7-2015

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Valerie Lander McCarthy
University of Louisville, valerie.mccarthy@louisville.edu

Jiying Ling
Michigan State University

Sharon Bowland
Eastern Washington University

Lynne A. Hall
University of Louisville

Jennifer Connelly
University of Louisville

Original Publication Information

This is a pre-copy-editing, author-produced PDF of an article accepted for publication in *Geriatric Nursing*, volume 36, issue 6, in 2015, following peer review. The definitive publisher-authenticated version is available online at DOI: **10.1016/j.gerinurse.2015.06.007**.

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

Valerie Lander McCarthy,[1] PhD, RN, Jiying Ling,[2] MS, PhD, RN, Sharon Bowland.[3] PhD, LCSW, Lynne A. Hall, DrPH, RN,[1] and Jennifer Connelly,[1] BSN, RN

(2015). *Geriatric Nursing*, 36(6), 431–437.

DOI: http://dx.doi.org/10.1016/j.gerinurse.2015.06.007

Corresponding Author:

Valerie Lander McCarthy, PhD, RN

Associate Professor

School of Nursing

University of Louisville

Louisville, KY 40292

vemcca01@louisville.edu

502-852-8395

Affiliations:

[a] University of Louisville

[b] Michigan State University

[c] Eastern Washington University

Acknowledgment: This study was funded by a grant awarded to Dr. Valerie Lander McCarthy by Sigma Theta Tau International and the National Gerontological Nurses Association.

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.[1] 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,[2] 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[2,3] 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.[2-10] 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.[3] 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).[11] Reed holds that ST helps older adults see living, aging, and dying as a meaningful process.[3]

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,[12-16] liver transplant recipients,[17] and women dealing with rheumatoid arthritis and multiple sclerosis.[18,19] ST has been studied in multiple populations including caregivers of persons with Alzheimer's disease,[20] homeless individuals,[21] and members of an Amish community.[22] Beaumont[23] examined ST among young adults, while Ellerman and Reed[24] studied ST and depression among middle-aged adults. Wiggs[25] 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,[14,15,17, 21, 22,25] as well as acceptance,[18,20,24] reaching out for support and coping,[15,21] and decreased depression.[24] Increased spirituality or spiritual equilibrium,[12,13,18,19,22,23,26] sense of purpose and meaning in life,[12,13,17, 18,19,25,26] and feelings of connectedness to self, others, and a higher dimension[12,13,18.19,25,26] 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.[27-29] Multiple studies showed ST was inversely related to depression in community-dwelling older adults.[30-34] Higher levels of ST were positively correlated with resilience, sense of coherence, and purpose in life among the oldest old, aged 85 and older.[34]

ST was associated with physical and mental health,[31,32] as well as with increased ability to complete activities of daily living[36] and instrumental activities of daily living.[37]

Reed[2] theorized that older adults with greater level of ST are better able to adapt and cope. McCarthy and colleagues[37-39] 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.[40]

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[33] 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[41] 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[12] 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[13] 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.[42] 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.[20] Subthemes identified using grounded theory included greater

acceptance, empathy, self-awareness, reflection, creativity, and helping others. [20] It is not clear if the effects of ST apply across cultures, as evidenced by Ramer, Johnson, Chan, and Barrett[43] 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[1] 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[44] 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[45] 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,[21,45-48] with test-retest reliability of .95.[47] Cronbach's alpha for the STS in this sample was .80.

Philadelphia Geriatric Center Morale Scale (PGCMS). Lawton's[49] 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 to17) to low (< 9). Validity was supported by correlation with Neugarten's Life Satisfaction Index[50] (.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.[51] Cronbach's alpha in this sample was .79.

Life Satisfaction Index for the Third Age-Short Form (LSITA-SF). The LSITA-SF[52] is an updated version of the Life Satisfaction Index-A (LSI-A),[50] 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[50, 53] as well as excellent goodness of fit scores in Confirmatory Factor Analysis supported the reliability and construct validity of the measure.[52] Cronbach's alpha for the LSITA in this sample was .84.

Acceptance and Action Questionnaire (AAQ-II). The 10-item unidimensional AAQ[54] 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.[55] The AAQ is considered the current gold standard measure of experiential acceptance of life situations.[53] 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[56] 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. [57] 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.[56] Cronbach's alpha for the PCI subscale in this sample was .88.

Geriatric Depression Scale (GDS). The GDS-15[58] 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 ($r = .84$, $p < .001$).[58] Cronbach's alpha in this sample was .80.

Short Form-20 Health Survey, Version 2 (SF-20). The 20-item SF-20[59] 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.[59] 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.[60] Cronbach's alpha for the SF-20 in this sample was .87.

Mini-Cog Dementia Test. The Mini-Cog[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).[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[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.

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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 to 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).

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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, [14,15,17, 21, 22,25] depression,[24, 30-34] acceptance, [18,20,24] physical and mental health,[31,32] and coping.[15,21, 37-39] 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.[12, 13, 20, 41, 42] 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

1. McCarthy VL, Bockweg A. The role of transcendence in a holistic view of successful aging: A concept analysis and model of transcendence. *J Holist Nurs*. 2013;31(2):83–91. doi: 0.1177/0898010112463492.
2. Reed PG. Theory of self-transcendence: In: Smith MJ, Liehr PR, eds. *Middle Range Theory for Nursing*. 3rd ed. New York, NY: Springer Publishing Company; 2014.
3. Reed PG. Demystifying self-transcendence for mental health nursing practice and research. *Arch Psychiat Nurs*. 2009;23(5):397–400.
4. Erikson EH, Erikson JM. *The Life Cycle Completed: Extended Version with New Chapters on the Ninth Stage of Development*. New York, NY: W. W. Norton and Company; 1997.
5. Erikson JM, Erikson EH, & Kivnick H. *Vital Involvement in Old Age.* New York, NY: Norton; 1986.
6. Jung CG. The transcendent function. In: Read H, Fordham M, Adler G, & McGuire W, eds. *The Structure and Dynamics of the Psyche: Volume 8. The Collected Works of CG Jung*. 2nd ed. London, UK: Routledge and Kegan Paul; 1972:338–357.
7. Maslow AH. *Toward a Psychology of Being*. 3rd ed. New York, NY: Wiley & Sons; 1972.
8. Peck R. Psychological developments in the second half of life. In: Neugarten B, ed. *Middle Age and Aging*. Chicago, IL: University of Chicago Press; 1968:137–147.
9. Tornstam L. Gerotranscendence: The contemplative dimension of aging. *J Aging Stud*. 1997;11(2):143–154.
10. Tornstam L. *Gerotranscendence: A Developmental Theory*. New York, NY: Springer Publishing; 2005.

11. Reed PG. Theory of Self-transcendence: In: Smith MJ, Liehr PR, eds. *Middle Range Theory for Nursing.* 2nd ed. New York: Springer; 2008:105–125.
12. Coward DD, Kahn DL. Resolution of spiritual disequilibrium by women newly diagnosed with breast cancer. *Oncol Nurs Forum*. 2004;31(2):E1–E8.
13. Coward DD, Kahn DL. Transcending breast cancer: Making meaning from diagnosis and treatment. *J Holist Nurs*. 2005;23(3):264–283.
14. Farren AT. Power, uncertainty, self-transcendence, and quality of life in breast cancer survivors. *Nurs Sci Q*. 2101;23(1):63-71.
15. Matthews EE, Cook PF. Relationships among optimism, well-being, self-transcendence, coping, and social support in women during treatment for breast cancer. *Psychooncology*. 2009;18(7):716–726. doi: 10.1002/pon.1461.
16. Thomas JC, Burton M, Griffin MT, Fitzpatrick JJ. Self-transcendence spiritual well-being, and spiritual practices of women with breast cancer. *J Holist Nurs*. 2010;28(2):115-22.
17. Bean KB, Wagner K. Self-transcendence, illness distress, and quality of life among liver transplant recipients. *J Theory Constr Test*. 2006;10(2):47–53.
18. Neil J. Transcendence and transformation in the life patterns of women living with rheumatoid arthritis. *ANS Adv Nurs Sci*. 2002;24(4):27-47.
19. Neill J. Health as expanding consciousness: seven women living with multiple sclerosis or rheumatoid arthritis. *Nurs Sci Q*. 2005;18(4):334-343. doi: 10.1177/0894318405280366.
20. Kidd LI, Zauszniewski JA, Morris DL. Benefits of a poetry writing intervention for family caregivers of elders with dementia. *Issues Ment Health Nurs*. 2011;32(9):598-604.
21. Runquist JJ, Reed PG. Self-transcendence and well-being in homeless adults. *J Holist Nurs*. 2007;25(1):5-13.

22. Sharpnack PA, Benders AM, Fitzpatrick JJ. Self-transcendence and spiritual well-being in the Amish. *J Holist Nurs*. 2011;29: 91-97.

23. Beaumont SL. Identity processing and personal wisdom: An information-oriented identity style predicts self-actualization and self-transcendence. *Identity: Int J Theory Res*. 2009;9(2): 95-115.

24. Ellermann CR, Reed PG. Self-transcendence and depression in middle age adults. *West J Nurs Res.* 2001;23(7):698–713.

25. Wiggs CM. Creating the self: Exploring the life journey of late-midlife women. *J Women Aging.* 2010;22(3):218-33.

26. Vachon M, Fillion L, Achille M. A conceptual analysis of spirituality at the end of life. *J Palliat Med*. 2009;12(1):53-59. doi: 10.1089/jpm.2008.0189.

27. Bickerstaff KA, Grasse CM, McCabe B. How elderly nursing home residents transcend losses of later life. *Holist Nurs Pract.* 2003;17(3):159–165.

28. Haugan G. Nurse-patient interaction is a resource for hope, meaning in life and self-transcendence in nursing home patients. *Scand J Caring Sci.* 2014;28(1):74–88. doi: 10.1111/scs.12028.

29. Haugan G, Rannestad T, Hammervold R, Garasen H, Espnes GA. The relationships between self-transcendence and spiritual well-being in cognitively intact nursing home patients. Int J *Older People Nurs.* 2013;9(1):65-78.

30. Hoshi M. *Self-transcendence, vulnerability, and well-being in hospitalized Japanese elders*. [dissertation]. University of Arizona; Accessed Sept. 12, 2014 at http://www.nursing.arizona.edu/library/084_hoshi_miwako.pdf; 2008.

31. Lundam B, Alex L, Jonsen E, et al. Inner strength in relation to functional status, disease, living, arrangements, and social relationships among people aged 85 years and older. *Geriatr Nurs.* 2012;33(3):167-76.

32. Moe A, Hellzen O, Ekker K, Enmarker I. Inner strength in relation to perceived physical and mental health among the oldest old people with chronic illness. *Aging Ment Health*. 2013;17(2):189-96.

33. Stinson CK, Kirk E. Structured reminiscence: An intervention to decrease depression and increase self-transcendence in older women. *J Clin Nurs*. 2006;15(2): 208–218.

34. Nygren B, Alex L, Jonsen E, Gustafson Y, Norberg A, Lundman B. Resilience, sense of coherence, purpose in life and self-transcendence in relation to perceived physical and mental health among the oldest old. *Aging Ment Health*. 2005;9(4):354–362.

35. Upchurch S. Self-transcendence and activities of daily living: The woman with the pink slippers. *J Holist Nurs*. 1999;17:251-266.

36. Upchurch S, Mueller WH. Spiritual influences in ability to engage in self-care activities among older African Americans. *Int J Aging Hum Dev*. 2005;60(1):77–94.

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.

38. McCarthy VL. A new look at successful aging: Exploring a mid-range nursing theory among older adults in a low-income retirement community. *J Theory Constr Test*. 2011;15(1):17–21.

39. McCarthy VL, Ling J, Carini R. The role of self-transcendence: A missing variable in the pursuit of successful aging? *Res Gerontol Nurs.* 2013;6(3):178–86. doi: 10.3928/19404921-20130508-01.

40. Flood M. Successful aging: A concept analysis. *J Theory Constr Test*. 2002;6(2):105-108.

41. Coward D. Facilitation of Self-transcendence in a breast cancer support group. *Oncol Nurs Forum*. 2003;30(2):291–300.

42. Walsh SM, Lamet AR, Lindgren CL, et al. Art in Alzheimer's care: Promoting well-being in people with late-stage Alzheimer's disease. *Rehabil Nurs*. 2011;36(2):66–72.

43. Ramer L, Johnson D, Chan L, Barrett MT. The effect of HIV/AIDS disease progression on spirituality and self-transcendence in a multicultural population. *J Transcult Nurs*. 2006;17(3):280-9.

44. Borson S, Scanlan JM, Chen P, Ganguli M. The Mini-Cog as a screen for dementia: validation in a population-based sample. *J Am Geriatr Soc*. 2003;51(10):1451-4.

45. Reed PG. Mental health of older adults. *West J Nurs Res*. 1989;11:143–163.

46. Reed PG. Self-transcendence and mental health in the oldest-old. *Nurs Res*. 1991;40(1):5–11.

47. Decker IM, Reed PG. Developmental and contextual correlates of elders' anticipated end-of-life treatment decisions. *Death Stud*. 2005;29:827–846.

48. Mellors MP, Riley TA, Erlen JA. HIV, self-transcendence, and quality of life. *J Assoc Nurses AIDS Care*. 1997;8(2):59–69.

49. Lawton MP. *Lawton's PGC Morale Scale*. Polisher Research Institute of the Philadelphia Geriatric Center. Available at: http://www.abramsoncenter.org/PRI/; 2003. Accessed November 31, 2012.

50. Neugarten BL, Havighurst RJ, Tobin SS. The measurement of life satisfaction. *J Gerontol*. 1961;16:134–43.

51. University of Western Ontario's Health and Rehabilitation Sciences program. *Biopsychosocial assessment tools for the elderly: Assessment summary sheet*. Accessed Sept.

12, 2014 at:
http://instruct.uwo.ca/kinesiology/9641/Assessments/Psychological/PGCMS.html; 2007.

52. Barrett AJ, Murk PJ. *Life Satisfaction Index for the Third Age – Short Form (LSITA- SF): An improved and briefer measure of successful aging*. Paper presented at: Midwest Research-to-Practice Conference in Adult, Continuing, Community and Extension Education. October 21–23, 2009; Chicago, IL: Northeastern Illinois University.
53. Salamon MJ, Conte VA. *Manual for the Salamon-Conte Life Satisfaction in the Elderly Scale (LSES)*. Odessa, FL: Psychological Assessment Resources; 1984.
54. Hayes SC, Strosahl KD, Wilson KG, et al. Measuring experiential avoidance: A preliminary test of a working model. *Psychol Rec.* 2004;54:553–578.
55. Bond FW, Hayes SC, Baer RA, et al. Preliminary psychometric properties of the Acceptance and Action Questionnaire – II: A revised measure of psychological flexibility and acceptance. *Behav Ther*. 2011;*42*:676–688.
56. Greenglass E, Schwarzer R, Jakubiec D, et al. *The Proactive Coping Inventory (PCI): A multidimensional research instrument*. Accessed Sept. 12, 2014 at: http://www.psych.yorku.ca/greenglass/pci.php; 1999.
57. Schwarzer R, Taubert S. Tenacious goal pursuits and striving toward personal growth: Proactive coping. In: Frydenberg, E. ed. *Beyond Coping: Meeting Goals, Visions and Challenges*. London, UK: Oxford University Press; 2002:19–35.
58. Sheikh JI, Yesavage JA. Geriatric Depression Scale (GDS). Recent evidence and development of a shorter version. In: Brink, T.L. ed. *Clinical Gerontology: A Guide to Assessment and Intervention*. New York, NY: Haworth Press; 1986:165–173

59. Stewart AL, Hays RD, Ware JE. The MOS Short Form General Health Survey: Reliability and validity in a patient population. *Med Care*. 1988;26:724–735. doi: 10.1097/00005650-198807000-00007.

60. Sui AL, Reuben DB, Ouslander JG, Osterweil D. Using multidimensional health measures in older persons to identify risk of hospitalization and skilled nursing placement. *Qual Life Res*. 1993;2:253–261.

61. Brown NW. *Psychoeducational Groups: Process and Practice*. New York, NY: Brunner & Routledge; 2004.

Table 1

PATH Intervention Methods and Schedule

Wk	Primary Theme (Purpose)	In-session Group Methods	Weekly Outside Activities
1	**Beginnings** (Initiating rapport and building trust)	Make a list of words/ideas associated with beginnings. Decorate a "reflection" box and share a collage of images/texts.	**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.
2	**Introspection** (Looking within and connecting to self)	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.	**Activity 2: Journaling** Listen to music CD. Write a brief story in response to questions for self-reflection in your notebook.
3	**Contemplation** (Looking at the nature of life and being part of something greater than the self)	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	**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.
4	**Relationships** (Looking at our connections with others)	Make a list of words/ideas associated with relationships. Discuss joys and barriers in relationships, with focus on	**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

		altruism and generativity. Join words/ideas to create a group story/poem or song	about the reading.
5	**Spirituality** (Looking at our connections with God or the sacred)	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.	**Activity 5: Seeking the Sacred** 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.
6	**Creativity** (Looking at how we express the self)	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.	**Activity 6: Creativity** While listening to music CD, use rain stick or other musical instrument to play along with the music.
7	**Summary** (Reinforcing learning for the long term)	Discuss benefits and feasibility of ongoing practices such as relationship sharing, reading, poetry, guided imagery, and journaling.	**Activity 7: Adopting an activity** Consider whether one or more activities that you may be continued after group ends
8	**Closure** (Saying goodbye and continuing on)		

Table 2

Demographic Characteristics of the Participants (N = 19)

Variable	Control *M (SD)* or *n (%)*	Intervention *M (SD)* or *n (%)*	Statistics	*p*-value
Age	72.63 (7.48)	68.00 (8.99)	$t(17) = 1.19$	.252
Sex			$\chi^2(1) = 3.07$	.08
Female	6 (75%)	11 (100%)		
Male	2 (25%)	0		
Race			$\chi^2(1) = .11$	.737
White	7 (87.5%)	9 (81.8%)		
Black	1 (12.5%)	2 (18.2%)		
Non-Hispanic	8 (100%)	11 (100%)	–	–
Marital Status			$\chi^2(3) = 1.38$	.71
Married/partnered	2 (25%)	5 (45.5%)		
Widowed	2 (25%)	3 (27.3%)		
Divorced/separated	2 (25%)	2 (18.2%)		
Never married	2 (25%)	1 (9.1%)		
Income			$\chi^2(3) = 1.36$	.715
Mostly inadequate	1 (12.5%)	1 (9.1%)		
Adequate	3 (37.5%)	7 (63.6%)		
Mostly adequate	1 (12.5%)	1 (9.1%)		
Completely adequate	3 (37.5%)	2 (18.2%)		

Education			$\chi^2(4) = 6.01$	.198
< high school diploma	1 (12.5%)	0		
High school diploma	0	5 (45.5%)		
Some college	4 (50%)	4 (36.4%)		
College graduate	2 (25%)	1 (9.1%)		
Professional degree	1 (12.5%)	1 (9.1%)		

Table 3

Study Outcomes by Group and Time (N = 19)

Variable	Control		Intervention	
	M (SD)		*M (SD)*	
	Time 1	Time 2	Time 1	Time 2
Self-transcendence STS	3.53 (.11)	3.49 (.12)	3.50 (.10)	3.55 (.10)
Life satisfaction LSITA-SF	3.85 (.21)	3.47 (.25)	3.66 (.18)	3.80 (.21)
Acceptance AAQ-II	5.53 (.94)	5.50 (1.03)	5.20 (1.05)	5.25 (.69)
Well-being PGCM	14.00 (3.12)	13.50 (3.16)	13.18 (2.96)	14.45 (1.44)
Proactive coping PCI	40.29 (6.26)	39.86 (5.98)	41.91 (8.37)	43.91 (6.43)
Depression GDS	3.25 (2.31)	3.13 (1.64)	2.91 (2.84)	1.91 (.94)
Health-related QOL SF-20	53.86 (14.45)	52.50 (14.44)	67.80 (18.96)	73.52 (14.63)

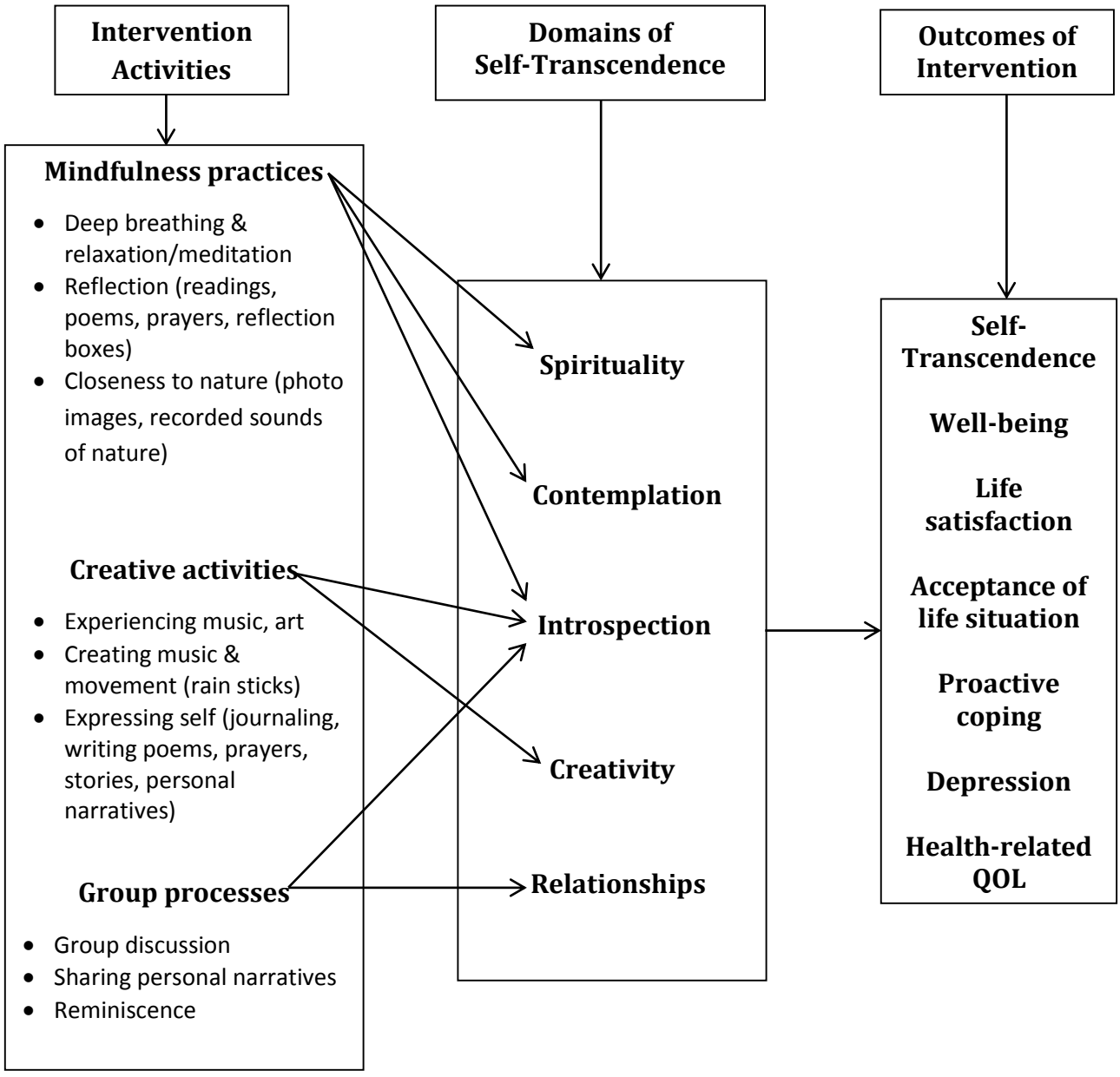

Figure 1. Model of the PATH Intervention Methods

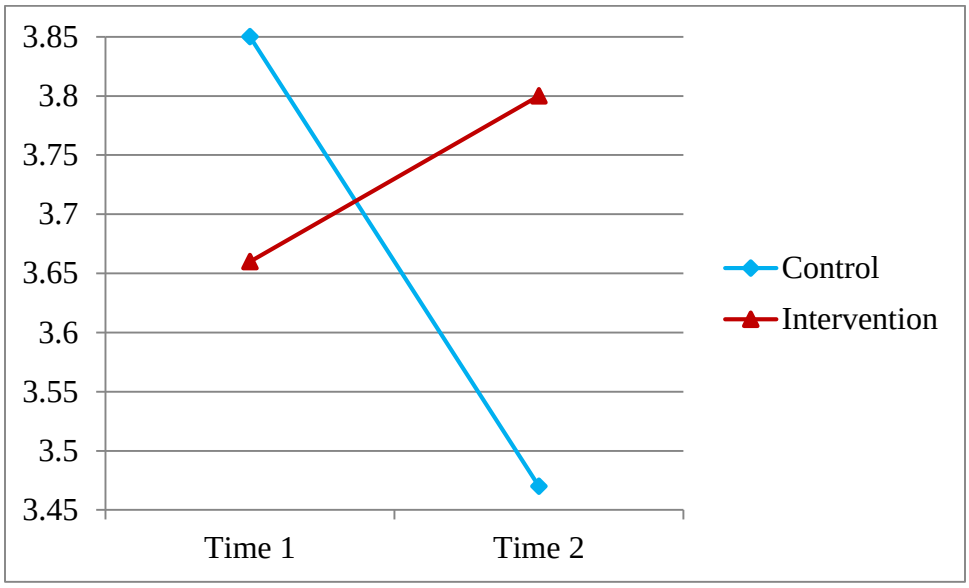

Figure 2. Mean Life Satisfaction by Group over Time (*N* = 19)