Preventive Activities and Services for the Well Elderly

(support systems, prevention)

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A demonstration project, including interviews conducted before and after a period of occupational therapy intervention, with a group of well elderly citizens attending a nutrition site showed significant, positive improvements in Indexes of Social Resources, Life Satisfaction, and General Affect. The results appeared to validate the provision of a support system through intervention aimed at helping to keep the elderly in the community.

A growing movement in the United States encourages the development of support systems to help the elderly remain in their communities. Program efforts have ranged from Federal to grass roots levels. Exploring the possible role of the occupational therapist in such a movement led to a search for identifying the value of purposeful activity and components that constitute quality life.

[Value of Activity] The value of activity for the elderly has been well documented in the literature. Piku­nas (1) described the theory of activity as stressing the need to maintain
vocational interests and to augment recreational activities in order to occupy one’s time fully and to make the later years gratifying and productive. Maddox (2) suggested that individuals whose activity levels are high or low generally maintain that ranking throughout life. Spelbring and Rhee (unpublished paper, 1972) found this to be true in an aging population in Michigan: the activity level of people during adulthood continued into their later years.

In contrast, Cumming and Henry (3) in 1961 introduced the disengagement theory. suggesting that gradual disengagement from social roles and withdrawal from social interaction in order to accept death more easily benefits both the individual and society. Havighurst’s study in 1961 found that both social and psychological engagement decreased with age (4). Further study of these data by Neugarten, Havighurst, and Tobin showed that social engagement, not disengagement, is generally related to psychological well-being. They found that people who remained relatively active in the various social roles of family member, citizen, club member, or friend showed the greatest satisfaction with their lives (5). Smith and Lipman (6) studied satisfaction in the elderly relative to the constraints of their environment. They found that people constrained in performance of self-care, moving about, and gainful employment were less likely to be satisfied.

Purposeful activity is claimed to be the trademark of the occupational therapy profession. King (7) drew an analogy between occupational therapy and corresponding elements of adaptation: that it is an active response; that it is evoked by environmental demands of needs, tasks, and goals; that it is organized below the level of consciousness, with conscious attention directed to objects or tasks; and that it is self-reinforcing, with each success serving as a stimulus for the next, more complex environmental challenge.

The 1974 Task Force on Target Populations specified the elderly in its identification of populations needing occupational therapy. The report targeted the well elderly as being at risk by virtue of living in environments that failed to support health (8).

Nontraditional examples of occupational therapy include one by Menks et al. who, in collaboration with a community health center, implemented a successful outreach activity group for psychogeriatric clients in the community (9). Another use of activity was reported by Kales-Rogoff (10), who arranged community outings for patients for purposes of evaluating functional abilities and providing an opportunity for patients to practice activities outside the center. Therapists assessed problem-solving skills in conjunction with the outings.

Warren (11) and Nystron (12), in separate studies, interviewed the elderly in the community about their perceptions of independence and leisure activities and found that most interviewees participated in both active and passive activities. In another unique setting, Hasselkus and Kiernat studied an independent living project for the elderly in the community and delineated the contributions of the occupational therapist in helping the elderly maintain their independent living status. Activity was inherent in independent living (13).

From the perspective of occupational therapy, no problem is found in interpreting these studies that correlate high activity with high satisfaction as likely preventives of isolation, boredom, and preoccupation with problems.

Quality Life Components. Many studies were reviewed to determine how to assess quality in a person’s life. George and Beaver suggested that the components of a quality life are life satisfaction, self-esteem, general health and functional status, and socioeconomic conditions (14). Campbell, Converse, and Rodgers defined the quality of life experience mainly in terms of satisfaction of needs (15). They concentrated on the experiences of life, rather than on the conditions of life, using the latter only to help account for the differences in the quality of experience that subjects report. Cantril used a Self-Anchoring Striving Scale to measure self-rated health and life satisfaction in an attempt to measure psychological well-being (16).

As early as 1972, Palmore and Luikart found self-rated health to bear the strongest relationship to life satisfaction (17). Six years later, Larson, in reviewing the literature of the previous 30 years, found that studies of life satisfaction, morale, and related constructs yielded a consistent body of findings. He was able to identify a single summary

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construct on subjective well-being (18). His research on Americans more than 60 years of age shows well-being to be most strongly related to health, followed by socioeconomic factors and degree of interaction with others. Maddox and Douglas found that a patient's self-assessment of health tended to be more congruent with well-being than the physician's rating of the patient's health (19), and supported the theory that how people feel about themselves assumes the greatest importance in an overall feeling of well-being. Returning to the focus of the study of activity and well-being, Mancini suggested that satisfaction with one's use of time and leisure activities may have an impact upon well-being, regardless of monetary resources or health level (20).

Although all these studies show some relationship to each other, researchers generally agree that perfect criteria have not been developed to predict and validate subjective well-being (21-23). Our study most closely approximates Campbell's viewpoint—that personal interpretation of life experiences most often determines quality of life.

Description of the Service Project

The Preventive Activities and Service Project was a joint service and research project established for a well elderly population that attended a nutrition site at the University of Illinois at the Medical Center. The object of the service program was to offer a support system to maintain the elderly in their own communities while attempting to improve the quality of their lives. The purposes of the program were to build on the participants' meaningful former relationships, to generate new opportunities for socialization, education, and purposeful activity, and to enrich their problem-solving abilities.

The need for intervention became apparent when a few of the seniors were observed arriving for lunch as early as 8:00 in the morning and sitting around the periphery of the room without interacting, much like the scene in a physician's waiting room. Something was needed to dispel the isolation so apparent there.

The program was initiated with one therapist working 2 days a week for a total of 10 hours. The time period between 9 and 1 o'clock appeared to be the most beneficial for client contact.

The therapist met with the principal investigator once a week (2 or 3 times per week during the orientation phase) to discuss the progress of the project, the growth of individual clients, and the effect of therapist behavior upon individuals and groups.

The occupational therapy intervention used avocational and recreational activities, physical exercise, and educational sessions to achieve the stated program goals. Initially, music (either records or piano playing), as well as dancing and singing, were used to encourage interaction. Then crafts and exercise sessions were introduced. Crafts were used to help rebuild the esteem diminished through loss of income when employment ceased. The exercise sessions included general exercises appropriate for seniors, and specific exercises for individual physical problems.

Bingo, a medium that requires a minimum of interaction, was used to help some of the seniors who were not able to interact or develop friendships easily. This activity also provided the therapist with an opportunity to evaluate and intervene in individual problem areas such as reversal of letters, inability to read, varied handicaps caused by arthritis, and decreased dexterity. The crafts and bingo activities helped some seniors regain confidence in their ability to be productive and enjoy activities, despite severely diminished vision, the result of cataracts or glaucoma.

As trusting relationships developed and participation increased, the therapist used more active listening in order to be informed of their clients' problems and needs. It became clear that the seniors needed suggestions or referrals to appropriate agencies for help with their individual problems. A second therapist, working 6 hours a week, was added to the program, making more one-to-one interactions possible. Because of the cold and deep snows that winter, information was provided on emergency services, danger of exposure, and proper nutrition. The development of spontaneous activities both at home and at the nutrition site was encouraged to help dispel the isolation caused by the long winter and by personal losses, such as the ability to get around, that altered each person's life space.

An intergenerational aspect, involvement with handicapped children at a nearby hospital school, was also added to the program. The seniors regularly visited the school and personally interacted with the children, giving gifts they made during the craft sessions. The visits helped the seniors put their ailments in perspective in relation to the children's severe physical limitations and provided opportunities for personal friendships to develop and grow. These visits were very popular with both the children and the seniors.

The goals of the project were met within the time constraints of its
operation. Participants assumed increased responsibility for all aspects of the program. They became more tolerant of each other's idiosyncrasies. Peer pressure and peer support helped seniors accept each other. Racial discrimination noticeably decreased as interaction increased. Therapeutic intervention in individual needs provided the support necessary to meet the project's objective of maintaining the elderly in their communities, while working to improve the quality of their lives.

**Description of the Research Component**

The research component of this project used pre- and post-interviews to measure change in self-care independence, and other aspects of the quality of the subjects' lives after a period of 6 to 8 months of occupational therapy intervention. The following areas were measured: Activities of Daily Living, Social Resources, Economic Resources, Performance of Household Activities, Health, Life Satisfaction, and General Affect.

Subjects

Forty-five senior citizens were interviewed at the beginning of the project and 31 of this group still in attendance and willing to participate were reinterviewed 6 to 8 months later. Attrition was caused by death, moving, or attendance at other nutrition sites. The demographic characteristics appear in Table 1. Most participants' attendance averaged 4 days per 5-day week.

**Interviewers**
The interviews were conducted by the occupational therapists who worked in the service program and by volunteers from the occupational therapy faculty. These therapists were selected because of their interest and/or experience with the elderly and because it was felt that occupational therapists, more than other profes-

<table>
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<tr>
<th>Table 1: Demographic Characteristics of 31 Subjects on PAS Project</th>
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<tbody>
<tr>
<td><strong>Age:</strong></td>
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<tr>
<td><strong>No Subjects</strong></td>
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<tr>
<td><strong>Percent</strong></td>
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<tr>
<td><strong>Sex:</strong></td>
</tr>
<tr>
<td><strong>No Subjects</strong></td>
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<td><strong>Percent</strong></td>
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<tr>
<td><strong>Race:</strong></td>
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<tr>
<td><strong>No Subjects</strong></td>
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<tr>
<td><strong>Percent</strong></td>
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<tr>
<td><strong>Place of Birth:</strong></td>
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<tr>
<td><strong>No Subjects</strong></td>
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<tr>
<td><strong>Percent</strong></td>
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<tr>
<td><strong>Marital Status:</strong></td>
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<tr>
<td><strong>No Subjects</strong></td>
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<tr>
<td><strong>Percent</strong></td>
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<tr>
<td><strong>Education:</strong></td>
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<tr>
<td></td>
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<tr>
<td><strong>No Subjects</strong></td>
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<td><strong>Percent</strong></td>
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<tr>
<td><strong>High School — Grades Completed</strong></td>
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<tr>
<td><strong>No Subjects</strong></td>
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<td><strong>Percent</strong></td>
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<tr>
<td><strong>Nature of Residence:</strong></td>
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<tr>
<td><strong>No Subjects</strong></td>
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<tr>
<td><strong>Percent</strong></td>
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<tr>
<td><strong>Living Arrangements:</strong></td>
</tr>
<tr>
<td><strong>No Subjects</strong></td>
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<td><strong>Percent</strong></td>
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Another measurement of quality, or how persons feel about their life in general, was taken from Campbell (15) and used to tap General Affect.

Our adapted instrument consisted of 38 questions divided into 4 areas: 8 questions on Activities of Daily Living, including performance on bathing, dressing, transfer, toileting, continence, feeding, walking, and home confinement; 12 questions of Social Resources, including living arrangements, marital status, transportation, amount of contact with relatives and friends, and amount of participation in clubs and organizations, as well as specific questions on leisure time activities; 3 questions on Economic Resources concerning major source of funds for food, clothing, shelter and medical care; employment status, interest in finding a part-time job, and 15 questions on Household Activities including car repairs, disposing of trash, driving (for errands), taking care of children, grocery shopping, household repairs, laundry, clothing care, paying bills, yard care, planning and preparing meals, and light or heavy cleaning.

The Cantril Ladder (Figure 1) was used to measure Health and Life Satisfaction. People were asked to suppose that the top of the ladder represented the best possible health, and the bottom, the worst possible health, and to show where they stood on the ladder at that time. A similar question was related to their perception of life satisfaction.

General Affect was measured on a 7-point scale, rating ten semantic variables (Figure 2) that described how persons feel about their present life.

Indexes were constructed for Activities of Daily Living, Social Re-
In constructing the Index of General Affect, the decision to include eight items in the Index (eliminating easy-hard and dependent-independent) was based on intercorrelations and factor analysis from an earlier study (26). A single additive score was then made available on each individual.

Pre- and post-mean-scores on the five Indexes—Activities of Daily Living, Social Resources, Economic Resources, Performance of Household Activities, and General Affect—and the two measures of Perception of Health and Life Satisfaction were submitted to statistical analysis by means of the t-test.

**Results and Discussion**

Table 2 shows the mean scores on interviews before and after occupational therapy intervention. Significance was achieved on Social Resources, Economic Resources, Life Satisfaction, and General Affect. The greatest significance ($p < .01$) was shown in Social Resources, reflecting the increase in socialization, both within the group and within social networks that developed outside the group setting. The Index on Economic Resources was significant at the .02 level in a negative direction. Many seniors' only income was a Social Security check, which made their economic future bleak in the face of inflation. The measurements on Life Satisfaction and General Affect were both significant at the .05 level, demonstrating increases that could not happen by chance alone. Since the

**Table 2**

<table>
<thead>
<tr>
<th>Indexes</th>
<th>Pre-OT Mean Scores</th>
<th>Post-OT Mean Scores</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADL</td>
<td>5.6</td>
<td>5.8</td>
<td>1.68</td>
<td>N.S.</td>
</tr>
<tr>
<td>Social Resources</td>
<td>4.7</td>
<td>5.0</td>
<td>2.79</td>
<td>.01</td>
</tr>
<tr>
<td>Economic Resources</td>
<td>4.7</td>
<td>4.5</td>
<td>-2.52</td>
<td>.02</td>
</tr>
<tr>
<td>Household Activities</td>
<td>5.2</td>
<td>5.4</td>
<td>1.65</td>
<td>N.S.</td>
</tr>
<tr>
<td>Perception of Health</td>
<td>7.13</td>
<td>7.06</td>
<td>-1.17</td>
<td>N.S.</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>8.0</td>
<td>8.7</td>
<td>2.38</td>
<td>.05</td>
</tr>
<tr>
<td>General Affect</td>
<td>5.9</td>
<td>6.2</td>
<td>2.42</td>
<td>.05</td>
</tr>
</tbody>
</table>

$n = 31$

$p < .05$ (set as acceptable level of significance)

$df = 30$

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**Figure 2**

Questions measuring General Affect (taken from Campbell, 15)

Here are some words we would like you to use to describe how you feel about your present life. If you think your present life is very boring, put an X in space next to Boring. If you think it's very interesting, put an X in space next to Interesting. If it's somewhere in between, put it where you think it belongs.

- Boring
- Enjoyable
- Easy
- Useless
- Friendly
- Full
- Discouraging
- Disappointed
- Best in me
- Independent
- Doesn't give me much chance
- Dependent on others

- Items revised to avoid making all answers in one column.
occupational therapy took place between the pre- and post-measurements, the positive changes on Social Resources, Life Satisfaction, and General Affect suggest that they may be related to the occupational therapy intervention.

The ADL Index was not significant. The subjects' ADL level was higher than expected, a condition explained by the fact that they were "well elderly." At times serious illness or disability prevented them from attending the program, eliminating them temporarily or permanently from the group. The level of performance on Household Activities also did not change significantly. It paralleled the ADL level of "mostly independent," with the number of activities reflecting independent living for the most part during both measurements. The negative t of -.17 on the Perception of Health measurement did reflect the serious illnesses within this group and a natural concern for chronic illness.

The second interview was conducted just as the seniors were able to return to the nutrition site after a severe snowstorm had paralyzed the city. The storm seemed to affect their health and morale, and those who had experienced bouts of illness were concerned about what they perceived as deteriorating health.

The significant findings on Self-Satisfaction and General Affect were a positive corroboration of the improvement in the seniors' affective level, as demonstrated in the program.

Summary
A project that combined research and an ongoing service program as the intervention was described. The goals were to maintain a well elderly population in the community and to improve life satisfaction.

The program included avocational and recreational activities, physical exercises, and educational sessions to help improve the overall quality of life.

Of the seven areas measured to assess the quality of the subjects' lives, four were found to have significant results between pre- and post-measurement: Economic Resources, Social Resources, Life Satisfaction, and General Affect.

The findings in the three areas of Social Resources, Life Satisfaction, and General Affect validate the existence of a support system to help maintain these elderly in the community.

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REFERENCES