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presently volunteer</td>
<td>17.14</td>
<td>13.87</td>
</tr>
<tr>
<td>SD</td>
<td>5.16</td>
<td>5.97</td>
</tr>
<tr>
<td>Volunteered in past</td>
<td>14.43</td>
<td>13.67</td>
</tr>
<tr>
<td>SD</td>
<td>6.15</td>
<td>5.89</td>
</tr>
<tr>
<td>Want to volunteer</td>
<td>14.70</td>
<td>13.56</td>
</tr>
<tr>
<td>SD</td>
<td>5.36</td>
<td>5.98</td>
</tr>
</tbody>
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