

**ACTIVITIES AND ADAPTIVE STRATEGIES IN LATE LIFE DEPRESSION:
A QUALITATIVE STUDY**

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Submitted to the Graduate Faculty of
School of Health and Rehabilitation Sciences in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy

University of Pittsburgh

2010

UNIVERSITY OF PITTSBURGH
SCHOOL OF HEALTH AND REHABILITATION SCIENCES

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This study sought to understand activity choices of older adults when they were depressed and in the early stages of recovery. Qualitative analysis was used to identify themes of activities continued, stopped, resumed, and newly begun. Participants (n=27) were recruited from a randomized clinical trial (R37 MH43832) and were community dwelling, predominantly female, with a mean age of 73.3 years. One interview was conducted with each participant in recovery for at least 3 but no longer than 7 months, using a semi-structured interview.

When depressed, participants continued some activities and stopped others. Activities were continued when they were part of an established habit or commitment, gratifying, a means of distraction or escape, and/or an attempt to hide depression from others. Participants continued activities when they were nudged by another person and/or felt a sense of pushing oneself to maintain normalcy. Participants stopped some activities when they were no longer meaningful and/ or were too physically painful to complete. Some activities were stopped when participants had insufficient physical/cognitive energy or did not wish to expend their limited reserve, avoided negativity, and/or constricted their social space.

In recovery, the majority of activities in which participants engaged when they were depressed were continued spontaneously. Some, however, were stopped when no longer meaningful or necessary, and/or when participants' activity level increased substantially, limiting available time. Participants resumed most activities when activities were again meaningful,

physical and/or cognitive energy returned, pain complaints diminished, health promotion was desired, and/or when participants were able to confront negative situations, and/or enlarge their social space. Some activities, however, were not resumed when participants actively weighed activity options and chose to divert time and energy to higher priorities. Some participants engaged in new activities not done prior to or during depression when positive self-change opened up opportunities for engagement or participants undertook efforts to reorganize their lives.

In conclusion, adaptive strategies were brought into play at various time points as participants selected activities to continue, stop, resume, and newly begin as they strove to survive the depressive episode and, then, re-enter and participate in their former lives in recovery.

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PREFACE

As I complete this 5+ year journey, there are many people I would like to recognize. First, I would like to thank my advisor and chair of my dissertation committee, Dr. Joan C. Rogers, PhD, OTR/L for her guidance throughout my doctoral training. I especially appreciate her unrivaled knowledge, profound wisdom, and unwavering fortitude while she challenged me to have a meaningful experience.

I would also like to thank the members of my dissertation committee, Dr. Margo B. Holm, PhD, OTR/L, for upholding rigorous standards and providing thorough, objective feedback; Dr. Ketki D. Raina, PhD, OTR/L, for sharing knowledge in qualitative research and answering countless questions; Dr. Elizabeth R. Skidmore, PhD, OTR/L, for sharing expertise in synthesis and writing; and Dr. Charles F. Reynolds, III, MD, for modeling research excellence and facilitating access to research participants (R37 MH43832).

Finally, I deeply thank my family and friends for their endless love and support throughout my doctoral program. I especially want to thank my parents for the love, guidance, and firm foundation they have provided throughout my life.

1.0 INTRODUCTION

Major depression is an illness characterized by a change in mood, sleeping or eating habits; low energy or fatigue; reduced concentration; feelings of worthlessness or excessive guilt; restlessness or slowed movements; and/or thoughts of death or suicide (American Psychiatric Association, 2000). In 2000 there were 35 million adults aged 65 and older in the United States and it is estimated that this number will double to 70 million by 2030 and rise to 82 million by 2050 (Jarvik & Small, 2005). The prevalence of major depression in this group is 1% with 1.4% in women and 0.4% in men. Additionally, approximately 15% have depressive symptoms that do not meet full diagnostic criteria for a specific depressive syndrome (Alexopoulos, 2005). It follows, then, that as the number of older adults increases, the number experiencing depression will also increase, adding to the existing public health concern.

Depression is included in The Diagnostic and Statistical Manual of Mental Disorders IV-TR (American Psychiatric Association, 2000), a nationally recognized system providing descriptions of diagnostic categories of mental disorders. This classification provides a common mechanism for professionals to diagnose, discuss, intervene and study individuals with various mental disorders. A multi-axial approach is used to organize information into 5 domains. Axis I, "Clinical Disorders and Other Conditions That May Be a Focus of Clinical Attention," includes 16 major groups of disorders. They are: Disorders Usually First Diagnosed in Infancy,

Childhood, or Adolescence; Delirium, Dementia, and Amnesic and Other Cognitive Disorders; Mental Disorders Due to a General Medical Condition; Substance-Related Disorders; Schizophrenia and Other Psychotic Disorders; Mood Disorders; Anxiety Disorders; Somatoform Disorders; Factitious Disorders; Dissociative Disorders; Sexual and Gender Identity Disorders; Eating Disorders; Sleep Disorders; Impulse-Control Disorders Not Elsewhere Classified; Adjustment Disorders; and Other Conditions That May Be a Focus of Clinical Attention. “Mood Disorders” is broken down into Depressive Disorders, Bipolar Disorders, Mood Disorder Due to a General Medical Condition and Substance-Induced Mood Disorder. Finally, the Depressive Disorders include Major Depressive Disorder, Dysthymic Disorder, and Depressive Disorder Not Otherwise Specified. There are nine DSM-IV criteria for a major depressive episode. They are:

- (1) depressed mood most of the day, nearly every day
- (2) markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day
- (3) significant weight loss when not dieting or weight gain, or decrease or increase in appetite nearly every day
- (4) insomnia or hypersomnia nearly every day
- (5) psychomotor agitation or retardation nearly every day
- (6) fatigue or loss of energy nearly every day
- (7) feelings of worthlessness or excessive or inappropriate guilt nearly every day
- (8) diminished ability to think or concentrate, or indecisiveness, nearly every day
- (9) recurrent thoughts of death, recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide (p.356).

Diverse negative consequences for the individual, society, and health care system are associated with depression (Luber et al., 2000; Luber et al., 2001; Lenze et al., 2001). Among them is functional disability, inclusive of activity and participation restrictions, well known as a cardinal symptom of major depression. One model of adaptive development, devised by Baltes and Baltes (1990), may be useful for understanding depression-related disability. This model, known as “selective optimization with compensation (SOC),” outlines an ensemble of behavioral strategies to promote successful life-management in all stages of life, including late-life. Each of the three processes, selection, optimization and compensation, are distinct but must be considered concomitantly, to pursue life goals and promote well-being. This model of adaptive development can also be used to understand how individuals adapt their behavior in response to illness, such as depression. In selection, individuals set goals to prioritize and narrow their focus. Optimization refers to selecting and engaging in behaviors and life choices that increase the quality and quantity of reserve capacity. Compensation implies implementing new behaviors or methods, including the use of technology, to reach desired goals when reserve capacity is insufficient. The activity loss and gain incorporated into SOC may inform about activity disengagement and re-engagement evidenced during the trajectory into and out of major depression.

This dissertation study focused on the activities and activity level of older adults when they were depressed and when they were in recovery from depression. Specifically, the 2 aims were to:

1. identify common themes among perceptions of activities continued and stopped during depression.

2. identify common themes among perceptions of activities continued, stopped, resumed, and newly begun in recovery.

Chapters 2 and 3 address aims 1 and 2 respectively. Chapter 2 focuses on the time when participants were depressed. Perceptions of their activity choices were examined and themes reflecting decisions to continue and stop activities emerged. A description of each theme, phrases used by participants, and case examples are included.

In Chapter 3, we turn our attention to the time when participants were in recovery from depression for 3-7 months. Again, we explore their activity choices, but with more extensive conditions, including activities continued, stopped, resumed, and newly begun. The application of SOC, a model of adaptive development, is explored with our sample in both phases, when depressed and in recovery, in Chapters 2 and 3.

In Chapter 4, the results of both studies are summarized along with directions for future research.

2.0 ACTIVITY CHOICES IN LATE-LIFE DEPRESSION

2.1 BACKGROUND AND SIGNIFICANCE

Depression renders diverse negative consequences for the individual, society, and health care system. Functional disability, inclusive of activity limitations and participation restrictions, is a cardinal symptom of major depression. It is projected that depression will be the second leading cause of disability in the adult population worldwide by 2020 (Murray & Lopez, 1997). Depression is associated with greater costs in primary care patients, increased medical burden and longer hospital stays. Specifically, depressed primary care patients had more than twice the number of hospital days over the expected length of stay compared with non-depressed patients and almost double the number of medical appointments annually (Luber et al., 2000; Luber et al., 2001). Furthermore, depression can cause disability and increase mortality if inadequately treated.

A systematic review completed by Lenze et al. (2001) found numerous studies demonstrating an association between depression and disability at the domain level, that is, in basic (ADL) and instrumental (IADL) activities of daily living. ADLs are necessary self-care tasks such as eating, dressing, and bathing, while IADLs, requisite for self-sufficiency and independent living, include paying bills, household maintenance and community mobility. Three key findings emerged from the systematic review. First, the severity of disability parallels the

severity of depression. Second, subsyndromal depression is as strongly associated with disability as is major depression. Third, depression and disability increase the risk for each other. Interestingly, beyond the systematic review, the association between depression and disability has been found to be even stronger than the association between physical impairments related to chronic diseases and disability (Ormel et al., 1998). Of particular interest to interventionists, depressed remitted older adults were comparable to controls and were aware of and accurately reported their abilities in personal care and functional mobility tasks (Rogers et al., in press). Surprisingly, in the same study, self-reports of depressed individuals were more accurate than controls for physical instrumental activities such as garbage removal and bed making, although they underestimated more and overestimated less. Effective intervention for depression can lead to improved ADL, IADL and health-related quality of life (Oslin et al., 2000).

Most of what we know about depression and activity is at the domain level. Less is known about specific activities and even less about the client's experience. Understanding the experience of depression in the context of activity engagement and disengagement will provide insight into the meaning and role of activity in human adaptation. In turn, this understanding of activity and adaptation will contribute to the development of interventions for individual clients as well as populations, potentially from both restorative and preventive perspectives.

2.1.1 Objective

To help understand older adults' perceptions of their activity choices during depression, we implemented a study to identify common themes among: 1) activities continued and 2) activities stopped.

2.2 METHOD

2.2.1 Study Design

This qualitative, descriptive study (Sandelowski, 2000) explored activities of older adults as they journeyed into and out of depression. This manuscript focuses on the time when individuals were depressed. Although our concern was activity engagement when depressed, research and clinical experience indicates that when people are depressed, they are less verbal and may lack insight (Breznitz & Sherman, 1987; Edison & Adams, 1992). Thus, interviewing individuals when they were depressed was thought to be less than optimal. In collaboration with experts in late life depression we decided to interview 3 to 7 months post stabilization of depression. This time was seen as sufficiently close to the depressive episode for participants to recall it and sufficiently far enough from it for them to be able to talk about it. Hence, we interviewed about the depressive phase retrospectively, during recovery.

2.2.2 Sample

Participants were recruited from a randomized clinical trial (RCT) (R37 MH43832) investigating the combined effect of an antidepressant and donepezil on cognitive performance and functional competence. Inclusion criteria for the RCT were: (a) age 65 years and older; (b) current episode of non-psychotic, non-bipolar major depression documented on the Structured Clinical Interview for Axis I DSM-IV disorders and a rating of 15 or higher on the 17 item HDRS; (c) English-speaking; (d) willingness to discontinue psychotropic medications other than those used in the

study; (e) available family member or caregiver willing to corroborate information; and (f) hearing capacity adequate to respond to raised conversational voice. Exclusion criteria were: (a) dementia based on DSM-IV criteria (2000, pp. 147-150); (b) lifetime diagnosis of bipolar disorder, schizophrenia, or schizoaffective or other psychotic disorder; or (c) alcohol/drug abuse within the past 12 months.

We added one further inclusion criteria for the qualitative study: in the recovery phase of depression at least 3 months but no longer than 7 months. Recovery was defined as a HDRS score of 10 or less for 3 consecutive weeks. Those living beyond a 150-mile radius from the Oakland campus of the University of Pittsburgh were also excluded. Thus, by using inclusion and exclusion criteria, we adopted criterion sampling for our qualitative study (Sandelowski, 2000).

2.2.3 Measures

One interview was conducted with each participant using the Activity Card Sort (ACS) (Baum & Edwards, 2001) as a stimulus to elicit responses to guiding questions. The ACS consists of 80 color photographs of culturally diverse older adults engaging in activities in four domains: (a) instrumental (e.g., cooking dinner, paying bills, managing investments); (b) low demand leisure (e.g., photography, reading newspaper, playing musical instrument); (c) high demand leisure (e.g., swimming, exercising, gardening/growing flowers); and (d) social (e.g., traveling, visiting with friends, volunteer work). A complete list of activities is in Appendix A.

We selected the ACS because we believed it would assist in promoting recall, prompting conversation, and provide structure and focus during the interview, along with consistency among interviews.

The interview was structured around 5 guiding questions:

1. When you were depressed which activities did you continue to do?
2. Can you help me to understand what it is ‘about these activities’ that influenced you to keep doing them?
3. Now I’d like to know if you did them in the ‘same’ way you usually did them when you were not depressed or if you did them differently in some way. Can you please tell me about that?
4. When you were depressed which activities did you stop doing?
5. Can you help me to understand what it is ‘about these activities’ that influenced you to stop doing them?

Additional probing questions such as “Can you tell me more about this?” were used to clarify participant responses and confirm our understanding.

2.2.4 Data Collection Procedures

Following Institutional Review Board approval, consecutive individuals in the aforementioned RCT were recruited by their primary clinician for this study. Those agreeing to participate were contacted via telephone by the primary investigator (PI). The study was explained in detail and an interview was scheduled.

All interviews were conducted by the PI and included completion of the consent form, demographic data form, and a semi-structured qualitative interview. Interviews took place in a private venue convenient to the participant and lasted approximately 2 hours. Field notes describing participants' appearance, facial expressions, and body language were completed following each interview. Interviews were audio taped and subsequently transcribed verbatim. Accuracy of the transcriptions was verified by the PI. Information concerning participants' course of illness (depression history, date of initial onset of depression, date of current onset of depression, Hamilton Depression Rating Scale) was obtained from RCT records.

During the interview, participants first reviewed the 80 activities in the ACS and discarded those that had not been a part of their routine for the past 1-2 years. Next, participants reviewed each activity sequentially and indicated if it was continued or stopped when depressed. For each activity continued, guiding questions 2 and 3 followed while for each activity stopped, question 5 was addressed. Some participants offered multiple responses and all responses were recorded. The open-ended nature of the interview questions and individualized probes facilitated rich and detailed narratives.

2.2.5 Data Analysis

Upon completion of each interview, the PI reviewed the audiotape and hand recorded responses to each guided question on data collection sheets designed for this study. Cards from the ACS, which were placed into 3 piles (not a part of life routine for the past 1-2 years, continued to do, stopped) during the interview, were also recorded. Before beginning subsequent interviews, the PI documented intuitive feelings regarding the participant's experience in context that emerged

through their words, facial expressions and body language during the interview and/or upon review of the audiotape. Atlas.ti was the computer software program used to manage the data (Atlas.ti, 2006). First, all transcripts were entered verbatim. Second, the PI created 3 codes to identify: (1) activities participants continued to do along with their rationale, (2) compensatory strategies used to complete specific activities, and (3) activities participants stopped doing along with their rationale. Third, the PI coded each transcript. Fourth, results for all participants for each of the 3 codes were printed separately. Fifth, the PI's hand recorded responses and Atlas.ti were crosschecked by the PI to ensure thoroughness. Sixth, data for each code was read and re-read for further immersion into the data. As each interview was compared to previous interviews, patterns and themes regarding activities continued and activities stopped emerged through an inductive reasoning process. Themes changed and were reshaped over time as additional participants revealed their experiences. Once all interviews were completed, an initial list of themes was created by the PI. These themes, in turn, were scrutinized by 3 additional members of the research team to confirm and challenge each theme and activities included therein. Modifications to the initial themes were made once researchers reached consensus. Finally, another person, a peer debriefer, experienced in conducting research as well as in working with this population, was identified. She coded 4 transcripts, 15% of the data, using themes created by the PI yielding close to 100% agreement. Discrepancies occurred when: (1) one person coded an activity in a single theme while the other person more thoroughly coded it in 2 themes, (2) one person coded an activity in a select theme while the other person did not include that activity in any theme, but upon reflection, understood and agreed with the decision, (3) the peer debriefer coded a select activity in one theme but the PI coded it in another theme because she was knowledgeable of the participant's entire experience of depression and early recovery, and (4) a

“new” theme was generated for consideration but, ultimately, was considered a subset of an existing theme.

Several strategies were employed to promote credibility in our study. First, skills in interviewing and data analysis were honed through a pilot study completed prior to this study. Second, prolonged engagement with interviews of 2 hour duration, on average, allowed time for participants to become accustomed to the PI and interview process. Furthermore, the cyclic nature of the interview permitted participants to rethink and change their responses throughout the interview as well as for the PI to identify discrepancies in responses and probe for clarification. Next, a peer debriefer coded 15% of the transcripts to confirm and challenge the PI’s coding. Moreover, other members of the research team, experienced researchers and experts in late-life depression, also oversaw themes created by the PI and critically appraised case examples identified as representative of each theme.

2.3 RESULTS

2.3.1 Sample Characteristics

This qualitative study was initiated during the final year of the RCT. Twenty-nine participants met study criteria prior to closing admission to the RCT and, of those, 2 declined to participate in this study. Apprehension in reflecting back to unpleasant times and lack of personal benefit were cited as reasons for refusal. The remaining 27 participants had a mean age of 73.3 years (range 65-88 years) and mean educational level of 14.6 years (range 10-19 years). Twenty were female

(74%) and 12 (44.4%) were engaged in paid employment. The mean number of months since stabilization of depression was 5.17 (range 3-7 months). The mean HDRS score prior to the interview (approximately 1-2 weeks) was 4.7 (range 0-10) indicating recovery from depression. All participants were community-dwelling, 26 were Caucasian and 1 was African American.

Results from qualitative analyses are presented in two sections: (1) activities continued during depression and (2) activities stopped during depression.

2.3.2 Activities Continued During Depression

Examination of participants' experiences in aggregate revealed 6 themes elucidating their activity engagement. A description of each theme along with examples of phrases used by participants and 2-3 case examples are given.

2.3.2.1 Established Habits and Commitments Kept Me Engaged

Activities that were part of a long standing habit, some required for survival and self-sufficiency such as cooking and laundry, were retained. Activity habits were performed more or less automatically, and were established at different times throughout participants' lives and for different reasons. For example, washing dishes dated from childhood for one participant and was necessitated by working parents; dining monthly at a restaurant with friends stemmed from relationships established in college and remained enjoyable for another participant; and managing investments was undertaken by another participant following marriage to fulfill spousal responsibilities. Additionally, this theme includes prearranged activities which incorporated a commitment forged by a previous financial expenditure, typically purchasing a

subscription to the theater or sporting event. Activities that involved a designated time and day with subsequent accountability to other people such as volunteer and leisure activities were also retained. This theme was reflected by participants in terms such as *just becomes a habit, did all my life, committed to it, they were already established, and I have a subscription.*

One gentleman told us he continued to read the newspaper when depressed stating, “I’m a newspaper nut, I mean I read every word.” When asked why he continued, he replied, “I don’t have any idea. Just every morning I swim a mile and a quarter, I buy that newspaper, and I read it. And I don’t even think about it . . . it’s been going on for at least 50 years, more than that. You know that’s one of those things that . . . people say you must be sick if you’re not reading the paper.” When asked if there was anything different about the activity when he was depressed he stated, “I read it . . . but I’m not sure I got anything out of it, you know, but I did read it.” He followed up by saying that when not depressed he is able to remember what he reads.

When asked about volunteer work, one gentleman stated he held leadership positions on 3 Boards and continued those when he was depressed because, “I have a term to fulfill.”

One participant described the longstanding relationship he and his wife had with two other couples while going to the theater. “. . . we were all struggling along with our careers and we started to go to the theater in Pittsburgh. And we could afford only the cheapest seats in the balcony . . . Over a period of years we ended up in the best seats,

center, and started going to a good restaurant. So as our careers got better we moved our seats down.” He further explained that his role in the group had always been to renew the subscription yearly while securing the best seats and he continued this activity when depressed because of the established routine and relationship he had with friends over many years.

2.3.2.2 Some Activities Were Still Gratifying

Despite being depressed, participants experienced pleasure or a sense of accomplishment when engaging in some activities. Pleasure was derived from the relaxation, stimulation and positive feelings, whether current or reminiscent of the past, inherent in activity engagement. For example, table games were relaxing to one participant, puzzles were stimulating to another, and a beauty shop appointment yielded positive feelings for a third. The degree to which an activity matched the participant’s comfort level contributed to the pleasure rendered. For example, one participant enjoyed remaining active physically and continued gardening and woodworking. One participant, averse to conversation, desired solitude and continued swimming in contrast to another participant who craved a social connection and enjoyed shopping with her daughter. A sense of accomplishment from activity engagement was demonstrated, for example, by one participant who quilted for many months to create a gift for a friend and by another participant who tended to a garden to enjoy, ultimately, the flowers produced. This theme was described by participants in terms such as *pleasure to be with her, loves to do, makes me feel good, would give me a little satisfaction and pleasure, and it’s a sense of accomplishment.*

One woman explained that when depressed, she specifically continued gardening and yard maintenance because they, “made me feel better. It was . . . something manual, which became really important when I was depressed. I was more likely to do that than something that would involve talking, especially . . . socializing. So this (activity) was my therapy. It kept me busy for one thing and usually if I’m depressed and I force myself to be active I feel better. And there’s also research that exercise and activity helps with depression...and working with plants, working with your hands was satisfying, rewarding.”

One participant who lived alone said, “I like to get out. I think it was being alone that made me not feel good I enjoy going out to a restaurant. I’m not alone.”

One woman continued playing the piano, noting, “I guess I can remember feeling depressed and just sitting down because it made me feel better.”

2.3.2.3 Family and Friends Nudged Me Into Action

Other people played a powerful role in prompting activity engagement. Vigilant spouses, children, neighbors, significant others, and/or friends provided the crutch needed to sustain activity when participants may not have been able to do so alone. A simple invitation was often sufficient to prompt some activity engagement. Alternatively, initiating activity that required a response, providing transportation, coaxing, making supplies readily available, and uniting efforts as a family were strategies employed to encourage activity. This theme was expressed by

participants in phrases such as *only if someone gave it to me, I'm told to, I went because my husband wanted me to, they picked me up, wife continued with the routine, and the person I was seeing kept pushing me to find something to do.*

Grandchildren can have a distinctive influence on activity engagement. The PI was struck by the terms of endearment used by participants in descriptions of their grandchildren. Observable changes such as more energetic conversation and upright body posture were evident. For some participants, the joy of interaction with grandchildren, not the specific activity itself, facilitated activity engagement. In some instances, specific requests by grandchildren to play a table game or read a story were the prompt for activity. Demonstrating support and family unity by attendance at a dance recital, soccer game or birthday party was another motivation for activity engagement. This theme was portrayed by participants in language such as *they're the bright spot in my life even when I'm down, that's uplifting stuff, grandchild came and wanted to play but I would not initiate, and I thought it was important to do that for the kids.*

A recent widow had 9 supportive children who acted on her behalf in several ways. First, they identified the change in her behavior, suspected depression and initiated an evaluation. While the participant denied depression, she cooperated with the evaluation and subsequent intervention. Second, because they suspected she was not eating, they devised a schedule to: (a) take her grocery shopping on a regular basis to make healthy provisions readily available, (b) have one child present in their mother's home each night for dinner to ensure adequate intake, and (c) take her out to a restaurant for meals frequently.

One woman spoke about a longstanding group of friends of similar age who supported each other through multiple health and family concerns as well as enjoying many recreational activities together. She felt free to discuss her situation without fear of judgment or criticism. When she became depressed she continued multiple activities because of the positive influence of this group. “We took a trip to bike in [Washington] DC and three women asked me to go in the car with them. I probably wouldn’t have gone and I wasn’t going to go, and they called me and said, “Oh, why don’t you go with us, we can fit a fourth person in our car.” I went because the three asked me and . . . I forced myself to go. But I had a great time, nice dinner that night and everything, but there were just moments when I would just feel very alone in the crowd.”

One woman remarked, “I always went to those because . . . I wanted them to have a grandparent who took part in their lives. I mean some of those dance sessions weren’t exciting, they were horribly boring, but I thought that it was important to do that. For the kids.”

2.3.2.4 I “Gotta” Keep Going

This theme stresses individuals’ deliberate participation in activity. Participants emphasized their initiation of activity even when they were not interested during the depressive state in hopes of preserving their typical lifestyles. This is in stark contrast to the theme addressing established habits and commitments where prearranged and longstanding opportunities facilitated participation that occurred almost automatically. Participants pushed themselves for varying reasons. One woman, for example, attended parties and worship services hoping to feel better

afterwards. Some participants continued their normal activities to avoid potential loss. For example, one woman feared relinquishing control to her spouse if she stopped paying the bills; another feared financial loss if investments were not managed; and a third feared lost friendships if she refused social invitations. Avoidance of physically-based negative consequences of inactivity also prompted continuation. For example, one participant with a family history of diabetes engaged in exercise as a means of prevention while swimming was engaged in by another to alleviate arthritis symptoms. This theme was illustrated by participants in terms such as *[I] continued because [I was] trying to maintain a feeling of normalcy, I forced myself to do everything whether I wanted to or not, I knew it wasn't good for my back to be inactive - I would really hurt if I didn't keep moving, and it gave me some sense of control over what was going on in my life.*

One woman visited with friends believing “it was the thing to do. I had to do the things that were kind of a normal part of life or I would just end up in the pits altogether. So it was partly because I knew that I had to do it and partly because it was the right thing to do for myself but I also could get some satisfaction.”

One woman indicated she never missed church because, “Oh, then you're really feeling sorry for yourself. If you stop going to church you're really disconnecting yourself from the things that are, for me anyway, the most important in my life. And if I stop going to church . . . it's all downhill from there because my social contacts are a big part of church.”

2.3.2.5 Distraction and Escape Took Me Away From My Situation

Participants engaged in some activities expressly to divert their attention away from themselves or negative circumstances associated with depression. Two levels of disconnection emerged, distraction and escape. Distraction, more superficial, provided an avenue to redirect thinking through physical or sedentary activity. One participant specifically selected an activity because of its positive focus, a movie with a happy ending, while another participant watched any random television show. Escape, a seemingly deeper level of disconnection, was employed to remove themselves from their current situation by temporarily entering a different environment through, for example, reading magazines or books, or by resting. This theme was expressed by participants in phrases such as *I can kind of turn off my mind for awhile, it kept me from thinking, I could be in another world and that's what I liked and to make me be somewhere else and feel different.*

One woman continued to go to the theater, stating, “That’s a nice diversion . . . you just forget about everything for that long a time.” She also watched movies at home, noting she could “. . . forget about all your troubles. I can watch a corny old movie on television – those Hallmark and Lifetime movies that you know had a happy ending and . . . that makes me feel pretty good.”

One gentleman pointed out when not depressed he was an outgoing individual who loved nothing more than to be around other people where he could be in charge of volunteer leadership opportunities such as the School Board and church committees. However when depressed his overall goal was to be alone. In both situations, depressed

and not depressed, swimming was an activity he continued but interestingly, the intent of the activity changed. When not depressed, he viewed it as enjoyable and health promoting but when depressed he said, “I continued that because . . . you’re as alone as you can be. The intent here was to escape from everything.”

2.3.2.6 I’m Hiding My Depression From Other People

Some participants attempted to hide their depression from others by maintaining previous activity engagement to avoid upsetting them, prevent additional unwanted caregiver assistance, and evade the stigma associated with depression. Activities that seemed to lend themselves to hiding depression were grocery shopping because it fulfilled household responsibilities, beauty shop services to keep up physical appearance, and visiting with friends to keep up the expected routine. Phrases used by participants to express this theme were *did not want to tell them I was depressed, didn’t want wife to realize how bad I was feeling and she’s used to me doing that, and tried to act natural.*

One mother continued hosting Sunday dinners and grocery shopping recalling, “I didn’t want to tell them I was depressed because then they would get upset and so I thought, I just felt it was a spell I was going through and probably would get adjusted to the medication and so I forced myself to do it but I didn’t enjoy it at all. It was a chore. Oh, I wish I wouldn’t have asked them but if I didn’t ask them for three weeks then somebody would [ask] what happened to those family dinners we used to have.”

One participant identified 3 activities he continued to do but clarified he did so in a different way. With grocery shopping, he planned his intended purchases ahead of time to get in and out of the store as expeditiously as possible and intentionally avoided Senior Citizen's Day because it slowed down the process. When cooking dinner, he did not make up his own recipes and prepared basic meals only. When visiting family and friends who were ill, he did so because he felt he was supposed to, not because he wanted to.

2.3.3 Activities Stopped During Depression

While continuing select activities when they were depressed, participants simultaneously stopped doing others. Analysis of all activities stopped yielded 5 themes of participants' activity choices. A description of each theme along with examples of participant phrases and case examples are included.

2.3.3.1 Not Meaningful To Me Now

When participants did not find activities sufficiently meaningful, they were stopped. Activities were no longer meaningful when the process or outcome of the activity had no or less perceived value. Mending, (a low priority and waste of time), was stopped by one participant; going to the theater, (no help resolving depression), was stopped by another; yard maintenance, (not pleasurable), was stopped by a third, and creative writing (perceived lack of interested readers) was stopped by a fourth. Moreover, activities ceased when participants did not care about themselves at the time such as one participant who stopped shopping in a store, no longer concerned about his appearance. Consequently, some activities were neglected while some were

assumed by family members or deferred to professionals. This theme was reflected by participants in terms such as *didn't appeal to me*, *no desire*, *thought it was a waste of time*, *it never occurred to me to do it*, and *I just didn't get the enjoyment out of it anymore*.

One gentleman explained, "My interest in the computer was not what it used to be and it's a funny thing about it. For 26 years that's all I did at Westinghouse. I was on bigger and larger machines [with] people counting on me . . . to take care of problems. Now all of a sudden I didn't care, in fact, I was ready to throw it out once."

One woman stopped recreational shopping, stating, ". . . I usually like to . . . I could go shopping all day and just look and come home without anything but no, why take the time? I wasn't interesting in looking. I wasn't even interested in anything."

Another participant described golf as an opportunity to enjoy peaceful surroundings and time with his grandson. He stopped, stating, "I got to the point where I hated it. I mean I would go out and if I shagged that ball I was mad at myself . . . I didn't enjoy it anymore." He ultimately stopped golfing in the middle of a game, walked off the course and did not return at all to this activity while depressed.

2.3.3.2 I No Longer Had the Physical/Cognitive Energy to Do It

Some activities were stopped due to a decrease in physical or cognitive energy. Interestingly, some participants' decisions to stop activities had positive roots leading to beneficial consequences. Despite being depressed, some participants had the capacity to actively weigh

activity options with their current energy level prior to activity engagement. This decision to allocate limited energy to the most meaningful activities by re-prioritizing activity choices allowed participants to remain engaged during the depressive state. In contrast, many participants' decisions were negatively focused and resulted in cessation of activity without evidence of benefit to them. Decrease in *physical energy*, consistently described as "being tired," was associated with, for example, ceasing museum visits, exercise, cooking dinner and hand crafts. In contrast, descriptions of decreased cognitive energy were varied. Activities stopped, for example, include fixing things around the house due to indecision; bill paying because of planning and organizational deficits; spectator sports due to shortened attention span; reading the newspaper due to poor concentration; storytelling to children because of impatience and visiting with friends due to inability to put up a front for others. Decrease in *cognitive energy* was expressed by participants in terms such as *my attention span wasn't there, I couldn't concentrate on that, I can't get the clarity in my mind to do things like that, trying to sit down and figure [it] out took so much energy, and I couldn't think of what to say.*

One woman stopped going to the museum, "because I got too tired walking around. I was just tired all the time."

Another woman worked half-time in a professional job independently managing company finances. Living alone, she independently managed her own home. In both areas of life she made many and varied decisions without difficulty. Yet, when depressed, her ability to make decisions diminished resulting in either delaying or abandoning an

activity. For example, indecision about her food menu resulted in delayed dining while indecision about who to hire for assistance eliminated fixing things around the house.

One participant stopped paying bills because, “I have to get them all together. It’s the organizing. I have to get my checks, checkbook . . . the bills . . . the envelopes and the stamps, [and] I have to look at each one. The bills can pile up for weeks and weeks and then I have to pay all those interest charges.”

2.3.3.3 Avoidance of Negativity

Participants viewed engagement in some activities as having a negative consequence either for others or themselves and, hence, stopped participating in that activity. Related to others, one participant stopped visiting those who were ill, believing she, while depressed, would not be helpful to others. On the other hand, self-negativity was associated with relationships with spouses and children, recent widowhood, sedentary activities, and the environment. For example, reading alongside her husband was stopped and replaced with sleeping to avoid marital arguments; family gatherings were stopped to circumvent the absence of estranged children or to avoid hurtful comments made by family members; travel was stopped to elude absence of a recently deceased spouse; sedentary activities such as television, music and thinking were stopped to avert excessive opportunity to worry; and reading the newspaper was stopped to avoid department store advertisements reminding a participant of her financial struggles. Phrases used by participants were *rather than fight and argue I would just go up the steps and go to bed and sleep, I wasn’t interested in all the other stuff that was going on that wasn’t making me feel*

better, we'd always walk together and I didn't want to do it without him, it reminded me that I was short of money and that's really sad for me.

Although having a good relationship with her two sons, one woman stopped family gatherings recognizing her heightened sensitivity to their remarks. As it was occurring, she thought, "You know, this never got on my nerves before, why is it getting on my nerves?" She further explained, ". . . . I found myself getting my feelings hurt when I was around family . . . over things people would say to me that shouldn't have hurt my feelings but it did." Specifically, she recalled a trip to the mall when her son said, "Why are you walking so slow?" and "Well move, you're in that person's way" and she reacted by thinking, "it just seemed like everything I did was wrong why did I ever come with him?" She replaced family gatherings with socialization with a longstanding group of friends who were accepting and supportive because they had similar problems and could empathize with her situation.

One woman pointed out that family gatherings as well as her marriage were sources of distress to her. "I stay away from family because it makes me feel bad. I hate going to [my husband's] family. If I'm depressed it's definitely out. I won't do it. With my own daughters, I probably would try not to. I feel out of it. I just don't feel like I belong." When specifically asked about her husband, she responded, "I think I didn't like the response from my husband. I didn't like my husband when I was depressed. He was not good for me."

2.3.3.4 It's Too Physically Painful

Complaints of pain concomitant with depression triggered activity disengagement for some participants. Localized back pain or diffuse bodily pain, either in preparation for or during activity, was sufficient for termination. Attendance at parties, theater or spectator sports, for example, stopped due to pain associated with travel to the destination. Similarly, hand crafts, gardening and walking were stopped due to pain associated with the requisite posture and movement inherent in the activity. This theme was expressed by participants in terms such as *my back was killing me, if I had to climb...like on a ladder...that's not good, you're bent over like this and that's probably the worst position to be in, too hard on my back and by the time [I arrive at the theater]) feeling as though I need a painkiller.*

One woman stopped going to the theater because the excessive walking required to get there was “too hard on my back.” She clarified that “. . . . if I could just be in the theater, no problem . . . I'd enjoy it.”

Another woman added that once at the destination (museum), the activity itself required additional walking which further increased her back pain. She noted, “And when I'm depressed and my back is bad I don't want to do any of that.”

One gentleman, a war veteran, stopped many activities because of diffuse bodily pain incurred decades earlier and continued to persist. “Just knowing that even if I felt halfway decent today, going to whatever [activity] was going to create a certain amount

of pain and I just tried to avoid it completely. So whatever I could avoid doing I didn't do."

2.3.3.5 Constricting My Social Space

Some participants narrowed their worlds by limiting social interaction with others and, at times more extreme, limiting even the physical interaction with others. Restricting social interaction was accomplished, for example, by not talking on the telephone or eating at a restaurant with friends because of the expectation, at least intermittently, to be social. Storytelling with grandchildren was stopped because of the continuous and animated interaction requisite in the activity. Some participants, when depressed, wished to further constrict social space by avoiding being in the physical presence of other people. Specifically, some avoided crowds by avoiding concerts and mall shopping, while others stopped attending worship services or restaurants to avoid even smaller groups of people. This theme was illustrated by participants in language such as *because of the crowds – it drove me wild, the last thing I want to be is social, I wouldn't want the interaction, I'd rather be by myself* and *I didn't like people around me*.

One gentleman explained that he was outgoing and social when not depressed but preferred to be alone when depressed. He did not entertain at home stating, "Didn't like people around me. Period. I wanted to be alone." He also refused to shop in a store, "because of the crowds . . . it just drove me wild."

One woman explained my ". . . focus turns around. It's inverted . . . the last thing I want is to be is social. It's too much trouble."

2.4 DISCUSSION

Among the qualitative studies that examined adaptive strategies for disability, none have concentrated on older adults during a depressive episode. While several theorists have considered adaptive strategies (Lawton, 1982; Heckhausen & Schulz, 1995), our findings are best elucidated by Baltes and Baltes' (1990) theory of Selective Optimization with Compensation (SOC). SOC consists of 3 processes: selection, optimization, and compensation. In selection, individuals set goals, thereby prioritizing and narrowing their focus. Selection may be elective or loss-based (Baltes & Freund, 2003). Elective selection is gain-focused where individuals select actions and activities for achievement or advancement. Loss-based selection occurs as the consequence of experiencing a loss, thus necessitating a change of goals. Optimization refers to activating means to reach goals including engaging in behaviors and life choices that increase the quality and quantity of one's reserve capacity. Compensation involves implementing alternate methods or behaviors to reach goals when needed. All three adaptive processes were identifiable in our participants during their depressive episode.

2.4.1 Selection

In depression, 'selection' was largely loss-based and included strategies used in response to lost capacity characteristic of a major depressive episode such as diminished interest or pleasure, psychomotor retardation, loss of energy, diminished ability to concentrate, and/or depressed mood. In response to this loss, individuals prioritized and selected areas in which to focus attention and resources and, in addition, set goals. Goals may have been as basic as

“making it through the depressive episode” or, in other words, participating in life to the best of one’s ability at the time. Participants in our study selected, consciously or unconsciously, actively or passively, to continue some activities, continue but limit some activities, and stop other activities as they focused on surviving the depressive episode. Specifically, activities continued were part of an established habit or commitment, were gratifying, provided a means for distraction or escape from themselves or their negative circumstances, and/or hid their depression from other people. Some participants deliberately initiated activity themselves despite their lack of interest while some were nudged by family or friends to engage in activity. Interestingly, interacting with their grandchildren appeared to catapult some participants into activity, sometimes because of the positive feelings experienced in their company, and other times, out of a sense of duty to them. We were particularly surprised by 2 themes, “Some Activities Were Still Gratifying” and “I Gotta Keep Going” because anhedonia and lack of initiation are typically seen in individuals with depression and these themes demonstrate that pleasure was experienced and initiation was demonstrated.

Additionally, even though activities were continued, some participants limited their engagement in various ways. First, the range of activities was constricted by, for example, attending weekly worship services but eliminating volunteer work at the church; reading the television guide and coupon section while discarding the remainder of the newspaper; and attending the theater but avoiding any social interaction with people nearby. Second, frequency changed, either more or less often, while continuing activities. The majority were done less often such as shopping in a store or cooking dinner because of fatigue or disinterest. However, some activities were done more often including taking care of a pet because the pet provided unconditional love; table games because they could be done alone when solitude was preferred;

and watching movies in the home because it was convenient and did not require interaction with other people. Third, even though the activity continued, specific content within the activity changed. For example, movies perceived to be sad and anticipated to add to an existing depressed mood were avoided by some participants. Finally, some activities, although continued, were delayed until they became mandatory such as laundering clothes needed to participate in paid work.

Concurrently, participants stopped activities when they were not meaningful to them, required physical or cognitive energy the participant lacked or did not wish to expend when activities were weighed against each other, viewed as having negative consequences, were too physically painful, and/or when participants chose to constrict their social space.

Selection was demonstrated in much the same way by our participants and those with physical impairments in other studies. Both groups reduced frequency, limited the amount or kind of activity, and relinquished activities to meet goals (Fried et al., 1996; Katz & Morris, 2007; Gignac et al., 2000; Gignac et al., 2002; Falter et al., 2003; Ryan et al., 2003). In addition, selection for those with depression included an increase in frequency of activities supporting current goals such as additional solitary card games when social interaction was uncomfortable.

2.4.2 Optimization

Optimization efforts in depression were geared heavily toward preservation, where participants mustered up any reserve they had to maintain a shadow of their former selves and meet the goal of making it through the depressive episode. Interestingly, despite their depression, participants actively undertook numerous and varied efforts that positively enhanced their ability to remain

engaged during the depressive episode. Beyond retaining basic activities requisite for daily functioning such as cooking dinner, resting, and driving, some sought strength outside themselves by seeking social support from family and friends, and/or pursuing spiritual support in their place of worship or through reading the Bible. Identifying and pursuing activities that had a positive outcome prior to depression where participants, for example, felt productive, relaxed, or good about themselves, was a strategy used by some in hopes of achieving a similar outcome when they were depressed. Others enhanced their physical condition and/or cognition via activities such as exercise and swimming, or reading and puzzles, respectively. Thinking beyond themselves to remain current with local and world affairs by reading the newspaper, and/or temporarily escaping their negative life circumstances via reading novels was a strategy used by some participants. Perhaps most notably, some participants demonstrated the capacity to explore the cause of their depression through computer research, and/or remain gainfully employed outside the home.

Optimization strategies, or means to reach goals, were predominantly related to lost capacity associated with impairments. These impairments differed between our group with depression and those with physical disabilities, and moreover, among people with diverse physical disabilities. Accordingly, the majority of strategies differed. The only similarities with our group and those with physical impairments were with people with osteoarthritis or COPD who incorporated rest, and with people living with COPD who used exercise and diet as optimization strategies. Strategies used by our sample with depression were in contrast to people with: (a) rheumatoid and osteoarthritis who used additional time (Katz & Morris, 2007; Gignac et al., 2000; Gignac et al., 2002); (b) osteoarthritis who planned activities ahead of time and/or used movement to avoid pain or stiffness (Gignac et al., 2000; Gignac et al., 2002); (c) vision

loss who practiced priority skills and/or learned new skills (Ryan et al., 2003); (d) COPD who divided complex tasks over a long period of time and/or used breathing techniques (Falter et al., 2003), and (e) multiple sclerosis who compared themselves to other people who were more functional as a source of inspiration (Dilorenzo et al., 2008).

2.4.3 Compensation

In response to lost capacity associated with depression described earlier, our participants used several compensatory strategies to reach their goal. First, we saw the influence of the external environment on participants' activity engagement. Some participants partnered with another person to complete activities jointly when typically they would have done them independently. Specifically, spouses and children participated to a greater extent as they together, for example, shopped for groceries, or entertained at home. On the other hand, some participants engaged in activities only upon request of friends, or with prodding or insistence of another person. Finally, some activities were completed almost entirely by another person on behalf of the participant to assure completion such as managing investments or yard maintenance.

Second, participants used alternate methods to accomplish activities and desired goals. Specifically, strategies to compensate for reduced concentration included turning off the radio when driving, reading newspaper headlines rather than full articles, or reading material with shorter and less in-depth content such as magazines in lieu of books. In addition, venues were changed to accomplish activities. Some participants watched movies at home to eliminate travel to a theater, making the activity less complicated and more manageable. One participant hosted a

family gathering at a restaurant after her son's death to avoid the familiar environment and empty chair at the table. Next, numerous examples illustrating compensatory strategies for more expeditious activity completion were identified. They were completing grocery shopping in a single store and eliminating comparisons across stores or even within one store; preparing a grocery list ahead of time rather than perusing options; avoiding shopping on Senior Citizen Day when stores were busier and checking out seemed slower; laundering all items together without sorting colors; selecting meals such as stir fry, sandwiches, soup or cereal that require less time for preparation and clean up; eliminating meal preparation by ordering pizza delivery or eating at a restaurant; purchasing already prepared food items such as rolls and pies rather than buying and assembling all ingredients; and preparing a single food item for the family dinner rather than various items based on individual family members' preferences.

Finally, some participants changed behaviors as a means of compensation. One participant acknowledged that remaining busy was an effective means of managing her depression and also identified that evenings and weekends were the hardest times for her. Hence, she chose to begin her laundry at 4:00 PM on weekdays to extend into the evening or complete laundry throughout the weekend due to the many steps and extended time required to complete the task. Another participant identified engaging in two tasks simultaneously, reading and watching television, to remain sufficiently engaged to avoid time for negative thinking. A third participant proactively selected uplifting, lively music while avoiding sad or music reminiscent of her recently deceased husband. Similarly, another participant selected to limit interaction to family and friends who were a positive influence while avoiding others who made her feel sad. One participant altered his behavior recognizing that, when alone and not busy, he became introspective with negative and suicidal thoughts. Specifically, while traveling on a cruise ship,

he compensated by staying in a crowd of people and close to his wife at all times for his own safety because he contemplated jumping overboard. Finally, one participant compensated for her negative thoughts by intentionally presenting herself in a positive fashion by smiling and talking to others at parties and family gatherings even when she did not want to be with other people.

There are both similarities and differences between the compensatory strategies implemented by our participants with depression and people disabled by physical impairments. Reliance on others for instrumental support is used by both groups. However, with depression, others tend to respond by partnering and encouraging the person to remain active, whereas with physical impairments the typical response may be more “hands-on” and is directed toward completing the activity for the person (Katz & Morris, 2007; Gignac et al., 2000; Falter et al., 2003). Both groups modify methods to conserve energy secondary to physical or cognitive fatigue. In addition, modifications for those with depression tend to focus on controlling distractions or undesired thoughts or feelings rather than managing pain or musculoskeletal limitations. Unlike those with physical impairments, who are heavy users of assistive technology, we did not encounter any device use in our participants, even though cognitive aides for time management or memory deficits would have been applicable.

2.4.4 Summary

As participants in our study selectively narrowed their focus during a depressive episode, they continued some activities, continued but limited some activities, and stopped others. Overall, participants used a variety of optimization strategies to accomplish their goal of “making it

through the depressive episode.” Finally, the use of compensatory strategies allowed some participants to meet their goal by using alternate means.

2.4.5 Clinical Relevance

Often when we ask clients about their activities, we focus on independence and difficulty in activity completion (Verbrugge & Jette, 1994; Karp et al., 2009; Rogers & Holm, 1991). Findings from our study suggest that ascertaining the client’s independence is not the critical issue with older adults when they are depressed. Rather, the critical issue pertains primarily to activities stopped and activities adapted in depression. Specifically, valuable information emerged in response to questions such as, “What have you stopped doing that you used to do before you were depressed? Are you doing things differently than you did before? Why?” Answers to these questions during a qualitative interview provided insight about the client that a typical checklist measuring independence likely would not capture. Specifically, understanding “why” an activity was stopped gives us insight into the client’s adaptive response during depression. For example, the response may be negatively focused such as an activity stopped because of complete disinterest and lack of pleasure. On the other hand, a positive adaptive response, actively choosing to stop an activity to conserve limited energy for activities of highest priority, may emerge. In this example, we see that is not always damaging to stop an activity, and supports the notion of gathering more detailed explanations from clients. Similarly, learning if and how a client continued an activity using a compensatory strategy further explains capacity to adapt during the depressive state. Finally, asking the client, “What activities have you continued to do to survive the depressive episode?” informs us further about their adaptive

response. Moreover, it gives us an opportunity to encourage clients to continue them and support them in so doing. This construct is different than independence and should be included in the clinical interview. We suggest that clinicians use a qualitative approach to ascertain which activities have been stopped, adapted, and continued, along with the rationale, in the client assessment during the depressive episode.

Interestingly, findings from our study are congruent with select aspects of Problem Solving Therapy (PST), a cognitive behavioral therapy approach used to teach patients to systematically solve psychosocial problems (D’Zurilla, 1986). In PST, individuals thoroughly and objectively compile a list of problems they encounter in daily life, systematically learn to identify solutions to these problems, and implement solutions. While using PST, health care practitioners recognize that depressed individuals may not spontaneously recall all problems and, hence, verbal probes are used to facilitate recall of problems. In our study, visual cues provided by the ACS prompted recall of participants’ activities in 80 different activities and it may be a useful tool in the PST approach as well. Because we identified compensation, a component of SOC, as a strategy used to continue some activities, compensation may be among the potential solutions identified using PST.

2.4.6 Strengths/Limitations/Further Research

As with all studies, this study had both strengths and limitations. The strengths involved a well characterized sample, the subset of a larger RCT, who had been thoroughly evaluated for depression using well accepted measures. We interviewed 27 people. In reviewing our data, no

new themes were identified after the 18th person, but the data continued to be enriched and supported the themes previously identified. The study limitations include interviewing participants about their depressive episode when they were in recovery. While this retrospective data collection strategy allowed sufficient time to pass for participants to be able to talk about their depression, recall bias may have inflated their narratives. Another potential limitation included selecting individuals who had recovered from depression and were open to self-reflection. This was done intentionally to maximize the amount of meaningful data that could be gathered, however, those not recovered were not included in this study. Our sample was relatively homogeneous, being primarily female and Caucasian with a high educational level. This group may potentially have had social and financial resources influencing their adaptive strategies unavailable to others. Finally, all participants engaged in therapy with a clinician as part of the RCT. It is possible that this intervention positively influenced adaptive responses that may not be seen in individuals not receiving intervention. Our results cannot be generalized to dissimilar samples due to study limitations.

Interviewing individuals during the depressive state may be possible and give us deeper insight into their adaptive strategies. However, further research is needed to understand the most effective way to elicit this information. Specifically, the manner in which questions are worded to engage clients if they are less verbal must be addressed. Similarly, interview questions that help clients recognize seemingly “automatic” or “minute” changes they make in adaptation is needed. Because the Activity Card Sort (ACS) (Baum & Edwards, 2001) was successful in eliciting rich and detailed responses to guiding questions when interviewing older adults in recovery, using the ACS during interviews in the depressive episode may be one potential tool. Furthermore, we used SOC in our study to examine adaptive strategies used by older adults in

the depressive state, but we did not test it. Longitudinal research to test the SOC theory is suggested with individuals who are subsyndromal, depressed, in recovery, and in relapse to shed light on strategies used throughout the depression continuum. Analysis of strategies used at various time points may be useful to clinicians in the development of intervention strategies.

3.0 ACTIVITY CHOICES IN RECOVERY FROM LATE-LIFE DEPRESSION

3.1 BACKGROUND AND SIGNIFICANCE

In 2000 there were 35 million adults aged 65 and older in the United States with projections to increase to 82 million by 2050 (Jarvik & Small, 2005). The prevalence of major depression is 1% in this group with an additional 15% displaying depressive symptoms that do not meet full diagnostic criteria for a specific depressive syndrome (Alexopolous, 2005). A myriad of studies have demonstrated the association between depression and disability (Lenze et al., 2001). In particular, these studies point out compromised ability to engage in activities of daily living (ADL) and instrumental activities of daily living (IADL).

But what happens when older adults are deemed “in recovery” from major depression? How does this translate into everyday life activities? Do they resume participation in their former lives 100%? Traditionally, a cut point on the Hamilton Depression Rating Scale is considered “recovery” from depression and the client likely then receives maintenance therapies. Health professionals may surmise that, once in recovery, clients return to their level of participation in life activities as done prior to depression. However, we know from previous studies of individuals recovering from depression that cognitive functioning and performance in some instrumental activities of daily living (IADL) does not always compare to the level of those who are not depressed. Specifically, one study informs us that although older adults with mild

cognitive impairment at baseline showed improved cognitive functioning upon recovery, they did not reach normal levels of performance, particularly in executive functions and memory (Butters et al., 2000). In another study, disability, measured as performance in IADL, improved in older adults recovering from depression, but was still greater than the control group without depression (Karp et al., 2009).

We know far less about participation in daily life during recovery from depression. This knowledge is important because it can help us understand disability throughout the depression/recovery continuum; support participation during the recovery process; and identify and provide services to, perhaps, eliminate or slow down relapse into depression. This may be particularly valuable given that older adults are already at risk for reduced participation due to, for example, reduced sensory function, limited social support, concomitant medical conditions, and compromised mobility (Desai, 2001). This study will add to the body of knowledge to more fully understand the experience of recovery from depression.

3.1.1 Objective

The purpose of this study was to elucidate older adults' perceptions of their activity choices during the first 3-7 months of recovery from depression. The specific aim was to identify common themes among perceptions of activities continued, stopped, resumed, and newly begun in recovery.

3.2 METHOD

3.2.1 Study Design

This qualitative, descriptive study (Sandelowski, 2000) explored activities of older adults in early recovery from major depression. In collaboration with experts in late life depression we decided to interview 3 to 7 months post stabilization of depression. This interval was seen as sufficient for participants to resume meaningful activities and lifestyles, yet close enough in time to the depressive episode to remember back to being depressed.

3.2.2 Sample

Participants were recruited from a randomized clinical trial (RCT) (R37 MH43832) at the University of Pittsburgh examining the combined effect of an antidepressant and donepezil on cognitive performance and functional competence. Inclusion criteria for the RCT were: (a) age 65 years and older; (b) current episode of non-psychotic, non-bipolar major depression documented on the Structured Clinical Interview for Axis I DSM-IV disorders and a rating of 15 or higher on the 17 item Hamilton Rating Scale for Depression (HDRS); (c) English-speaking; (d) willingness to discontinue psychotropic medications other than those used in the study; (e) hearing capacity adequate to respond to raised conversational voice; and (f) available family member or caregiver willing to corroborate information. Exclusion criteria were: (a) dementia based on DSM-IV criteria (2000, pp. 147-150); (b) alcohol/drug abuse within the past 12

months; and (c) lifetime diagnosis of bipolar disorder, schizophrenia, or schizoaffective or other psychotic disorder.

One further inclusion criteria was added for the qualitative study: in recovery from depression at least 3 months but no longer than 7 months. Recovery was defined as a score of 10 or less for 3 consecutive weeks on the HDRS. Individuals residing beyond a 150-mile radius from the Oakland campus of the University of Pittsburgh were excluded. Criterion sampling, reflective of a qualitative perspective, was implemented by using inclusion and exclusion criteria to identify participants for our study (Sandelowski, 2000).

3.2.3 Measures

A single interview was performed with each participant using the Activity Card Sort (ACS) (Baum & Edwards, 2001) to promote responses to guiding questions. The ACS consists of 80 color photographs of older adults engaging in activities in four domains: (a) instrumental (e.g., driving, yard maintenance, laundry); (b) low demand leisure (e.g., spectator sports, table games, watching movies); (c) high demand leisure (e.g., bowling, bicycling, running); and (d) social (e.g., parties/picnics, talking on the phone, entertaining at home or club). A complete list of activities is in Appendix A.

The ACS was selected because we believed it would have several positive influences. Specifically, the ACS would actively engage the individual during the interview, promote recall of activity, assure that the activities addressed were consistent among individuals, facilitate comprehensive (breadth and depth) responses, and provide a means to focus individuals throughout the interview.

The interview was structured around 4 guiding questions:

1. Now that you are recovering from your depression, are you still doing the activities you did while you were depressed?
2. You said you were doing some of the activities differently than you normally would when you were depressed. How are you doing them now?
3. Of the activities you stopped doing when you were depressed, have you resumed doing any of them or started to do any new activities?
4. Is there anything you are doing to promote your own health, for example, your psychological health, emotional health, spiritual health, and/or physical health?

Additional probing questions such as, “Can you tell me more about this?” were used to facilitate more in-depth discussion as well as to clarify participants’ responses.

3.2.4 Data Collection Procedures

Subsequent to Institutional Review Board approval, consecutive individuals in the RCT were recruited by their primary clinician for this study. Individuals giving permission were, in turn, contacted by the primary investigator (PI) via telephone. The study was thoroughly explained, questions answered, and an interview was scheduled for those consenting to participate.

The PI conducted all interviews and included completion of the consent form, demographic data form, and a semi-structured qualitative interview. Interviews were conducted in a private setting convenient to the participant and lasted approximately 2 hours. Participants’ appearance, facial expressions, and body language were documented following each interview.

All interviews were audio taped and transcribed verbatim. Additional information concerning each participant's course of illness including depression history, date of first episode of depression, date of onset of current depression, and Hamilton Depression Rating Scale was obtained from RCT records.

To begin the interview, participants reviewed the 80 activities in the ACS and discarded those that had not been a part of their routine for the past 1-2 years. Next, participants reviewed each remaining activity sequentially and indicated if it was continued or stopped when depressed. For each activity continued when depressed, the participant was asked if it was continued or stopped during recovery (guiding question #1). If continued during recovery, guiding question #2 was addressed to ascertain if it was performed in the same way. If stopped during recovery, participants were asked to explain their rationale. Next, activities stopped during depression were addressed to learn if they had been resumed (guiding question #3) and, if resumed, the reasoning behind their choice. Additionally, participants were queried about any activities newly begun during the recovery phase (guiding question #3). Finally, participants were asked if they were doing anything to promote their emotional, psychological, spiritual and/or physical health (guiding question #4).

3.2.5 Data Analysis

The PI reviewed each audiotape and hand recorded responses to all guided questions on tailored data collection sheets upon completion of the interview. Additionally, observations of participants' facial expressions and body language as well as the PI's intuitive feelings relative to the participants' experience of depression were recorded prior to subsequent interviews. All

transcripts were entered verbatim into Atlas.ti, the computer software program used to manage the data (Atlas.ti, 2006). The PI created codes to identify: (1) activities continued in depression and into recovery, (2) compensatory strategies used to complete specific activities (3) activities continued in depression but stopped in recovery along with their rationale, (4) activities stopped in depression and recovery along with their rationale, (5) activities stopped in depression but resumed in recovery along with their rationale, (6) activities newly begun in recovery, and (7) optimization strategies used. Next, the PI coded each transcript and printed the results for each code separately. Each transcript was cross checked with data printed from Atlas.ti to ensure thoroughness. All data from each code were read multiple times for deeper immersion into the data and in so doing, patterns and themes emerged. As additional participants were interviewed, themes were amended over time. Upon completion of all interviews, an initial list of themes was created by the PI which, in turn, were reviewed and challenged by 3 additional members of the research team knowledgeable of this population and research methodology. Modifications to the initial themes were made once consensus among the group was reached. Finally, an additional researcher familiar with this population, a peer debriefer, coded 4 transcripts, 15% of the data, using themes created by the PI. Only minor discrepancies occurred when: (1) nuances such as tone of voice or body language during the interview were not evident in the written transcript, (2) one person coded an activity in a select theme while the other person coded it in a different theme but, upon reflection, agreed it could be included in both themes, (3) one reviewer coded an activity as a new activity while the other coded it as an optimization strategy, while recognizing it was a new activity, and (4) the peer debriefer coded an activity in one theme while the PI, knowledgeable of the participant's entire experience of depression and recovery, coded it in another theme.

In our study, several strategies were used to promote credibility. First, a pilot study was conducted prior to this study to enhance skills of the PI in interviewing and data analysis. Second, prolonged engagement with each participant facilitated rapport with the PI and comfort of the participant during the typical 2 hour interview process. In addition, the semi-structured nature of the interview where activities were reviewed several times provided an opportunity for participants to reflect upon and alter responses. The PI was able to focus on consistency of responses and probed deeper when inconsistencies were encountered. Next, members of the research team, experts in late-life depression, critically reviewed and challenged themes developed by the PI. Moreover, a peer debriefer, knowledgeable about late life depression, coded 15% of the transcripts to confirm and challenge those of the PI.

3.3 RESULTS

3.3.1 Sample Characteristics

This qualitative study was initiated during the final year of the RCT. Twenty-nine participants met study criteria prior to closing admission to the RCT. Two declined to participate in this study citing apprehension in reflecting back to unpleasant times and lack of personal benefit as reasons for refusal. The remaining 27 participants had a mean age of 73.3 years (range 65-88 years) and were predominantly female (74%). All were community-dwelling, 26 were Caucasian and 1 was African American. The mean educational level was 14.6 years (range 10-19 years); 12 (44.4%) were engaged in paid employment; and the mean number of months since stabilization of

depression was 5.17 (range 3-7 months). The mean HDRS score prior to the interview (approximately 1-2 weeks) was 4.7 (range 0-10), indicating recovery from depression.

Results from qualitative analyses are presented in two sections: (1) recovery trajectory of activities continued during depression and (2) recovery trajectory of activities stopped during depression.

3.3.2 Recovery Trajectory of Activities Continued During Depression

The majority of activities in which participants engaged when they were depressed were also continued into recovery. When they were depressed, they continued them because they were part of an established habit or commitment, were gratifying, were nudged by another person, felt a sense of pushing oneself to maintain normalcy, were a means of distraction and escape, and provided a means to attempt to hide their depression from other people. A full description of all themes, words used by participants, and case studies illustrating each theme is in Chapter 2. In recovery, participants continued these activities spontaneously upon resuming their daily lives as done prior to depression.

Interestingly, however, not all activities continued during depression were continued into recovery. Some were stopped in recovery as a result of change in participants' life circumstances, but most activities that were stopped were related to the participant's depression. Examination of activities related to the participant's depression revealed 3 themes. A description of each theme as well as phrases and examples that are illustrative of each theme are given.

3.3.2.1 Not Meaningful to Me Now

The meaning of some activities to participants was not constant but, rather, varied when they were depressed and when they were in recovery. The degree to which an activity was perceived as meaningful at a given time point drove their decision to continue or stop it. Hence, although continued when depressed, when an activity was no longer perceived as meaningful in recovery, it was stopped. For example, one participant stopped reading the Bible when no longer grieving the death of a spouse, and another participant stopped reading the newspaper when a more active lifestyle was desired. This theme was reflected by participants in terms such as *I'm ready to move on, I'm eliminating things that don't really help me, I have more things I'd rather be doing and I got tired of doing it.*

One woman stopped attending her place of worship reporting, "I'm eliminating things that don't really help me. It's not meeting my needs and the time doesn't suit me in the morning. Most of the people my age or my generation are dead . . . there are not many people there that I know . . . there doesn't seem to be any reason for me to go anymore."

Another participant stopped reading the newspaper because, "I have more things I'd rather be doing than reading about who got killed. I did not find that satisfying. I am busy with activities . . . that are more valuable to me."

3.3.2.2 I Don't Need To Anymore

One activity, rest, seemed to be required when depressed but, in recovery, was no longer necessary. This theme was reflected as *I don't need to*.

One woman rested excessively when depressed because, "I just didn't have the energy to get up and go. I just didn't have it." However, in recovery she stopped resting stating, "I don't need to."

3.3.2.3 I'm Too Busy

When in recovery, the activity level of many participants increased substantially resulting in termination or restriction of select activities due to insufficient time. For example, quilting, an activity viewed as a luxury by one participant, was stopped in its entirety. Talking on the telephone was continued by another, but restricted to brief conversations. Participants expressed this theme in terms such as *that's a real luxury, I don't have the time right now* and *I'm too busy*.

One woman noted that when depressed she quilted, albeit less often, for a sense of accomplishment upon completion. Interestingly, she resumed many activities when in recovery but stopped quilting because there was ". . . . so much else going on. That's a real luxury. I really don't have time to do the quilting but I can't wait until I can get back to it because it gives me a lot of pleasure."

Another woman stopped talking on the telephone for extended periods of time explaining, “I’m too busy.” In her current active lifestyle, she only talked on the telephone briefly to “. . . arrange card games or [upcoming social] functions . . .”

3.4.3. Recovery Trajectory of Activities Stopped During Depression

In recovery, participants resumed most of the activities they had stopped during depression. Examination of their personal experiences revealed 6 themes explicating their activity resumption and 1 theme illustrating activities not resumed.

3.4.3.1 Meaningful to Me Now

As previously noted, the meaning of an activity fluctuated for participants between phases of depression and recovery. Furthermore, some activities regained meaning and were resumed, while others were not seen as meaningful in recovery and were stopped. For those activities resumed, meaning was described as renewed enjoyment, satisfaction, desire, interest, motivation, religious faith, and value. Additionally, activities were meaningful when participation did not result in negative emotions such as anger. For example, enjoyment was derived from shopping in a store after weight loss following a more active lifestyle; satisfaction was found in home beautification through household maintenance; desire for a comfortable environment led to fixing things around the home; renewed interest and motivation prompted museum or theater visits; return of religious faith led to attendance at worship services; rekindled value overrode

fatigue leading to taking photographs while traveling; and loss of anger prompted return to golf for relaxation and socialization. Some participants experienced an extreme change in perception of activity effort between phases. The author was struck by some participants' descriptions of "disbelief" in their inability to complete an activity such as washing dishes when depressed that, when in recovery, was viewed as simple and completed spontaneously. Participants used terms such as *I look at it the way I did before, I can't wait to do it, I found satisfaction in something I used to do, I enjoy it now - I stopped because I just wasn't interested and I want to whereas before I didn't.*

One woman stopped shopping in a store stating, ". . . . my back was killing me and I just didn't have the wherewithal to get there and do it." However, she resumed noting, "I've looked forward . . . to buying clothes and stuff I hated before I feel better . . . I've lost a few pounds and I enjoy it."

One participant stopped photography stating, "I don't do much photography anyway but certainly I wouldn't do that when I'm depressed. No. It's just the wrong thing to do. I would say that's very low on the [priority] list." However, in recovery, she traveled to Israel and while there, reported having a life changing spiritual experience. To capture the moment, she bought disposable cameras and resumed photography on her trip because, "it was so important. The importance superseded having to walk around [which was tiring]."

However, not all activities were perceived as meaningful in recovery and were not resumed. Specifically, not meaningful included lack of desire, interest, and/or necessity for activities such as table games, spectator sports, or recreational shopping, respectively. Additionally, failure to meet personal needs such as a sense of community when attending worship services was described as not meaningful. Participants used terms such as *I can live without it, there's always so many more interesting things to do, it's too much trouble right now, I'll get to it* and *I'm not interested*.

One participant stopped listening to music when depressed because “it was meaningless to me” and did not resume it because “I think I got out of the habit of it and I haven't begun to think about doing it again. I guess I don't feel a need to do it.”

One participant said the sense of community he felt at his place of worship prior to depression was the key to his attendance. When depressed, he stopped attending because his wife, who was severely ill, did not desire this sense of community and he was disappointed with the church's efforts to reach out to help him at that time. Once in recovery, and after his wife passed away, he did not return to his place of worship noting, “I'm infected by Catholicism but I find myself to be quite angry about certain things about the church and . . . I've had my own little rebellion. And then, in due course, without a community I have no desire to go by myself I am now playing tennis on Sunday morning.”

3.4.3.2 Return of Energy

Return of physical or cognitive energy was the impetus for some activity resumption. *Physical energy*, described specifically as no longer being tired, was associated with re-engagement, in partial or full capacity, in both physically active and sedentary pursuits. For example, yard maintenance and hiking, requiring substantial levels of aerobic activity and endurance, as well as mending and handcrafts, requiring considerably less, were resumed by some participants. *Cognitive energy* was described as concentration or enthusiasm. Increased concentration, for example, led to resumption of reading the newspaper for one participant and studying for personal advancement for another. Renewed enthusiasm led to active, animated storytelling to grandchildren by a third. Return of physical energy was described by participants as *I have the energy to do it – when I'm depressed I'm tired, I'm not that awful tired and washed out anymore and I don't have to come home and sleep all evening*. Return of cognitive energy was described by participants as *I can concentrate more now, I am able to now – it takes an awful lot of energy for me when I don't feel good...because it's fake and artificial, I couldn't make that decision before and I feel better emotionally... to talk to people [when I was depressed] was a tremendous burden and the burden was lifted*.

One gentleman resumed gardening in partial capacity, completing those portions within his ability, and enlisted assistance from his children for the remainder.

One woman resumed reading magazines and books because, “I can concentrate now” and added, “I even belong to the book club at church.”

Conversely, although in recovery from depression, some participants continued to lack sufficient energy to resume all previous activities. Specifically, insufficient physical energy prohibited resumption of activities such as walking and recreational shopping that challenged participants' cardiovascular systems. Participants described their experiences in terms such as *I'm tired all the time and I don't have the energy yet.*

One participant had not resumed recreational shopping noting, "I'm tired all the time."

Another participant had not resumed walking saying, "I don't have the energy yet but I intend to start."

3.4.3.3 No Need to Avoid Negativity

Some participants demonstrated sufficient improvement in, or resolution of, personal factors that led them to resume activities. Specifically, a reduction of self worry or an increase in ability to confront suboptimal situations resulted in activity resumption.

Participants used terms such as *I have an attitude, an expectation, where I'm allowed to do things and I'm not worrying about myself now.*

When depressed, one woman stopped watching television and sitting/thinking because they were not sufficiently engaging and, consequently, she focused her thoughts on her problems. When in recovery she resumed them when she no longer was "worrying about [myself]."

One woman avoided interacting with her overbearing and controlling husband by sleeping excessively which resulted in stopping many activities. When in recovery, however, she was better able to tolerate her husband's behavior and negotiate with him stating, "I'm doing a lot less sleeping . . . I want out of my situation less I have time for activities and I have this attitude, an expectation, where I'm allowed to do things."

However, some participants continued to anticipate negative feelings associated with engagement in an activity and, hence, did not resume them.

One woman did not resume paying bills explaining, ". . . I just realized I've been very much afraid about this. I've been spending money and I'm afraid I don't have enough [money] [I'm] afraid to find out."

3.4.3.4 It's Not as Physically Painful Now

Diminished pain complaints were the stimulus for some activity resumption. Reduction of back pain, for example, was associated with improved mobility resulting in resumption of shopping. Reduction of diffuse bodily pain allowed the participant, for example, to maintain a seated position required to assemble model airplanes as well as to climb stairs to enter a major league baseball field and attend a spectator sport. This theme was expressed by participants in terms such as *my back doesn't hurt* and *I can get out and not feel...that my walking around the store is going to somehow [make my diffuse bodily pain unbearable]*.

One participant resumed walking because, “I feel better and my back doesn’t hurt. If I walked up and down 3 aisles [in the grocery store] then my back would just start to hurt, burn or something. I’d find myself thinking I didn’t really need those carrots and could live without them so I could get out of the store.”

Another participant explained he “was feeling better with less pain [throughout the body]” and could now resume numerous activities such as fixing things around the house, spectator sports, and hand crafts.

Some pain complaints related to physical impairments such as longstanding osteoarthritis and chronic pain were not reduced sufficiently for participants to resume prior activities. In our study, participants were pursuing intervention, surgical and pharmacological, for pain reduction. For example, knee pain prevented completion of laundry when stair climbing was required. Persistent back pain was associated with an inability to participate in, for example, spectator sports due to extensive walking required to enter the arena, and gardening due to kneeling. This theme was expressed by participants in terms such as *I’m in too much pain* and *I can’t kneel and my back was always killing me.*”

One woman indicated arthritic pain in her back and both knees prevented studying for personal advancement. She explained, “I’m interested [in a class] . . . but I’m in too much pain. I can’t sit still long enough for a lecture or anything.”

One participant did not resume gardening because “I can’t kneel and my back was always killing me.” Interestingly, however, she was exploring alternate ways to accomplish this task saying, “I thought about one of my granddaughters who loves to dig in the dirt and...thought that, in the fall, we could put in some bulbs.”

3.4.3.5 To Improve My Health

Some participants acknowledged the need to improve their health, specifically their physical health and/or general overall wellness, and subsequently resumed select activities in recovery. Substituting eating at a restaurant with cooking dinner at home to control food intake; and swimming, walking and exercising for cardiovascular fitness were resumed for their physical benefit. Hand crafts, computer use, museum visits, managing investments and sitting/thinking were resumed to promote mental stimulation and enhance general overall wellness. This theme was expressed by participants in terms such as *I know it’s important for my heart, I feel I better get control of my food intake, I know I need to do something and I get tired of sitting in the room, I recognized I was being a bump on a log and I’m not getting any younger and this body is the only body I have.*

One participant acknowledged his unhealthy habit of long work hours and sought to create a more balanced lifestyle. Hence, he resumed managing his investments stating, “I’m reprioritizing. I’m trying to see how much I really want to do and have to do and how much I can rely on the underlying base without working. I need to learn how not to work.”

Another participant resumed walking because “now I want to do it for a reason . . . for fitness. Before I just had no reason, no care, no desire.”

3.4.3.6 Enlarging My Social Space

When in recovery, participants resumed some activities that expanded their worlds beyond themselves by becoming involved with other people. Some simply wrote letters and enjoyed anticipating a response. Others loved to ‘people watch’ in a public place yet avoided personal interaction while, conversely, some participants reported a renewed willingness, openness, and interest in socialization. Interestingly, some enjoyed not only being in the presence of family and friends, but specifically being in a crowd of people. Finally, some resumed a leadership role in church and community activities. This theme was reflected in participants’ terms such as *I love to watch the people, I like to be in a crowd, I like to have people around me, I was anxious to see the people there, and it’s more of a willingness to be with them, to be around them.*

One participant remarked that his goal was to be alone when depressed but, paradoxically, resumed spectator sports in recovery because “I like to be in the crowd.” Additionally, he resumed activities at his church “because one of the things that I enjoy most is being in front of a crowd and being a public speaker . . . and I like running meetings.”

One participant resumed shopping in a store and spectator sports because, “I love to people watch. If we get to the airport early I’m in heaven because I can sit there and watch people.”

3.4.3.7 I'm Prioritizing My Activities

This single theme sheds light on participants' perceptions of activities they did not resume in recovery. Some participants weighed activity options and chose not to resume those not perceived as the most advantageous way to spend time or not seen as a priority. For example, one participant purchased commercially prepared foods such as rolls and pies when depressed in lieu of assembling them herself. During recovery, she chose to continue this substitution as a substantial time savings, allowing her to focus her efforts elsewhere. Participants used phrases such as *its not top priority anymore*, and *I'm learning to say "no."*

One participant actively chose not to resume all activities stating she had "completely switched her pattern and thought it was a good idea." Specifically, she stopped volunteer work out of obligation, noting "I have a lot of friends telling me I have to learn the word no."

One woman did not resume collecting sheet music for the piano because, "its not top priority anymore. I'm beginning to feel that I'm old enough to stop collecting. I've got enough."

3.3.4 Activities Newly Begun In Recovery

When in recovery from depression, some participants engaged in new activities not done prior to or during depression. Examination of these activities revealed 2 themes. A description of each theme as well as phrases used by participants and case examples are included.

3.3.4.1 I Have a New Life

Some participants demonstrated the capacity to engage in new activities in accordance with positive self-change in recovery. For example, yoga was initiated by one participant upon becoming more health conscious; a church leadership position was assumed with improved confidence by another; and activities done with other people for the purpose of fostering new friendships, such as shopping, began when openness for socialization emerged in a third participant. This theme was expressed in terms such as *I'm making the effort to listen more and get involved, I thought it would be a good idea, I felt it was my responsibility and I feel more open.*

One participant assumed a 3 year term on the Board of Directors at her church stating, "I'm willing to do that. I said no for so many years." She felt it was her responsibility and that everyone [in the church] was expected to help noting she had the "feeling that I could do it."

Another participant began a yoga class recalling, "I thought it would be a good idea. I saw a sign for a lunchtime yoga series. It's only 4 blocks from me . . . it's very low priced and so I signed up."

3.3.4.2 I'm Reorganizing My Life

Efforts to reorganize their lives by undertaking new activities associated with the living environment or family were initiated by some participants. Related to the living environment, one participant attended yoga and coffee gatherings provided by the retirement village for the

first time although she had lived there for several years; another replaced furniture damaged a number of years prior; and a third downsized household belongings to ease the burden on surviving family members. Related to family, one participant reduced paid employment hours allowing more time to travel and visit her children. This theme was reflected by participants in terms such as *I don't want them to have a mess to clean up, getting rid of clutter, I lost so many things in the flood that weren't replaced – I'm able to do that now and yoga and coffee are new – they are right here.*

One woman began attending activities provided in her retirement village stating, “Yoga and coffee are new [for me]. We get together from 9:30 to 10:30. There will be other things that I'll get involved with that are new too.”

Another woman described her four-story home as “crammed full of stuff. When I came home from my trip I saw how out of control I was because there was clutter all over [I am] downsizing . . . I just filled up 3 bags of books for the library and . . . catalogs and things I haven't looked at I plan to just chuck.”

3.4 DISCUSSION

While other qualitative studies have examined adaptive strategies for disability, none have focused on older adults as they transition from a depressive state into recovery. In a previous qualitative study, we identified adaptive strategies used by older adults during depression and, in

this study, directed our attention to adaptive strategies in recovery (Leibold et al., 2010). Again, Baltes and Baltes' (1990) theory of Selective Optimization with Compensation (SOC) helped to categorize the strategies reported by our participants. SOC is a model of human adaptation, developed to understand how people manage their lives to foster personal development and well-being throughout the lifespan. It consists of 3 processes: selection, optimization, and compensation. In selection, individuals set goals to prioritize and narrow their focus. Selection may be elective or loss-based (Baltes & Freund, 2003). Elective selection is gain focused toward advancement or achievement, whereas loss-based selection occurs in response to a loss and entails a change in goals. In optimization, individuals activate means to reach their goals and employ alternate methods or behaviors to reach goals, when needed, in compensation. All three adaptive strategies outlined in SOC were identifiable in our participants in their recovery from depression.

3.4.1 Selection

In recovery, lost capacity characteristic of a major depressive episode, such as loss of energy, diminished ability to concentrate, and/or diminished interest or pleasure, was returning. Hence, adaptive strategies were, in a sense, “return from loss” in recovery, and gain-focused where participants' goals focused on re-entry and participation in their former lives. As they transitioned into recovery, participants continued most activities they engaged in when they were depressed, and continued them naturally as they settled into their previous lives. In contrast, some activities, although continued in depression, were stopped in recovery. Interestingly, in all cases, activities were stopped for a positively-focused reason. Specifically, they were no longer

meaningful, were unnecessary, and/or participants were too busy with their substantially increased overall level of activity.

Most activities stopped during depression were resumed in recovery because they once again felt meaningful and/or were less physically painful to complete. Furthermore, participants experienced a return of physical and/or cognitive energy, were capable of enlarging their social space, wished to improve their health, and no longer avoided negative situations in their daily lives. Some activities, however, were not resumed, but with a positive motive once again, when participants prioritized their time and eliminated activities that did not meet their adjusted forward-focused goals.

Finally, participants demonstrated the capacity to begin new activities not done prior to or during depression, a positive outcome, as they were establishing a new sense of self and/or re-organizing their lives.

There are similarities and differences between the adaptive strategies related to selection implemented by our participants when they were in recovery and in a depressive episode. While they had goals at both time points, the focus was on survival during the depressive episode but, in recovery, was adjusted to reentry and participation in their former lives (Leibold et al., 2010). Some activities were continued at both time points. In recovery, they occurred naturally however, in the depressive state, participants relied on support from other people for prompting or they engaged in activities for alternate reasons such as opportunities for distraction from their circumstances, or to hide their depression from other people. At both time points some activities were stopped but rationales were substantively different. In depression, a negative focus such as low energy or constricted social space was predominant while, in contrast, a positive focus such as resumption of a busy lifestyle was consistently cited in recovery. Interestingly, though, some

participants had the capacity to weigh activity options when they were depressed and stop those with perceived lesser value to conserve and redirect their limited energy to higher priority activities. Finally, unlike in a depressive state, participants began new activities in recovery.

3.4.2 Optimization

To meet their goal of enhanced participation in daily life in recovery and, in addition, bolster reserve capacity, participants implemented a broad range of optimization strategies. Not surprisingly, efforts revolved heavily on optimizing emotional and psychological health but also included cognitive, spiritual, and physical health. Strategies were employed to support current daily functioning as well as to avoid or slow down relapse into depression. Participants strove to improve *emotional/psychological health* through, for example, active participation in support services provided by the RCT, accepting the need for and implementing lifestyle changes due to the effects of chronic obstructive pulmonary disease (COPD), initiating social connections with people in the workplace, and distancing themselves from abusive children. Examples of enhancing *cognitive health* included engaging in mentally challenging crossword puzzles, mathematical calculations, and educational readings as well as learning to use the computer. Efforts targeted toward improving *spiritual health* involved, for example, attending religious worship services, modeling Christian behavior to help other people, extensive religious readings, and praying. Finally, strategies to improve *physical health* were associated with balanced, low fat meals; dietary supplements; additional physical activity; and sufficient sleep and rest.

There were similarities and differences in optimization strategies employed by our participants in the depressive state and in recovery. Even though goals differed from preservation

of basic daily functioning in depression to resumption of life participation in recovery, similarities were realized. At both time points, some participants sought strength from social connections and spiritual resources, engaged in efforts to promote their physical and cognitive conditions, and remained gainfully employed to meet their goals (Leibold et al., 2010). On the other hand, because goals differed, it follows that some efforts to support goals would differ in each phase. Not surprisingly, perhaps the most notable difference between the two phases was participants' capacity, in recovery, to think beyond themselves and, moreover, into the future. They, for example, thought beyond themselves by helping other people in the role of lay pastor or by modeling Christian behavior for others experiencing a loss. Making decisions about future living arrangements or prioritizing life activities to permit focus on health promotion reflected thinking into the future. In depression, participants tended to rally any available reserve capacity while, in contrast, they strove to augment reserve capacity in recovery.

3.4.3 Compensation

Compensatory strategies, used to meet a goal or complete an activity when the usual manner is not possible or successful were unnecessary and, although used in the depressive state, largely eliminated in recovery. Specifically, participants no longer required assistance from another person, or an altered method or behavior to accomplish goals as was done in a depressive state. Interestingly, however, in one instance, a compensatory strategy implemented due to depression-related fatigue was deliberately continued into recovery because of its positive outcome. One participant purchased commercially prepared foods in lieu of assembling them herself when depressed and deliberately continued this time-saving substitution into recovery despite

regaining sufficient energy in recovery. Also, 1 participant performed some aspects of gardening and delegated the rest to children.

3.4.4 Summary

When participants were in recovery from depression they were, for a second time, challenged to adapt but this time in a positive direction as lost capacity incurred in the depressive state was resolving. They, in turn, selectively adjusted their goals and continued, stopped, resumed, and began new activities. Participants implemented a broad range of optimization strategies to meet amended goals related to enhanced participation in daily life. Compensatory strategies were unnecessary and largely eliminated except those deliberately continued upon recognition of their positive outcomes.

3.4.5 Clinical Relevance

Our study provides further information about recovery from depression in the context of activity. Perhaps most notably, we learned that giving up past activities during recovery is not always detrimental. In fact, we found that, in many instances, there was a positive motive behind participants' decisions not to restart an activity that was done either in or prior to depression. Specifically, we found that the meaning of some activities to the individual changed over time and when an activity was no longer seen as a means to meet their amended goals, it was eliminated. We could not compartmentalize activities into clear-cut categories representing those

continued and stopped based on characteristics of the activity alone. Rather, it appeared to be the meaning or value the individual associated with the activity that drove their decision to continue or stop it.

Additionally, some activities were stopped in recovery when individuals' capacity to participate in daily life escalated, leaving insufficient time for endless activities, hence, requiring them to make choices. For these reasons, our findings suggest that asking probing questions to understand the rationale behind the individual's decision to stop an activity during recovery is required to provide insight into their adaptive response.

3.4.6 Strengths/ Limitations/Further Research

As with all studies, this study had both strengths and limitations. The first strength involves use of a sample, part a subset of a large RCT, who were comprehensively evaluated for recovery from depression using well accepted assessments. Second, the ACS was an effective method to prompt responses to guiding questions. It was tailored to varying lifestyles and activities because of the inclusiveness of 80 diverse activities, and photographs seemed to spark immediate and detailed responses from most people. Additionally, using a semi-structured interview allowed participants to revisit their responses and gave opportunities to clarify and adjust responses. Finally, we interviewed 27 participants and, while upon review, no new themes were identified after participant 18, additional interviews enriched our data and supported our themes.

One limitation involved interviewing participants at only one time point during recovery and that was fairly early during recovery. It is possible that insufficient time had elapsed to implement some adaptive strategies and/or strategies may differ over time. Another potential

limitation involved using a relatively homogenous sample, that being primarily Caucasian females with a high educational level. It is unknown if and how gender, social support and/or financial resources influenced adaptive strategies. Finally, all participants were receiving maintenance therapies for depression. It is possible that clinicians influenced participants' adaptive strategies in a positive direction that may not represent those not receiving therapy services. Due to study limitations, our results cannot be generalized to disparate samples.

A semi-structured interview targeting the rationale for activities stopped in recovery needs to be developed. Further research to determine its efficacy as, for example, a supplement to well-accepted measurement tools such as the Hamilton Depression Rating Scale (Hamilton, 1960) would follow. Additionally, examining adaptive strategies with larger samples longitudinally spanning the depression/recovery continuum is suggested.

4.0 CONCLUSION

This study sought to understand activity choices of older adults when they were depressed and when they were in the early stages of recovery. Qualitative analysis was used to identify themes of activities continued and stopped in depression as well as activities continued, stopped, resumed, and newly begun in recovery. Participants (n=27) were recruited from a randomized clinical trial (R37 MH43832) at the University of Pittsburgh investigating the combined effect of an antidepressant and donepezil on cognitive performance and functional competence. Participants had a mean age of 73.3 years (range 65-88 years) and mean educational level of 14.6 years (range 10-19 years). Twenty were female (74%) and 12 (44.4%) were engaged in paid employment. The mean number of months since stabilization of depression was 5.17 (range 3-7 months). The mean HDRS score prior to the interview was 4.7 (range 0-10) indicating recovery from depression. All were community-dwelling, 26 were Caucasian and 1 was African American. One interview was conducted with each participant when they were in recovery for at least 3 but no longer than 7 months, using a semi-structured interview.

When they were depressed, participants continued some activities and stopped others. Activities were continued when they were part of an established habit or commitment, gratifying, a means of distraction or escape, and/or an attempt to hide their depression from other people. Additionally, participants continued activities when they were nudged by another person and/or

felt a sense of pushing oneself to maintain normalcy. Simultaneously, participants stopped some activities when they were no longer meaningful to them and/ or were too physically painful to complete. Furthermore, some activities were stopped when participants had insufficient physical/cognitive energy or did not wish to expend their limited reserve, avoided negativity, and/or constricted their social space.

When they were in recovery, the majority of activities in which participants engaged when they were depressed were continued spontaneously as they re-entered their former lifestyles. However, some were stopped. Specifically, activities were stopped when they were no longer meaningful to the participant, were unnecessary, and/or when participants' activity level increased substantially and they were too busy for all available activities. Moreover, in recovery, participants resumed most of the activities they had stopped during depression. They resumed activities when they were once again meaningful to them, physical and/or cognitive energy had returned, personal factors had improved or resolved so they no longer avoided negative situations, pain complaints diminished, they wished to engage in health promoting activities, and/or they were open or able to enlarge their social space. Some activities, however, were not resumed in recovery when participants actively weighed activity options and deliberately chose not to resume them so they could devote time and energy to higher priority activities. Finally, a number of participants engaged in new activities not done prior to or during depression. Some participants demonstrated positive self-change that opened up opportunities for engagement in new activities, while others undertook efforts to reorganize their lives.

In conclusion, adaptive strategies were brought into play by participants at various time points as they selected activities to continue, stop, resume, and newly begin as they strove to

survive the depressive episode and, then, re-enter and participate in their former lives in recovery.

APPENDIX A

ACTIVITY CARD SORT BY DOMAIN

Instrumental (20)	Low Demand Leisure (28)
Shopping in a Store	Spectator Sports
Shopping for Groceries	Recreational Shopping
Dishes	Cooking as a Hobby
Laundry	Sewing
Yard Maintenance	Quilting
Taking Out the Trash	Hand Crafts
Cooking Dinner	Table Games
Mending	Flower Arranging
Preserving Food	Computer
Household Maintenance	Collecting
Fixing Things around the House	Puzzles
Driving	Photography
Getting Gas	Drawing/Painting
Car Maintenance	Interior Decorating
Taking Care of a Pet	Playing a Musical Instrument
Paying Bills	Reading Magazines/Books
Managing Investments	Reading Newspaper
Resting	Reading the Bible/Religious Activities
Beauty/Barber Shop	Creative Writing/Journal
Child Care	Letter Writing
	Bird Watching
	Going to the Museum
	Attending Concerts
	Going to the Theater
	Watching Movies
	Watching Television
	Listening to Music
	Sitting/Thinking

High Demand Leisure (17)	Social(15)
Swimming Woodworking Bowling Golfing Walking Running Exercising Playing Tennis or Similar Sports Hiking Bicycling Horseback Riding Yard Games Camping Canoeing/Boating/Sailing Hunting Fishing Gardening/Growing Flowers	Studying for Personal Advancement Traveling Parties/Picnics Family Gathering Talking on the Phone Visiting Family/Friends Who are Ill Visiting with Friends Eating at a Restaurant Dancing Going to Place of Worship Volunteer Work Going to Children's/Grandchildren's Activities Storytelling with Children Marriage/Relationship Entertaining At Home or Club

(Baum & Edwards, 2001)

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