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The Effect of a Resourcefulness Training Intervention on Relocation Adjustment and Adaptive Functioning among Older Adults in Retirement Communities

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Abstract

The population of older adults is increasing rapidly and is expected to reach 83.7 million by the year 2050. Previous research demonstrates that greater resourcefulness is associated with better quality of life and life satisfaction. The purpose of this pilot study was to evaluate the effects of a resourcefulness training intervention on positive cognitions, resourcefulness, relocation adjustment, and adaptive functioning among older adults who have relocated to retirement communities. Resourcefulness theory provided the theoretical framework for this study. Forty older adults who relocated to three

retirement communities in Milwaukee, WI were randomly assigned to either a diversional activity group or to a resourcefulness training (RT) intervention group. Two older adults dropped out of the study (one from the diversional activity group and one from the RT group), leaving 38 elders. The results of the study indicated that there were slight increases (a trend) in the mean of positive cognitions, relocation adjustment, adaptive functioning, and personal resourcefulness in the expected direction for the RT intervention group as compared to the diversional group. Recommendations for future research include the use of larger and more diverse samples over a longer periods of time (6 weeks and 12 weeks post-intervention) as well as the use of cut scores on the resourcefulness scale so that the RT training intervention is taught to those who need it.

The population of older adults is increasing rapidly and is expected to reach 83.7 million by the year 2050, which is approximately double the number of older adults estimated in 2012 (Ortman, Velkoff, & Hoga, 2014). The rapidly growing aging population in the United States has lead to the construction of 30,000 to 40,000 retirement communities that house around one million elderly residents (Bekhet, Zauszniewski, & Nakhla, 2009; Chao, Hagsavas, Mollica, & Dwyer, 2003). Relocation to a retirement community is a life transition that has become a fact of life for many elderly persons (Aminzadeh, Dalziel, Molnar, & Garcia, 2009; Dupuis-Blanchard, Neufeld, & Strang, 2009). Older adults are especially prone to relocation to retirement communities after an acute illness, a period of hospitalization, or the death of a spouse (Hertz, Rossetti, Koren & Robertson, 2007). Relocation often results in changes in an elder's health, social support, adaptive functioning, ability to cope, and might result in increased morbidity and mortality (Gallagher & Walker, 1990; Grant, Skinkle & Lipps, 1992; Hertz et al., 2007; Kao, Travis, & Acton, 2004; Walker, Curry, & Hogstel, 2007).

Bekhet and colleagues (2009) conducted a study to understand the reasons for relocation to retirement communities from the perspectives of relocated older adults. Several themes emerged from the qualitative analysis. The themes reflected three categories, labeled as pushing factors, pulling factors, and overlapping factors. Pushing factors included the elder's or their spouse's failing health, getting rid of responsibilities, not being helped, facility closure, and loneliness. Pulling factors were location, familiarity and reputation of the facility, security, and joining with friends. The third category reflected both pushing and pulling factors, which overlapped and constituted their

reason for moving. Taken together, these factors suggested the need for tailored interventions to address elders' special needs or concerns associated with relocation (Bekhet, Zauszniewski, & Nakhla, 2009).

The middle range theory of resourcefulness provided the theoretical framework for this study (Zauszniewski, 2012). In general, a middle range theory is defined as a collection of related ideas that are focused on a limited dimension of the nursing discipline. These theories are composed of concepts and suggested relationships among them that can be depicted within a theoretical framework (Smith, 2014). Resourcefulness theory suggests that the effects of relocation on an elder's adaptive functioning and relocation adjustment may be influenced by positive cognitions and resourceful behaviors. Figure 1 shows the major constructs of resourcefulness theory addressed in this study: process regulators, resourcefulness, and quality of life (Zauszniewski, 2012).

Figure 1. Major constructs of resourcefulness theory addressed in the study.

As shown in Figure 1, process regulators are variables that may affect personal and social resourcefulness and quality of life indicators, represented in this study by adaptive functioning and relocation adjustment. The process regulator identified in this study was positive cognitions, defined as specific positive thinking patterns that enhance one's ability to effectively manage daily activities and promote mental health (Zauszniewski, McDonald, Krafcik, & Chung, 2002). The selection of positive cognitions as the process regulator in this study is

consistent with seminal research on resourcefulness in which process-regulating cognitions were identified (Rosenbaum, 1980, 1990).

Within resourcefulness theory, the construct of resourcefulness is conceptualized in two forms: personal (self-help) and social (help-seeking) resourcefulness. However, in general, resourcefulness is "a collection of cognitive and behavioral skills that are used to attain, maintain, or regain health" (Zauszniewski, 2012, p. 448). Resourcefulness includes the ability, through personal resourcefulness or self-help, to maintain independence in daily tasks despite potentially unfavorable situations (Rosenbaum, 1990; Zauszniewski, 2012) and to look for help from others when one cannot function alone (i.e., social resourcefulness or help-seeking) (Zauszniewski, 2012). The theory suggests that personal and social resourcefulness may influence the effects of process regulators on quality of life indicators. The quality of life indicators that were examined in the study reported here are relocation adjustment and adaptive functioning; that is, how well an elder adjusts to relocation and how well he or she functions in daily activities. Relocation adjustment refers to the ability of older adults to handle the different demands associated with relocation and to stabilize as members of a residential home community (Bekhet & Zauszniewski, 2014; Lee, Woo, & Mackenzie, 2002). Adaptive functioning includes personal care, socialization, and relationships with others, leisure activities, and vocational skills.

Previous research demonstrates that greater resourcefulness is associated with better quality of life, life satisfaction, and being better able to deal with adverse situations more constructively (Bekhet, Zauszniewski, & Wykle, 2008; Boonpongmanee, Zauszniewski, & Morris, 2003; Zauszniewski, Musil, Burant, Standing, & Au, 2014). A descriptive, cross-sectional study conducted by Bekhet and colleagues (2008) showed that resourcefulness had a moderating effect on the relationship between relocation controllability (the extent to which elders decide to move while they were still in control of the move) and relocation adjustment when controlling for covariates in a sample of 104 cognitively unimpaired elders (aged 65+ years) who have relocated to retirement communities in Northeast Ohio.

In summary, the information gained from previous studies provided direction for developing and testing a resourcefulness training intervention for older adults who relocated to retirement communities as an initial step to help older adults to adjust to relocation and to maintain healthy, independent, productive lifestyles and adaptive functioning.

Purpose of the study

The purpose of this pilot study was to evaluate the effects of a resourcefulness training (RT) intervention on positive cognitions, resourcefulness, relocation adjustment, and adaptive functioning among older adults who have relocated to retirement communities. The specific hypotheses of the study are:

1. The RT intervention group will have a higher mean scores post-intervention (T2) on the primary outcome measures, namely total resourcefulness, personal resourcefulness, and social resourcefulness, as compared to the pre-intervention baseline (T1).
2. The RT intervention group will have a higher mean scores post-intervention (T2) on the secondary outcome measures, namely positive cognitions, relocation adjustment, and adaptive functioning, as compared to as compared to the pre-intervention baseline (T1).
3. The RT intervention group will have higher mean scores post-intervention on the primary and secondary outcome measures, namely total resourcefulness, personal resourcefulness, social resourcefulness, positive cognitions, relocation adjustment, and adaptive functioning, as compared to the diversional activity group.

The RT intervention

The resourcefulness training intervention was administered to two small groups with ten elders in each of the two groups. One participant dropped from one of the two intervention groups leaving 19 participants (ten in one group and nine in the other group). Research has shown that group interventions have greater potential than

individual interventions (Conn, Valentine, & Cooper, 2002). A group approach is desirable for older adults who live in retirement communities because they are accustomed to groups. Older adults have been found to be more active and maintain more active lifestyles when they have more opportunities to interact and communicate with others, gain new friends, and enjoy the companionship of other participants (Caperchione & Mummery, 2006). In fact, various group interventions have been successful with older adults including, psycho-educational, cognitive behavioral, psychodynamic, and interpersonal interventions (Ayers, Sorrell, Thorp, & Wetherell, 2007; Miller, 2008; Van't Veer-Tazelaar et al., 2009; Wilkinson et al., 2009).

The small group format provides a forum for socialization, exercises for improving social skills and self-efficacy, and addresses other barriers to social contact. In comparison to large groups, medium size groups have been found more conducive to achieving the goals of the group, that is, socialization and sharing of personal information (Cohen-Mansfield et al., 2007). A group size of ten elders was used in a previous study of resourcefulness training (Zauszniewski, 1997; Zauszniewski, Eggenschwiler, Preechawong, Roberts, & Morris, 2006). Thus the small group size was ideal for the resourcefulness training intervention for relocated older adults in the proposed study.

For the two resourcefulness intervention groups training (RT), one session was scheduled every week for six weeks. Each session lasted for one and one half hours and included teaching older adults the skills that constitute resourcefulness. The eight skills in the RT were taught by a trained nurse clinician and were made up of three social (help-seeking) and five personal (self-help) resourcefulness skills.

The first session provided an introduction to eight strategies that spell the word RESOURCE. Then, the eight strategies were taught as follows: Rely on family/friends and, Exchange ideas with others (session #2); Seek professionals or experts (session #3); Organize daily activities (session #4); Use positive self-talk and Reframe the situation positively (session #5); and Change from usual reaction and Explore new ideas (session #6). The first three of the eight skills that

were taught in sessions #2 and #3, are social resourcefulness skills (help-seeking) and the last five, taught in sessions #4, #5, and #6, are personal resourcefulness skills (self-help). The RT intervention is innovative in using principles of learning and memory enhancement (i.e., mnemonic strategies that include an acronym, chunking, and reinforcement) (Thornton & Conway, 2013) for teaching and recalling the RT skills. An acronym, by definition, is formed by the first letter of words or groups of words to form a new word. The acronym "RESOURCE" is used to facilitate learning and recall of the eight resourcefulness strategies. Chunking is another mnemonic strategy, and it refers to the common rule that a person can remember between five and nine things at one time. The word RESOURCE contains eight letters, which is a reasonable "chunk" of ideas for the caregivers to remember, and the skills are chunked into personal and social resourcefulness skills. Reinforcement is another mnemonic strategy. In fact, the skills constituting resourcefulness must be reinforced and practiced, not just learned. Therefore, during each small group session, the resourcefulness skills were discussed by the intervention provider and the caregivers; examples of situations where the caregivers may use each skill were shared and reinforced by the other group members (Zauszniewski & Bekhet, 2011; Zauszniewski, Musil, & Au, 2013).
Instructional methods included group discussion, verbal instruction, and mnemonic cards.

Methods

Research Design

The design for this study involved random assignment of participants to one of two conditions, either to receive resourcefulness training (RT) or to receive a diversional activity. Participants in the diversional activity group engaged in six sessions of activities such as bingo, domino, and card games. The diversional activities consisted of one session per week for six weeks. Each session lasted for one and one half hours. The six sessions were facilitated by an undergraduate student who was blinded to the RT intervention. Data were collected before elders' participation in either group and immediately after the intervention.

Participants

To be included in the study, the participant had to be 65 years or older and cognitively intact as determined by the Short Portable Mental Status Questionnaire (SPMSQ; Pfeiffer, 1975). The SPMSQ was administered to screen for cognitive deficits, and four older adults who scored less than seven were not included in the study because they failed to meet the study criteria of being cognitively intact. As a result, they did not complete the baseline survey and were not assigned to any of the groups. The recruitment process continued until we reached our desired sample of 40 cognitively intact older adults. However, two of the 40 participants (one from the diversional activity group and one from the RT group) dropped out of the study during the intervention period leaving a total of 38 older adults who completed the study.

Procedure

Prior to recruitment, approval was obtained from the university's Institutional Review Board. The researchers contacted the staff in the three retirement communities to ask for their help in recruiting the study participants. Flyers containing information about the study as well as the researchers' contact information were distributed in the three retirement communities by staff members. In addition, staff members arranged a meeting time in the retirement communities, during which the PI and the research assistant met the residents in each retirement community, introduced them to the study, and answered their questions. Those who were interested contacted the researchers. The research assistant met with the residents in a conference room at an agreed upon time and explained the purpose of the study. Those who were interested completed the Short Portable Mental Status Questionnaire (SPMSQ) to screen for cognitive deficits (Pfeiffer, 1975). The questionnaire items, as well as the intervention, required older adults to be cognitively intact. Those who were interested in participating and met the study criteria were interviewed and completed all the study questionnaires after signing a consent form.

Three retirement communities in Milwaukee, WI, participated in the study. One retirement community housed one control group (ten

participants) and one intervention group (ten participants). In this retirement community, participants were randomly assigned by the flip of coin to be either in the diversional activity group or the RT group. One participant dropped out of the intervention group in this facility due to scheduling conflicts; leaving nine participants in the intervention group in this facility. The two groups were held in this retirement community on different days and in different rooms. The two other retirement communities were randomly assigned to either a diversional activity or to the RT intervention. The RT intervention and the diversional activity groups took place within these retirement communities.

On an agreed upon date and time, quantitative data concerning relocation adjustment, adaptive functioning, positive cognitions, and resourcefulness were collected during individual face-to-face, structured interviews with the older adults before the intervention (baseline, Time 1 [T1]) and at one week post-RT intervention (Time 2 [T2]); interviews were performed on a similar timeframe for the diversional activity group. All data collection interviews took place in the retirement communities, either in the older adult's room or in a private room within the facility as preferred by the older adult.

Measures

Resourcefulness

Resourcefulness was measured by the 28-item Resourcefulness Scale (RS) (Zauszniewski, Lai, & Tithiphontumrong, 2006). The Resourcefulness Scale is a self-report tool that evaluates participants' tendencies to use self-help and help-seeking behaviors when faced with negative situations (Zauszniewski, Lai et al., 2006). The Resourcefulness Scale consists of 28 items; 16 items measure the individual's personal resourcefulness and 12 items measures the individual's social resourcefulness (Zauszniewski, Lai et al., 2006). The RS is a six-point Likert Scale ranging from 0 (not at all like me) to 5 (very much like me); the scores range from 0 to 140 and higher scores indicate greater personal and social resourcefulness (Zauszniewski, Lai et al., 2006). Internal consistency for the Resourcefulness Scale has been estimated by Cronbach's alpha of .83

(Zauszniewski, Lai et al., 2006). Evidence for construct validity was demonstrated by the emergence of the two dimensions of resourcefulness (personal and social) in a confirmatory factor analysis and strong intercorrelation between the two subscales ($r = .41$, $p < .001$) (Zauszniewski, Lai et al., 2006). The Cronbach's alphas on the Resourcefulness Scale in this study were .90 and .93 for Time 1 and Time 2, respectively.

Positive cognitions

The Depressive Cognition Scale (DCS; Zauszniewski, 1995) was used to measure positive cognitions. The DCS measures depressive cognitions when its scoring is reversed; however, all items are phrased in a positive direction (Zauszniewski, Chung, Krafcik, & Sousa, 2001). In this study, the scores were not reversed for the purpose of measuring positive cognitions. The DCS consists of eight items on a 6-point scoring system ranging from 5 (strongly agree) to 0 (strongly disagree) to denote the degree to which a specific statement represents the participant's current thoughts (Zauszniewski, 1995; Zauszniewski et al., 2001). Scores range from 0 to 40 and a higher score denotes a greater number of positive cognitions when scoring is not reversed (Zauszniewski, 1997). Zauszniewski (1995) reported acceptable internal consistency (α = .78) and demonstrated construct validity by significant correlations in the expected directions ($p < .001$) with measures of depression and adaptive functioning (r's = .54, −.60, respectively). Confirmatory factor analysis indicated the presence of a single factor with all item factor loadings exceeding .30; 40% of the total variance of the scale was explained (Zauszniewski, 1997; Zauszniewski et al., 2001). The Cronbach's alphas of the DCS in this study were .73 and .74, for Time 1 and Time 2, respectively.

Relocation adjustment

Relocation adjustment was measured by the Index of Relocation Adjustment scale (IRA; Prager, 1986), which contains six items on a 4-point Likert type scale ranging from completely agree to completely disagree. Scores may range from 0 to 18 with higher scores indicating better relocation adjustment after reverse scoring three items. The results of factor analysis revealed a single factor, with loadings ranging

from .65 to .79. The Cronbach's α coefficient of .87 revealed that six items reflected a single construct. Construct validity was indicated by the relatively high correlation of .79 between a measure of relocation adjustment and the 25-item General Contentment Scale (GCS; Hudson, 1982). The six items are components of adjustment that reflect two integrally related dimensions of adjustment: congruence and continuity. The physical integration of the self, the experience of psychosocial and cultural belonging, and the maintaining and maximizing of control and independence in interactions with one's situational stimuli, are suggested by the first three items. The last three items reflect more on the need of the relocatee to maintain a sense of continuity with his or her past. The Cronbach's alphas of the IRA in this study were .80 and .76, for Time 1 and Time 2, respectively.

Adaptive functioning

Adaptive functioning was measured using a modified version of the Smith and Ford (1990) Community Living Skills Scale (CLSS). The modified CLSS contains 42 items that are phrased in behavioral terms on a 4-point Likert scale ranging from hardly ever to almost always. The scale has four measures that assess: 1) personal care; 2) socialization and relationship with others; 3) leisure activities; and 4) vocational skills. Higher composite scores indicate higher adaptive functioning of older adults. Internal consistency of the modified CLSS ranged from .93 to .97 (Zauszniewski, 1994, 1997). Construct validity was demonstrated (Smith & Ford, 1990; Zauszniewski, 1997). The Cronbach's alphas of the DCS in this study were .89 and .85, for Time 1 and Time 2, respectively.

Plan For Data Analysis

Data were analyzed using IBM SPSS Statistics 22.0. Preliminary data analysis involved an examination of descriptive data, including means and standard deviations as well as frequency distributions.

Effectiveness of the RT intervention was determined through hypothesis testing and experimental design, including a comparison between pre- and post-intervention groups on the primary outcome

measure, resourcefulness (personal and social resourcefulness), and on the three secondary outcome measures, positive cognitions, relocation adjustment, and adaptive functioning. In addition, elders who received the RT intervention were compared to those in the diversional activity groups on the primary and secondary outcome measures. Since this study was a pilot study with a final sample size of 38, the focus was on examining trends in expected direction on the study outcomes and effect sizes.

First, we examined the differences (trends) between the mean scores on the primary outcome measure, resourcefulness (personal and social) at Time 1 (pre-intervention) and Time 2 (post-intervention) for the RT intervention group ($n = 19$).

Next, we examined the differences between the mean scores on the secondary outcome measures, positive cognitions, relocation adjustment, and adaptive functioning at Time 1 (pre-intervention) and Time 2 (post-intervention) for the RT intervention group ($n = 19$). Also, we calculated the effect sizes for future research for each of the primary and the secondary outcome measures.

Finally, we compared the mean scores on the primary and the secondary outcome measures between the two groups (the RT intervention [$n = 19$] and the diversional activity groups [$n = 19$]).

Results

The age range of the sample was 65 to 92 ($M = 78$ years). 75% of the participants were female ($n = 29$) and 24% were male ($n = 9$); 26.3% of the residents were married ($n = 10$), 23.7% were never married ($n = 9$), 26.3% were widowed ($n = 10$), and 23.7% were divorced or separated ($n = 9$); 31.6% said that their annual income was between $5,000 and $10,000 ($n = 12$); 26.3% said that their annual income was between $10,000 to less than $20,000 ($n = 10$); 21.1% said that their annual income ranged between $20,000 to less than $40,000 ($n = 8$); 18.4% said that their annual income was equal or more than $45,000 ($n = 7$); and one older adult reported "unknown income." Regarding education, almost 40% of the sample reported some high school or a high school diploma ($n = 15$), 44.8% completed

an associate or college degree (*n* = 17), 10.5% reported a graduate degree (*n* = 4), and two older adults reported that their education was less than seven years of school. All residents were currently living in the independent living facility where the study took place. Eighty-two percent of older adults in this sample were transferred from home and 18% were transferred either from hospitals, other units, or other sites. 60.5% of the participants were Caucasian and 31.6% were African American, the remaining were of another ethnicity, such as Hispanic (Bekhet, Zauszniewski, & Matel-Anderson, 2012).

The reasons for relocating to retirement communities, as indicated by relocated older adults in this study, were: health problems and the need to be taken care of, loneliness, the death of the partner, affordability, being around people, and being in a familiar neighborhood.

As shown in Table 1, there were slight increases (a trend) in the mean scores on the primary outcome measure in the expected direction (post-intervention) for all the measures (total resourcefulness, personal resourcefulness, and social resourcefulness).

TABLE 1 Measures of fidelity—Personal resourcefulness, social resourcefulness, and total resourcefulness for the intervention group (*n* = 19).

Fidelity Measures	T1-Mean (*SD*)	T2-Mean (*SD*)	Effect size
Personal Resourcefulness	63.89 (13.99)	64.75 (13.82)	.06
Social Resourcefulness	38.32(12.98)	38.68 (13.37)	.03
Total Resourcefulness	102.21 (25.14)	103.42 (24.64)	.05

Also, there were slight increases (a trend) in the mean scores on the secondary outcome measures in the expected direction (post-intervention) on the three outcome measures, positive cognitions, relocation adjustment, and adaptive functioning (Table 2).

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TABLE 2 Measures of the outcomes—Positive cognitions, relocation adjustment, and adaptive functioning for the intervention group (*n* = 19).

Outcome Measures	T1-Mean (*SD*)	T2-Mean (*SD*)	Effect size
Positive Cognitions	34.58 (4.53)	35.53 (4.50)	.11
Adaptive Functioning	99.63 (13.39)	101.53 (11.96)	.15
Relocation Adjustment	12.53 (3.60)	13.42 (3.11)	.29

Finally, the results of the study revealed that there were slight increases (a trend) on the mean scores on positive cognitions, relocation adjustment, adaptive functioning, and personal resourcefulness in the expected direction for the intervention group as compared to the diversional group. Surprisingly, the mean scores in regard to social resourcefulness were higher in the diversional activity group than in the RT intervention group (Table 3).

TABLE 3 Comparison between the control and the intervention groups on the outcome measures post-intervention (time 2).

	Total sample (*n* = 38)	
Variable	Intervention (*n* = 19) Mean (*SD*)	Diversional (*n* = 19) Mean (*SD*)
Positive Cognitions	35.53 (4.5)	35.47 (3.3)
Personal Resourcefulness	64.74 (13.82)	63.32 (15.06)
Social Resourcefulness	38.69 (13.37)	42.26 (10.97)
Adaptive Functioning	101.5 (12.0)	101.5 (11.45)
Relocation Adjustment	13.58 (2.87)	12.53 (3.60)

Discussion

This study is the first attempt to evaluate the effects of a resourcefulness training (RT) intervention on relocation adjustment among older adults who have relocated to retirement communities. The study also evaluated the effects of RT on positive cognitions and adaptive functioning among older adults who relocated to retirement communities. The results of this study show slight increases in the expected direction (i.e., trends) from baseline to post-intervention on the mean scores on the primary (total, personal, and social resourcefulness) and secondary outcome measures (positive cognitions, relocation adjustment, and adaptive functioning). These results are similar to those reported from a study of healthy elders

who received a six-week small group resourcefulness training intervention (Zauszniewski, 1997). In that study, the elders who received resourcefulness training improved in resourcefulness, adaptive functioning, and life satisfaction from pre-test to post-test while those in a diversional activities group did not.

In addition, the findings from the study reported here are consistent with other longitudinal studies of the effects of resourcefulness training using the group process with elders in retirement communities (Zauszniewski, Bekhet, Lai, McDonald, & Musil, 2007; Zauszniewski, Eggenschwiler, Preechwong, Roberts, & Morris, 2006). Taken together, the results from those studies showed that elders who received resourcefulness training improved in their perceptions of their health and functional status in comparison with elders in a reminiscence group (Zauszniewski, Eggenschwiler et al., 2006) and in their affect, behavior, and cognition in comparison with elders in a diversional activity group (Zauszniewski et al., 2007). Gonzalez and colleagues (2014) tested a resourcefulness training intervention, which used the group process, in family caregivers of persons with dementia. Their results indicate that caregivers in the intervention group reported significantly more resourcefulness skills and lower anxiety over time than caregivers in a standard care control condition.

Although use of the group process to reinforce resourcefulness skills was reported to be effective, it is important to consider that the group approach to intervention with older adults might not be universally desirable. In fact, researchers have suggested some barriers to group participation, including unsuitable meeting schedules, mobility restrictions, reluctance to disclose personal problems, concern for confidentiality, lack of time, and not knowing other group members (Wright & Hyner, 2009). Additionally, research on resourcefulness training with populations that were not older adults, including mothers of technology-dependent children (Toly, Musil, & Zauszniewski, 2014) and grandmothers raising grandchildren (Zauszniewski, Musil, Burant, & Au, 2014; Zauszniewski, Musil, Burant, Standing, & Au, 2014), has shown positive effects on health outcomes using an individualized and tailored approach. Therefore, although it may be interesting to explore differences in approaches used in resourcefulness training with elders

(i.e., group versus individual approaches), in a systematic review of literature by Forsman and colleagues (2011), the use of the group approach to psychosocial interventions with elders was found to be superior for mental health promotion and enhanced quality of life.

The lack of significant differences in the study reported here was most likely due to the small sample size of 19 subjects in each group. Other studies of resourcefulness training yielded medium to large effect sizes, but other outcomes were measured; sample sizes were larger; in many cases, the populations were not older adults; and, in some cases, the approach to teaching resourcefulness skills was different (Gonzalez et al., 2014; Toly et al., 2014; Zauszniewski et al., 2007; Zauszniewski, Eggenschwiler et al., 2006; Zauszniewski, Musil, Burant, & Au, 2014; Zauszniewski, Musil, Burant, Standing, & Au, 2014) However, because this study yielded small effects sizes on the outcomes of interest, future studies may require a larger sample size to detect significant changes on the outcome of interest.

In addition, changes on the outcome measures may not have been noticeable because of the time frame used in this study. In other words, it might have been too early to expect to see changes in adaptive functioning and relocation adjustment immediately after the intervention. Previous studies on resourcefulness have shown effects on such outcomes beginning to emerge at 6 weeks post-intervention and maybe not until 12 weeks post-intervention (Zauszniewski et al., 2007; Zauszniewski, Eggenschwiler et al., 2006). Similarly, for resourcefulness, because the measure captures use of resourcefulness skills (and intervention recipients may not have had a chance to begin to use what they were taught), we might not see changes until six weeks after intervention, and this pilot study was not extended for that long. In fact, in a randomized controlled trial conducted by Gonzalez and colleagues (2014), a resourcefulness training intervention in caregivers of persons with dementia illustrated this point. More specifically, their results indicated that caregivers in the intervention group reported significantly more resourcefulness skills, with a medium effect at week 6 and a small effect 12 weeks later, compared with the control group. Also, caregivers' anxiety (as an outcome measure) was reduced in the intervention group at 12 weeks. Similarly, grandmothers who received the RT reported fewer

symptoms over time than those in the comparison group (Zauszniewski, Musil, Burant, Standing, & Au, 2014).

A final factor that might account for the lack of significance is that the study participants in the current study were already high on positive thinking and resourcefulness before the intervention, giving them little room for improvement. Indeed, their baseline score of 102 on the resourcefulness scale reflects a somewhat low need for resourcefulness training (Zauszniewski, Au, & Musil, 2012). In fact, preliminary screening of study participants based on their baseline resourcefulness score and exclusion of those whose scores indicate a low need for the intervention might lead to the possibility of a ceiling effect. Rather, future research might consider the use of cut scores on the resourcefulness scale so that the resourcefulness training intervention is taught to those who would be most likely to benefit from it.

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