

# **Designing a life of wellness**

*Evaluation of the demonstration  
program at the Wilder Humboldt campus*

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Wilder Humboldt campus*

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# Program description

Designing a Life of Wellness, developed by the Department of Occupational Therapy at the College of Saint Catherine, utilizes a proactive approach to enhance personal management of life choices and actions. A primary program goal is to enable program participants to retain control over their own lives, remaining autonomous in their life choices and planning. The program focuses on the importance of meaningful activity and social participation for health and well being, strategies to remove personal and environmental barriers to wellness, promotion of health-promoting behaviors, and advocacy and support for achieving wellness goals.

In their own work with older adults, Wilder Rehabilitative Services staff had identified concerns with client boredom, depression, lack of meaningful activity, lack of physical activity, lack of engagement in their environment, and isolation. Many of these clients live at Wilder supportive housing sites. Wilder staff believed that Designing a Life of Wellness would improve the social and mental health of many supportive housing residents with possible indirect effects of improved physical function.

The Wilder Foundation entered into a contract with the Department of Occupational Therapy at the College of Saint Catherine for the provision of the Designing a Life of Wellness program at Wilder supportive housing properties, and to train Wilder physical and occupational therapy staff to administer the Designing a Life of Wellness program. This initial offering was made available to residents at the Humboldt campus.<sup>1</sup> The program was a six month program with weekly group sessions, including outings, which ran from March 2002 through August 2002. After the initial implementation at the Humboldt campus, Wilder's trained staff will continue to implement the program at other Wilder sites.

## *Curriculum*

The program curriculum is intended to assist participants in exploring how to redefine their daily activities and lifestyle for optimal satisfaction and improved health. The program begins with individual assessments of interests. This assessment provides the basis for individual treatment plans. The first session then addresses the costs and benefits of occupation – the expenditure of energy for, and the reward of, what we do on a daily basis. The program sessions go on to address barriers to what participants want to do. The curriculum includes:

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<sup>1</sup> “Humboldt campus” refers to Wilder’s supportive housing for older adults located at 508/510 and 516 Humboldt on the West Side of Saint Paul.

- Definition of occupations (what we do); costs and benefits of occupation
- Daily patterns of occupations; barriers to what we want to do
- Transportation issues
- The meaning of good health and quality of life and what to do to obtain both
- Occupation balance inventory – balancing the costs and benefits of one’s own daily activities; goal setting
- Exercise
- What is stress; how stress affects health; managing stress
- Nutrition
- Energy conservation and how to simplify life
- Coping with grief, depression, loss
- Safety, risk factors for falls, how to prevent falls
- Personal safety; presentation from local police department
- How to engage in effective communication
- Effective communication, continued
- Creative expression and health
- Community/social relationships

Additionally, usually three community outings are planned by the program participants.

An initial assessment of each individual participant is performed at the beginning of the program that guides the development of the treatment plan by indicating barriers to activities deemed important by the individual. Individuals who have experienced major life transitions and losses, or those who are becoming increasingly isolated and inactive, are particularly encouraged to participate in the program. All sessions are led by occupational therapists, and individual coaching visits are provided as part of the program.

## Research questions and methods

In previous studies, occupational therapy interventions have been shown to maximize independence and enhance function. By utilizing productive and meaningful activity, program participants have been able to maximize independence and enhance function. Furthermore, this approach has been shown to constitute a potentially effective approach to preventing illness and disability and promoting health in frail populations (Clark, 1998). Other studies of the Designing a Life of Wellness intervention, specifically, concluded that the program is successful in increasing the frequency in which participants participate in social and community events (Matuska, in press). Previous studies also revealed that the program intervention has significant impact on states of well being, such as life satisfaction, perceived health, and various social, emotional and mental health components of quality of life (Clark, 1998; Matuska, in press).

The primary research question asked in this study was, “Did the intervention significantly affect factors of well being and quality of life of the program participants?” the aspects of well-being include: physical functioning, limitations due to physical and mental disability, bodily pain, perceived health, social functioning, sexual functioning, mental health, cognitive functioning, and life satisfaction.” Each of the instruments addressed these aspects of function and well-being. The two assessment tools used to collect the outcome data were: the SF-36 Health Survey, a measure of functional status and well-being, and the LEIPAD Questionnaire, a measure of physical, social, emotional, and mental health components that contribute to quality of life. These instruments are described in greater detail below.

For this research project, we used a quasi-experimental (non-random), pre-test/post-test design. Two senior supportive housing sites were selected by Wilder management to participate in the study. One site was identified as the experimental group and the other was identified as the control group. Ideally, we would have randomly assigned individuals to participate in either the experimental or control group. However, individuals were classified as experimental or control participants by virtue of the location of their residence.

Using the SF-36 and the LEIPAD Questionnaire, the data were collected on the first day of the program and at the end of the program six months later. These data were collected from the control group within the same month as the data were collected from the experimental group.



## *Recruitment of study participants*

### **Experimental group – residents of the Humboldt campus apartments (508/510 and 516 Humboldt)**

The residents of the Humboldt campus apartments were invited to participate in the program, and if interested, to participate in research examining the outcomes of the program. A recruitment flyer was used to invite the residents to be part of the research project. The flyer made it clear that participation in the research was not required for attending the program. Interested residents attended an information session held at 516 Humboldt where the research was explained and questions were answered. If those attending the information session chose to participate, they gave informed consent and completed the assessments during the information session. If they missed the information session, but came to the first day of class, consent was obtained and the participant completed the assessments at the beginning of the class period.

The Humboldt campus apartments serve a primarily white population; 89 percent and 87 percent of the residents are white at 508/510 Humboldt and 516 Humboldt, respectively. The average age of residents at 508/510 Humboldt is 78 and the average at 516 Humboldt is 79 years. Twenty-four residents completed pre-tests, but only eight residents became core program participants and completed post-tests. This is a reduction in the number of program participants by 67 percent. Core program participants attended at least 50 percent of the Designing a Life of Wellness sessions.

Of those residents completing pre-tests, 22 were female and two were male; 22 were white; one was American Indian; and one was of Hispanic origin. The average age was 82 years. Of those 8 residents who completed post-tests, seven were female and one was male, and all were white. The average age was 81 years. All participants were older adults who live independently. However, some have chronic conditions or receive supportive services to stay in their homes.

### **Control group – residents of Concordia Arms**

The residents at Concordia Arms were invited to participate in the research as the control group. A recruitment flyer was used to invite them to be part of the research project. The flyer made it clear that they would not be participating in the program during the research period, but that they would have an opportunity to participate in the program September 2002 through February 2003. The flyer was posted in the mailroom or elevators in the apartment building. An information session was held in the apartment complex to explain the research. If those attending the information session chose to participate, they gave informed consent and completed the assessments during the information session.

The general characteristics of the control group participants reflected the characteristics of the general resident population. Concordia Arms serves a primarily white population (97%), and the average age of residents at Concordia Arms is 80 years. Thirty-two residents completed pre-tests, but only 15 returned to complete post-tests, which is a reduction in the number of control group participants by 53 percent. Of those residents completing pre-tests, 31 were female and one was male, and all were white. Of those 15 residents completing post-tests, all were female and white. The ages of control group participants were not collected.

## ***Assessment tools***

The two tools that were administered at the beginning and the completion of the intervention are the SF-36v2 Health Survey and the LEIPAD Quality of Life Questionnaire. These tools are described in greater detail below.

### **SF-36**

The SF-36 was developed out of the Medical Outcomes Study (MOS), which was a study of the variations in physician practice styles and patient outcomes in different health care systems spanning the 1980s. The purpose of the MOS was to test of the feasibility of self-administered patient questionnaires and generic health scales for those with chronic conditions, including older adults (Ware, Snow, Kosinski & Gandek, 2000). The SF-36, which was one of the MOS surveys developed, is considered a generic measure that assesses health-related quality of life outcomes; that is, it measures those outcomes most likely to be directly affected by disease and treatment (2000). For the evaluation of *Designing a Life of Wellness*, we used the SF-36 Version 2.0 (SF-36v2). Version 2.0 was recommended by Ware, Kosinski, and Dewey (2000), because of the improved instructions and item wording, improved layout, and increased comparability in relation to translation and cultural adaptations.

All subscale scores are standardized based on national norms generated by published data using the SF-36v2 Health Survey. The values assigned to the scales range from one to five with one subscale ranging from one to three. The most favorable response is represented by the higher number.

The SF-36v2 covers eight domains:

- Physical Functioning
- Role-Physical
- Role-Emotional (role of emotional functioning on daily life)

- Bodily Pain
- General Health
- Vitality (energy/fatigue)
- Social Functioning
- Mental Health (nervousness and depression)

### **Physical functioning**

The Physical Functioning subscale is a 10-item scale that measures type and extent of physical limitations such as lifting and carrying groceries, climbing stairs, bending, kneeling, and walking moderate distances. The response categories of this subscale range from “yes, limited a lot,” “yes, limited a little,” to “no, not limited at all.”

### **Role-physical and role-emotional**

The Role-Physical subscale is a four-item scale that measures role limitations due to physical health conditions. Questions comprising the subscales ask about limitations in type of work or other usual activities, reducing the amount of time spent in work or usual activities, and difficulty performing work or usual activities due to physical health conditions. The response categories of this subscale range from “all of the time,” “most of the time,” “some of the time,” “a little of the time,” to “none of the time.”

The Role-Emotional subscale is three-item scale that measures role limitations due to mental health conditions. Questions comprising the subscales ask about limitations in type of work or other usual activities, reducing the amount of time spent in work or usual activities, and difficulty performing work or usual activities due to emotional problems. The response categories of the first question, which asks how much pain the respondent has experienced during the past 4 weeks, range from “all of the time,” “most of the time,” “some of the time,” “a little of the time,” to “none of the time.” The response categories of the second question, which asks how much the pain experienced during the past four weeks interfered with normal activities, range from “not at all,” “a little bit,” “moderately,” “quite a bit,” to “extremely.”

### **Bodily pain**

The Bodily Pain subscale is a two-item scale that measures the intensity of bodily pain or discomfort and the impact of pain or discomfort on normal activities. The response categories of this subscale range from “none,” “very mild,” “mild,” “moderate,” “severe,”

## **General health**

The General Health subscale is a five-item subscale that measures the respondent's perception of his/her own health status, health status relative to his/her peers, and expectations for future health status. The five response categories of the first question, which asks the respondent to rate his/her own health, ranges from "excellent," "very good," "good," "fair," to "poor." The other four questions use a four-point response scale ranging from "definitely true," "mostly true," "don't know," "mostly false," to "definitely false."

## **Vitality**

The Vitality subscale is a four-item subscale that measures energy level and fatigue. The response categories of this subscale range from "all of the time," "most of the time," "some of the time," a little of the time," to "none of the time."

## **Social functioning**

The Social Functioning subscale is a two-item subscale that measures the quantity and quality of social activities of the individual respondent. Specifically, the respondent is asked if his/her physical health or emotional problems affected social activities. The response categories of the first question, which asks to what extent has physical health or emotional problems interfered with normal activities during the past four weeks, range from "not at all," "slightly," "moderately," "quite a bit," to "extremely." The response categories of the second question, which asks how much time has physical health or emotional problems interfered with normal activities during the past four weeks, range from "all of the time," "most of the time," "some of the time," a little of the time," to "none of the time."

## **Mental health**

The Mental Health subscale is a five-item subscale that measures feelings of nervousness and depression or on the contrary, feelings of peacefulness, happiness, or calmness. The response categories of this subscale range from "all of the time," "most of the time," "some of the time," a little of the time," to "none of the time."

## **Expected impact of intervention on SF-36 subscales**

Findings from previous research conducted by the College of Saint Catherine's Department of Occupational Therapy, School of Nursing, and School of Social Work indicate that the program significantly improves the Vitality and Social Functioning

subscales and the Mental Health summary score (Vitality, Social Functioning, Emotional Role, and Mental Health subscales) of the SF-36 Health Survey (Matuska, in press).

## **LEIPAD**

Similar to the SF-36, the LEIPAD Questionnaire covers seven functional domains pertaining to quality of life. It is a subjective assessment questionnaire specifically designed to assess quality of life in older adults. The LEIPAD Questionnaire was developed by Diego De Leo and colleagues under the auspices of the World Health Organization (De Leo, et al., 1998). The LEIPAD has been administered internationally, in Italy (Padua and Brescia), the Netherlands (Leiden), and in Finland (Helsinki). The name “LEIPAD” is the combination of Padua and Leiden, the universities with which the researchers are affiliated.

Wilder Research Center became interested in the LEIPAD as a tool to assess the general quality of life of older adults, because it was developed specifically for older adults as a tool to assess general quality of life, its ease of implementation, potential for telephonic administration, cross-cultural validity, and comprehensive coverage of the domains of quality of life. Moreover, the researchers developing the LEIPAD intended for the instrument to be tested and validated in a wide variety of settings and populations (De Leo, Diekstra, & Lonnqvist, 1998). However, unlike the SF-36, the LEIPAD has not been widely used, and therefore, lacks the standardization and comparative norms of the SF-36.

Each subscale has four response categories enumerated zero through three, with zero representing the most favorable response.

The seven domains covered by the LEIPAD include:

- Physical Function
- Self-Care
- Depression and Anxiety
- Cognitive Functioning
- Social Functioning
- Sexual Functioning
- Life Satisfaction

### **Physical function**

The Physical Function scale is a five-item scale that measures the respondent's current physical and health status. Questions in this scale ask about the individual's perception of overall health, ability to sleep well, level of energy, ability to accomplish usual tasks, and to what extent physical health impacts usual activities. Scale scores range from a positive situation (0) to a negative situation (15).

### **Self-care**

The Self-Care Scale is a six-item scale that measures the respondent's ability to perform daily activities without the help of other. Daily activities include activities such as getting up and down stairs, dressing, eating, bathing, shopping, and travel by public transport. Scale scores range from no dependence (0) to nearly total dependence (18).

### **Depression and anxiety**

The Depression and Anxiety Scale is a four-item scale that measures subjective feelings of anxiety and the respondent's perception of feeling depressed. Scale scores range from no symptom of anxiety or depression (0) to extreme anxiety or depression (12).

### **Cognitive functioning**

The Cognitive Functioning Scale is a five-item scale that measures ability to concentrate, feelings of confusion, and memory problems. Scale scores range from no problems (0) to a high presence of problems (15).

### **Social functioning**

The Social Functioning Scale is a three-item scale that measures levels of social integration and satisfaction by examining whether the respondent has friends, whether she/he can confide in others, and whether the respondent finds these relationships satisfactory. Scale scores range from high satisfaction (0) to high dissatisfaction (9).

### **Sexual functioning**

The Sexual Functioning Scale consists of two-items that measure the existence and interest in sexual activity. Scale scores range from sexual activity is present (0) to interest in sexual activity is absent (6).

## **Life satisfaction**

The Life Satisfaction Scale is a six-item scale that measures the respondent's satisfaction with his/her financial situation and standard of living and levels of satisfaction compared with the past and with expectations for the future. Scale scores range from high satisfaction (0) to extreme dissatisfaction (18).

In addition to the seven core subscales comprising the LEIPAD Quality of Life Questionnaire, the LEIPAD includes a number of moderator scales that may be used to assess the influence of social desirability and personality characteristics on responses to questions comprising the core domains.

Two moderator scales, Anger and Self-Esteem, were analyzed for statistically significant change resulting from the Designing a Life of Wellness intervention. Other moderator scales include Perceived Personality Disorder, Social Desirability, and Trust in God. The construction of the Perceived Personality Disorder Scale requires modification as one question comprising the scale uses a four-item (0-3) response scale and the other five questions utilize a two-item (0-1) response scale. Rewording of question 39 to "You feel that most people cannot be trusted" with response categories of False (0) and True (1) would remedy the problem.

Copies of the assessment tools are provided in the appendix.

## ***Data analysis***

The analysis of the data involved two steps. The first step included an analysis of the scores for each group, experimental and control. Using paired sample t-tests to compare the changes in the SF-36 and the LEIPAD Questionnaire, the pre- and post-test scores were analyzed within each group. The purpose of the paired t-tests was to identify the direction of change in scores between the pre- and post-tests as well as determine if these changes were statistically significant. It is important to note that the small numbers of respondents in each group limits the statistical power behind this test.

The second step involved using an analysis of covariance (ANCOVA) procedure to determine if there were any statistically significant changes in the pre- and post-test scores between groups. First, an analysis of covariance for each case is normally conducted to determine baseline factors related to changes in outcome variable scores (SF-36 and LEIPAD scores). Baseline factors may include variables such as pretest scores, demographic characteristics, disability status, and living arrangements. Due to the similarity of the demographics of the experimental and control groups, an analysis of covariance was not conducted on the demographics of the two groups. Instead, the analysis of covariance was conducted on the pretest scores generated from each site to

determine whether the pre-test scores were similar enough that the effect of the intervention would be discernable. Next, analyses of covariance were performed to compare the effect of the intervention by testing the change in the mean scores between pre- and post-test of the experimental and control groups. Comparisons of subscale scores and total summary scores between groups were tested for statistical significance, although as with the paired sample t-test, the small numbers of respondents in each group limits the statistical power behind this test.

### **Missing data**

Missing data were handled differently for the SF-36 and the LEIPAD. For the SF-36, missing data were handled according to published procedures (Ware, Kosinski & Dewey, 2000). If a respondent failed to answer a question on the SF-36, the average of the transformed scores of the respondent's responses to other items in that scale were used as the response for the missing item. However, in this analysis, there were no missing data on the SF-36 pre- or post-tests.<sup>2</sup>

For the LEIPAD, we established rules to govern the handling of missing data. For a respondent's answers to be included under each subscale, the respondent needed to answer at least 50 percent of the items in that subscale. For a respondent's questionnaire to be included in the analysis, the respondent needed to answer at least 80 percent of the questions overall. Missing LEIPAD data included responses from the control group under the following LEIPAD subscales: Anger (missing 2), Social Functioning (missing 1), Sexual Functioning (missing 1), and Life Satisfaction (missing 1).

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<sup>2</sup> Question 2 on the SF-36 was eliminated from the analysis, because of a typographical error in the pre-test questionnaire. The question asks, "Compared to one year ago, how would you rate your health in general now?" The response categories should be "much better now than one year ago," "somewhat better now than one year ago," "about the same as one year ago," "somewhat worse than one year ago," and "much worse now than one year ago." However, the response categories on the pre-test form read, "much better now than one week ago," "somewhat better now than one week ago," "about the same as one week ago," "somewhat worse than one week ago," and "much worse now than one week ago." This question represents "health transition" over the course of one year and is not directly relevant to the evaluation of the Designing a Life of Wellness program.



# Findings

## *Comparison of pre-and post-tests for each group*

### **SF-36**

By comparing the change in mean scores from the pre- and post-tests of the experimental group using the paired sample t-test, we found that change occurred in the right direction (improvement in the mean scores) on all subscales, with the exception of General Health, as shown in Figure 1. However, no change of statistical significance was found except for a statistically significant difference at  $p = .05$  between the pre- and post-tests mean scores on the Role-Physical subscale ( $p = .024$ ). Improvement in the Role-Physical subscale indicates improvement with pre-existing problems with work or other daily activities as a result of physical health. This is one area staff had hoped the Designing a Life of Wellness program would impact, although it is not an area that has shown statistically significant improvement in previous studies.

Based on the findings of Matuska's study (in press), using the paired t-test procedure we had expected a statistically significant difference in the Mental Health subscale, Vitality subscale, Social Functioning subscale, and the Mental Health summary (Vitality, Social Functioning, Role-Emotional, and Mental Health subscales) scores. However, the differences between the mean scores on these scales within the experimental group were not statistically significant. This means that although the program had a positive effect on participants' scores on these scales, we cannot say with confidence that the difference between the pre- and post-test scores is dependable or one that happened through chance in this study.

In contrast to the findings for the experimental group, a comparison of mean scores from the pre- and post-tests of the control group participants revealed inconsistent patterns of change, as shown in Figure 1. That is, for example, mean scores for three out of the eight subscales improved (Bodily Pain, Social Functioning, and Role-Emotional) and five worsened (Physical Functioning, Role-Physical, General Health, Vitality, and Mental Health). Furthermore, there were no statistically significant differences in the pre- and post-test scores among control group participants, which was as expected, because control group participants had not received the intervention.

**1. Comparison of SF-36 pre- and post-test mean scores for experimental and control groups (t-tests)**

Group	Physical functioning	Role-physical	Bodily pain	General health	Vitality	Social functioning	Role-emotional	Mental health
Experimental	Improved	Improved <sup>a</sup>	Improved	Worsened	Improved	Improved	Improved	Improved
Control	Worsened	Worsened	Improved	Worsened	Worsened	Improved	Improved	Worsened

<sup>a</sup> Statistically significant difference at  $p \leq .05$

**LEIPAD**

Similar to the findings of the SF-36, by comparing the change in mean scores from the pre- and post-tests of the experimental group using the paired sample t-test, we found that change occurred in the right direction (improvement in the mean scores) on all subscales among experimental group participants, as shown in Figure 2. However, no change of statistical significance was found except for the improvement between the pre- and post-test mean scores on the Anger moderator subscale. A statistically significant difference at  $p=.05$  between pre- and post-test means scores on the Anger moderator subscale was found among experimental group participants ( $p=.033$ ). However, Anger is not one of the core quality of life subscales, but rather, a scale that may be used to test the influence of personality characteristics on the seven core subscales.

Based on previous studies, we expected to find statistically significant differences in LEIPAD subscales that resembled SF-36 subscales that were found to be significant in previous studies. The comparable LEIPAD subscales include: the Social Functioning subscale and the Depression and Anxiety subscale (similar to the SF-36 Mental health subscale). However, the differences between the mean scores on these scales among experimental group participants were not statistically significant.

In contrast to the experimental group, a comparison of mean scores from the pre- and post-tests scores of the control group participants revealed inconsistent patterns of change in mean scores, and there were no statistically significant differences in the pre- and post-tests among the control group participants, as shown in Figure 2.

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## 2. Comparison of LEIPAD pre- and post-test mean scores for experimental and control groups (t-tests)

<b>Group</b>	<b>Physical functioning</b>	<b>Self-Care</b>	<b>Depression &amp; Anxiety</b>	<b>Cognitive functioning</b>	<b>Social functioning</b>	<b>Sexual functioning</b>	<b>Life satisfaction</b>	<b>Anger</b>	<b>Self-esteem</b>
Experimental	Improved	Worsened	Improved	Improved	Improved	Improved	Improved	Improved <sup>a</sup>	Improved
Control	Worsened	Worsened	Improved	Worsened	Worsened	Improved	Worsened	Worsened	Worsened

<sup>a</sup> Statistically significant difference at  $p \leq .05$

## *Comparison of change between groups*

### **SF-36**

Another test of effect is to compare change in mean scores between the experimental and control groups. Using Analysis of Covariance (ANCOVA), we observed a statistically significant difference in the change in scores from pre- to post-test between the groups on the Mental Health subscale ( $p=.038$ ). This scale measures participants' level of nervousness and depression. Changes in means scores for all other subscales were not statistically significant.

### **LEIPAD**

The change in scores between groups revealed a statistically significant difference for one subscale of the LEIPAD Questionnaire, Life Satisfaction. However, after testing pre- and post-tests for interaction effects between groups (group-by-covariate interaction), we found that the LEIPAD scores on this subscale violated a key assumption of homogeneity of the regression slopes underlying the ANCOVA. In simple terms, this means that the dispersion of the experimental and control groups' Life Satisfaction scores was too dissimilar to accurately compare post-test scores.

# Conclusions

Using a quasi-experimental design, we attempted to measure the effect of the program on independent older adults living in a supportive housing environment. It is important to note that individual participation in the experimental and control groups was not by random assignment, but rather, by a decision made by Wilder management that one site would serve as the experimental group and the other site would serve as the control group.

Noting the limitations of the study, the effect of the intervention can be seen in the differences in the pre-and post-test results of the experimental group when compared to the control group. On the SF-36, the experimental group scores showed improvement on the following scales whereas the control group scores worsened on these scales: Physical Functioning, Role-Physical (effect of physical condition on ability to work or perform daily activities), Vitality (level of energy), and Mental Health (nervousness and depression). Note, however, that the differences in pre- and post-test scores (except for Role-Physical) are not statistically significant. On the LEIPAD Questionnaire, the experimental group scores improved whereas the control group scores worsened on the scales for: Physical Functioning, Self-Care (similar to role-physical on the SF-36), Cognitive Functioning, Social Functioning, Life Satisfaction, Anger, and Self-Esteem. Effectiveness of the Designing a Life of Wellness program is further evident in the experimental group's scores on the SF-36 Role-Physical subscale and the LEIPAD Questionnaire Anger subscale, which resulted in statistically significant differences between pre- and post-test scores.

In addition to the comparison of means between pre- and post-tests, analysis of covariance revealed that the program had a statistically significant effect on the change in the SF-36 Mental Health subscale scores of the experimental group compared with the change in the scores of the control group.

Synthesizing the results of the two instruments is problematic, because although they each have many of the same components of health, function, and well-being, these components are combined into subscales that may not be comparable. For example, the SF-36 separates energy level and fatigue into one scale, Vitality, whereas the LEIPAD combines a question of energy level and fatigue with questions of physical health and function under the Physical Function subscale. In future studies, we recommend the use of the SF-36 only, because the two instruments attempt to measure the same concepts but in different combinations making comparisons difficult. We selected the SF-36 for future use, because it is more widely used and offers a standard tool for measuring function and well-being, two critical components of quality of life.

In summary, this demonstration program and preliminary analysis shows promising results in several areas. Noting the limitations of the study (lack of randomness and small numbers that limit the power of the statistical tests), the Designing a Life of Wellness program appears to have a positive effect on the ability of participants to perform work or daily activities despite participants' physical condition or general health. Additionally, the level of anger expressed through the LEIPAD Questionnaire Anger subscale score appeared to have significantly improved within the experimental group. More importantly, the Designing a Life of Wellness program appears to effectively address participants' feelings of nervousness and depression as measured by the statistically significant difference in scores between the experimental and control groups on the Mental Health subscale.

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# **Appendix**

*Outcomes: pre- and post-test mean scores for experimental and control groups (t-tests)*

*SF-36*

*LEIPAD Questionnaire*



***Outcomes: pre- and post-test mean scores for experimental and control groups (t-tests)***

<b>Instrument/scale</b>	<b>Group</b>	<b>Pre-test mean</b>	<b>Post-test mean</b>	<b>Change, mean</b>	<b>p-value (2-tailed)</b>
<b>SF-36 (Note: an increase in mean represents improvement)</b>					
Physical Functioning	Experimental	30.99	31.19	0.20	.962
	Control	32.11	28.96	-3.15	.297
Role-Physical	Experimental	30.53	35.73	5.20	.024 <sup>a</sup>
	Control	34.00	32.85	-1.14	.640
Bodily Pain	Experimental	38.19	43.68	5.49	.146
	Control	39.24	41.27	2.03	.483
General Health	Experimental	49.06	45.01	-4.05	.425
	Control	43.69	43.67	-0.02	.993
Vitality	Experimental	42.34	45.46	3.12	.264
	Control	42.93	41.68	-1.25	.616
Social Functioning	Experimental	43.21	43.90	.68	.882
	Control	44.85	46.31	1.45	.623
Role-Emotional	Experimental	36.93	38.39	1.46	.807
	Control	34.11	34.37	.26	.955
Mental Health	Experimental	50.36	55.64	5.28	.064
	Control	45.13	44.33	-.80	.762
<b>LEIPAD (Note: a decrease in mean represents improvement)</b>					
Physical Functioning	Experimental	7.50	6.63	-.88	.155
	Control	6.60	7.27	.67	.324
Self-Care	Experimental	2.63	3.25	.63	.217
	Control	3.53	3.67	.13	.709
Depression and Anxiety	Experimental	1.75	1.63	-.13	.763
	Control	2.40	2.00	-.40	.233
Cognitive Functioning	Experimental	2.88	2.38	-.50	.553
	Control	3.54	3.67	.15	.636
Social Functioning	Experimental	2.13	2.00	-.13	.826
	Control	3.20	3.71	.57	.205
Sexual Functioning	Experimental	5.13	5.00	-.13	.685
	Control	5.79	5.71	-.07	.336
Life Satisfaction	Experimental	4.63	4.38	-.25	.685
	Control	5.87	6.71	.50	.169
<i>Anger (moderator scale)</i>	Experimental	2.25	1.92	-.50	.033 <sup>a</sup>
	Control	1.53	1.75	.31	.165

<sup>a</sup> Statistically significant difference at  $p \leq .05$

## The SF-36v2 Health Survey

### Instructions for Completing the Questionnaire

Please answer every question. Some questions may look like others, but each one is different. Please take the time to read and answer each question carefully by filling in the bubble that best represents your response.

### EXAMPLE

**This is for your review.** Do not answer this question. The questionnaire begins with the section *Your Health in General* below.

For each question you will be asked to fill in a bubble in each line:

1. **How strongly do you agree or disagree with each of the following statements?**

	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
a) I enjoy listening to music.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) I enjoy reading magazines.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please begin answering the questions now.

## Your Health in General

1. **In general, would you say your health is:**

Excellent	Very good	Good	Fair	Poor
<input type="radio"/> O <sub>1</sub>	<input type="radio"/> O <sub>2</sub>	<input type="radio"/> O <sub>3</sub>	<input type="radio"/> O <sub>4</sub>	<input type="radio"/> O <sub>5</sub>

GH01

2. **Compared to one year ago, how would you rate your health in general now?**

Much better now than one year ago	Somewhat better now than one year ago	About the same as one year ago	Somewhat worse now than one year ago	Much worse now than one year ago
<input type="radio"/> O <sub>1</sub>	<input type="radio"/> O <sub>2</sub>	<input type="radio"/> O <sub>3</sub>	<input type="radio"/> O <sub>4</sub>	<input type="radio"/> O <sub>5</sub>

HT

***Please turn the page and continue.***

3. The following questions are about activities you might do during a typical day. Does your health now limit you in these activities? If so, how much?

	Yes, limited a lot	Yes, limited a little	No, not limited at all	
a) <b>Vigorous activities</b> , such as running, lifting heavy objects, participating in strenuous sports	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	PF01
b) <b>Moderate activities</b> , such as moving a table, pushing a vacuum cleaner, bowling, or playing golf	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	PF02
c) Lifting or carrying groceries	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	PF03
d) Climbing <b>several</b> flights of stairs	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	PF04
e) Climbing <b>one</b> flight of stairs	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	PF05
f) Bending, kneeling, or stooping	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	PF06
g) Walking <b>more than a mile</b>	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	PF07
h) Walking <b>several hundred yards</b>	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	PF08
i) Walking <b>one hundred yards</b>	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	PF09
j) Bathing or dressing yourself	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	PF10

4. During the **past 4 weeks**, how much of the time have you had any of the following problems with your work or other regular daily activities **as a result of your physical health?**

	All of the time	Most of the time	Some of the time	A little of the time	None of the time	
a) Cut down on the <b>amount of time</b> you spent on work or other activities	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	<input type="radio"/> <sub>4</sub>	<input type="radio"/> <sub>5</sub>	RP01
b) <b>Accomplished less</b> than you would like	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	<input type="radio"/> <sub>4</sub>	<input type="radio"/> <sub>5</sub>	RP02
c) Were limited in the <b>kind</b> of work or other activities	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	<input type="radio"/> <sub>4</sub>	<input type="radio"/> <sub>5</sub>	RP03
d) Had <b>difficulty</b> performing the work or other activities (for example, it took extra effort)	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	<input type="radio"/> <sub>4</sub>	<input type="radio"/> <sub>5</sub>	RP04

5. During the **past 4 weeks**, how much of the time have you had any of the following problems with your work or other regular daily activities **as a result of any emotional problems** (such as feeling depressed or anxious)?

	All of the time	Most of the time	Some of the time	A little of the time	None of the time	
a) Cut down on the <b>amount of time</b> you spent on work or other activities	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	<input type="radio"/> <sub>4</sub>	<input type="radio"/> <sub>5</sub>	RE01
b) <b>Accomplished less</b> than you would like	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	<input type="radio"/> <sub>4</sub>	<input type="radio"/> <sub>5</sub>	RE02
c) Did work or other activities <b>less carefully than usual</b>	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	<input type="radio"/> <sub>4</sub>	<input type="radio"/> <sub>5</sub>	RE03

6. During the **past 4 weeks**, to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbors, or groups?

Not at all	Slightly	Moderately	Quite a bit	Extremely	
<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	<input type="radio"/> <sub>4</sub>	<input type="radio"/> <sub>5</sub>	SF01

7. How much **bodily pain** have you had during the **past 4 weeks**?

None	Very mild	Mild	Moderate	Severe	Very severe	
<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	<input type="radio"/> <sub>4</sub>	<input type="radio"/> <sub>5</sub>	<input type="radio"/> <sub>6</sub>	BP01

8. During the **past 4 weeks**, how much did **pain** interfere with your normal work (including both work outside the home and housework)?

Not at all	A little bit	Moderately	Quite a bit	Extremely	
<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	<input type="radio"/> <sub>4</sub>	<input type="radio"/> <sub>5</sub>	BP02

9. These questions are about how you feel and how things have been with you **during the past 4 weeks**. For each question, please give the one answer that comes closest to the way you have been feeling. How much of the time during the **past 4 weeks**...

	All of the time	Most of the time	Some of the time	A little of the time	None of the time	
a) did you feel full of life?	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	<input type="radio"/> <sub>4</sub>	<input type="radio"/> <sub>5</sub>	VT01
b) have you been very nervous?	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	<input type="radio"/> <sub>4</sub>	<input type="radio"/> <sub>5</sub>	MH01
c) have you felt so down in the dumps that nothing could cheer you up?	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	<input type="radio"/> <sub>4</sub>	<input type="radio"/> <sub>5</sub>	MH02
d) have you felt calm and peaceful?	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	<input type="radio"/> <sub>4</sub>	<input type="radio"/> <sub>5</sub>	MH03
e) did you have a lot of energy?	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	<input type="radio"/> <sub>4</sub>	<input type="radio"/> <sub>5</sub>	VT02
f) have you felt downhearted and depressed?	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	<input type="radio"/> <sub>4</sub>	<input type="radio"/> <sub>5</sub>	MH04
g) did you feel worn out?	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	<input type="radio"/> <sub>4</sub>	<input type="radio"/> <sub>5</sub>	VT03
h) have you been happy?	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	<input type="radio"/> <sub>4</sub>	<input type="radio"/> <sub>5</sub>	MH05
i) did you feel tired?	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	<input type="radio"/> <sub>4</sub>	<input type="radio"/> <sub>5</sub>	VT04

10. During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting friends, relatives, etc.)?

All of the time	Most of the time	Some of the time	A little of the time	None of the time
<input type="radio"/> O <sub>1</sub>	<input type="radio"/> O <sub>2</sub>	<input type="radio"/> O <sub>3</sub>	<input type="radio"/> O <sub>4</sub>	<input type="radio"/> O <sub>5</sub>

SF02

11. How TRUE or FALSE is each of the following statements for you?

	Definitely true	Mostly true	Don't know	Mostly false	Definitely false
a) I seem to get sick a little easier than other people	<input type="radio"/> O <sub>1</sub>	<input type="radio"/> O <sub>2</sub>	<input type="radio"/> O <sub>3</sub>	<input type="radio"/> O <sub>4</sub>	<input type="radio"/> O <sub>5</sub>
b) I am as healthy as anybody I know	<input type="radio"/> O <sub>1</sub>	<input type="radio"/> O <sub>2</sub>	<input type="radio"/> O <sub>3</sub>	<input type="radio"/> O <sub>4</sub>	<input type="radio"/> O <sub>5</sub>
c) I expect my health to get worse	<input type="radio"/> O <sub>1</sub>	<input type="radio"/> O <sub>2</sub>	<input type="radio"/> O <sub>3</sub>	<input type="radio"/> O <sub>4</sub>	<input type="radio"/> O <sub>5</sub>
d) My health is excellent	<input type="radio"/> O <sub>1</sub>	<input type="radio"/> O <sub>2</sub>	<input type="radio"/> O <sub>3</sub>	<input type="radio"/> O <sub>4</sub>	<input type="radio"/> O <sub>5</sub>

GH02

GH03

GH04

GH05

## *LEIPAD Questionnaire*

### Quality of Life LEIPAD Questionnaire

Thank you for completing this survey.

This survey asks for your views about your quality of life. This information will help keep track of how well you feel and how satisfied you are with different areas of your life.

Please mark in "x" in the box that best describes your answer.

**1. How would you rate your overall physical health?**

<sup>0</sup>Excellent      <sup>1</sup>Good      <sup>2</sup>Not so good      <sup>3</sup>Bad

**2. Are you able to get up and down the stairs without help?**

<sup>0</sup> Without difficulty      <sup>1</sup> With difficulty      <sup>2</sup> Only with help      <sup>3</sup> Not able at all

**3. Are you able to dress all by yourself?**

<sup>0</sup> Without difficulty      <sup>1</sup> With difficulty      <sup>2</sup> Only with help      <sup>3</sup> Not able at all

**4. Are you able to eat by yourself?**

<sup>0</sup> Without difficulty      <sup>1</sup> With difficulty      <sup>2</sup> Only with help      <sup>3</sup> Not able at all

**5. Are you able to bathe or take a shower by yourself?**

<sup>0</sup> Without difficulty      <sup>1</sup> With difficulty      <sup>2</sup> Only with help      <sup>3</sup> Not able at all

**6. Do you have sleep problems?**

<sup>0</sup> No, not at all      <sup>1</sup> Yes, minor      <sup>2</sup> Yes, moderate      <sup>3</sup> Yes, very severe

**7. Do you feel tired, without energy?**

<sup>0</sup> Never      <sup>1</sup> Occasionally      <sup>2</sup> Rather often      <sup>3</sup> Very often

**8. Do you have difficulties concentrating?**

<sup>0</sup> Never      <sup>1</sup> Occasionally      <sup>2</sup> Rather often      <sup>3</sup> Very often

**9. Are you able to accomplish your usual tasks either at home, at work, or elsewhere?**

<sup>0</sup> Yes, fully   <sup>1</sup> For the greater part   <sup>2</sup> Only some   <sup>3</sup> No, none

**10. Can you shop all by yourself?**

<sup>0</sup> Without difficulty   <sup>1</sup> Alone, with difficulty   <sup>2</sup> Only with help   <sup>3</sup> Not able at all

**11. Can you travel by public transportation?**

<sup>0</sup> Without difficulty   <sup>1</sup> Alone, with difficulty   <sup>2</sup> Only with help   <sup>3</sup> Not able at all

**12. How much do your physical health problems (if any) stand in the way of doing the things you want to do?**

<sup>0</sup> Not at all   <sup>1</sup> Somewhat   <sup>2</sup> Rather much   <sup>3</sup> Much

**42. Is the following statement true or false in your situation?**

"I am always ready to go out of my way to help someone else"

<sup>0</sup> False   <sup>1</sup> True

**13. How often, would you say, does it happen that you are not able to think clearly or that you are confused?**

<sup>0</sup> Very rarely   <sup>1</sup> Rarely   <sup>2</sup> Often   <sup>3</sup> Very often

**14. How much do your problems with thinking (if any) stand in the way of doing the things you want to do?**

<sup>0</sup> Not at all   <sup>1</sup> Somewhat   <sup>2</sup> Rather much   <sup>3</sup> Much

**15. How good is your memory?**

<sup>0</sup> Excellent   <sup>1</sup> Good   <sup>2</sup> Poor   <sup>3</sup> Bad

**16. How much do your memory problems (if any) stand in the way of doing the things you want to do?**

<sup>0</sup> Not at all   <sup>1</sup> Somewhat   <sup>2</sup> Rather much   <sup>3</sup> Much

**17. Taking everything in consideration, how anxious do you feel?**

<sup>0</sup> Not anxious at all   <sup>1</sup> Somewhat anxious   <sup>2</sup> Anxious   <sup>3</sup> Very anxious

**18. How much do your feelings of anxiety (if any) stand in the way of doing the things you want to do?**

<sup>0</sup> Not at all   <sup>1</sup> Somewhat   <sup>2</sup> Rather much   <sup>3</sup> Much

**32. I feel easily annoyed or irritated.**

<sup>0</sup> Never   <sup>1</sup> Occasionally   <sup>2</sup> Rather often   <sup>3</sup> Very often

**33. I have temper outbursts that I cannot control.**

<sup>0</sup> Never   <sup>1</sup> Occasionally   <sup>2</sup> Rather often   <sup>3</sup> Very often

**34. I get into arguments with others.**

<sup>0</sup> Never   <sup>1</sup> Occasionally   <sup>2</sup> Rather often   <sup>3</sup> Very often

**35. I tend to be resentful.**

<sup>0</sup> Not at all   <sup>1</sup> A little   <sup>2</sup> Quite a bit   <sup>3</sup> Very much

**19. Taking everything in consideration, how depressed (blue) do you feel at present?**

<sup>0</sup> Not depressed at all   <sup>1</sup> Somewhat depressed   <sup>2</sup> Depressed   <sup>3</sup> Very depressed

**20. How much do your depressed feelings (if any) stand in the way of doing the things you want to do?**

<sup>0</sup> Not at all   <sup>1</sup> Somewhat   <sup>2</sup> Rather much   <sup>3</sup> Much

**43. Is the following statement true or false in your situation?**

"I like to gossip at times"

<sup>0</sup> False   <sup>1</sup> True



**36. Taking everything in consideration, do you feel inferior to other people?**

<sup>0</sup> Not at all      <sup>1</sup> Somewhat      <sup>2</sup> Rather much      <sup>3</sup> Much

**37. How often do you avoid things (refrain from doing things) because you feel inferior?**

<sup>0</sup> Very rarely      <sup>1</sup> Rarely      <sup>2</sup> Often      <sup>3</sup> Very often

**38. I tend to have a negative opinion of myself.**

<sup>0</sup> Not at all      <sup>1</sup> A little      <sup>2</sup> Quite a bit      <sup>3</sup> Very much

**21. How satisfied are you with your social ties or relationships?**

<sup>0</sup> Very satisfied      <sup>1</sup> Satisfied      <sup>2</sup> Dissatisfied      <sup>3</sup> Very dissatisfied

**22. Do you feel emotionally satisfied in your relationships with other people?**

<sup>0</sup> Not at all      <sup>1</sup> A little      <sup>2</sup> Quite a bit      <sup>3</sup> Very much

**23. Is there someone to talk to about personal affairs when you want to?**

<sup>0</sup> Nearly always      <sup>1</sup> Fairly often      <sup>2</sup> Occasionally      <sup>3</sup> Not at all

**39. How often do you feel that most people cannot be trusted?**

<sup>0</sup> Never      <sup>1</sup> Occasionally      <sup>2</sup> Rather often      <sup>3</sup> Very often

**24. Are you interested in sex?**

<sup>0</sup> Not at all      <sup>1</sup> A little      <sup>2</sup> Quite a bit      <sup>3</sup> Very much

**25. How often do you have sexual contact?**

<sup>0</sup> Never      <sup>1</sup> Occasionally      <sup>2</sup> Rather often      <sup>3</sup> Very often

**26. How satisfied are you with your ability to manage your hobbies or recreational activities?**

<sup>0</sup> Very satisfied      <sup>1</sup> Satisfied      <sup>2</sup> Dissatisfied      <sup>3</sup> Very dissatisfied

**27. How satisfied are you with your financial situation?**

<sup>0</sup> Very satisfied      <sup>1</sup> Satisfied      <sup>2</sup> Dissatisfied      <sup>3</sup> Very dissatisfied

**28. Do you feel you cannot afford the standard of living you would like?**

<sup>0</sup> Not at all      <sup>1</sup> A little      <sup>2</sup> Much      <sup>3</sup> Very much so

**44. Is the following statement true or false in your situation?**

"There have been times when I was quite jealous of the good fortune of others"

<sup>0</sup> False      <sup>1</sup> True

**29. How satisfied are you with your life at present when compared to the past?**

<sup>0</sup> Very satisfied      <sup>1</sup> Satisfied      <sup>2</sup> Dissatisfied      <sup>3</sup> Very dissatisfied

**30. Taking everything in consideration, how would you expect things will go in the future?**

<sup>0</sup> Much better      <sup>1</sup> Better      <sup>2</sup> Worse      <sup>3</sup> Much worse

**31. How much do your expectations of the future stand in the way of doing or initiating the things you want to do?**

<sup>0</sup> Not at all      <sup>1</sup> Somewhat      <sup>2</sup> Rather much      <sup>3</sup> Much

**45. Is the following statement true or false in your situation?**

"Over the past several years, I am often troubled by the difficulties I have dealing with others".

<sup>0</sup> False      <sup>1</sup> True

**46. Is the following statement true or false in your situation?**

"Over the past several years, I am bothered by the kind of person I am".

<sup>0</sup> False      <sup>1</sup> True

**47. Is the following statement true or false in your situation?**

"Over the past several years, the way I behave often gets me into trouble, either on the job, at home, or elsewhere".

<sup>0</sup> False      <sup>1</sup> True

**48. Is the following statement true or false in your situation?**

"Over the past several years, other people often seem to be bothered by the things I do or say".

<sup>0</sup> False      <sup>1</sup> True

**49. Is the following statement true or false in your situation?**

"I haven't got as far in life as I'd like to because of the kind of person I am".

<sup>0</sup> False      <sup>1</sup> True

**40. Do you trust in God or some superior being?**

<sup>0</sup> No      <sup>1</sup> Yes

**41. Do you find comfort or support in such a belief?**

<sup>0</sup> No      <sup>1</sup> Yes

**Thank you for completing this survey!**

**SCORING SHEET**

Please copy scores for each item in the appropriate cell in the questionnaire sheets. Then, sum the scores of the items for each scale. Followingly, items pertaining to each scale may be reported.

**LEIPAD Quality of Life Scales**

							Abbrev	Total Score	
<b>Physical Functioning Scale</b>								<b>PF</b>	
Items:	1 .....	6 .....	7 .....	9 .....	12 .....			.....	
<b>Self-Care Scale</b>								<b>SC</b>	
Items:	2 .....	3 .....	4 .....	5 .....	10 .....	11 .....		.....	
<b>Depression and Anxiety Scale</b>								<b>DA</b>	
Items:	17 .....	18 .....	19 .....	20 .....				.....	
<b>Cognitive Functioning Scale</b>								<b>CF</b>	
Items:	8 .....	13 .....	14 .....	15 .....	16 .....			.....	
<b>Social Functioning Scale</b>								<b>SF</b>	
Items:	21 .....	22 .....	23 .....					.....	
<b>Sexual Functioning Scale</b>								<b>SxF</b>	
Items:	24 .....	25 .....						.....	
<b>Life Satisfaction Scale</b>								<b>LS</b>	
Items:	26 .....	27 .....	28 .....	29 .....	30 .....	31 .....		.....	
								<b>Sum score</b>	.....

**LEIPAD Moderator Scales**

							Abbrev	Total Score	
<b>Perceived Personality Disorder Scale</b>								<b>PPD</b>	
Items:	39 .....	45 .....	46 .....	47 .....	48 .....	49 .....		.....	
<b>Anger Scale</b>								<b>A</b>	
Items:	32 .....	33 .....	34 .....	35 .....				.....	
<b>Social Desirability Scale</b>								<b>SD</b>	
Items:	42 .....	43 .....	44 .....					.....	
<b>Self-Esteem Scale</b>								<b>SE</b>	
Items:	36 .....	37 .....	38 .....					.....	
<b>Trust in God Scale</b>								<b>TG</b>	
Items:	40 .....	41 .....						.....	

SOURCE: Courtesy of the World Health Organization