Cognitive coping and depression in elderly long-term care residents

Christine Viola McCormick

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COGNITIVE COPING AND DEPRESSION IN ELDERLY LONG-TERM CARE RESIDENTS

A Project
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Social Work

by
Christine Viola McCormick
June 2007
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Approved by:

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ABSTRACT

Depression is a significant and complex problem in the elderly population and can be a serious threat to the health, well-being, and even the life of the elderly. However, depression is particularly prevalent and critical among elderly residents of long-term care. The purpose of this research, therefore, was to examine the relationship between depression and the cognitive coping methods used by 37 elderly residents, age 60 and over, in two long-term care facilities. Cognitive coping methods were measured by administering a short version of the Cognitive Emotion Regulation Questionnaire with the addition of two questions measuring a religious aspect of cognitive coping. Symptoms of depression were determined using the 15-item Geriatric Depression Scale. Significant positive relationships were found between depression and the cognitive coping methods of rumination, catastrophizing, and other-blame, with other-blame having the strongest association. Depression was indicated in 13.5% of the participants. Residents who had been in long-term care for less than one year had almost three times the mean level of depression as those who had been in residency for over one year.
ACKNOWLEDGMENTS

With much appreciation to my research supervisor, Dr. Rosemary McCaslin, and all the faculty of the Social Work Department at CSUSB for their guidance and encouragement.

I also wish to thank each of the research participants, and all involved staff of each of the long-term care residences, who contributed their time and effort to help with this study.
DEDICATION

Dedicated to my husband, Matt, and daughter, Autumn, who graciously supported me, and tolerated my emotional absence from their lives while I worked on this project.
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CHAPTER ONE
INTRODUCTION

This chapter begins with an overview of the problem of depression among the elderly population, as well as its relationship to quality of life and suicide risk. Included in this discussion is the particularly high risk of depression among the elderly in long-term care. Existing policy related to depression in the elderly is examined, followed by an explanation of the purpose of this study, which was to examine the relationship between cognitive coping methods and depression among residents of long-term care. Finally, this chapter concludes with a justification for the importance of this research to social work practice.

Problem Statement

There are multiple and complex factors related to depression among the elderly population. Social workers who specialize in gerontology are concerned with depression in this population because it is a serious threat to the health, well-being, and even the life of the elderly. Overall quality of life is frequently affected by even minor depression in this age group.
Minor (subsyndromal) depression is defined as a sustained depressive mood that has similar symptoms as major depression, however does not qualify for a DSM-IV diagnosis of major depression because it involves fewer identifying symptoms (American Psychiatric Association (APA), 2000). In a community sample of people over the age of 80, over 12% presented with subsyndromal depression. These depressed individuals reported less satisfaction with life, as well as a lower quality of life than did controls (Xavier et al., 2002). In one large study of 500 85-year old community-dwelling elders, 15.4% were found to be depressed as indicated by a score of 5 or more on the Geriatric Depression Scale (Stek, Gussekloo, Beekman, van Tilburg, & Westendorp, 2004).

Depression rates may be even higher in long-term care settings (Ron, 2004). Researchers of elderly nursing home patients in the Netherlands found astoundingly high rates of depression in this population. Of the 333 patients tested, 8.1% indicated major depression, and 14.1% indicated minor depression, resulting in a total of over 22% who tested with some form of depression. In this same study, an additional 24% of the patients had symptoms of sub-clinical depression, meaning that they
had symptoms of depression, but did not score in the range for minor or major depression (Jongenelis, Pot, Eisses, Beekman, Kluiter, & Ribbe, 2004). Earlier research conducted by Parmelee, Katz, and Lawton (1992) of 868 elders in assisted care found that nearly 16% had symptoms of major depression, and over 16% had minor depressive symptoms.

Depression had been shown to have a considerable negative impact on the overall well-being of the elderly. Research by Beekman, Penninx, Deeg, de Beurs, Geerlings, and van Tilburg (2002) examined the effect of depression in the elderly on disability, use of health services, and well-being. They found that depression had a detrimental effect on all three areas. Depression affected the ability of these elders to function well in their daily lives and significantly reduced their social participation including their use of health-care services. Depression also contributed to their overall dissatisfaction with life. Snowdon (1986) found a similar correlation between reduced life satisfaction and depression among 320 nursing home residents in Australia. In addition to lessened life satisfaction, these
depressed elderly patients also reported less contentment and achievement.

Depression at all ages must be taken seriously because of its relationship to suicide. Over 50% of all suicides have a link to at least one episode of major depression. However, in the elderly the connection between depression and suicide rises dramatically. A history of depression is the most commonly reported diagnosis in older persons who have attempted or completed suicide. An autopsy study of elderly nursing home patients who had committed suicide found that some form of depression had been diagnosed in 75% of the patients prior to their deaths (Souminen, Henriksson, Isometsa, Conwell, Heila, & Lonnqvist, 2003). Research comparing depression, hopelessness, and suicidal thoughts among both community and nursing home elders, found that those residing in nursing homes indicated higher levels of all three variables (Ron, 2004).

Alarming, suicide rates are disproportionately higher among the elderly. In the year 2001, people over the age of 65 completed more than 17% of all suicides, however comprised only 12.4% of the entire population of this country (Szanto, 2003). This statistic indicates
that the elderly have the highest suicide rates of all age groups. After the age of 65 suicide rates continue to rise and reach the highest risk between the ages of 80 and 84 (Department of Health and Human Services, National Strategy for Suicide Prevention, 2001). The elderly also have higher rates of completed suicide per attempt than any other age group, indicating a more serious intent to die (Draper, 1996). Reducing depression in the elderly may help to reduce these distressing suicide statistics.

In addition to suicide risk, several studies have indicated that depression in the elderly raises the risk of other types of mortality. In a study of 2,847 people between the ages of 55 and 85, depression was shown to be associated with higher cardiac related death rates in both cardiac patients and in controls without cardiac disease (Penninx et al., 2001). The relationship between depression and mortality may be even more significant in long-term care settings. It was found that major depression in the first year after admission to nursing homes increased the probability of elderly patients' mortality by 59%, after controlling for health variables (Rovner, German, Brant, Clark, Burton, & Folstein, 1991).
Because of the many detrimental effects of depression in the elderly, it must be taken seriously. However, depression in the elderly population residing in long-term care is not only more prevalent than for community dwelling elderly, but has particularly grim consequences (Ron, 2004; Snowdon, 1986; Souminen et al., 2003). Rovner et al., (1991) indicated that over 18% of 454 newly admitted nursing home residents suffered from major depression during their first year of admission. This increased rate of major depression during the first year indicates that this may be an especially critical time for identifying and treating depression in long-term care residents.

Consequently, understanding the factors that relate to depression in the long-term care setting is essential to gerontologists and social workers considering how to decrease depressive symptoms in this vulnerable population.

Existing Policy Related to Depression in Long-Term Care

The need for attention to the mental health of residents in long-term care has been acknowledged, as indicated by the passage of the Nursing Home Reform Act,
a component of the Omnibus Budget Reconciliation Act of 1987 (OBRA; H.R.3545, 1987, Subtitle C). The purpose of this act was to establish standards for the appropriate rights and care of residents of nursing facilities receiving funding from MediCare and MediCaid. OBRA suggested guidelines for the assessment and treatment of mental illness in general, however the problem of depression was not given a place of priority or specificity, considering its detrimental consequences. Several states have chosen to make the nursing home standards suggested in OBRA into state law for all licensed long-term care facilities.

More recent and specific guidelines for the treatment and assessment of depression among nursing home residents were submitted by the American Geriatrics Society and American Association for Geriatric Psychiatry Expert Panel on Quality Mental Health Care in Nursing Homes (American Geriatrics Society (AGS), 2003). The goal of the panel in submitting these guidelines was to improve diagnosis and quality of care offered to nursing home patients with depression.

Among the recommendations of the panel were the following suggestions: 1) residents should be assessed
for depression within the first two to four weeks after admittance, and at six month intervals thereafter; 2) those with suicidal thoughts, even though they may not have a definite suicide plan, should be referred to a mental health professional; 3) for major depression, antidepressant medication combined with nonpharmacological treatment is recommended; 4) for minor depression, options include nonpharmacological methods, antidepressants, and waiting; and 5) cognitive-behavioral therapy, either in groups or individually, is among those treatments recommended for treating depression.

To date, depression has been overlooked and under treated in this high-risk group (Evers, Samuels, Lantz, Khan, Brickman, & Marin, 2002; Brown, Lapane, & Luisi, 2002). However, as depression is increasingly assessed and recognized in the elderly as a result of policy change, it is anticipated that more patients will be referred to mental health professionals for treatment. The abovementioned guidelines, if implemented as recommended by the panel, may afford increasing opportunities for gerontologists and social workers to provide nonpharmacological interventions, such as
cognitive-behavioral therapy, for the treatment of depression in the long-term care population.

Purpose of the Study

In looking at possible factors that relate to depression in this population, it was considered beneficial to consider the coping methods used by the elderly to adjust to the long-term care setting. Given that some elderly adjust to the transition fairly well, and some have poorer psychological outcomes to the same circumstances, it is plausible that the coping methods used by the individual, in addition to the environmental change, play a considerable role in psychological adjustment. In support of this suggestion, Schanowitz and Nicassio (2006) found that coping methods used by 100 elderly individuals in assisted care were related to their psychosocial adjustment, independent of their physical condition.

The purpose of this research, therefore, was to examine specific coping methods used by the elderly as they adjust the environment of a long-term care facility, and to examine the correlations between these coping methods and levels of depressive symptomatology.
Understanding the coping methods used during this period, and how they relate to depressive symptoms, may allow social workers and gerontologists to develop more effective therapeutic techniques to help alleviate symptoms of depression in this initial adjustment phase.

The particular coping strategies examined in this study were the cognitive coping methods used by elderly residents. Cognitive coping is the manner in which individuals use thoughts to cope with stressful or challenging situations. This type of coping strategy was selected because it is a means readily available to the majority of elderly people, despite physical or environmental limitations. Long-term care residents often have limited options and opportunities for the use of more action-oriented and problem-focused coping methods; on the other hand, most can use their thoughts to help them cope with stressful events. Moreover, cognitive coping has been shown to be highly correlated with depressive symptoms (Garnefski, Kraaij, & Spinhoven, 2001).

In addition to cognitive coping methods, an element of religious coping was included. The rationale for including spirituality in this study is that it has been
shown to be correlated with cognitive coping, as well as symptoms of depression (Bosworth, Park, McQuoid, Hays, & Steffens, 2003; Danhauer, Carlson, & Andrykowski, 2005; Folkman, 1997; Meisenhelder & Chandler, 2002). Furthermore, religion becomes increasingly important to many people as they age. In a study of religious importance in 114 community-dwelling women over the age of 65, more than 80% of the women considered religion to be of significant value to their well-being, and two thirds reported regular participation in religious activities. Over 69% reported that religion had become progressively more significant to them as they aged (Zorn & Johnson, 1997). As with cognitive coping, religious coping is a method that is accessible to most elderly individuals despite a restrictive environment or failing physical health.

In the present study, coping methods were measured by administering a short version of the Cognitive Emotion Regulation Questionnaire (CERQ), an 18-item self report measure which includes scales that measure nine separate cognitive coping methods (Garnefski, Kraaij, & Spinhoven, 2001). Additionally, two factors from the Brief RCOPE (Pargament, Smith, Koenig, & Perez, 1998) were added that
measure the cognitive dimension of religious coping. Symptoms of depression were measured using the 15-item Geriatric Depression Scale (GDS; Lesher & Berryhill, 1994). Correlations between the variables of coping and depression were examined in order to more fully understand the relationship between specific cognitive coping methods and depression among the elderly adjusting to long-term care.

Only those skilled nursing facility and assisted living residents who were 60 or older, and able to comprehend the content of the research questions were included in the study. Potential participants were screened using a short interview to determine mental clarity, and surveys of those demonstrating more than slight dementia were not included in this research.

Significance of the Project to Social Work Practice

As has been discussed, depression in the long-term care setting is a distressing problem in need of further attention by mental health professionals, as well as legislators and researchers interested in the mental well-being of the elderly. An increased understanding of the variables related to depression in this population
will allow social workers specializing in gerontology to develop more effective therapeutic interventions that can be applied early in the transition process to assisted care. If more fully understood, the relationship between specific cognitive coping methods and symptoms of depression will equip mental health professionals with additional skills to be used in the implementation of cognitive techniques with the elderly, both individually and in group settings.

In addition, understanding the significance of cognitive coping to the mental health of residents adjusting to long-term care may assist in reinforcing the recommendations of the Expert Panel regarding depression (AGS, 2003). Suggestions made by the panel that may be supported by these results are the early screening of depression within two weeks of admittance, and at six month intervals thereafter, as well as the recommendation for the use of cognitive/behavioral therapy as an effective intervention for depression. Supporting these recommendations may perhaps help to facilitate the adoption of these guidelines into required practice.

This knowledge may be applicable to four stages of the Generalist Model: Assessment, Planning,
Implementation, and Evaluation. Understanding the relationship between cognitive coping and depression in the elderly may be helpful when developing screening tools to assess for depression in the long-term care setting. Screening tools that measure the specific cognitive coping methods of an individual will help to identify negative thought patterns. Identifying the specific dysfunctional cognitive coping methods used may enable social workers to develop an individualized treatment plan that incorporates more functional coping styles, and may also be used for prevention of depression. Once depression is identified, and the treatment plan developed, more helpful cognitive coping techniques can be taught and encouraged as part of an overall treatment program for the depressed elder. For evaluative purposes, a post-test to measure cognitive coping can be administered to determine if the intervention was effective in changing coping patterns.

The results of this research may also be valuable to researchers attempting to more fully understand depression in the elderly. Few studies have examined coping methods used by the elderly in long-term care (Schanowitz, 2004; Schanowitz & Nicassio, 2006; Danhauer,
Carlson, & Andrykowski, 2005). Fewer yet have looked specifically at cognitive coping methods and how they relate to depression in the elderly (Kraaij, Pruymboom, & Garfefski, 2002). Consequently, this research may provide invaluable information and help to narrow the gap that exists in the current literature.
CHAPTER TWO

LITERATURE REVIEW

Introduction

This literature review begins by introducing the importance of coping, in general, to psychological adjustment. Subsequently, theories of coping are examined, beginning with a discussion of the two main categories of coping, problem-oriented and emotion-oriented, and the psychological outcomes of each. An explanation for the sometimes contradictory outcomes of emotion-oriented coping is offered by suggesting that emotion-oriented coping may actually be made up of subsets of cognitive coping styles that should be considered individually. The connection between emotion-oriented coping and cognitive coping is discussed, leading to an explanation of cognitive coping and an in-depth literature review of its relationship to depression. Finally, this section concludes with a look at the scant literature regarding the use of cognitive coping in the elderly population.
Coping Predicts Psychological Outcomes

Numerous studies indicate a relationship between the coping methods used by individuals and psychological well-being despite difficult or challenging circumstances (Folkman & Greer, 2000). For example, caregiver partners of men with AIDS were able to experience positive emotional states even while going through the illness and loss of their partners. The mood of the participants was related to the type of coping utilized during these exceptionally difficult situations (Moskowitz, Folkman, Collette, & Vittinghoff, 1996). Longitudinal research by Folkman (1997) looked at the psychological functioning of over 250 care giving partners of men with AIDS and came to a similar conclusion. The majority of the caregivers were able to experience a positive mood at times during the care of, and loss of, their partners. Specific coping methods used by caregivers were related to their emotional states.

Additionally, a review of the literature regarding positive change following traumatic events indicated that the coping methods employed were associated with well-being after the trauma (Linley & Joseph, 2004). These authors suggested that the types of coping methods
used both during and after the difficult event were consistently related to whether or not the survivors experienced personal growth in the long-term. Those who perceived that they had grown from the trauma experienced fewer symptoms of depression in the period following the event.

The significance of coping in the ability to experience positive affect in the midst of difficulty has been demonstrated in the long-term care elderly population as well. Danhauer, Carlson, and Andrykowski (2005) suggest that nursing home residents may experience positive psychosocial functioning in spite of distressful situations. The type of coping techniques used by 92 elderly residents with poor health, were related to whether they experienced positive affect, negative affect, or depression, despite their difficult circumstances. Schanowitz (2004), too, looked at the coping methods used by 100 elderly residents in nursing homes, intermediate homes, or assisted care. It was found that the coping styles used by the residents were related to positive psychological well-being. These studies support the suggestion that coping is strongly associated with psychological adjustment.
Theoretical Background of Cognitive Coping

Early theory on emotion assumed that affect was the causal driving force for both cognitive and behavioral responses (Lindsley, 1951 as cited in Lazarus & Folkman, 1984); however a more recent conceptualization is that emotion is a product of cognition (Lazarus & Folkman, 1984; Folkman & Lazarus, 1988). In other words, it is now acknowledged that thought comes before affect. This newer view of emotion gives primacy to thought processes, because it assumes that cognitions can be controlled and modified in order to change emotional states. The belief that thoughts have the power to change affect is central to cognitive theories of coping.

In their model of coping, Lazarus and Folkman (1984) describe coping as "cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of a person" (p. 141). They categorize coping into two main types, problem-oriented and emotion-oriented (see also Lazarus, 1993). Problem-oriented coping is the attempt to form a solution, or to otherwise take action directed at resolving a challenging situation. On the other hand, emotion-oriented coping is the effort of managing a
stressful event with an affective or cognitive response, rather than acting upon the challenge directly.

Most studies support the idea that the specific coping methods employed can predict fairly consistent emotional results. In general, research indicates that problem-focused coping results in more favorable outcomes than emotion-focused strategies (Lazarus, 1993). For example, in one community sample of 224 elderly people, participants who engaged in more problem-oriented coping had fewer depressive symptoms and less functional disability (Greenglass, Fiksenbaum, & Eaton, 2006). Problem-oriented coping was associated with decreased depression in Veterans with lower-limb amputations. Those amputees who engaged in more problem-oriented coping methods had fewer depressive symptoms, as well as fewer symptoms of anxiety (Desmond & MacLachlan, 2006). Kraaij, Garnefski, and Maes (2002) found that emotion-oriented coping resulted in higher levels of depression in a community-dwelling sample of 194 people over the age of 65. In this study, the correlation between emotion-oriented coping and increased depression was significant for both sexes, but was stronger for women than for men.
As noted, Lazarus (1993) held that emotion-oriented coping resulted in generally poorer outcomes than problem-oriented methods, however in her study of caretaker partners of men with AIDS, Folkman (1997) later revised this existing theory to include a type of emotion oriented cognitive coping called *meaning-based coping*, which was associated with positive psychological outcomes. Meaning-based coping encompasses an individual’s perception of a situation, and includes a person’s efforts to find a positive meaning in the midst of a negative or challenging event. Coping techniques used to give meaning to negative events include positive reappraisal, goal directed thoughts, finding significance in everyday events, and spirituality. Folkman stated that, “These four types of coping have a common underlying theme: searching for and finding positive meaning” (p. 1212). She discovered that the use of meaning-based coping was related to good psychological outcomes for the caretakers in the study, both during the illness of their partners, and after their death.

As noted above, Lazarus and Folkman’s (1984) category of emotion-oriented coping and Folkman’s (1997) meaning-based coping included cognitive efforts to cope,
however paradoxically, each appears to be associated with somewhat opposing results. It may be that Folkman’s model of meaning-based coping recognized and defined more specific and more adaptive elements of emotion-oriented coping. It is possible that some elements of cognitive coping are adaptive, and some are maladaptive, and that each element should be considered independently. More recently, research has begun to focus on these more precise cognitive aspects of coping, or the way in which the specific type of appraisal used affects an individual’s emotions. It has been suggested that how an individual perceives a situation has more of an effect on adjustment than does the actual event itself.

In support of this proposal, Gall and Evans (2001) found that the manner in which participants perceived negative situations in their lives had a greater impact on their emotional health than either the actual experience, or the frequency of the experience. Perceiving an event as undesirable was related to greater depression, however perceiving it as a challenge, or having the potential for personal growth, was related to fewer depressive symptoms. Perception of a situation also affected how patients with rheumatoid arthritis adjusted
to their illness. In a sample of 75 women, patients’ perceptions of the severity of their illness had more influence on their psychological adjustment, including their levels of depression, than did the actual medical measures of their illness (Groarke, Curtis, Coughlan, & Gsel, 2004).

The cognitive appraisal methods used by patients with Acute Respiratory Syndrome (SARS) were also related to their psychological outcomes. Cheng and Wong (2005) looked at coping methods used by sufferers of SARS during the 2003 outbreak in China. They found that a positive appraisal of their situation, such as looking for personal growth in the midst of the trauma, was related to decreased symptoms of depression among those who survived the epidemic. Those who took a more negative appraisal, such as concentrating on the losses associated with the illness, indicated more depressive symptomatology.

The importance of cognitive appraisal in mental health outcomes is also central to Aaron T. Beck’s theory of the “Cognitive Triad” (Beck, 1976). Beck argues that the three ingredients in the triad, a negative view of self, a negative view of the world, and a negative view
of the future, are responsible for depression. These three negative viewpoints become evident in an individual’s "automatic thoughts," which are a person’s immediate and involuntary thoughts concerning a situation. Automatic thoughts are responsible for how individuals perceive situations, and their corresponding emotional outcomes.

Additionally, negative automatic thoughts are considered a key element in the "downward spiral of depression" (Freeman, Pretzer, Fleming, & Simon, 2004, p. 104). This downward spiral is a cycle that is first activated by a stressful or difficult event. The problematic event triggers an individual’s negative automatic thoughts, which in turn cause the person to feel depressed. The depression, in turn, can create a negative bias in how the person perceives events in their environment. This negative bias continues to fuel the depressed mood, and the depression continues until the cycle is interrupted. Freeman, Pretzer, Fleming, and Simon state that "[I]t is important to break the self-perpetuating cycle of negative automatic thoughts, depressed mood, and biased recall and perception to alleviate the depression" (p. 105). In order to achieve
lasting outcomes, it would be necessary to not only break the cycle, but to also attempt to modify the individual’s problematic negative thoughts.

This study aimed to achieve a better understanding of both problematic and adaptive thought processes used by elderly participants, and how these coping methods relate to depression. A more thorough understanding of the specific cognitive coping techniques used by depressed persons may be of benefit when developing interventions aimed at interrupting the downward spiral of depression and modifying maladaptive coping styles.

The Significance of Cognitive Coping Styles in Psychological Adjustment

Cognitive and meaning-based coping techniques may be particularly useful to the elderly in skilled nursing facilities and assisted living settings. These elders may well find that many of the decisions and events in their lives are beyond their control. Poor health and the regulations of a more restricted environment may reduce opportunities for problem-focused coping; however, cognitive coping methods are readily available. Lazarus and Folkman (1984) maintain the idea that the coping
methods used by an individual are likely to change and adapt to new environmental demands.

In support of this supposition, research indicates that people faced with uncontrollable events, such as those in long-term care, often make use of more emotion-than problem-oriented coping methods. Folkman and Lazarus (1980) found that situations requiring an individual’s acceptance favored emotion-oriented coping methods, such as cognitive and meaning-based coping. When faced with difficult situations in which an individual had some control over the outcome, problem-oriented methods were the most effective. However, when the situation was out of the command of the individual, emotion-focused methods were most often used with success.

Research by Mastriano (1996) demonstrated that a combination of emotion-oriented positive reappraisal and problem-oriented coping were used effectively by 43 skilled nursing facility residents, resulting in favorable emotional outcomes. However, residents who used more of the cognitive technique of positive reappraisal, which included a spiritual element, indicated more subjective well-being, as well as less depression, than did those using other coping methods.
In more recent research, 144 patients with Systemic Lupus Erythematosus used more emotion-focused than problem-focused techniques to cope with their illness, as compared to a control group of healthy individuals. When the patients' illness was perceived as beyond their control, the use of the emotion-oriented cognitive technique of positive reinterpretation was related to greater quality of life. These patients also indicated more use of acceptance and religious coping methods (Rinaldi et al., 2006). Similarly, rheumatoid arthritis patients made more frequent use of emotion-oriented cognitive coping methods such as positive reinterpretation, religious coping, and acceptance (Groarke, Curtis, Coughlan, & Gsel, 2004).

Since emotion-oriented coping may be more beneficial, as well as more feasible for long-term care residents facing uncontrollable circumstances, this research concentrated on the cognitive and meaning-based aspects of emotion-oriented coping. In particular, a set of nine cognitive coping techniques has been described, known collectively as Cognitive Emotion Regulation (CER), which has shown strong and relatively consistent correlations with depressive symptoms and other
psychological outcomes (Garnefski, Kraaij, & Spinhoven, 2001). The coping techniques which make up the CER set include self blame, blaming others, acceptance, refocus on planning, positive refocusing, rumination, positive reappraisal, putting into perspective, and catastrophizing.

Kraaij and Garnefski (2006) define cognitive coping strategies as "[T]he cognitive way of managing the intake of emotionally arousing information, involving thoughts or cognitions that help to manage or regulate our emotions." Or more simply, "[W]hat people think after the experience of threatening or stressful life events" (p. 4). Theoretically, the coping strategies of positive reappraisal and positive refocusing have been shown to be more adaptive, while the use of rumination, self-blame, and catastrophizing have indicated consistently poorer results (Garnefski, Kraaij, & Spinhoven, 2001).

A noteworthy amount of research involving younger participants implies significant relationships between these cognitive coping strategies and psychological adjustment. Garnefski, Boon, and Kraaij (2003) discovered a strong association between the use of rumination and increased levels of depression in adolescents between the
ages of 14 and 18. This same study indicated a negative association between the use of positive reappraisal and depression in these young participants. Martin and Dahlen (2005) looked at anger, anxiety and depression and their corresponding relationships to the cognitive coping methods used by 362 college students. These authors found that the coping strategies of rumination and catastrophizing were associated with greater levels of anger, depression and anxiety. However, the use of positive reappraisal and positive refocusing was related to lessened anxiety and depression. Interestingly, the use of acceptance as a coping strategy was related to higher levels of depression and stress.

In a study comparing the use and outcomes of cognitive coping in 251 men versus 379 women with a mean age of 42, it was found that women used rumination, catastrophizing and positive refocusing more often than did men. However, the use of self-blame, rumination, and catastrophizing was related to greater depression in both groups. In addition, increased use of positive reappraisal was related to decreased levels of depression in both men and women (Garnefski, Teerds, Kraaij, Legerstee, & van den Kommer, 2004). Research by
Nolen-Hoeksema (2000) examined the relationship between rumination and the resulting levels of depression and anxiety in 1,132 adults between the ages of 25 and 75. The author concluded that the use of rumination predicted increased levels of both depression and anxiety. In particular, rumination was related to the persistence of major depression as well as to the onset of new major depressive episodes.

Similar results were found in a study regarding the use of rumination in 253 adults who had experienced the loss of a loved one (Nolen-Hoeksema, Parker, & Larson, 1994). The bereaved participants who reported the use of more rumination one month after their losses were more likely to be depressed at six months. It is interesting to note that in this study, as well, women reported the use of more rumination than did men.

In research comparing the cognitive coping strategies used by adolescents and adults, it was again found that the use of rumination and self-blame were related to increased depression and anxiety in both groups. However, positive reappraisal was strongly and negatively correlated with depression and anxiety at all ages. The adults used more cognitive coping methods than
did the adolescents. In particular the adolescents made less use of both rumination and the more adaptive positive reappraisal than did the adults (Garnefski, Legerstee, Kraaij, van den Kommer, & Teerds, 2002).

Garnefski and Kraaij (2006) looked specifically at the relationship between cognitive coping and depression in four different age groups that ranged from 12 to 97 years in age, and one psychiatric group. In all five groups rumination and catastrophizing were associated with greater levels of depression, and positive reappraisal was related to a decrease in depressive symptomatology. In this study, the elderly made the most frequent use of acceptance; however acceptance was positively associated with depression at this age. The authors suggest that acceptance in the elderly may be a type of resignation, or giving up of hope, in response to a distressing situation (see also Kraaij, Pruymboom, & Garnefski, 2002).

Only a small number of published studies have looked specifically at the relationship between cognitive coping methods and depression in the elderly population. Kraaij and Garnefski (2006) examined the cognitive coping methods used by 248 elderly people who had experienced
the trauma of war over 50 years ago. They noted that the coping methods of positive reappraisal and positive refocusing were significantly related to decreased depression in these participants. Once again, the use of rumination, catastrophizing, and self-blame had significant associations with an increase in depressive symptoms.

In a longitudinal study, Kraaij, Pruymboom, and Garnefski (2002) considered the relationship between depression and cognitive coping methods used by 99 community-dwelling elderly people. In accord with earlier studies, those elderly participants who used greater levels of rumination, acceptance, and catastrophizing reported the most depressive symptoms, and those using more positive reappraisal indicated lower depression scores. Two and a half years after the first measures, the authors re-examined whether the above relationships were affected by negative life events and prior depression. After controlling for these variables, the use of acceptance and positive reappraisal maintained their strong associations with depression.

Because of the established importance of cognitive coping methods to depression, the present study attempted
to determine how an elderly person’s use of cognitive coping strategies during residency in long-term care was related to symptoms of depression. Understanding the relationship between cognitive coping and the mental health of the elderly in long-term care settings may be helpful to gerontologists and clinicians when developing treatment plans for their depressed clients. Since personal religious beliefs affect how people perceive distressing situations, such beliefs were also considered when assessing cognitive coping methods in this study.

Based on the above research findings, it was hypothesized that the use of positive reappraisal by elderly residents in long-term care would be inversely related to depression, and the use of rumination, acceptance, and catastrophizing would be positively related to depression. It was also hypothesized that positive religious coping would be inversely related to depression in this population.
CHAPTER THREE

METHODS

Introduction

The intent of this chapter is to describe the objectives of this research, as well as the techniques used to conduct the study. Included are a description of the sample that was used, the methods used to acquire the sample, an explanation and specific content of the survey instruments used, procedural methods that were followed, and confidentiality and debriefing processes. Finally, the statistical procedures utilized to analyze the data are discussed.

Study Design

The objective of this study was to explore the cognitive coping methods used by the elderly residing in one skilled nursing facility and one assisted living facility. The specific cognitive coping methods measured were compared with levels of depression in these same residents in order to explain the relationship between cognitive coping methods and depression in this population.
Residents age 60 or older, from one skilled nursing facility in Riverside County, and one assisted living facility in San Bernardino County, California, were recruited for the study. Quantitative methods were used to collect the data in order to employ existing instruments that have demonstrated reliability in measuring the constructs of cognitive coping and depression in the elderly.

In accord with previous research on cognitive coping, this study expected to find positive relationships between the variables of ruminative coping, catastrophizing, and depression, and to find a negative relationship between the variable of positive reappraisal and depression. It was also expected that positive religious coping would be negatively associated with depression in this population. However, this study is non-directional, in that it is unable to predict the directions of the above-mentioned associations.

Sampling

A convenience sampling method was used. Forty-one residents ages 60 and over, and having no more than mild dementia, were recommended by the facilities' social
services directors as potential candidates for this research. Those residents who were recommended by staff were screened using a short conversational interview that included questions from the Mini Mental Status Exam (MMSE) (Folstein, Folstein, & McHugh, 1975) to determine whether they were sufficiently oriented to understand the survey questions. Only surveys of those demonstrating sufficient mental clarity were included, resulting in a total of 37 surveys for this research. Participants were offered the option of receiving ten dollars as compensation, or of having that same amount donated to an activity fund within the facility.

Data Collection and Instruments

In this research, the independent variables were the cognitive coping methods that elderly residents used to cope with their stay in long-term care. The level of depression among these same residents was the dependent variable. A detailed description of the measures used is included below.

Measure of Cognitive Coping Methods

Cognitive coping methods were measured by administering a short version of the Cognitive Emotion
Regulation Questionnaire (CERQ), an 18-item self-report measure consisting of questions measuring nine separate subscales of cognitive coping methods (Garnefski, Kraaij, & Spinhoven, 2001). The nine subscales, consisting of two items each, are: Positive Refocusing, which involves thinking about something pleasant, rather than the unpleasant event; Positive Reappraisal, which involves the effort of creating a positive meaning out of the unpleasant event; Acceptance, which involves accepting and resigning oneself to the negative event; Refocus on Planning, which involves thinking about plans and methods in which to handle the negative event; Self-Blame; which involves thoughts of blaming oneself for the event; Other-Blame, which involves thoughts of blaming other people or situations for the negative event; Rumination, which involves repetitious thoughts of the negative event; Catastrophizing, which involves thinking about how dreadful the event is or was; and Putting into Perspective, which involves diminishing the seriousness of the event by thinking of the event in relation to other more difficult situations (Garnefski & Kraaij, 2006) (for specific questions grouped under subscales, see Appendix A).
The wording of questions from the original CERQ was slightly modified to measure coping in the environment of a long-term care facility. Items in the questionnaire were measured using a 5-point Likert scale ordinal measure ranging from 1 (Never) to 5 (Very Often). For each subscale two items were added, creating an interval measure ranging from 2 to 10. Written permission was obtained from the authors of this survey (see Appendix B).

The alpha coefficients indicating the internal consistency of the nine subscales of the CERQ have been determined to be good to very good as evidenced by scores ranging from .75 to .86 in adult populations. Test-retest reliability indicators have ranged between .48 and .65. The CERQ is a relatively recent survey instrument that has been in use for less than six years. It has indicated good validity to date, however support for validity continues to be an ongoing effort.

In addition to the CERQ, two items from the Brief Measure of Religious Coping (RCOPE), (Pargament, Smith, Koenig, & Perez, 1998) were added to measure the cognitive dimension of positive religious coping. These two items were: Since being here, I have focused on
religion to stop worrying; and, Since being here, I have thought that God might be using this situation for good. These additional cognitive/religious coping items were measured using the same 5-point Likert scale used with the CERQ, and added to form a tenth subscale.

To introduce the section on cognitive coping methods, the following instructions were included at the beginning of the survey, “The following 20 statements concern your thoughts about your move to a long-term care facility. Please read the statements below and indicate how often you have the following thoughts by circling just one answer for each question.”

Measure of Depressive Symptoms

Symptoms of depression were measured using the 15-item Geriatric Depression Scale (GDS-SF; Sheikh & Yesavage, 1986). The wording of some questions was slightly modified to better reflect life in a long-term care situation. (The 15 items from the GDS are listed in Appendix C). Each of the questions on the GDS was answered by circling either “yes” or “no”, and each item was coded either “0” or “1”. The 15 items were then added to create an interval score ranging from 0 to 15.
The GDS-Short Form used in this research has been found to be highly correlated with the GDS-Long Form ($r = .89, \ p < .001$). The original GDS-LF has been in use for over 20 years, and has been shown to have good reliability and validity for measuring depression in elderly subjects (Sheikh & Yesavage, 1986). In a study comparing the two surveys, Lesher and Berryhill (1994) found the GDS-SF to be an adequate substitute for the GDS-LF, with the exception of use with elderly subjects who have dementia.

**Collection of Demographic Information**

Four final questions regarding participant demographics were included in the survey. These questions regarded length of stay in the facility (less than one year, or more than one year); gender (male or female); ethnicity (American Indian or Alaskan Native, Asian or Pacific Islander, Black, Caucasian, Hispanic, or Other); and age. Age was recorded as an ordinal measure; all others were nominal. All survey information was printed in large 14-point type for ease of reading (see Appendix C for the complete survey).
Procedures

The social services director of each facility recommended potential candidates for this research. Visits took place during February and March of 2007, either in a large social room, in the facility’s library, or in the participants’ individual rooms. This researcher explained the nature of the study and the study’s usefulness to gerontology. Surveys were administered either in small groups, or individually, and care was taken to provide a confidential setting for answering the surveys. During these visits, the cognitive ability of the participants to fully understand the survey questions was determined using a conversational-style interview which included questions from the MMSE. Participants were read the informed consent, and were personally handed a survey to fill out by this researcher. Participants were told that they would be left alone for 10 to 15 minutes to fill out the survey, and were instructed how to contact this researcher during that period of time, should there be any questions. Those residents with poor eyesight, or other difficulties, were asked if they would like this researcher to read them the survey questions.
After a period of approximately 10 to 15 minutes, this researcher returned to collect the surveys and to debrief the participants. At that time, completed surveys were placed into a large envelope without identifying information. However, surveys of those who had indicated sufficient dementia to disqualify them were held aside, and not included in the research.

In June of 2007, this researcher returned to the nursing facility and offered a presentation to residents and staff explaining the specifics of this study, the results obtained, and also results of prior studies using similar measuring instruments. Refreshments were provided for those attending this presentation.

Protection of Human Subjects

No names were collected with the surveys. All identifying information was anonymous and confidential, and only numbers were used when entering data to identify individual surveys. All completed surveys were securely held in a locked box in this researcher’s home, and were destroyed upon completion of this research study.

Informed consent (see Appendix E) was provided in 14 point type for ease of reading. Participants were read
the informed consent, and thereafter acknowledged their consent by placing a checkmark in the box provided. A copy of the informed consent statement was given to each participant at the beginning of the study.

After completion of the study, participants were given a copy of the debriefing statement (see Appendix E), which was also printed in 14 point type. Participants with poor eyesight were read the debriefing statement. After debriefing, participants were asked if they had any further questions about the study, and were thanked for their participation.

Data Analysis

The quantitative data retrieved was analyzed using SPSS. Pearson correlations were used to examine the relationship between the independent variables of cognitive coping and the dependent variable of depression. Age of residents was also compared with levels of depression using a Pearson correlation. An independent samples t-test was performed to compare residents who had been in the facility less than one year, and those who had been in more than one year, with levels of depression.
Frequencies were used to determine the mean age of residents, and also the distribution of age among participants. Distribution of ethnicity among the sample was evaluated using frequencies.

Summary

In summary, care was taken during all procedures to protect the confidentiality of the participants. In addition, all participants were treated with respect and fully informed of the intent of the study and the procedures in which they were involved. During the debriefing procedure this researcher provided an opportunity for any unanswered questions or uncertainties about the research to be processed with each participant. It was the intent of this researcher to not only determine the relationship between cognitive coping methods and depression, but also to ascertain that all participants were comfortable with the process, and that they left the research experience feeling appreciated for their contributions and time invested in this study.
CHAPTER FOUR

RESULTS

Introduction

In this chapter, the outcomes of the statistical analysis are presented. The results of frequencies and descriptive statistics are presented to describe the mean age of residents, the distribution of gender, the distribution of age, and the distribution of ethnicity among the sample.

Outcomes of quantitative data analysis using Pearson correlations examining the relationship between cognitive coping methods and depression are described. Finally, the results of independent samples t-tests are presented to compare the mean scores of gender, length of stay, and ethnicity.

Presentation of the Findings

The participants of this study consisted of elderly residents of long-term care ranging in age from 60 to 102 years (N = 37, M = 82.33, SD = 9.83). Women made up the majority of the sample (n = 28, 76%), and men a smaller percentage (n = 9, 24%). The majority of the participants
were Caucasian \((n = 29, 72.5\%)\). Other ethnicities represented were American Indian \((n = 1, 2.5\%)\), Asian \((n = 1, 2.5\%)\), African American \((n = 1, 2.5\%)\), Hispanic \((n = 3, 7.5\%)\), and Other \((n = 1, 2.5\%)\). One participant failed to provide ethnic data. Eight participants had been in long-term care for less than one year \((21.5\%)\), and 29 had been admitted for more than one year \((78.5\%)\).

Table 1. Depression Scores by Frequency and Percent

<table>
<thead>
<tr>
<th>Depression Score</th>
<th>n</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>11</td>
<td>29.7</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>8.1</td>
</tr>
<tr>
<td>2</td>
<td>10</td>
<td>27.0</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>5.4</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>16.2</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>2.7</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>2.7</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>2.7</td>
</tr>
<tr>
<td>12</td>
<td>2</td>
<td>5.4</td>
</tr>
<tr>
<td>Total</td>
<td>37</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note. Possible range of scores is from 0 through 15.

The Cronbach alpha coefficient for the Geriatric Depression Scale was .84, indicating good internal consistency in this study. Overall scores for the
dependent variable of depression were low \((M = 2.57, SD = 2.94)\), with possible scores ranging from 0-15. Depression in participants was determined by a score of 5 or more, resulting in 13.5% of the total sample indicating some form of depression \((n = 5)\), and 5.4% indicating major depression with a score of 12 \((n = 2)\). Eleven participants scored 0, indicating no symptoms of depression \((29.7\%)\). For a complete list of depression scores, see Table 1.

Good internal consistency for the cognitive coping scale, including the subscale of religious coping, was indicated by a Cronbach alpha coefficient of .84. Mean scores for all independent variables of the subscales of cognitive coping methods are shown in Table 2. Of the 10 subscales measured, positive refocusing was used the most frequently \((M = 7.97, SD = 1.76)\), followed by positive reappraisal \((M = 6.95; SD = 1.72)\); and other-blame was used the least frequently \((M = 2.94; SD = 1.70)\). Because each subscale consists of two questions, scores have been multiplied by 2 to achieve total values for individual subscales. Adjusted scores for each subscale range from 2 through 10.
Table 2. Mean Depression Scores and Standard Deviations for Sub-Scales of Cognitive Coping

<table>
<thead>
<tr>
<th>Sub-Scale</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other-Blame</td>
<td>2.94</td>
<td>1.70</td>
</tr>
<tr>
<td>Catastrophizing</td>
<td>3.94</td>
<td>2.07</td>
</tr>
<tr>
<td>Self-Blame</td>
<td>5.44</td>
<td>2.60</td>
</tr>
<tr>
<td>Rumination</td>
<td>5.67</td>
<td>2.94</td>
</tr>
<tr>
<td>Refocus on Planning</td>
<td>5.78</td>
<td>2.04</td>
</tr>
<tr>
<td>Acceptance</td>
<td>6.22</td>
<td>2.47</td>
</tr>
<tr>
<td>Putting in Perspective</td>
<td>6.75</td>
<td>2.25</td>
</tr>
<tr>
<td>Positive Religious Coping</td>
<td>6.86</td>
<td>2.44</td>
</tr>
<tr>
<td>Positive Reappraisal</td>
<td>6.95</td>
<td>1.72</td>
</tr>
<tr>
<td>Positive Refocusing</td>
<td>7.97</td>
<td>1.76</td>
</tr>
</tbody>
</table>

Note. Range of scores is from 2 through 10 for each subscale. Each subscale consists of two items, so scores have been multiplied by 2 to achieve totals for individual subscales.

Relationships between the ten subscales of cognitive coping (as measured by the CERQ, and the two additional items of positive religious coping) and depression (as measured by the Geriatric Depression Scale, short form) were analyzed using Pearson product-moment correlation coefficients. Significant relationships were found with depression for the variables of other-blame ($r = .557$, $N = 36$, $p < .01$), catastrophizing ($r = .446$, $N = 36$, $p < .01$), and rumination ($r = .378$, $N = 37$, $P < .05$). All
significant relationships were positive, indicating that higher levels of other-blame, catastrophizing, and rumination were associated with higher levels of depression. Pearson correlations for all cognitive coping subscales and depression are listed in Table 3.

Independent-samples t-tests were conducted to compare mean scores for depression by length of stay, gender, location, and ethnicity. Although the mean scores for residents admitted for less than one year and more than one year were considerably different ($M = 5.13, SD = 4.79; M = 1.86, SD = 1.73$, respectively), the data violated the assumption of equal variance. No significant difference in depression scores was indicated in those admitted for less than one year and more than one year ($t(7.51) = 1.89, p = .098$).

Analysis of mean depression scores for men ($M = 1.22, SD = 1.56$) and women ($M = 3.0, SD = 3.16$) indicated no significant difference ($t(35) = -1.61, p = .116$). Differences of scores for location in either a nursing home ($N = 17, M = 2.7, SD = 2.24$) or assisted care ($N = 20, M = 2.65, SD = 2.65$) also were not significant ($t(35) = -.183, p = .856$).
Table 3. Correlations of Cognitive Coping Methods and Symptoms of Depression

<table>
<thead>
<tr>
<th>Method</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other-Blame</td>
<td>.557**</td>
</tr>
<tr>
<td>Catastrophizing</td>
<td>.446**</td>
</tr>
<tr>
<td>Self-Blame</td>
<td>-.278</td>
</tr>
<tr>
<td>Rumination</td>
<td>.378*</td>
</tr>
<tr>
<td>Refocus on Planning</td>
<td>.083</td>
</tr>
<tr>
<td>Acceptance</td>
<td>.044</td>
</tr>
<tr>
<td>Putting in Perspective</td>
<td>.103</td>
</tr>
<tr>
<td>Positive Religious Coping</td>
<td>-.122</td>
</tr>
<tr>
<td>Positive Reappraisal</td>
<td>-.181</td>
</tr>
<tr>
<td>Positive Refocusing</td>
<td>.182</td>
</tr>
</tbody>
</table>

* p ≤ 0.05; **p ≤ 0.01.

For purposes of analysis, the variable ethnicity was collapsed resulting in two categories of Caucasian and Other Ethnicity (n = 29, n = 7, respectively). No significant difference in depression between Caucasians (M = 2.24, SD = 1.96) and Other Ethnicities (M = 4.14, SD = 5.49) was noted (t(6.37) = -.903, p = .4).

Summary

This chapter covered the results of the statistical analysis on all continuous and categorical variables of the study. All results were presented in a statistical format. The following chapter will discuss the
significance and implications of these results in more depth.
CHAPTER FIVE

DISCUSSION

Introduction

This chapter concludes the study with a discussion of the results and whether the results were consistent with previous findings, as well as possible explanations and implications of the findings. Limitations of this research and recommendations for future research are also considered. Finally, suggestions are made for integrating these findings into existing social work treatment interventions for depression in the elderly population.

Discussion

The present study examined the relationships between cognitive coping methods and depression among residents of long-term care. It was hypothesized that the use of positive reappraisal by elderly residents would be inversely related to depression, and the use of rumination, acceptance, and catastrophizing would be positively related to depression. It was also hypothesized that positive religious coping would be inversely related to depression in this population.
Contrary to previous findings, the results indicated that positive reappraisal was not significantly related to depression in this study. The relationship was inverse, yet fell short of the level of significance. The study also failed to find a significant relationship between acceptance and depression. However, in agreement with the hypothesis, rumination and catastrophizing were significantly and positively related to an increase in depressive symptomology as was reported by prior findings (Garnefski & Kraaij, 2006; Garnefski & Legerstee, 2002; Kraaij, Pruymboom & Garnefski, 2002).

Further, the results failed to suggest a relationship between positive religious coping and depression. This finding was contrary to prior findings which indicated that positive religious coping had a strong inverse relationship with depression in the elderly (Danhauser, Carlson, & Andrykouski, 2005; Meisenhelder & Chandler, 2002). However it was found that positive religious coping was employed frequently by the elderly in this study, which was in agreement with previous research (Zorn & Johnson, 1997).

Levels of depression in this sample were lower than expected, with 13.5% indicating some level of depression.
with a score on the Geriatric Depression Scale of five or more, and 5.4% of the total sample indicating symptoms of major depression with a score of 12. A previous study of over three-thousand nursing home residents found the prevalence of depression to be just over 20% (Jones, Marcantonio & Rabinowitz, 2003).

Of the ten sub-scales measured, other-blame was associated with depression the most significantly, indicating a strong positive relationship. A review of prior studies did not find a significant relationship between other-blame and depression in the elderly population; in fact prior findings indicated only very weak relationships between these two variables. Additionally, the use of self-blame appeared to have little relationship with depressive symptomatology in the present research, as opposed to the majority of prior findings (Garnefski, Baan, & Kraaij, 2004; Garnefski & Kraaij 2005; Kraaij & Garnefski, 2006; Kraaij, Prumboom & Garnefski, 2002).

An important difference, however, between prior research on cognitive coping in the elderly and the present study, is that previous research looked at a community-dwelling sample, rather than elderly residents
residing in long-term care. Consequently, it is worth considering why other-blame would be related to symptoms of depression in a long-term care setting, and not in a community sample of elderly people.

One explanation for these perplexing results is that the elderly residing in long-term care facilities may not have chosen to be there. The choice to be placed in an institution is often made by others out of a concern for the safety of the elder. Those elders who did not choose their living situation may have more symptoms of depression than their peers, because they were robbed of their autonomy in the decision, and therefore may have a more difficult time adjusting to their new environment.

These same elders may also be more inclined to blame others for their situation, resulting in higher levels of depression for those who use more other-blame as a coping method. The questions representing other-blame in this research were worded in such a way that the blame for being in long-term care fell on others. For example, one question states, "I feel that basically other people are the cause of my being in long-term care."
There is some existing support for the suggestion that blaming others for placement in the facility may be related to depression. In a study of 32 elderly residents of long-term care, Espejo, Goudie and Turpin (1999) found that the majority of those residents who made the decision to go into care on their own were able to adjust to their living situation. However, a large majority of those who had not yet accepted their situation had the decision made in their behalf. These results suggest a possible relationship between depression, and whether or not the elder had a voice in the decision to be placed in long-term care. Thus, an elder’s lack of choice may moderate the effect of other-blame on depression.

Another finding of interest was the relationship between the residents’ length of stay in the facility and symptoms of depression. Those residents who had been in the facility less than one year had almost three times the level of depressive symptoms as those who had been admitted for more than one year, indicating that depression may decrease as length of stay increases. A similar finding was reported by Ron (2002), who found that both depression and suicidal ideation decreased with length of stay, with the highest risk for depression
occurring during the first three months after admission. However, Jones, Marcantonio, and Rabinowitz (2003) found contradictory results, with symptoms of depression increasing in the period between one and two years after admittance. They admit that the effect, however statistically significant, was quite small (p. 1406).

The present study also supported prior research that found women to be more likely to have symptoms of depression than men. The elderly women in this study had more than two times the levels of depression than did their male counterparts. In a study comparing elderly men and women and levels of depression, Ron (2004) also found a similar ratio of gender to depression.

A surprising finding was the nearly identical levels of depression found in the elderly in the nursing home, and those in assisted living. Intuitively, one would expect to find higher levels of depression in those in the more restrictive environment of the nursing facility. This population of elderly residents was also more frail and in poorer health overall than those in the assisted living home. This finding lends support to studies previously mentioned that suggest that an individual's method of coping, rather than difficult circumstances, is
the best predictor of psychological adjustment (Folkman, 1997; Moskowitz, Folkman, Collette, & Vittinghoff, 1996).

Limitations

Although significant relationships were discovered in this study, it should be emphasized that the sample size was small, and that the strength of the correlations would be more reliable had a larger sample been used. In addition, a possible confounding factor may be that the elderly participants had been pre-selected by facility staff. It is probable that those residents who seemed to be the most responsive and sociable were selected, and those possessing more negative characteristics were excluded. If this were the case, such personal characteristics could have an effect on the levels of depression measured, and may help to explain the relatively low levels of depression found in this study.

Moreover, conclusions should not be made about causality in the relationships between the variables of depression and cognitive coping methods, as it is just as likely that depression may influence coping, as it is that coping methods may influence depression. However, the relationships between depression and variables such
as length of stay and gender are unidirectional; therefore it can be assumed that these independent variables have some influence on levels of depression.

The present study was also limited by the use of participant self-report for the symptoms of depression and cognitive coping methods. Use of observer ratings or interviews to further validate symptoms of depression is recommended for future research.

Additionally, Caucasian elderly were over-represented in this study, resulting in the necessity to collapse all minority races into one category for purposes of comparison. Doing so did not allow an accurate measure of depression for elders of other ethnicities.

Recommendations for Social Work Practice, Policy and Research

In keeping with other research on the relationship between cognitive coping and depression in a variety of populations, this study found that rumination and catastrophizing were significantly related to depression in elderly residents of long-term care. This knowledge can be used as an adjunct to existing therapy methods that have demonstrated efficacy in relieving symptoms of
depression in the elderly, such as cognitive therapy and life review therapy.

Cognitive theory would be especially beneficial in reducing these negative thought processes because of its emphasis on challenging distressing thoughts and beliefs. For example, the inclusion of the concepts of "magnification" and "all-or-nothing thinking" which are similar to catastrophizing, and "focusing on the negative," which is comparable to rumination, could be utilized in bringing these patterns of thought to the elder's awareness. Once the elder is taught to recognize these negative thoughts, the therapist can continue with cognitive methods to help the elder to challenge and replace them with less distressing thought patterns (Beck, 1976; Cooper & Lesser, 2005).

In addition, these techniques would integrate smoothly into structured life review therapy. Unlike reminiscence therapy, which is an unstructured method that encourages the recall and expression of memorable past events, life review involves a more thorough process of recalling both pleasant and unpleasant events, past and present, and of re-evaluating the subjective meaning these events hold for the elder (Burnside, & Haight,
In the life review process, the therapist can assist the elder in reframing the meaning of the distressing life events over which the elder is ruminating, in order to reduce their negative influence on the elder’s mood.

Results of the present study also suggest that an elder’s length of stay in a facility may be a considerable risk factor for depression. These findings indicate that residents who have been in a facility for less than one year have much greater levels of depression than those who have been admitted for more than one year. As noted above, a prior study found the first three months to be the critical period for developing symptoms of depression and suicidal ideation (Ron, 2002). These outcomes have important implications for social workers, as well as other professionals who work with the institutionalized elderly. Because of the possibility of a higher risk for depression in the first year, it is recommended that elderly residents be carefully monitored for symptoms of depression and suicidal ideation during this period.

Moreover, additional research on the relationship between length of stay in a facility and depression
should be conducted to further verify these findings, and to determine which of the initial periods holds the highest risk. To make this determination, future research would benefit from using a larger sample, and by dividing the first year into four 3-month intervals, to determine levels of depression in each of these time periods.

To further examine this researcher’s suggestion that an elder’s lack of choice in the decision to be placed in long-term care moderates the effect of other-blame on depression, research is needed that looks specifically at this relationship. If this proposal is substantiated by future research, it would inform those who work with residents of long-term care to be alert for signs of depression in elderly residents who were not involved in their own placement decision.

Finally, a great deal more research is needed that examines the relationship between cognitive coping methods and depression in elderly long-term care residents. In reviewing the literature on this subject, no published studies were located that looked specifically at cognitive coping in this population. To be valuable, future research that examines these relationships would include a larger sample, and would
attempt to avoid confounding factors such as pre-selection of participants.

Conclusions

The importance of this study is that it lends support to prior research on the elderly indicating that the cognitive coping methods of catastrophizing and rumination are related to depression in this population. It also supports prior findings suggesting that the length of stay in long-term care may be related to levels of depression.

Additionally, although prior studies examined cognitive coping in community-dwelling elderly, this research may be unique in that it looks specifically at cognitive coping in elderly residents of long-term care.

Another important distinction of this research is that it uncovered a strong relationship between other-blame and depression. This relationship was not found in community-dwelling elderly, and may be unique to residents of long-term care, suggesting further research on the subject.

Finally, several suggestions are made for further research in this population, and it is the author’s hope
that this study will serve as a springboard for additional research to examine depression and its relationship with coping methods in elderly residents of long-term care.
APPENDIX A

COGNITIVE EMOTION REGULATION SUBSCALES
COGNITIVE EMOTION REGULATION SUBSCALES

**Self Blame**
I feel that I am the one who is responsible for being here
I think that basically I am the cause of my being in long-term care

**Acceptance**
I think that I have to accept that I am in long-term care
I suppose that I have to accept being here

**Rumination**
I often think about how I feel about being in long-term care
I am preoccupied with what I think and feel about being in long-term care

**Positive Refocusing**
I think of pleasant things that have nothing to do with being in long-term care
I think of something nice instead of worrying

**Refocus on Planning**
I think about how I can change my situation
I think about a plan of what I can do best now that I am here

**Positive Reappraisal**
I think I can learn something from being here
I think that I can become a stronger person because I am here

**Putting into Perspective**
I think that this hasn’t been too bad compared to other things
I tell myself that there are worse things in life than being in long-term care

**Catastrophizing**
I keep thinking about how extremely difficult it is to be in long-term care
I think a lot about how awful it is to be in long-term care

**Other Blame**
I feel that others are responsible for my being in long-term care
I feel that basically other people are the cause of my being in long-term care
APPENDIX B

AUTHORS' PERMISSION TO USE THE COGNITIVE EMOTION REGULATION QUESTIONNAIRE SURVEY
Dear Christine,

nice to hear you are continuing the research and that you are satisfied with the CERQ. Hereby I give you permission to use the CERQ within your research project. I would like to be informed about the results! Good luck with your work.

Best,

Vivian Kraaij.

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APPENDIX C

ITEMS FROM THE GERIATRIC DEPRESSION SCALE
ITEMS FROM THE GERIATRIC DEPRESSION SCALE

Questions that correlate positively with depression:

Have you dropped many of your activities and interests?
Do you feel that your life is empty?
Do you often get bored?
Do you worry that something bad is in your future?
Do you often feel helpless?
Do you prefer to stay in your room, rather than going out and talking with others?
Do you feel you have more problems with memory than most people?
Do you feel pretty worthless?
Do you feel that your situation is hopeless?
Do you think that most people are better off than you are?

Questions that correlate negatively with depression:

Are you basically satisfied with your life?
Are you in good spirits most of the time?
Do you think it is wonderful to be alive now?
Do you feel full of energy?
Do you feel happy most of the time?
APPENDIX D

QUESTIONNAIRE
The following 20 statements concern your thoughts about your stay in a long-term care facility. Please read the statements below and indicate how often you have the following thoughts by circling *just one number* for each question.

1) I think I can learn something from being here
   1. Never       4. Often
   2. Almost Never 5. Very Often
   3. Occasionally

2) I often think about how I feel about being in long-term care
   1. Never       4. Often
   2. Almost Never 5. Very Often
   3. Occasionally

3) I think that I have to accept that I am in long-term care
   1. Never       4. Often
   2. Almost Never 5. Very Often
   3. Occasionally

4) I feel that I am the one who is responsible for being here
   1. Never       4. Often
   2. Almost Never 5. Very Often
   3. Occasionally

5) Since being here, I have focused on religion to stop worrying
   1. Never       4. Often
   2. Almost Never 5. Very Often
   3. Occasionally

6) I suppose that I have to accept being in long-term care
   1. Never       4. Often
   2. Almost Never 5. Very Often
   3. Occasionally

7) I am preoccupied with what I think and feel about being in long-term care
   1. Never       4. Often
   2. Almost Never 5. Very Often
   3. Occasionally

8) I think of pleasant things that have nothing to do with being in long-term care
   1. Never       4. Often
   2. Almost Never 5. Very Often
   3. Occasionally

9) I think that I can become a stronger person because I am here
   1. Never       4. Often
   2. Almost Never 5. Very Often
   3. Occasionally

*Please turn the page ➔*
10) I keep thinking about how extremely difficult it is to be in long-term care.

11) I feel that others are responsible for my being in long-term care.

12) I think of something nice instead of worrying.

13) I think about how I can change my situation.

14) I think that this hasn't been too bad compared to other things.

15) I think that basically I am the cause of my being in long-term care.

16) I think about a plan of what I can do best now that I am here.

17) Since being here, I have thought that God might be using this situation for good.

18) I tell myself that there are worse things in life than being in long-term care.

19) I think a lot about how awful it is to be in long-term care.
20) I feel that basically other people are the cause of my being in long-term care
   4. Often  5. Very Often

In the following section, there are 15 questions that ask about how you feel. Please circle just one answer for each question.

1) Are you basically satisfied with your life?
   Yes        No

2) Have you dropped many of your activities and interests?
   Yes        No

3) Do you feel that your life is empty?
   Yes        No

4) Do you often get bored?
   Yes        No

5) Are you in good spirits most of the time?
   Yes        No

6) Do you worry that something bad is in your future?
   Yes        No

7) Do you often feel helpless?
   Yes        No

8) Do you prefer to stay in your room, rather than going out and talking with others?
   Yes        No

9) Do you feel you have more problems with memory than most people?
   Yes        No

10) Do you think it is wonderful to be alive now?
    Yes        No

11) Do you feel pretty worthless?
    Yes        No

12) Do you feel full of energy?
    Yes        No

13) Do you feel that your situation is hopeless?
    Yes        No

14) Do you think that most people are better off than you are?
    Yes        No

15) Do you feel happy most of the time?
    Yes        No

You are almost finished!
Please turn the page for 4 final questions ➤
1) How long have you been in long-term care?
   1. Less than a year
   2. More than a year

2) What is your gender?
   1. Male  2. Female

3) What is your age? ______

4) What is your race?
   1. American Indian or Alaska Native
   2. Asian or Pacific Islander
   3. Black
   4. Caucasian
   5. Hispanic
   6. Other

You’re Finished!
This study is meant to help Gerontologists to better understand how residents adjust to living in a long-term care facility. Your participation in this research may someday help others like yourself to adjust to their new setting.

All of your answers will be confidential and anonymous. No one will see your answer sheet except the researcher conducting this study.

Please answer all of the questions inside. It should take approximately 10 to 15 minutes to complete this questionnaire.

Your help with this study is very much appreciated!

Please remember that there are no right or wrong answers. Please circle whichever answer seems best to you.

Please do not put your name on this questionnaire.
APPENDIX E

INFORMED CONSENT
INFORMED CONSENT

The study in which you are being asked to participate is designed to explore cognitive coping methods used by residents in a long-term care facility. Cognitive coping is the way people cope with troubling events by using their thoughts. This study is being conducted by Christine McCormick under the supervision of Dr. Rosemary McCaslin, Professor of Social Work, California State University, San Bernardino. This study has been approved by the Social Work Subcommittee of the Institutional Review Board, California State University, San Bernardino.

In this study you will be asked to respond to several statements or questions. Please circle the answer that you feel best represents your opinion. There are no right or wrong answers. The survey should take about 10 to 15 minutes to complete. All of your responses will be held in the strictest of confidence by the researcher. Your name will not be reported with your responses. All data will be reported in group form only. You may receive the written group results of this study in September of 2007, by requesting them from the Social Services Director of this facility, or from the Pfau Library on the CSUSB campus, located at 5500 University Parkway, San Bernardino.

Your participation in this study is voluntary. You can choose not to answer any questions and you may withdraw at any time during this study without penalty. When you have completed the survey, you will receive a debriefing statement describing the study in more detail. In order to ensure the validity of the study, we ask that you please not discuss this study with other residents until the study has been completed in this facility. The results of this study will help gerontologists and social workers who work with residents in long-term care to better understand how residents adapt and cope with living in long-term care. There are no foreseeable risks as a result of participation in this study, however answering survey questions may sometimes cause slight psychological discomfort. If you have any questions or concerns about this study, please contact Dr. Rosemary McCaslin at (909) 537-5507.

By placing a check mark in the box below, I acknowledge that I have been informed of, and that I understand, the nature and purpose of this study, and I freely agree to participate.

I also acknowledge that I am at least 18 years of age. (©)

Place a check mark here □

Today's date: __________________
APPENDIX F

DEBRIEFING STATEMENT
Study of Cognitive Coping Methods

Debriefing Statement

This study you have just completed was designed to investigate cognitive coping methods used by residents in long-term care. Nine separate cognitive coping methods were measured: Positive Refocusing, which involves thinking about something pleasant, rather than an unpleasant event; Positive Reappraisal, which involves the effort of creating a positive meaning out of a difficult event; Acceptance, which involves accepting and resigning yourself to an event; Refocus on Planning, which involves thinking about plans and methods to handle a difficult event; Self-Blame; which involves thoughts of blaming yourself for the event; Other-Blame, which involves thoughts of blaming other people or situations for the difficult event; Rumination, which involves repetitious thoughts of the event; Catastrophizing, which involves thinking about how dreadful the event is or was; and Putting into Perspective, which involves diminishing the seriousness of the event by thinking of the event in relation to other more difficult events (Garnefski & Kraaij, 2006).

In past research, these cognitive coping methods have been associated with levels of depression. Some have been associated with more depression, and others have been associated with lessened depression. We are particularly interested in the relationship between these nine cognitive coping methods and how they relate to depression (or lack of depression) in long-term care residents.

Thank you for your participation and for not discussing the contents of the survey with other residents. If you would like to discuss any issues raised by filling out this survey, please see the Social Services Director of this facility. If you have any questions about the study itself, please contact Dr. Rosemary McCaslin at (909) 537-5507. Please do not show this debriefing statement to other residents. If you would like to obtain a copy of the group results of this study please contact the Social Services Director of this facility, in September of 2007. At that time, results will also be available at the Pfau Library on the CSUSB campus, located at 5500 University Parkway, San Bernardino.
REFERENCES


