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Promoting Self-transcendence and Well-being in Community-dwelling Older Adults: A Pilot Study of a Psychoeducational Intervention

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Abstract

Self-transcendence changes how older adults perceive themselves, their relationships with others, the material world, and the metaphysical or spiritual dimension. It is associated with multiple indicators of well-being. The purpose of this pilot study (N = 20) was to examine the feasibility and effectiveness of a psychoeducational intervention to increase self-transcendence and well-being of older adults. Data were analyzed using generalized estimating equations. All variables trended in the directions hypothesized. Self-transcendence increased in the intervention group and decreased in the control group but not significantly. The group × time interaction for life satisfaction was significant (z = 2.89, p = .004). This feasibility study supports further investigation to assess the effectiveness of the intervention in a larger sample.
Promoting Self-transcendence and Well-being in Community-dwelling Older Adults: A Pilot Study of a Psychoeducational Intervention

Self-transcendence (ST) is an inherent, late-life developmental process involving a modified worldview that shapes an individual’s perspective on the self, relationships with others, the nature of the material world, and of a dimension beyond the here and now. ST may be instrumental in helping older adults cope effectively with the challenges and opportunities that come with aging, but opportunities for optimal development of ST vary. While challenging life circumstances, such as a life-threatening diagnosis, have been shown to promote development of ST, some individuals may have fewer personal and financial resources for development than others. Thus affordable, practical programs that support optimal development of ST which can be adapted for older adults in a variety of settings and populations are needed.

The Psychoeducational Approach to Transcendence & Health (PATH) Program piloted in this feasibility study was designed to increase ST and indicators of overall well-being among community-dwelling adults aged 60 years and older at a community senior center. Recognizing that, as with other developmental processes, it is not possible to create or cause ST, we hypothesized that the theory-based PATH Program would support and foster an individual’s optimal development of ST and that potential indicators of well-being would improve with increased ST.

Theoretical Basis for the PATH Intervention

The PATH intervention piloted in this feasibility study was based on Reed’s mid-range Theory of Self-transcendence. Most theorists share the view that transcendence is an inherent, developmental process which involves a change in perspective and a tendency toward a higher levels of consciousness in late life. According to Reed’s theory, when faced with vulnerability or awareness of mortality, individuals have the capacity to develop
ST and to benefit from its positive effects on mental health and well-being. Reed’s theory is largely congruent with other theorists’ views of transcendence but it differs in that Reed’s view of ST “embodies experiences that connect rather than separate a person from self, others, and the environment” (p. 106). Reed holds that ST helps older adults see living, aging, and dying as a meaningful process.

A significant body of research demonstrated a relationship between ST and factors which have important effects on older adults’ well-being including adults facing terminal or life-changing illnesses such as women with breast cancer, liver transplant recipients, and women dealing with rheumatoid arthritis and multiple sclerosis. ST has been studied in multiple populations including caregivers of persons with Alzheimer’s disease, homeless individuals, and members of an Amish community. Beaumont examined ST among young adults, while Ellerman and Reed studied ST and depression among middle-aged adults. Wiggs considered the developmental aspects of ST among women in late mid-life. In these populations, ST was associated with increased overall well-being and quality of life, as well as acceptance, reaching out for support and coping, and decreased depression. Increased spirituality or spiritual equilibrium, sense of purpose and meaning in life, and feelings of connectedness to self, others, and a higher dimension were also associated with higher levels of ST.

Similar associations have been noted in older adult samples. Among older adults living in nursing homes, ST was related to well-being, meaning in life, and hope which helped transcend losses of later life. Multiple studies showed ST was inversely related to depression in community-dwelling older adults. Higher levels of ST were positively correlated with resilience, sense of coherence, and purpose in life among the oldest old, aged 85 and older.
PROMOTING SELF-TRANSCENDENCE

ST was associated with physical and mental health, as well as with increased ability to complete activities of daily living and instrumental activities of daily living.

Reed theorized that older adults with greater level of ST are better able to adapt and cope. McCarthy and colleagues found that ST and proactive coping significantly predicted successful aging, defined as satisfaction with the ability to cope with late life changes while maintaining a sense of meaning and spiritual connectedness.

Intervention research provides some support for the hypothesis that ST can be increased or that it has a positive effect on indicators of well-being. Stinson and Kirk assessed the effect of group reminiscing on ST and depression among older women living in assisted living, and found a non-significant trend toward increased ST and decreased depression. Coward and Kahn examined ST, and emotional and physical well-being among 22 women recently diagnosed with breast cancer who attended an eight-week ST theory-based breast cancer support group. They concluded ST scores were higher, but not significantly different post-intervention. Coward and Kahn found that a sense of spiritual disequilibrium triggered participants to reach out for information and support from other people and from faith-based resources and to reach inwardly to examine life values, both aspects of ST. Coward and Kahn also found women reported a sense of bonding within the group and expanded self-boundaries resulting in increased comfort and appreciation of supportive others, thus helping the women to create meaning from the experience of breast cancer. People with late-stage Alzheimer’s disease exposed to a creative bonding intervention displayed evidence of ST and well-being. Caregivers of elders with dementia who participated in a poetry writing intervention found female caregivers were lower in ST and resilience, and higher in depressive symptoms and burden, but older caregivers scored higher than younger caregivers. Subthemes identified using grounded theory included greater
acceptance, empathy, self-awareness, reflection, creativity, and helping others. It is not clear if the effects of ST apply across cultures, as evidenced by Ramer, Johnson, Chan, and Barrett who examined ST, health status, and depression in Hispanic people with HIV/AIDS; neither disease progression nor severity was related to ST.

**Conceptual model.** Based on the process of concept analysis, a conceptual model of ST was developed to provide a rationale for the content and structure of the PATH Program. Literature from philosophy, theology, psychiatry, psychology, sociology, and nursing was identified and organized into five logically-related categories or domains of ST, representing various aspects of this complex and abstract concept. The conceptual model describes five domains of ST: (1) *relationships* with others in the past, present, and future; (2) *introspection* or looking within the self; (3) *creativity* or expressing the self; (4) *contemplation* of the nature of this world; and (5) *spirituality* or thinking about the nature of the next world. Domains are not hierarchical but dynamic and overlapping, interacting amongst one another.

While literature on specific activities likely to increase development of ST directly is limited, evidence exists to support methods for development of each of the five individual domains of ST. Thus evidence-based activities shown to support each of the five individual domains were combined as the basis for development of the PATH intervention program. Figure 1 demonstrates the relationships among intervention activities, domains of ST, and the outcome of ST, with activities grouped as either group processes, mindfulness practices, or creative activities.

… INSERT FIGURE 1 HERE …

**Purpose and Specific Aims**
The purpose of this pilot study was to examine the feasibility and effectiveness of a psychoeducational intervention to increase self-transcendence and well-being of older adults. The insights gained will be used to refine and further develop a future iteration of the PATH Program for testing in a larger sample.

The specific aims were to:

1. Assess the feasibility of conducting the intervention at a senior community center by examining acceptability and practicality of the components of the PATH intervention.
2. Explore the face validity of quantitative self-report instruments used to measure self-transcendence and indicators of well-being.

Method

Design and Sample

For this study assessing the feasibility of an initial version of the PATH Program, a convenience sample (N = 20) was recruited at a community senior center in a moderate-income, urban neighborhood. The center provided recreational and health promotion activities for active, community-dwelling older adults. Participation in the study was limited to cognitively intact adults aged 60 years or older with no diagnosis of a life-threatening disease, more than one hospitalization, or significant loss within the past six months. Following written consent, the Mini-Cog Dementia Test was administered to screen for cognitive status. A computerized program was used to randomly assign adults who met the inclusion criteria to either attention control or intervention groups.

Measures

Data were collected using reliable and valid questionnaires at baseline and at the end of the 8-week PATH Program. Instruments selected to measure each study variable were:
**Self-transcendence Scale (STS).** The 15-item unidimensional STS uses a 4-point Likert-scale ranging from “not at all” to “very much” to measure older adults’ perceptions of the degree or level of transcendence. Scores are summed, then a mean is calculated. Internal consistency has been demonstrated by Cronbach’s alphas ranging from .80 to .93 with test-retest reliability of .95. Cronbach’s alpha for the STS in this sample was .80.

**Philadelphia Geriatric Center Morale Scale (PGCMS).** Lawton’s 17-item revised PGCMS assesses overall psychological well-being in older adults. Dichotomous items are scored “high-morale” or “low-morale”. Summary scores range from high (13 to 17) to low (< 9). Validity was supported by correlation with Neugarten’s Life Satisfaction Index (.57) and by factor analysis. Internal consistency was demonstrated by consistency coefficients of .85, .81 and .85, respectively; test-retest reliability was .91 after five weeks and .75 after three months. Cronbach’s alpha in this sample was .79.

**Life Satisfaction Index for the Third Age-Short Form (LSITA-SF).** The LSITA-SF is an updated version of the Life Satisfaction Index-A (LSI-A), it measures overall life satisfaction. The 12-item summative scale employs a 6-point Likert-type response with choices ranging from “strongly disagree” to “strongly agree”. Higher scores denote greater dissatisfaction. Cronbach’s alpha of almost .90 and strong correlations (> .70) with two scales, as well as excellent goodness of fit scores in Confirmatory Factor Analysis supported the reliability and construct validity of the measure. Cronbach’s alpha for the LSITA in this sample was .84.

**Acceptance and Action Questionnaire (AAQ-II).** The 10-item unidimensional AAQ measures non-avoidance of aversive stimuli, tolerance of unpleasant emotions, and capacity for productive response on a scale from “never true” to “always true”. The AAQ-II explained 40%
to 46% of the variance with most factors loadings greater than .40. Reliability of the AAQ-II ranged from .81 to .87. The AAQ is considered the current gold standard measure of experiential acceptance of life situations. Cronbach’s alpha in this sample was .80.

**Proactive Coping Inventory Subscale (PCI).** The unidimensional, 14-item Proactive Coping subscale of the Proactive Coping Inventory uses a 4-point Likert-type scale, ranging from “not at all true” to “completely true”. The Proactive Coping subscale was positively correlated with subscales of the Brief Cope among two samples. Correlations with Active Coping were .52 and .50; with Planning were .42 and .45; and with Behavioral Disengagement were -.42 and -.54, respectively. Internal consistency was indicated by an alpha of .86.

Cronbach’s alpha for the PCI subscale in this sample was .88.

**Geriatric Depression Scale (GDS).** The GDS-15 measures indicators of depression based on psychiatric diagnostic criteria. Developed for use among older adults in multiple settings, this 15-item dichotomous (Yes/No) scale uses normative scoring (scores ≤ 4 are normal; 5-10 are suggestive of depression; scores greater than 10 are diagnostic for depression). Sensitivity (92%) and specificity (89%) were very good when compared to diagnostic criteria with evidence of construct validity ($r = .84, p < .001$). Cronbach’s alpha in this sample was .80.

**Short Form-20 Health Survey, Version 2 (SF-20).** The 20-item SF-20 is used to measure the covariates of health and function. The SF-20 is an abbreviated version of the Rand Medical Outcomes Study SF-36 which assessed physical, social, mental health, role functioning, pain and pain perceptions, and self-rated health. Stewart et al. reported internal consistency for the four subscales ranged from .81 (role functioning) to .88 (mental health). Among a sample of older adults, the SF-20 exhibited convergent validity with other scales and significantly predicted
future nursing home placement and hospitalization.\textsuperscript{60} Cronbach’s alpha for the SF-20 in this sample was .87.

**Mini-Cog Dementia Test.** The Mini-Cog\textsuperscript{44} is a brief (approximately three minutes) screening tool designed to identify those with dementia. The test uses a 3-item recall exercise and a clock-drawing test and has been validated among older adults with various language, culture, and literacy levels in clinical and community settings, with sensitivity (76\% vs 79\%) and specificity (89\% vs 88\%) for dementia similar to the Mini-Mental State Examination and comparable to neuropsychological testing (75\% sensitivity, 90\% specificity).\textsuperscript{44}

**Intervention**

The intervention in this feasibility study consisted of multiple modalities in a structured, theory-based 8-week program. Size of the intervention and control groups was determined by the optimal size of psychotherapy groups\textsuperscript{61} allowing for up to 20\% attrition. The PATH Program was facilitated by the principal investigator, a social worker with a Master’s degree in gerontology, and a research assistant. It included eight weekly 1½ hour group sessions which were held at the senior center. Elements of the PATH Program derived from the conceptual model (see Figure 1) included: group processes (focused discussion, personal narratives, bonding exercises); mindfulness practices (meditation, guided imagery, inspirational music and texts); and creative experiences (‘reflection’ boxes, journaling and writing stories, poems or prayers, making and using rainsticks). To maximize the effect of this brief intervention, participants were asked to spend about 15 minutes daily practicing one or more activities of their choice to reinforce learning, increase the effects of the group sessions, and potentially to be integrated into participants’ lives. See Table 1 for the format of group sessions, elements of each session, and at-home practices. The PATH Program provided
opportunities for participants to focus on personal development and to experience a variety of activities hypothesized to increase ST. An important aspect of the program was encouraging participants to join discussions, share feelings, or take on creative projects as much – or as little – as was comfortable. Rather than being directed through set, standardized activities, participants selected personally meaningful choices from a wide range of options (e.g., readings, music, guided imagery CDs, art supplies, and journaling) to individualize experiences in ways that seemed appropriate and useful to each participant.

--- INSERT TABLE 1 HERE ---

**Procedure**

After the study was approved by the university’s Institutional Review Board, potential participants were approached at the community center and the study was briefly described. If the person was interested in participating, further description of the study was given, questions were answered, and written informed consent was obtained. Quantitative data were collected one week prior to the first intervention session and one week after the last intervention session.

The attention control group received an alternate activity (attending a “Movie Matinee”). The intervention group and the control group met in separate wings of the senior community center at the same time as the intervention group. The potential for contamination between groups was partially addressed by explaining the importance of maintaining confidentiality.

**Data Analysis**

Data were analyzed using SAS 9.4. Means ($M$) and standard deviations ($SD$) were used to describe continuous variables, and frequencies and percentages were used to describe categorical variables. Interrelationships among study variables were examined using Pearson product-moment correlations. Generalized estimating equations (GEE) were used to examine the main
effects of group (control vs. intervention) and time (pre- and post-intervention), and the group ×
time interaction for each of the outcome variables. Qualitative data from a focus group were
collected at the community senior center by a coinvestigator not involved in the intervention two
weeks after final quantitative data collection.

Results

Sample Characteristics

A total of 20 older adults, aged 60 to 91 years old, agreed to participate; one participant
opted out after consent but before completing the demographic questionnaire. The remaining 19
participants were randomly assigned to the intervention (n = 11) or control (n = 8) group. Their
mean age was 69.95 years (SD = 8.50). The majority were female (n = 17; 89.5%), White (n =
16; 84.2%), and unmarried (n = 11; 63.2%). Only two (10.5%) participants perceived having
inadequate family income, and one (5.3%) participant did not receive a high school diploma.
Age was positively correlated with ST at Time 1 (r = .53, p = .02). Demographic characteristics
of the sample by group are presented in Table 2. The groups did not differ at baseline on any
demographic characteristic.

--- INSERT TABLE 2 HERE ---

Feasibility of Intervention Delivery

Both intervention and control groups were attended only by enrolled participants and were held
in locations within the senior center separate from other activities, without intrusions or
interruptions. All sessions were held as scheduled and were conducted using a standardized
protocol. A graduate research assistant conducted all alternative activity control group sessions.
Two alternative activity group participants missed one session each and a third missed three
times. When surveyed, these participants agreed they were pleased with the choices of movie
DVDs, refreshments, the scheduled times, the setting, and the social contact. Several participants indicated they felt they were not “in the real study” and perceived increased attention given to “the other group”.

Interventions group sessions were conducted by the principal investigator, a single co-facilitator, and a research assistant. The protocol (displayed in Table 1) was reviewed and discussed in weekly team meetings attended by the principal investigator, a co-facilitator, research assistants, and a consultant to ensure consistent compliance with the study protocol. In the intervention group, one participant missed two sessions because she moved out of state but returned to attend the closing session and data collection. All participants actively engaged in group discussions and creative activities. One participant with multiple sensory and mobility limitations was able to fully participate with the help of a research assistant. Some adjustments in creative activities for future studies were identified to allow adequate time for completion and minor adjustments were made to discussion questions. Participants were asked to maintain records of independent at-home practice of activities taught during group sessions. Participants were not consistent in keeping these records, although most returned at least six of the eight weekly reports; several participants reported they practiced multiple activities daily.

**At-home Activities**

An activity called Reflection Box was practiced most often (86 times) perhaps because it was the first activity introduced. The activity consisted of contemplation of a brief reading, photo, or memento while attending to thoughts and feelings invoked. Five participants reported they intended to continue the Reflection Box activity after the study ended. The second most practiced at-home activity (57), and the activity participants were most likely to report they intended to continue beyond the end of the study, was some form of mindfulness meditation such
as deep breathing and relaxation while listening to meditation tapes or music, or while creating rhythmic sound and motion using rainsticks. As a result, a deep breathing and relaxation activity was identified as an option for future interventions. The other at-home activity that participants frequently reported practicing (53) was some form of writing, whether that was writing in journals independently or in response to open-ended questions, or simply writing prayers, poems, stories, or messages to loved ones; however, only two participants reported an intent to continue writing or journaling after the study ended.

**Effects of the Intervention**

For ST, the main effects of group ($z = -.53, p = .596$) and time ($z = -.79, p = .431$), and the interaction effect of group × time ($z = .74, p = .462$) were not significant. For life satisfaction, there were significant main effects of group ($z = -2.2, p = .028$) and time ($z = -3.09, p = .002$); and the group × time interaction was also significant ($z = 2.89, p = .004$). As shown in Figure 2, life satisfaction decreased significantly in the control group ($t_7 = 2.69, p = .031$), but there was an increasing, though non-significant, trend toward higher satisfaction in the intervention group ($t_{10} = 2.69, p = .304$).

--- INSERT FIGURE 2 HERE ---

Depression scores of the intervention and control groups did not change over time ($z = -.95, p = .342$). For other variables, none of the outcomes differed by group over time. Table 3 displays the means and standard deviations of the study variables by group across time.

--- INSERT TABLE 3 HERE ---

**Discussion**

All outcome variables changed in the directions hypothesized in the conceptual model, supporting the theoretical basis for the PATH Program. Given the small sample size for this pilot
study, statistical significance was not anticipated, but as hypothesized, levels of ST increased in
the intervention group, although not significantly. There were non-significant but healthy trends
toward improved psychological well-being, acceptance of life situation, coping, health-related
quality of life, and depression.

The findings of this study are similar to those from studies of ST in other older adult
samples. Multiple studies among older adults as well as among middle-aged adults and adults
with chronic or terminal illnesses reported associations between ST and well-being and quality
of life, depression, acceptance, physical and mental health, and coping. An intervention study using reminiscence among older women in assisted living
also found a non-significant trend toward increased ST and decreased depression. Other studies
using group support and bonding to increase ST and associated positive effects among women
with breast cancer, persons with Alzheimer’s disease, and caregivers of elders with dementia
have demonstrated non-significant trends toward increased ST and provided qualitative evidence
supporting the potential to effectively increase ST. However, there is scant evidence
of interventions showing statistically significant increases in ST and related positive outcomes,
largely due to the small number of quantitative studies and small sample sizes.

The small sample size of the present study limited generalizability and power to find
significance. Data were limited to self-report questionnaires, although risk of social desirability
bias was limited because responses on questionnaires were not clearly identifiable as positive or
negative. Self-selection bias existed as with all convenience samples; participants willing to
volunteer may differ from participants who declined to participate. The potential for
contamination between control and intervention groups also existed due to the likelihood of
contact between the groups in this setting. While the negative effects of contamination were
explained to participants, who were requested to avoid discussion of their activities, the decrease in ST in the control group at the end of the study strongly suggested demoralization related to awareness of the increased attention received by the intervention group. And the intervention group may have experienced the Hawthorne effect which could account for the increase in ST post-intervention.

A subsequent longitudinal study is planned with a larger, more diverse sample to test the effects of the PATH Program, clarify the role of ST as a possible mediator or moderator of the effect of the intervention on indicators of well-being in late life, and determine whether effects persist over time. Power analysis using effect sizes from a second pilot study will be used to determine sample size for the future study to increase the potential to find significant effects should they exist. The program will be implemented in a variety of gender, racial, and cultural groups recruited in multiple settings to avoid contamination.

Despite the small sample size, this feasibility study suggests that the theory-based PATH Program may have a positive effect on ST and indicators of well-being. This study is innovative in that it combines multiple methods including group processes, creative projects and at-home practice based on ST theory. The findings that ST and several indicators of well-being varied as expected provide some preliminary support for the hypothesis that activities derived from multiple domains of ST, as described in the conceptual model, can work together to increase ST and well-being. Further investigation is merited to assess the effectiveness of the program in a larger, more diverse sample with improved control and to examine the specific role ST plays in influencing indicators of well-being. Understanding the developmental process of transcendence and its potential to increase well-being in late life is critical given the growing population of older adults. Ultimately, pending further testing, the PATH Program may be an affordable and
practical method of fostering ST and well-being in diverse socioeconomic and cultural groups at sites such as retirement communities, churches, senior centers and other sites where older adults gather.
References


37. McCarthy VL. *Exploring a new theory of successful aging among low-income older adults in a retirement community.* Poster presented at: Gerontological Society of America's 62nd Annual Scientific Meeting; November 18–22, 2010; Atlanta, GA.


51. University of Western Ontario’s Health and Rehabilitation Sciences program.


Table 1

**PATH Intervention Methods and Schedule**

<table>
<thead>
<tr>
<th>Wk</th>
<th>Primary Theme</th>
<th>In-session Group Methods</th>
<th>Weekly Outside Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Purpose)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Beginnings</td>
<td>Make a list of words/ideas associated with beginnings. Decorate a “reflection” box and share a collage of images/texts.</td>
<td>Activity 1: Life Review Listen to music CD. Select or create an image or text to place inside “Reflection Box” that has personal meaning for participant.</td>
</tr>
<tr>
<td></td>
<td>(Initiating rapport and building trust)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Introspection</td>
<td>Make a list of words/ideas associated with introspection. Decorate covers of journals and complete a journal entry about introspection. Share with others and create a group story.</td>
<td>Activity 2: Journaling Listen to music CD. Write a brief story in response to questions for self-reflection in your notebook.</td>
</tr>
<tr>
<td></td>
<td>(Looking within and connecting to self)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Contemplation</td>
<td>Make a list of words/ideas associated with contemplation. Experience guided imagery (recording). Discuss emerging images and connect with shifts from rational to cosmic worldview</td>
<td>Activity 3: Guided imagery Insert guided imagery CD and sit quietly for a few minutes, listening to the recording and thinking about how your story is part of the cycle of life.</td>
</tr>
<tr>
<td></td>
<td>(Looking at the nature of life and being part of something greater than the self)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Relationships</td>
<td>Make a list of words/ideas associated with relationships. Discuss joys and barriers in relationships, with focus on</td>
<td>Activity 4: Meditation I Insert music CD and select a brief story or poem to read. After reading, sit quietly for a few minutes thinking</td>
</tr>
<tr>
<td></td>
<td>(Looking at our connections with others)</td>
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<tr>
<td></td>
<td><strong>altruism and generativity.</strong> Join words/ideas to create a group story/poem or song about the reading.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Spirituality</strong> (Looking at our connections with God or the sacred)</td>
<td><strong>Make a list of words/ideas associated with spirituality. Discuss prayers, poems, and journaling as routes to experiencing the sacred. Select one of these to enhance a sense of unity with God. Share with the group.</strong> <strong>Activity 5: Seeking the Sacred</strong> Find a quiet spot with view of a place of natural beauty or use image selected in session. Listen to a music CD while writing a prayer, poem or journal reflection.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Creativity</strong> (Looking at how we express the self)</td>
<td><strong>Make a list of words/ideas associated with creativity. Make a rain stick or other musical instrument to be “played” along with music. Play CD and create group music-making experience.</strong> <strong>Activity 6: Creativity</strong> While listening to music CD, use rain stick or other musical instrument to play along with the music.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Summary</strong> (Reinforcing learning for the long term)</td>
<td><strong>Discuss benefits and feasibility of ongoing practices such as relationship sharing, reading, poetry, guided imagery, and journaling.</strong> <strong>Activity 7: Adopting an activity</strong> Consider whether one or more activities that you may be continued after group ends</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Closure</strong> (Saying goodbye and continuing on)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Table 2

*Demographic Characteristics of the Participants (N = 19)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Control</th>
<th>Intervention</th>
<th>Statistics</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD) or n (%)</td>
<td>M (SD) or n (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>72.63 (7.48)</td>
<td>68.00 (8.99)</td>
<td>t(17) = 1.19</td>
<td>.252</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>6 (75%)</td>
<td>11 (100%)</td>
<td>χ²(1) = 3.07</td>
<td>.08</td>
</tr>
<tr>
<td>Male</td>
<td>2 (25%)</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>7 (87.5%)</td>
<td>9 (81.8%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>1 (12.5%)</td>
<td>2 (18.2%)</td>
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<td></td>
</tr>
<tr>
<td>Non-Hispanic</td>
<td>8 (100%)</td>
<td>11 (100%)</td>
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<tr>
<td>Marital Status</td>
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<td></td>
</tr>
<tr>
<td>Married/partnered</td>
<td>2 (25%)</td>
<td>5 (45.5%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Widowed</td>
<td>2 (25%)</td>
<td>3 (27.3%)</td>
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<td></td>
</tr>
<tr>
<td>Divorced/separated</td>
<td>2 (25%)</td>
<td>2 (18.2%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never married</td>
<td>2 (25%)</td>
<td>1 (9.1%)</td>
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</tr>
<tr>
<td>Income</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mostly inadequate</td>
<td>1 (12.5%)</td>
<td>1 (9.1%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adequate</td>
<td>3 (37.5%)</td>
<td>7 (63.6%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mostly adequate</td>
<td>1 (12.5%)</td>
<td>1 (9.1%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completely adequate</td>
<td>3 (37.5%)</td>
<td>2 (18.2%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
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<tr>
<td>--------------------------</td>
<td>--------</td>
<td>--------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; high school diploma</td>
<td>1 (12.5%)</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school diploma</td>
<td>0</td>
<td>5 (45.5%)</td>
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<td></td>
</tr>
<tr>
<td>Some college</td>
<td>4 (50%)</td>
<td>4 (36.4%)</td>
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<tr>
<td>College graduate</td>
<td>2 (25%)</td>
<td>1 (9.1%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional degree</td>
<td>1 (12.5%)</td>
<td>1 (9.1%)</td>
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</table>

\[ \chi^2(4) = 6.01 \] .198
### Table 3

**Study Outcomes by Group and Time (N = 19)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Control</th>
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<th>Intervention</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time 1</td>
<td>Time 2</td>
<td>Time 1</td>
<td>Time 2</td>
</tr>
<tr>
<td>Self-transcendence</td>
<td>M (SD)</td>
<td></td>
<td>M (SD)</td>
<td></td>
</tr>
<tr>
<td>STS</td>
<td>3.53 (.11)</td>
<td>3.49 (.12)</td>
<td>3.50 (.10)</td>
<td>3.55 (.10)</td>
</tr>
<tr>
<td>Life satisfaction</td>
<td>3.85 (.21)</td>
<td>3.47 (.25)</td>
<td>3.66 (.18)</td>
<td>3.80 (.21)</td>
</tr>
<tr>
<td>LSITA-SF</td>
<td>5.53 (.94)</td>
<td>5.50 (1.03)</td>
<td>5.20 (1.05)</td>
<td>5.25 (.69)</td>
</tr>
<tr>
<td>Acceptance</td>
<td>14.00 (3.12)</td>
<td>13.50 (3.16)</td>
<td>13.18 (2.96)</td>
<td>14.45 (1.44)</td>
</tr>
<tr>
<td>Well-being</td>
<td>40.29 (6.26)</td>
<td>39.86 (5.98)</td>
<td>41.91 (8.37)</td>
<td>43.91 (6.43)</td>
</tr>
<tr>
<td>Proactive coping</td>
<td>3.25 (2.31)</td>
<td>3.13 (1.64)</td>
<td>2.91 (2.84)</td>
<td>1.91 (.94)</td>
</tr>
<tr>
<td>PCI</td>
<td>53.86 (14.45)</td>
<td>52.50 (14.44)</td>
<td>67.80 (18.96)</td>
<td>73.52 (14.63)</td>
</tr>
</tbody>
</table>
Mindfulness practices
- Deep breathing & relaxation/meditation
- Reflection (readings, poems, prayers, reflection boxes)
- Closeness to nature (photo images, recorded sounds of nature)

Creative activities
- Experiencing music, art
- Creating music & movement (rain sticks)
- Expressing self (journaling, writing poems, prayers, stories, personal narratives)

Group processes
- Group discussion
- Sharing personal narratives
- Reminiscence

Figure 1. Model of the PATH Intervention Methods
Figure 2. Mean Life Satisfaction by Group over Time ($N = 19$)