SEARCHING FOR MEANING: AN INVESTIGATION OF LIFE MEANING IN
DEPRESSED ADULTS

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Abstract

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Psychological risk factors for depression and suicide have been identified, but the impact of life meaning on symptoms of depression and suicide has not been adequately examined in empirical investigations. The present study examined life meaning in depressed patients at the VA Medical Center in Cleveland, Ohio, during an initial assessment consisting of a diagnostic interview and self-report questionnaires. Patients were re-evaluated at an 18 week follow-up visit. Two measures of life meaning were completed, the Life Regard Index – framework subscale and the Personal Meaning Profile. Among depressed veterans, less life meaning was significantly related to more severe depression, more intense hopelessness, and more frequent thoughts of suicide. Furthermore, life meaning contributed to the understanding of suicidal ideation above and beyond known risk factors. Follow-up analyses revealed that an increase in life meaning during the 18 week follow-up was significantly related to a decrease in depressive
symptoms and hopelessness. Researchers and clinicians are encouraged to address the impact of a lack of life meaning on the development and course of depressive symptoms, hopeless thoughts, and suicidal behaviors.
Major Depression has a pervasive impact on Americans, affecting between 15-20% at some time in their lives (Kessler et al., 2003). Women, Caucasians, the unemployed, and the disabled population are at risk for developing a Major Depressive Episode (Kessler, Zhao, Blazer & Swartz, 1997). Approximately 9% of people have thoughts of suicide during their lives (Nock et al., 2008). Unmarried males who are older than 55 are at high risk for completed suicide (Beautrais, 2001; Kposowa, 2000). Predisposition to suicidal behavior includes variables related to psychiatric history. Mood disorders are the strongest diagnostic risk factors for suicide (Nock et al., 2008). An inpatient psychiatric hospitalization that occurred during the previous year increases risk for suicide (Goldston et al., 2001). History of a highly lethal suicide attempt increases future likelihood of suicidal behavior (Bryan & Rudd, 2006).

Psychological risk factors for depression have been extensively examined. Maladaptive coping behaviors and cognitive vulnerabilities contribute to a Major Depressive Disorder. Depressive symptoms can be partially understood by ineffective behavioral patterns that prevent individuals from experiencing pleasure in their lives (Jacobson, Martell, & Dimidjian, 2001). In addition, many depressed patients develop cognitive distortions, automatic thoughts, and information-processing biases about the world that promote a negative mood (Beck, 2008). Rumination, or the tendency to continuously mull over the causes or consequences of the depressed mood, contributes to the etiology of depression (Nolen-Hoeksema, 2000).

Psychological functioning is predictive of the course of depressive symptoms. About 20% of people with depression will have another depressive episode within two years (Kessler et al., 2008). Greater baseline levels of depressive and a longer duration of
Depressive symptoms predict a more severe course of depression (McCusker et al., 2007). The presence of hopeless beliefs predicts a more severe course of depression. Among depressed patients enrolled in a treatment program, patients who were initially hopeless were less likely to respond quickly to treatment than patients who remained hopeful (Hayes et al., 2007).

Depressive symptoms and a depressed mood are robust predictors of suicidal ideation and suicide attempts (Chioqueta & Stiles, 2003; Kessler et al., 2008). Psychological risk factors for suicidal thinking can be understood by patterns of destructive thinking (Smith, Alloy, & Abramson, 2006). Depressed patients are likely to display a negative inferential style, or the tendency to make negative assumptions about the self and the world (Safford, Alloy, Abramson, & Crossfield, 2007). Dysfunctional attitudes often precipitate suicidal ideation. Suicidal psychiatric outpatients reported more dysfunctional attitudes that psychiatric outpatients without suicidal ideation (Beck, Steer, & Brown, 1993).

Certain factors appear to be associated with suicidal ideation over time. In a large scale, longitudinal study, the strongest predictor of suicidal behavior was baseline suicidal behavior (Borges, Angst, Nock, Ruscio, & Kessler, 2008). A pessimistic outlook on the future, or hopelessness, is a well established psychological risk factor for suicidal behaviors. Hopelessness has been linked with suicidal ideation, attempts, and completed suicide (Beck et al., 1993; Goldston et al., 2001). In a longitudinal study examining community members, hopeless participants were eleven times more likely to die by suicide over the follow-up interval, as compared to non-hopeless participants (Wen-
Hung, Gallo, & Eaton, 2004). Furthermore, hopelessness may be a better predictor of suicidal ideation than depression (Wetzel, Margulies, Davis, & Karam, 1980).

Research has led to a sophisticated understanding of the behavioral and cognitive factors that contribute to depression and suicide. However, empirical studies have largely ignored the impact of life meaning on depression and suicidal ideation. A lack of attention to meaning is striking considering its value to both traditional and unconventional theoretical models of psychotherapy. Viktor Frankl’s early ideas initiated the field of logotherapy, a psychotherapy approach that incorporates existential principles (Frankl, 1959). Additionally, a distinct feature of third-wave cognitive and behavioral treatments is an appreciation of older, less scientific traditions. Consequently, the newest surge of cognitive and behavioral treatments includes issues such as spirituality and values, some of which have generated empirical support (Hayes, 2004). Despite an emphasis on meaning in psychotherapy, contemporary psychological research has failed to rigorously examine life meaning as a construct relevant to our understanding of psychopathology. The current study considers life meaning as a possible factor influencing depression, hopelessness, and suicidal ideation.

**Life Meaning**

Existential meaning refers to a full sense of meaning in life (Frankl, 1959). Life meaning includes cognitive and affective components (Debats, 1990). Meaning reflects an understanding of one’s existence and a feeling of purpose (Reker, Peacock, & Wong, 1987). A sense of coherence, or a view of life as comprehensible and manageable, contributes to a life of meaning (Antonovsky, 1998). Life meaning offers direction and a framework for living life. A life of meaning includes future goals and opportunities.
Life meaning appears to have a pervasive impact on human functioning, as it is associated with physical and psychological development. In a large community sample, life meaning was related to good physical health, absence of physical disability, well-being, and social support (Skrabski, Kopp, Rozsa, Rethelyi, & Rahe, 2005). Life meaning was unrelated to age, gender, and education (Skrabski et al., 2005).

Victor Frankl (1959) believed that the desire for a meaningful life is a basic human drive. The opportunity to discover life meaning is present even in uncontrollable, challenging life circumstances by adopting an attitude that finds meaning in suffering (Frankl, 1959). Self-transcendence and engagement with the world are essential to the quest for meaning, because they provide pleasure and the opportunity for self-actualization (Frankl, 1959). Pathways to establishing life meaning are uniquely discovered (Frankl, 1959). Consequently, people choose a range of approaches to create meaning in their lives. A community sample of over 700 participants revealed seven factors of meaning that highlight the importance of relationships, work, and health (Harlow & Newcomb, 1990). Relationships may be the most important source of life meaning (Debats, 1999). Frankl (1987) argued that family interactions provide a lifelong opportunity to develop meaning. Love, intimacy, and sex are pathways to meaning (Frankl, 1987; Wong, 1998). Certain types of love relationships may be more likely to generate meaning than others. Altruistic love, or a benevolence and compassion toward one’s partner may foster life meaning (Prasinos & Tittler, 1984). Other sources of meaning include religion and spirituality (Chamberlain & Zika, 1992). In addition, establishing a healthy view of the self provides a foundation for discovering meaning. Acknowledging setbacks and imperfections can promote self-acceptance which fosters
meaning (Wong, 1998). Furthermore, life meaning can be achieved through altruistic endeavors and creative life experiences (Yalom, 1982).

Life meaning is conceptualized as an ongoing process that is constantly evolving over time as opposed to an end state to be achieved (Ryff & Singer, 1998). Life meaning is more malleable than personality (Steger & Kashdan, 2007). Although life meaning is relatively stable over a one year time period, life meaning may change during life transitions (Steger & Kashdan, 2007). Life meaning is more likely to be discovered in later adulthood as opposed to early adulthood (Scannell, Allen, & Burton, 2002).

Life meaning may be essential to healthy psychological functioning. College students and community adults believe that life meaning is important to a life of desirability and moral goodness (King & Napa, 1998). Furthermore, the field of positive psychology argues that establishing life meaning is a critical component of wellness (Ryff & Singer, 1998). Life meaning is associated with positive well-being (Zika & Chamberlain, 1992). Among younger and older adults, life meaning is significantly related to happiness and spiritual well-being (Scannell, Allen, & Burton, 2002).

People who report life meaning demonstrate coping skills that allow them to manage difficult life experiences. A sense of living in the present and the ability to tolerate doubt are reported by individuals who endorse life meaning (Melton & Schulenberg, 2008; Prasinos & Tittler, 1984). People who experience life meaning accept ambiguity when faced with inevitable life stressors, but remain determined. Individuals with life meaning experience a sense of commitment, control, and challenge (Maddi, 2004). Self-confidence and the desire to adopt an active role in life are typical of people who report a meaningful life (Melton & Schulenberg, 2008). Although people
with life meaning are able to endure uncertainty, establishing future goals is helpful in fostering life meaning. College students with a sense of life meaning had more concrete and well-defined career tasks, as compared to college students without a sense of life meaning (Lindeman & Verkasalo, 1996). People who have found meaning in their lives are likely to engage in stimulating activities with others. College students with a sense of meaning reported spending less time alone and experiencing less boredom than those who lack meaning (Melton & Schulenberg, 2008).

Despite the historical influence of existential theory, rigorous methods of assessment are lacking for the construct of life meaning. The definition of meaning is difficult to identify, because of the rich, but vague concepts included (Klinger, 1998). In a thorough, recent review, Park (2010) confronts the meaning literature and identifies a lack of standardized terminology as a common problem encountered in meaning research. Constructs such as life meaning, meaning-making, the search for meaning, and discovering positive meaning have all been empirically examined. The use of such a vast number of terms emphasizes the need for the use of clear, consistent definitions when conducting meaning research.

The meaning-making model (Park & Folkman, 1997; Park, 2010) provides a theoretical representation of meaning constructs. Although it is often used to describe meaning-making in the context of coping, the model incorporates the definition of global meaning. Global meaning is comprised of three components: beliefs, goals, and a subjective sense of meaning or purpose in life (Park, 2010). Early studies examining meaning utilized the Purpose in Life Test which appears to assess the concept of meaningfulness, or the subjective component of global meaning. The Purpose in Life
Test is a twenty item, self-report measure of meaning in life (Crumbaugh, 1968; Crumbaugh & Malholick, 1964). Numerous psychometric investigations have since demonstrated several inadequacies in the factor structure and questionable discriminant validity of the Purpose in Life Test (Chamberlain & Zika, 1988). The Purpose in Life Test directly measures experiences of depression and suicidal ideation. As a result, the Purpose in Life Test confounds with mental health variables that it is often used to predict. Some argue that a subjective sense of meaning, should not be included as an aspect of global meaning (Park, 2010).

More recent measures used to assess life meaning aim to measure specific subconstructs depicted in the meaning-making model. Newer approaches that examine subconstructs of life meaning were designed to improve the discriminant validity of meaning in life assessment. The current study was designed to evaluate the non-subjective aspects of global meaning, beliefs and goals. Beliefs represent a framework through which people interpret themselves and their world (Janoff-Bulman & Frantz, 1997; Reker & Wong, 1988). Goals reflect internal representations of desired outcomes or achieved aspirations that one seeks to maintain (Austin & Vancouver, 1996, Klinger, 1998). Common global goals include relationships, religion, and achievement (Emmons, 2003).

Depression and Life Meaning

A lack of life meaning is a psychological factor that may contribute to Major Depression. Evidence exists for a link between life meaning and depression. Depression, negative affect, and hopelessness are significantly related to a lack of life meaning (Mascaro & Rosen, 2005; Mascaro & Rosen, 2006). The relationship between depression and life meaning appears to be unrelated to age or culture. In a large sample
of high school students, more severe depression was significantly related to the absence of an established meaning framework for living life (Jensen, Svebak, & Gotestam, 2004). Greater depressive symptoms among older adults are significantly associated with lower levels of purpose and satisfaction in life (Garner, Bhatia, Dean, & Byars, 2007). In a sample of American and Japanese participants, unhappiness was significantly related to a lack of life meaning (Steger, Kawabata, Shimai, & Otake, 2008).

In addition, life meaning may contribute more to our understanding of depression than known risk factors. Life meaning was a more consistent predictor of depression and negative affect than internal locus of control and assertiveness (Zika & Chamberlain, 1987).

Depressed patients are likely experiencing a lack of life meaning. In one study, 20% of patients seeking therapy reported problems related to a lack of life meaning (Yalom, 1980). Among depressed outpatients, concerns about life meaning were one of eight core reasons for initiating treatment (Addis, 1995). Severely depressed patients in treatment at a medical center reported a strong desire for a sense of meaning and the wish to make sense of their pain (Sorajjakool, Aja, Chilson, Ramirez-Johnson, & Earll, 2008). Frankl (1992) described a psychological state in which emptiness and meaninglessness are prominent. Depressed patients who lack meaning in their lives are likely to display a specific constellation of cognitive, affective, and behavioral symptoms (Maddi, 1967). Some depressed patients may be unable to recognize value or purpose in life. Depressed patients who lack meaning are likely lacking direction and feeling alienated (Newcomb & Harlow, 1986). An absence of life meaning may be reflected in apathy, or a lack of intense emotion in depressed clients (Maddi, 1967). Depressed patients who lack
meaning are often inactive. More importantly, depressed patients who lack meaning tend to spend their time participating in unengaging, obligatory activities (Maddi, 1967).

Prior investigations have not examined whether certain meaning pathways have a greater contribution to depressive symptoms than others. Wong’s (1998) Personal Meaning Profile measures seven categories of goals and values that provide life meaning including achievement, religion, self-transcendence, self-acceptance, relationships, intimacy, and fair treatment. Failure to achieve life goals in the area of achievement, self-transcendence, and self-acceptance may be most strongly linked with depression severity. A sense of achievement cultivates life meaning with the establishment of goals and strategic actions. Self-transcendence fosters life meaning by dedicating time and energy to unselfish pursuits. Self-acceptance promotes life meaning by accepting limitations and finding meaning in suffering. Each of these sources can successfully foster life meaning through meaningful engagement and a healthy, adaptive worldview.

Life meaning impacts the course of depressive symptoms over time. Discovering life meaning may promote a reduction in symptoms of depression. Among older adults, life meaning appears to have a causal influence on depressive symptoms (Halama, 2003). Research by Mascaro and Rosen (2005) provides evidence that life meaning may directly impact the progression of depressive symptoms. In a prospective study of college students, baseline levels of life meaning predicted a significant amount of the variance in depressive symptoms at a two month follow-up (Mascaro & Rosen, 2005). Furthermore, baseline meaning explained depressive symptoms beyond the variance explained by baseline levels of depression and personality variables (Mascaro & Rosen, 2005). Analyses were conducted to examine a possible causal influence of depression on life
meaning. Depressive symptoms did not have a causal effect on the progression of life meaning (Mascaro & Rosen, 2005). Results provide preliminary evidence that a lack of life meaning is predictive of future depressive symptoms.

**Suicide and Life Meaning**

Life meaning contributes to the understanding of suicide risk. Suicidal individuals report significantly less meaning in their lives than non-suicidal individuals (Orbach, Mikulincer, Gilboa-Schechtma, & Sirot, 2003). Similarly, in a large sample of military personnel, suicidal men reported significantly less sense of coherence than non-suicidal men (Lester & Francis, 1993). Among males, more frequent thoughts of suicide are significantly related to a lack of meaning and purpose (Harlow, Newcomb, & Bentler, 1986). Purpose in life predicts both current and previous suicidal ideation (Lester & Badro, 1992). Furthermore, in depressed patients, life meaning may influence the course of suicidal ideation over time. Purpose in life and a sense of coherence are negatively related to future likelihood of suicidal behavior (Edwards & Holden, 2003). A prospective study including psychiatric inpatients examined the role of life meaning, depression, hopelessness, and self-esteem in predicting future suicidal ideation (Petrie & Brook, 1992). Suicidal ideation at the six month follow-up was best predicted by aspects of meaning in life at baseline (Petrie & Brook, 1992). Results argue that life meaning may have a causal influence on the development of suicidal ideation over time.

**Specific Goals and Hypotheses**

Numerous studies have examined risk factors for depression and suicide. However, the role of life meaning has been largely unobserved in empirical investigations. The current study examined the relationship between depressive
symptoms, hopelessness, thoughts of suicide, and life meaning in depressed adults. In addition, the current study explored sources of life meaning (achievement, relationship, religion, self-transcendence, self-acceptance, intimacy and fair treatment) that contribute to depression severity, hopelessness, and suicidal ideation. The present study explored whether life meaning improves the understanding of suicidal ideation beyond known risk factors. Follow-up analyses examined the impact of life meaning on future depressive symptoms, hopelessness, and suicidal ideation. The current study examined the relationship between change in life meaning and change in depressive symptoms, hopelessness, and suicidal ideation during an 18 week interval.

**Hypotheses**

1) Less life meaning, as measured by the Life Regard Index – framework subscale and the Personal Meaning Profile, was expected to be significantly related to more severe depression, greater hopelessness, and more frequent thoughts of suicide.

2) Life meaning was predicted to contribute significantly to our understanding of suicidal ideation beyond known risk factors (depressive symptoms, level of hopelessness).

3) The seven subscales of the Personal Meaning Profile were expected to explain a significant percentage of variance in depressive symptoms, hopelessness, and suicidal ideation. Achievement, self-acceptance, and self-transcendence were hypothesized to be the best predictors of depressive symptoms, hopelessness, and suicidal ideation.
4) An increase in life meaning was predicted to be significantly associated with a decrease in depressive symptoms, hopelessness, and suicidal ideation during the 18 week follow-up interval.

5) A baseline level of life meaning was expected to significantly contribute to future depression severity, hopelessness, and suicidal ideation, as measured at an 18 week follow-up assessment.

Method

Participants

A sample of 110 patients was recruited from a VA Medical Center in a large Midwestern city. Participants were patients recruited from the psychology day hospital or the outpatient mental health treatment center. Eligibility requirements included a primary diagnosis of a Mood Disorder (Major Depressive Disorder, Dysthmic Disorder, and Adjustment Disorder with depressed mood). Exclusion criteria included an age younger than 18, non-English speaking, and an inability to read at a middle school reading level, as assessed by an inability to read the informed consent document (see Appendix A; Appendix B). Additionally, patients with a diagnosis of bipolar disorder, schizophrenia, dementia, mental retardation, or an organic brain disorder were excluded from the study, because of inherent differences from patients with a primary unipolar depressive disorder. Selection was not influenced by any other demographic factor (i.e., gender, ethnicity, marital status, or religion).

A total of 132 individuals were provided informed consent for study participation. Fourteen (10.61%) were dropped from the analyses because of incomplete data, five
(3.79%) were ineligible based on inclusion/exclusion criteria, two (1.51%) participants
did not return the questionnaire packet, and one (0.76%) was dropped because he was
suicidal at the time of the assessment and thus had to be escorted to the psychiatric
emergency room. A final sample of 110 participants with informed consent and complete
data remained. Participants primarily included African-American (64.54%) males
(90.91%). The average age of participants was 52.31, and ages ranged from 22 to 83.
Most participants were unmarried (63.64%) and unemployed (84.55%). Greater than
one-third of the participants (38.18%) reported that their physical health was poor or
moderately poor.

At the time of the initial assessment, all participants met criteria for a depressive
disorder based on the SCID (First et al., 1995) interview findings. Diagnoses included
Recurrent Major Depressive Disorder (84.5%), Dysthymia (10.9%), Single Episode
Major Depressive Disorder (3.6%), and Adjustment Disorder with Depressed Mood
(0.9%). Participants represented a chronically depressed population with the current
depressive episode persisting for an average of 333.09 weeks, or about six and a half
years. Almost half (46.36%) of the participants had a prior psychiatric hospitalization,
and one-third (33.64%) reported a past suicide attempt. Additionally, some participants
met criteria for a co-morbid psychiatric disorder including post-traumatic stress disorder
(20.91%), substance abuse/dependence (18.18%), generalized anxiety disorder (8.18%),
and alcohol abuse/dependence (7.27%).

Approximately three months following the initial assessment, research assistants
attempted to contact study participants to schedule the follow-up assessment. Of the
original 132 participants, 29 participants (21.97%) were not contacted for follow-up.
Because data collection occurred over a two year period, 21 (14.40%) were not yet eligible for the follow-up assessment due to the specified three month interval between the initial and second round of data collection. Five (3.79%) were not contacted because they did not meet inclusion/exclusion criteria, two (1.52%) were not contacted because they did not return the questionnaire packet and the initial assessment, and one (.75%) participant was not contacted because he did not complete the initial assessment due to suicidal intent. A total of 103 participants were contacted to participate in the follow-up assessment. Most participants (66.99%) agreed to participate in the follow-up, but some (33.01%) did not participate in the follow-up. Of the 34 participants who did not participate in the follow-up assessment, 20 (58.82%) could not be reached for the follow-up assessment, 11 (32.35%) did not show for their appointments, 2 (5.88%) declined, and 1 participant was deceased (2.94%). Sixty-nine (66.99%) of the contacted participants attended the follow-up assessment. Of the 69, 9 (13.04%) participants were excluded from follow-up analyses due to failure to return the questionnaire (1.45%) or an incomplete questionnaire (11.59%), leaving 60 participants who were included in the follow-up analyses.

At the follow-up assessment, most of the participants (71.67%) still met criteria for a depressive disorder. About one-fifth (21.67%) of the participants had recovered from their depressive disorder, and no longer met criteria for a psychiatric diagnosis. A few participants (6.67%) no longer met criteria for a depressive disorder, but they met criteria for post-traumatic stress disorder (1.67%), generalized anxiety disorder (1.67%), or alcohol dependence (3.33%). The average number of completed psychotherapy
appointments between the initial and follow-up assessments was 2.83, and number of psychotherapy visits ranged from 0 to 24.

Prior to all analyses, a power analysis was conducted using G-Power 3.0 to determine the necessary sample size. A sample size of 59 was required to ensure power \(= .80\), with a medium to large effect size \((f^2 = .20)\), and \(\alpha = .05\).

**Measures**

The Structured Clinical Interview for DSM-IV (SCID v2.0; First, Spitzer, Gibbon, & Williams, 1995) is a semi-structured clinical interview designed to assess Axis I diagnoses based on DSM-IV criteria (American Psychological Association, 1994). The interview includes a series of questions regarding frequency, chronicity, and severity of symptoms. The SCID is used to identify affective, anxiety, psychotic, and substance abuse disorders. In the current study, the SCID was used to substantiate a depressive diagnosis and identify possible co-morbidities (Appendix C). Good inter-rater reliability \((\alpha = .80)\) and adequate test-rest reliability \((\alpha = .61)\) have been established for the diagnosis of a Major Depressive Disorder (Zanarini & Frankenburg, 2001). Concurrent validity of the SCID has been established. In a college student sample, the number of depressive symptoms assessed by the SCID were significantly, positively correlated with the BDI-II scores (Sprinkle et al., 2002). In addition, the SCID was significantly correlated with a self-report measure of depression in psychiatric outpatients (Zimmerman, Sheeran, & Young, 2004).

The Beck Depression Inventory (BDI-2; Beck, Steer, & Brown, 1996) is a 21-item self-report measure commonly used to evaluate cognitive, behavioral, and affective symptoms of depression in the previous two weeks (Appendix D). Items are scored from
0 to 3. Total scores can range from 0-63 with higher scores indicating more severe depression. Average BDI-II scores are similar in younger and older adults (Segal, Coolidge, Cahill, & Riley, 2008). Reliability and validity for the BDI-II have been established. An outpatient sample of mixed psychiatric disorders yielded BDI-II results suggesting very good internal consistency ($\alpha = .93$) (Beck et al., 1996). Other studies report internal consistencies of .89 (Steer, Clark, Beck, & Ranieri, 1998) and .92 (Whisman, Perez, & Ramel, 2000). Results conducted on an outpatient sample and large university population provide evidence for a 2 factor structure including a cognitive-affective component and a somatic component (Beck et al., 1996; Whisman et al., 2000). Among community-dwelling adults, the BDI-II significantly correlated with the Center for Epidemiologic Studies Depression Scale (CES-D) and the Coolidge Axis II Inventory (CATI) - depression subscale providing evidence for convergent validity (Segal, Coolidge, Cahill, & O’Riley, 2008).

The Beck Scale for Suicidal Ideation (BSSI; Beck, Kovacs, & Weissman, 1979) includes 21 items used to evaluate the presence and severity of suicidal thoughts (Appendix E). The first 19 items assess the severity of suicidal plans and attitudes. The final two items examine the number of previous suicide attempts and the level of intent to die associated with the most recent attempt. Participants read sets of three statements and circle the statement that best captures current beliefs. The BSSI has been found to be useful in quantifying the degree of suicidal ideation in psychiatric patients and can serve as a warning sign when evaluating suicide risk (Steer, Kumar, & Beck, 1993). A high level of internal consistency ($\alpha = .95$) has been established (Steer et al., 1993). The BSSI has moderate test-retest reliability ($r = .54$) with psychiatric inpatients (Steer, Rissmiller,
Ranieri, & Beck, 1993). BSSI scores highly correlate with clinician ratings of suicidal ideation with correlation coefficients ranging from \((r = .90)\) for psychiatric inpatients to \((r = .94)\) for psychiatric outpatients (Beck, Steer, Ranieri, 1988).

The Beck Hopelessness Scale (BHS; Beck, Weissman, Lester, & Trexler, 1974) includes 20 true-false items that assess pessimistic outlooks (Appendix F). Total scores range from 0 to 20, and higher scores indicate greater hopelessness. Among a large group of adult outpatients, internal consistency for the BHS was strong \((\alpha = .92)\). Results conducted on patients with a primary mood or anxiety disorder show that the BHS has two underlying factors including pessimism about the future and resignation to changing the future (Steer, Beck, & Brown, 1997). The BHS is significantly related to measures of neuroticism \((r = .46)\) and depression \((r = .47)\) but the BHS is unrelated to other personality variables which suggests discriminant validity (Velting, 1999). The BHS identifies a high risk group of individuals at risk for suicide (McMillan, Gilbody, Beresford, & Neilly, 2007).

The Life Regard Index – framework subscale (LRI; Debats, 1998) is a 14-item measure adapted from Battista and Almond’s (1973) original meaning scale (Appendix G). The LRI has been used with college students, adults, and the elderly (Chamberlain & Zika, 1988). The LRI – framework subscale measures the degree to which an individual envisions life within a meaningful perspective and has developed life goals from this outlook. Debats (1998) revised the original measure to include a three point Likert scale \((1=\) do not agree, \(2=\) no opinion, \(3=\) agree) instead of a five point scale. In addition, Debats (1998) reordered the items to alternate between positively and negatively worded items. Total scores range from 0-42 and higher scores indicate greater life meaning. Factor
analysis of the original LRI revealed two subscales, represented by the framework and fulfillment subscales (Debats, 1990; Van Ranst & Marcoen, 1997). More recent factor analysis of the revised LRI yielded moderate support for a two factor structure (Yockey, 2006). Discriminant validity suggests that the framework subscale represents the cognitive component of life meaning as opposed to the fulfillment subscale which represents the affective component (Debats, 1996). The framework subscale demonstrates good internal consistency ranging from .81 to .87 (Mascaro & Rosen, 2006; Steger, 2007).

The Personal Meaning Profile (PMP; Wong, 1998) is a 57-item self-report measure designed to assess the degree to which an individual reports goals and values considered to define a meaningful life (Appendix H). The PMP includes seven subscales that represent various sources of meaning including achievement, relationships, religion, self-transcendence, self-acceptance, intimacy, and fair treatment. A 7-point Likert scale ranging from “not at all” to “a great deal” is used to measure degree of meaning derived from the diverse sources. The PMP allows for the measurement of breadth, depth, and balance of life meaning sources. The PMP was developed in a Canadian sample of over 300 participants ranging from age 18 to over 60 (Wong, 1998). A factor analysis conducted during the development of the PMP revealed that items accounted for 67% of the variance in meaning (Wong, 1998). High, negative correlations between the PMP total score and the BDI ($r = -.70$) and a positive correlation with a measure of psychological well-being ($r = .49$) have been reported (Wong, 1998). Adequate test-retest reliability ($\alpha = .85$) has also been confirmed (Wong, 1998). The PMP has been used to examine life meaning in Dutch cancer patients (Jaarsma, Pool, Ranchor, &
Sanderman, 2007), Canadian students at a religious university (Klaasen & McDonald, 2002), and American psychologists (Kernes & Kinnier, 2008).

Procedures

Participants were recruited from the psychology day hospital and outpatient mental health programs at the local VA Medical Center. Three different methods were used to recruit study participants. Flyers were placed in the psychology day hospital and clinic waiting areas so that interested patients could contact the research team by phone to set up an appointment (Appendix I). Researchers also contacted outpatient psychologists to obtain the names of current patients with a depressive diagnosis. In addition, the psychologist on the day hospital staff notified the research team when a current patient met criteria for the study.

A member of the research team checked the chart of potential participants to confirm that eligibility criteria had been met. After diagnostic criteria had been verified, a member of the research team called potential participants to briefly explain the study rationale and to set up an appointment with interested patients. Each participant was assigned a random code number to ensure confidentiality. Code numbers consisted of the research assistant’s number, the year in the program, and the number of the subject tested by the research assistant that year. Consider this example for the code #150322: this would indicate that the research assistant’s personal number is 15, she is in her third year of the program, and it was the 22nd participant she interviewed that year. There was no master code that could be used to decode the numbers.

Assessment sessions were conducted by clinical psychology graduate students. Assessments took place in an unused office in the day hospital unit of the VA Medical
Center. Data collection consisted of an interview and a questionnaire packet. Prior to the interview, the researcher explained the study and obtained consent. Next, the researcher proceeded with the interview which included a diagnostic assessment and an orally administered suicide history form (Appendix J). Immediately following the interview, the participant completed the questionnaire packet consisting of a biographical data sheet (Appendix K), a family history of mental illness questionnaire (Appendix L), and the study measures. The questionnaire packet also included the subject’s random code number so that the data could be later linked with follow-up measures. Participants were thanked for their time and compensated either ten dollars in cash or ten dollars in the form of a Wal-Mart gift card (Appendix M). Type of compensation was determined by availability of resources.

Before leaving the VA, the investigator completed a follow-up sheet that included the participant’s first and last name, random code number, phone number, date of interview, and anticipated follow-up date (Appendix N). Follow-up sheets were placed in an envelope that was stored at the VA. No identifying information left the VA. After the interview was complete, the questionnaire packet was placed inside an envelope in a locked briefcase that was directly returned to the psychology building at Case Western Reserve University. Questionnaires were stored in a locked file cabinet. Approximately three months following initial interviews, research team members contacted participants by phone to arrange a follow-up appointment. The average interval between the initial and re-assessment was 139.17 days (i.e. about four and a half months or 18 weeks). Follow-up procedures were conducted in person, at the VA, in the same manner as the primary appointment.
During the follow-up appointment, the researcher verified the participant’s medical chart to record any psychological treatment that had been received during time period between the initial and re-assessment. Psychological treatment was considered to be any individual or group treatment provided by a social worker, psychologist, or psychiatrist in which psychotherapy was provided. Mental health appointments that primarily focused on assessment, evaluation, or medication monitoring were excluded. All completed psychotherapy appointments were tallied to represent the total number of 60 minute psychotherapy appointments completed in the time period between the initial and follow-up assessment. No participants reported receiving psychological treatment outside of the VA System.

Data Analytic Plan

Descriptive Statistics

Descriptive statistics were initially conducted to examine the distribution of scores on the Beck Depression Inventory, the Beck Hopelessness Scale, the Beck Scale for Suicidal Ideation, the Life Regard Index – framework subscale, and the Personal Meaning Profile. Internal consistency (Cronbach’s alpha) was calculated to evaluate the reliability of the measures used in the current study. All measures contained a sufficient amount of internal consistency, with an $\alpha$ above .70 (Nunnally, 1978). Descriptive statistics were used to examine demographic and diagnostic characteristics, and the mean age of the participants was calculated. Group comparisons were conducted to examine potential differences between participants who were recruited from the psychology day hospital and participants who were recruited from outpatient mental health. Prior to
calculating follow-up analyses, relationships between measures collected at the 18 week follow-up assessment and covariates (e.g. psychotherapy visits completed during the follow-up interval, duration of time between the initial and follow-up assessments) were examined. Potential differences between participants who completed the follow-up assessment and participants who did not complete the follow-up assessment were evaluated with t-tests and chi-square analyses.

Testing of Hypotheses

1) Less life meaning, as measured by the Life Regard Index – framework subscale and the Personal Meaning Profile, was expected to be significantly related to more severe depression, greater hopelessness, and more frequent thoughts of suicide.

   a. Pearson correlations were calculated to compare the cross-sectional relationships between depression, hopelessness, suicidal ideation, and both measures of life meaning. Correlations were calculated using measures collected at the initial assessment. Cohen’s (1988) suggestions for interpreting correlations were used. A correlation coefficient between .01 and .29 indicated a small effect, between .30 and .49 indicated a medium effect, and between .50 and 1.0 indicated a large effect.

2) Life meaning was predicted to contribute significantly to our understanding of suicidal ideation beyond known risk factors (depressive symptoms, level of hopelessness).

   a. A hierarchical regression analysis was conducted to examine the contribution of life meaning to suicidal ideation. Significant covariates
(i.e. self-reported physical health, a prior suicide attempt, and history of an
inpatient psychiatric hospitalization) were entered at Step 1. The Beck
Depression Inventory was entered at Step 2. The Beck Hopelessness
Scale was entered at Step 3. The Personal Meaning Profile was entered at
Step 4. The Life Regard Index – framework subscale was entered at Step
5. The order of entry for life meaning measures was determined based on
chronological sequence of events. Sources of life meaning, (as measured
by the Personal Meaning Profile) are likely to be established prior to the
cognitive element of life meaning, (as measured by the Life Regard Index
– framework subscale). Life meaning was considered a significant
contributor to the model if the $F$ change value for Step 4 or 5 was less than
.05.

3) The seven subscales of the Personal Meaning Profile were expected to explain
a significant percentage of variance in depressive symptoms, hopelessness,
and suicidal ideation. Achievement, self-acceptance, and self-transcendence
were hypothesized to be the best predictors of depressive symptoms,
hopelessness, and suicidal ideation.

a. Pearson correlations were initially calculated to determine which subscales
would be included in the regressions, using the criterion of $p < .05$. Three
standard multiple regression analyses were conducted to examine the
contribution of Personal Meaning Profile subscales to depressive
symptoms, hopelessness, and suicidal ideation. Subscales of the Personal
Meaning Profile (achievement, relationship, religion, self-transcendence,
self-acceptance, intimacy, fair treatment) were entered simultaneously. Subscales were considered to significantly contribute to depressive symptoms, hopelessness, and suicidal ideation if the significance value for $F$ was less than .05. Beta values were compared to examine the individual contribution of each subscale. Beta values that were significant in the final model ($p < .05$) indicated the best predictors of the dependent variables.

4) An increase in life meaning was predicted to be significantly associated with a decrease in depressive symptoms, hopelessness, and suicidal ideation during the 18 week follow-up interval.

a. Possible covariates were initially evaluated by calculating Pearson correlations between measures collected at follow-up and demographic characteristics, diagnostic variables, psychotherapy visits completed, and follow-up duration in days. Change scores were calculated for each of the five main measures (e.g. Beck Depression Inventory, the Beck Hopelessness Scale, the Beck Scale for Suicidal Ideation, the Life Regard Index – framework subscale, and the Personal Meaning Profile) using regression residuals from a multiple regression analysis. Pearson correlations were calculated between regression residuals, and they were considered significant if $p < .05$.

6) A baseline level of life meaning was expected to significantly contribute to future depression severity, hopelessness, and suicidal ideation, as measured at an 18 week follow-up assessment.
a. Pearson correlations were calculated to examine the relationships between life meaning (as measured by the LRI and PMP) at time 1 and depression, hopelessness, and suicidal ideation at time 2. Three hierarchical regression analyses were conducted to examine the contribution of life meaning at baseline to future depression, hopelessness, and suicidal ideation. Analyses controlled for covariates (marital status, employment status, and self-reported physical health) and baseline levels of the dependent variable. In each analysis, the Personal Meaning Profile was entered at Step 3, and the Life Regard Index – framework subscale was entered at Step 4. The contribution of baseline life meaning to follow-up levels of depression, hopelessness, and suicidal ideation was examined by evaluating the significance of the R squared change value. A p-value less than .05 was considered significant.

Results

Analyses were performed using the Statistical Packages for the Social Sciences for Windows (SPSS, version 17.0). Unless otherwise specified, the alpha level for significance was set at $p < .05$. Prior to data analysis, all variables were examined for accuracy of data entry, missing values, and outliers. In five cases, one measure was incomplete from the questionnaire packet. Cases were excluded pairwise; thus, they were only excluded only from analyses that required the missing data. Missing data at the item level was infrequent with less than 1% of the items missing. Missing items were replaced by the series mean only in measures that had 1-2 missing items.


**Preliminary Analyses**

The total sample of 110 participants included mental health outpatients \((n = 81)\) and day hospital patients \((n = 29)\). There were no significant differences between the two samples in terms of age, gender, ethnicity, marital status, self-reported physical health, history of suicide attempts, and prior inpatient hospitalizations (see Table 1). No group differences were observed on the measures. As expected, participants recruited from the outpatient mental health center were significantly more likely to be employed than participants recruited from the day hospital clinic \(\chi^2 (1, N = 110) = 4.35, p < .05\). Thus, the outpatients and day hospital patients were combined into one sample.

Means, standard deviations, and inter-correlations were calculated to examine the relationships between measures and to test for multi-collinearity (Table 2). Preliminary analyses were performed to ensure no violation of normality, linearity, and homoscedasticity. A histogram, Normal Q-Q Plot, Detrended Normal Q-Q Plot, and boxplot were evaluated for each measure. Scores on the Beck Scale for Suicidal Ideation were positively skewed, with scores clustered at the low values indicating that severe levels of suicidal ideation were rare in the current sample. However, skew and kurtosis values were all less than an absolute value of 2, indicating that scores in this sample could be normally distributed across all variables of interest (Curran, West, & Finch, 1996). Inter-correlations between measures were all significant, with correlation coefficients ranging from .33 to .75. Using Cohen’s (1988) suggestions for interpretation, medium correlations were observed between the Beck Scale for Suicidal Ideation and both life meaning measures. Large correlations were observed between the
Beck Depression Inventory, the Beck Hopelessness Scale and both life meaning measures.

Cronbach’s alpha coefficients were calculated for all study measures to evaluate scale reliability. Internal consistency was very good for all measures: Beck Depression Inventory-II ($\alpha = .91$), Beck Hopelessness Scale ($\alpha = .93$), Beck Scale for Suicidal Ideation ($\alpha = .96$), Life Regard Index – framework subscale ($\alpha = .86$), and Personal Meaning Profile ($\alpha = .97$). Cronbach’s alpha coefficients were also calculated to examine reliability of the seven subscales of the Personal Meaning Profile. Internal consistency ranged from adequate to very good with all subscales having an $\alpha$ greater than .70.

**Hierarchical Regression**

A Hierarchical Regression Analysis was conducted to assess the ability of the two life meaning measures (Personal Meaning Profile and Life Regard Index – framework subscale) to predict levels of suicidal ideation after controlling for the influence of significant covariates and well-established suicide risk factors (depression, hopelessness). Preliminary analyses were conducted to ensure no violation of assumptions of multicollinearity, normality, linearity, and homoscedasticity. Tolerance values were greater than .10 and Variance Inflation Factors (VIF) were less than 10 which indicated no evidence of multicollinearity among the independent variables (Tabachnick & Fidell, 2007). The Normal Probability Plot of the Regression Standardized Residual depicted points in a reasonably straight line from bottom left to top right, suggesting normality. Outliers were not detected in the Scatterplot of the standardized residuals when using Tabachnik and Fidell’s (2007) criteria that define outliers as values are greater than 3.3 or less than -3.3. Correlations between suicide risk factors and measures were examined.
More severe suicidal ideation was significantly related to poor physical health \( r(109) = .24, p < .05 \), a prior inpatient psychiatric hospitalization \( r(109) = .20, p < .05 \), and a past suicide attempt \( r(109) = .24, p < .05 \).

When predicting suicidal ideation, significant covariates (self-reported physical health, history of an inpatient psychiatric hospitalization, and a prior suicide attempt) were entered at Step 1, explaining 13.1% of the variance in suicidal ideation. The Beck Depression Inventory was entered at Step 2, and the total variance explained by the model was 30.4%, \( F(4, 103) = 11.25, p < .001 \). The Beck Depression Inventory added an additional 17.3% of the variance in suicidal ideation (\( \Delta R^2 = .17 \), after controlling for self-reported physical health and psychiatric history variables (history of inpatient hospitalization and suicide attempts), \( F \) change (1, 103) = 25.58, \( p < .001 \). In Step 3, scores from the Beck Hopelessness Scale were added, and they explained an additional 2.8% percent of the variance, (\( \Delta R^2 = .03 \), which was significant, \( F \) change (1, 102) = 4.26, \( p < .05 \). The two life meaning variables were entered in the final steps of the model. The addition of the Personal Meaning Profile at Step 4 did not significantly contribute additional variance to the model as a whole, \( F \) change (1, 101) = .44, ns. After the Life Regard Index – framework subscale was entered at Step 5, the total variance explained by the model was 36.7%. The Life Regard Index – framework subscale added an additional 3.2% of the variance in suicidal ideation (\( \Delta R^2 = .03 \), which was significant, \( F \) change (1, 100) = 5.14, \( p < .05 \). Only three variables significantly contributed to the final model. In order of importance, significant variables included: Life Regard Index - framework subscale (beta = -.27, \( p < .05 \)), Beck Depression Inventory (beta = .26, \( p < .05 \)), and history of a suicide attempt (beta = .19, \( p < .05 \)).
Simultaneous Multiple Regression Analyses

Three Simultaneous Multiple Regressions were calculated to examine how well various sources of life meaning predict depression severity, hopelessness, and suicidal ideation. Preliminary analyses were conducted to ensure that there were no violations of multicollinearity, normality, linearity, and homoscedasticity. Although Personal Meaning Profile subscales were strongly inter-related, Tolerance and VIF values were all within the expected ranges. No major deviations from normality were observed in the Normal Probability Plots of the Regression Standardized Residual which depicted reasonably straight lines from bottom left to top right. The Scatterplots of the standardized residuals confirmed the absence of values greater than 3.3 or less than -3.3. Inter-correlations were calculated between each of the three measures (Beck Depression Inventory, Beck Hopelessness Scale, and Beck Scale for Suicidal Ideation) and the seven subscales of the Personal Meaning Profile (achievement, relationships, religion, self-transcendence, self-acceptance, intimacy, and fair treatment). Inter-correlations revealed significant, negative correlations, ranging from -.17 to -.74.

In the first regression analysis, the dependent variable was the Beck Depression Inventory. All seven subscales were entered simultaneously into the standard multiple regression analysis. Each of the seven subscales was significantly related to depression with correlations ranging from -.32 to -.49. After including all sources of meaning into the model, 29.9% of the variance in depression severity was explained, \( R = .55, F (7, 102) = 6.23 \, p < .001. \) Subscales with the highest Beta values were self-transcendence (beta = -.30), self-acceptance (beta = -.21), and achievement (beta = -.20). However, no sources of meaning made a significant, unique contribution to the model. A second
regression analysis was conducted with the Beck Hopelessness Scale as the dependent variable. All seven subscales were entered simultaneously into the standard regression analysis. Each of the seven subscales was significantly related to hopelessness with correlations ranging from -.55 to -.74. After including all sources of meaning into the model, 59.9% of the variance in hopelessness was explained, $R = .77$, $F(7, 101) = 21.55$, $p < .001$. Subscales with the highest Beta values were self-transcendence ($\beta = -.46$), self-acceptance ($\beta = -.19$), and religion ($\beta = .17$). Self-transcendence made a significant, unique contribution to the model ($\beta = -.46$, $p < .01$). A third regression analysis was conducted with the Beck Scale for Suicidal Ideation as the dependent variable. All seven subscales were entered simultaneously into the standard regression analysis. Each of the seven subscales was significantly related to suicidal ideation with correlations ranging from -.17 to -.34. After including all sources of meaning into the model, 20.2% of the variance in suicidal ideation was explained, $R = .45$, $F(7, 101) = 3.66$, $p = .001$. Subscales with the highest Beta values were self-transcendence ($\beta = -.52$), relationships ($\beta = .37$), and self-acceptance ($\beta = -.25$). Self-transcendence ($\beta = -.52$, $p < .05$) and relationships ($\beta = .37$, $p < .05$) were the only variables that made a significant, unique contribution to the model.

**Follow-Up Analyses**

Follow-up analyses included a total of 60 participants. Preliminary analyses were conducted to examine potential differences between participants who completed the follow-up assessment ($n = 60$) and participants who were contacted, but did not complete the follow-up ($n = 43$). No differences were observed in terms of recruitment location ($\chi^2(1, N = 103) = 2.09$, $ns$). Chi-square analyses revealed that the two groups were
similar in terms of demographics: age ($t(101) = -1.42, \text{ns}$), gender ($X^2 (2, N = 103) = 3.02, \text{ns}$), ethnicity ($X^2 (3, N = 103) = 1.91, \text{ns}$), marital status ($X^2 (6, N = 103) = 10.81, \text{ns}$), and employment ($X^2 (1, N = 103) = .97, p < .05$). The two groups were not significantly different in terms of self-reported physical health ($X^2 (1, N = 103) = .09, \text{ns}$). Chi-square analyses revealed no differences between the two groups in terms of a variety of psychiatric variables: history of suicide attempts ($X^2 (1, N = 103) = .01, \text{ns}$), prior psychiatric inpatient hospitalizations ($X^2 (1, N = 103) = .00, \text{ns}$), and duration of depressive episode ($t(100) = -1.25, \text{ns}$). No significant group differences were observed on the measures completed at the initial assessment. Groups reported similar levels of depression ($t(101) = -.06, \text{ns}$), hopelessness ($t(99) = -.08, \text{ns}$), and suicidal ideation ($t(95) = -1.83, \text{ns}$), at the original assessment. Thus, the follow-up sample was considered to be a representative sample of depressed veterans.

Means, standard deviations, and inter-correlations were calculated to examine the relationships between measures and to test for multi-collinearity. Preliminary analyses were performed to ensure no violation of normality, linearity, and homoscedasticity. Mean scores revealed slight increases in life meaning as assessed by the Life Regard Index - framework subscale ($M = 29.14, SD = 6.57$) and the Personal Meaning Profile ($M = 247.50, SD = 75.33$), when comparing means to time 1 scores. Mean scores also revealed slight decreases in depressive symptoms ($M = 23.37, SD = 13.72$), hopelessness ($M = 9.96, SD = 6.73$), and suicidal ideation ($M = 3.28, SD = 6.26$), as compared to time 1 data. Inter-correlations were calculated between life meaning measures collected at time 1 and follow-up scores on the Beck Depression Inventory, Beck Hopelessness Scale, and Beck Scale for Suicidal Ideation. Higher scores on the Life Regard Index –
framework subscale at time 1 were significantly related to less depressive symptoms at
time 2 $r(60) = -.28, p < .05$, less severe hopelessness at time 2 $r(59) = -.64, p < .0001$, and
less frequent suicidal thoughts at time 2 $r(59) = -.40, p < .001$. Higher scores on the
Personal Meaning Profile at time 1 were significantly related to less depressive symptoms
at time 2 $r(60) = -.27, p < .05$, less severe hopelessness at time 2 $r(60) = -.56, p < .001$,
and less frequent suicidal thoughts at time 2 $r(60) = -.26, p < .05$.

**Inter-correlations and Change Scores**

Correlations between risk factors and follow-up measures (Beck Depression
Inventory, Beck Hopelessness Scale, and Beck Scale for Suicidal Ideation) were
calculated. Risk factors included in the correlational analyses were age, ethnicity, marital
status, employment, physical health, history of suicide attempts, and history of an
inpatient psychiatric hospitalization. Gender was excluded from the analysis because
there were only four women in the follow-up sample. Depression was significantly
related to marital status $r(60) = -.29, p < .05$, employment status $r(60) = -.26, p < .05$, and
self-reported physical health $r(60) = -.35, p < .01$. More severe depression was more
common among unmarried participants, the unemployed, and participants who reported
poor physical health, as compared to married participants, the employed, and participants
who reported average or better physical health. Non-significant correlations were
observed between the Beck Hopelessness Scale and risk factors. Similarly, non-
significant correlations were observed between the Beck Scale for Suicidal Ideation and
risk factors.

Additional analyses were calculated to evaluate the potential influence of
covariates (i.e., duration of time between the initial and follow-up assessment, completed
psychotherapy appointments) on time 2 scores. The number of days between time 1 and time 2 data collection was not significantly related to follow-up scores on the Beck Depression Inventory $r(60) = .08$, $ns$, the Beck Hopelessness Scale $r(59) = .17$, $ns$, and the Beck Scale for Suicidal Ideation $r(59) = .03$, $ns$. Additionally, inter-correlations were calculated to examine whether a higher number of completed psychotherapy visits during the period between time 1 and time 2 data collection was significantly related to less severe depression, reduced hopelessness, and less intense suicidal thoughts. Number of completed psychotherapy visits was not significantly related to time 2 depression severity $r(60) = -.06$, $ns$, hopelessness $r(59) = -.05$, $ns$, or suicidal ideation $r(59) = -.05$, $ns$.

The relationship between change in life meaning measures and change in depression, hopelessness, and suicidal ideation was evaluated using residualized change scores. Residualized change scores provide a method of evaluating change by removing bias from unreliability and regression to the mean (Streiner & Norman, 2003). A regression analysis was computed for each of the five measures (Beck Depression Inventory, Beck Hopelessness Scale, Beck Scale for Suicidal Ideation, Personal Meaning Profile, and Life Regard Index – framework subscale), with the time 1 score as the independent variable and the time 2 score as the dependent variable. Treatment (number of psychotherapy visits completed) was not included as a covariate, because it was not significantly related to follow-up measures. Regression residuals were saved as a new variable, and Pearson correlations were calculated. Personal Meaning Profile change scores were significantly, negatively related to Beck Depression Inventory change scores $r(58) = -.51, p < .001$ and to Beck Hopelessness Scale change scores $r(56) = -.64, p <
Personal Meaning Profile change scores were not significantly related to Beck Scale for Suicidal Ideation change scores. Life Regard Index – framework subscale change scores were significantly, negatively related to Beck Depression Inventory change scores $r(60) = -.55$, $p < .001$ and to Beck Hopelessness Scale change scores $r(58) = -.63$, $p < .001$. Life Regard Index – framework subscale change scores were not significantly related to Beck Scale for Suicidal Ideation change scores.

Hierarchical Multiple Regression Analyses

Three Hierarchical Regression Analyses were conducted separately to assess the ability of two life meaning measures (Personal Meaning Profile and Life Regard Index – framework subscale) from time 1 to predict follow-up levels of depression, hopelessness, and suicidal ideation. Only significant covariates from the correlational analyses were included as covariates. Preliminary analyses were conducted prior to each of the three regression analyses to ensure there were no violations of assumptions of multicollinearity, normality, linearity, and homoscedasticity. Tolerance and VIF values were in the expected ranges of greater than .10 and less than 10, respectively (Tabachnick & Fidell, 2007). No major deviations from normality were noted by the Normal Probability Plot of the Regression Standardized Residual. Finally, scatterplots confirmed the absence of outliers.

The first Hierarchical Regression Analysis was conducted to assess the ability of the two life meaning measures to predict follow-up levels of depression (Table 3). At Step 1, significant covariates (marital status, employment status, and physical health) were entered which explained a significant portion ($\Delta R^2 = .23$) of the variance in time 2 depression scores. At Step 2, time 1 depression scores were entered, accounting for a
significant percent ($\Delta R^2 = .11$) of the variance in time 2 depression scores which was significant ($\Delta F (1, 54) = 11.35, p = .001$). At Step 3, the time 1 Personal Meaning Profile was added which did not account for additional variance in time 2 depression scores. At Step 4, the time 1 Life Regard Index – framework subscale was added which did not account for additional variance in time 2 depression scores. The final model accounted for a significant percent ($R^2 = .40$) of the variance in time 2 depression, and the model as a whole was significant ($F (6, 59) = 4.53, p = .001$). Time 1 depression severity ($\beta = .36, p < .05$) was the only variable that significantly contributed to the final model.

A Hierarchical Regression Analysis was conducted to examine the ability of the two life meaning measures to predict follow-up levels of hopelessness (Table 4). At Step 1, covariates (marital status, employment status, and physical health) were entered which did not explain a significant portion ($\Delta R^2 = .11$) of the variance in time 2 hopelessness. At Step 2, time 1 scores from the Beck Hopelessness Scale were entered, accounting for a significant percent ($\Delta R^2 = .38$) of the variance in time 2 hopelessness which was significant ($\Delta F (1, 53) = 38.62, p < .001$). At Step 3, the time 1 Personal Meaning Profile was entered which did not account for additional variance. At Step 4, the time 1 Life Regard Index – framework subscale was entered, accounting for an additional 3% ($\Delta R^2 = .03$) of the variance which was not significant ($\Delta F (1, 51) = 3.40, p = .07$). The final model accounted for a significant percent ($R^2 = .52$) of the variance in time 2 hopelessness, and the model as a whole was significant ($F (6, 57) = 9.14, p < .001$). Hopelessness at time 1 ($\beta = .43, p < .05$) was the only variable that significantly contributed to the final model.
A Hierarchical Regression Analyses was conducted to examine the ability of the two life meaning measures to predict follow-up levels of suicidal ideation (Table 5). At Step 1, covariates (marital status, employment status, and physical health) were entered which did not explain a significant portion ($R^2 = .10$) of the variance in time 2 suicidal ideation. At Step 2, time 1 scores from the Beck Scale of Suicidal Ideation were entered, accounting for a significant portion ($R^2 = .29$) of the variance in time 2 suicidal ideation, which was significant ($F(1, 53) = 25.27, p < .001$). At Step 3, the time 1 Personal Meaning Profile was entered which did not account for additional variance. At Step 4, the time 1 Life Regard Index – framework subscale was entered which accounted for 4% ($R^2 = .04$) of the variance in time 2 suicidal ideation which was not significant ($F(1, 51) = 3.89, p = .05$). The final model accounted for a significant portion 44% ($R^2 = .44$) of the variance in time 2 scores on the Beck Scale for Suicidal Ideation which was significant ($F(6, 57) = 6.63, p < .001$). Suicidal ideation at time 1 ($\beta = .51, p < .001$) was the only variable that significantly contributed to the final model.

**Discussion**

The current study examined life meaning, depressive symptoms, hopelessness, and suicidal ideation in a sample of depressed veterans. Variables were measured at an initial assessment and re-evaluated 18 weeks later. Life meaning was evaluated by two different measures. The Life Regard Index – framework subscale (LRI) assessed the degree to which individuals view their lives in a meaningful perspective or framework. The Personal Meaning Profile (PMP) measured the extent to which individuals report goals and values considered to provide life meaning.
As predicted by hypothesis 1, cross-sectional analyses revealed significant relationships between depression and both measures of life meaning and between hopelessness and both measures of life meaning. Among depressed veterans, less life meaning (as measured by the LRI and the PMP) was significantly related to greater depressive symptoms and more intense hopelessness. Follow-up analyses showed that less life meaning (as measured by the LRI and the PMP) was significantly related to greater depressive symptoms and more severe hopelessness 18 weeks later. As predicted by hypothesis 4, when examining change over time, inverse relationships were observed between life meaning and depression and life meaning and hopelessness. An increase in life meaning (as measured by the LRI and the PMP) during the 18 week follow-up was significantly related to a decrease in depression severity and hopeless thoughts.

Chronically depressed, hopeless patients are likely to be lacking attitudes and goals that provide meaning to their life. Among depressed individuals, a lack of direction and few personal goals may promote a depressed mood and a negative outlook on life. Chronic depression and hopelessness may further reduce life meaning by inhibiting an adaptive perspective of one’s life and meaningful engagement in life. The current sample consisted of patients who were struggling with depressive symptoms for many years. Chronically depressed adults are more likely than adults with a non-chronic depressive disorder to display dysfunctional attitudes (Riso et al., 2003). Participants displayed moderate levels of depression and high levels of hopelessness at the intake. High levels of hopelessness, as measured by a Beck Hopelessness Scale score equal to or greater than 9, is predictive of completed suicide (Beck, Brown, Berchick, Stewart, & Steer, 1990). The mean level of hopelessness in the current study was noticeably high ($M = 10.59$).
Effective treatment is vital for hopeless patients who have been unable to recover from their depression. Over the course of therapy, reducing depressive symptoms and encouraging hopeful beliefs may simultaneously increase life meaning in depressed patients. Life meaning can also be a target in therapy, an approach that may be associated with improvement in mood and a more optimistic outlook. In addition to treating depressive symptoms, therapists are encouraged to help patients discover meaningful activities and novel ambitions in their life.

In the current study, the Personal Meaning Profile (Wong, 1998) was used to evaluate seven categories of goals and values considered to provide life meaning including achievement, relationships, intimacy, self-acceptance, self-transcendence, religion, and fair treatment. Cross-sectional analyses were calculated to explore the relationship between meaning subscales and levels of depression, hopelessness, and suicidal ideation present at baseline. As predicted by hypothesis 2, the seven domains accounted for a significant proportion of variance in depression severity, hopelessness, and suicidal ideation. Depressed, suicidal clients are likely to be lacking meaning in one or more of these seven areas. Almost 60% of the variance in hopelessness was accounted for by the seven domains of life meaning. A pervasive level of hopelessness in depressed clients may be understood by a failure to have established life meaning in multiple areas. It seems likely that high levels of hopelessness in depressed clients indicate a lack of success in cultivating aspirations and commitments in life that provide life meaning. In depressed clients, hopelessness may be closely linked with the absence of typical life goals.
Therapists may aim to utilize the seven meaning sources as a framework for evaluating clients’ life meaning in multiple domains. As compared to other sources of meaning, self-transcendence uniquely contributed to hopelessness and suicidal ideation in the present sample of depressed veterans. Self-transcendence may be the most important source of meaning for clinicians to focus on during treatment. Self-transcendence refers to the extent to which a person has beliefs and goals that exceed one’s own self-interests such as “I believe I can make a difference in the world” and “I strive to make this world a better place.” Depressed, hopeless clients can be encouraged to expand their self-interests by discovering service organizations that peak their interest. Engaging in volunteer activities may broaden depressed individuals’ perspectives and improve their mood.

At the time of the intake, significant, negative correlations were observed between suicidal ideation and both measures of life meaning. Less life meaning (as measured by the LRI and PMP) was significantly related to more frequent thoughts of suicide. As predicted by hypothesis 2, the Life Regard Index - framework subscale explained a significant percentage of variance in suicidal ideation after controlling for well established risk factors (e.g. history of inpatient hospitalization, history of suicide attempt, self-reported physical health, depressive symptoms, and hopelessness). Prior history of a suicide attempt is one of strongest predictors of future suicidal thoughts and behaviors (Nordstrom, Asberg, Aberg-Wistedt, & Nordin, 1995). Furthermore, the toxic combination of depression and hopelessness has a powerful influence on suicide risk (Weishaar & Beck, 1992). However, the Life Regard Index – framework subscale made a significant, unique contribution to the model suggesting that a lack of life meaning may
be a distinctive component of suicidal ideation that is not captured by commonly addressed risk factors. In addition to depressive symptoms and hopeless beliefs, chronically depressed, suicidal patients are likely struggling with a lack of meaning in their lives.

In contrast to the Life Regard Index – framework subscale, the Personal Meaning Profile did not add to the understanding of suicidal ideation after controlling for known risk factors. The Personal Meaning Profile includes many items that evaluate sources of life meaning in seven distinct domains. The Personal Meaning Profile appears to closely resemble the motivational aspect of global life meaning, goals, which is defined in the meaning-making model (Park & Folkman, 1997).

The Life Regard Index – framework subscale added to the understanding of suicidal ideation after controlling for robust correlates of suicidal ideation, including history of inpatient hospitalization, history of suicidal behaviors, current levels of depression and hopelessness, and self-reported physical health. Furthermore, the Life Regard Index – framework subscale added to the understanding of suicidal ideation above and beyond the Personal Meaning Profile. The Life Regard Index – framework subscale is a 14-item measure of life meaning that broadly assesses an individual’s beliefs, philosophy, or perspective on living life. The Life Regard Index – framework subscale seems to resemble the beliefs component of global meaning in Park and Folkman’s (1997) meaning-making model. The beliefs component of life meaning may be a better indicator of suicide risk than the motivational component of life meaning. Depressed, suicidal clients can learn to develop a cognitive framework through which they can make sense of their life. Therapy can help depressed clients adopt a meaningful
life perspective that reflects a sense of coherence, a philosophy of life, and the existence of plans or aspirations. Developing a meaningful perspective on life may be more important than participating in activities considered to provide life meaning, such as social interaction, achievement endeavors, and religious pursuits.

Treatment of depressed, suicidal individuals may be improved by including an evaluation of life meaning. Managing suicide risk and reducing depressive symptoms are primary goals of treatment with suicidal clients. However, outpatient treatment aimed toward long-term recovery from a suicidal crisis may be improved by allowing for exploration of deeper issues, such as life meaning. After suicide risk has diminished and depressive symptoms have decreased, addressing life meaning in therapy may protect clients from subsequent suicidal crises.

Current approaches to psychotherapy rarely address life meaning in an explicit manner; even though, traditionally, there has been a strong influence of meaning in psychotherapy (Frankl, 1959; Neimeyer, Burke, Mackay, & Van Dyke, 2010). More recently, researchers and clinicians have shown increased interest in meaning in the context of post-traumatic stress disorder (Foa, Ehlers, Clark, Tolin, & Orsillo, 1999). Some interventions have been designed to promote meaning-making and post-traumatic growth (Henry et al., 2010; Lee, Cohen, Edgar, Laizner, & Gagnon, 2006; Lester, McBride, Bliese, & Adler, 2010). However, these interventions specifically address meaning in the context of coping, and they are exclusively designed for post-traumatic stress disorder as opposed to depressive disorders. Therapists are encouraged to remain open to incorporating the assessment and improvement of life meaning into their treatment with depressed, suicidal clients. Therapy can include a values assessment in
which patients are asked about life goals in various spheres, such as friendship, career, and spirituality (Hayes, 2004).

Despite strong relationships between life meaning and depression, a baseline level of life meaning did not predict future levels of depression after controlling for marital status, employment, physical health, and baseline level of depression. Depressive symptoms are the strongest predictor of future depressive symptoms, after controlling for demographic and physical health variables (Karsten et al., 2011). The robustness of this finding was confirmed in the present study with baseline levels of depression being the strongest predictor depression severity at the 18 week follow-up. The current sample primarily included middle aged veterans, most of who had been suffering from chronic depressive symptoms in addition to a variety of other stressors including declining physical health, co-morbid psychiatric diagnoses, and financial strain. In the present sample of depressed veterans, being unmarried, struggling with unemployment, and having poor physical health were strongly related to depression symptoms present 18 weeks later. Although many depressed veterans may be experiencing a lack of life meaning, psychosocial stressors may be more indicative of the course of their disorder as opposed to intrapsychic variables such as life meaning.

In contrast with hypothesis 5, the Life Regard Index – framework subscale and the Personal Meaning Profile did not add a significant percentage of additional variance to the regression models predicting hopelessness and suicidal ideation at follow-up. Baseline levels of hopelessness and suicidal ideation were the strongest predictors of hopelessness and suicidal ideation 18 weeks later. Depression is an episodic disorder, but adults with chronic major depression may not experience full remission between
depressive episodes (Keller, Hanks, & Klein, 1996). In the current study, most participants (71.67%) still met criteria for a depressive disorder at the follow-up evaluation. Additionally, psychotherapy treatment received during the interval between the initial and re-assessment was limited (an average of 2.83 sessions). Hopeless attitudes and suicidal thoughts are likely to persist among chronically depressed patients who are not engaged in consistent psychotherapy.

The present findings are in contrast with a study by Mascaro and Rosen (2005) which concluded that a baseline level of life meaning significantly predicted future depressive symptoms and hopelessness after controlling for baseline depression and hopelessness. Although Mascaro and Rosen (2005) used the same measures of life meaning as the current study, the sample represented a non-depressed, college student population. Similarly, recent empirical investigations of global life meaning have used students (Brassai, Piko, & Steger, 2011; Thompson & Feldman, 2010), caregivers (Wu, Cho, Le, Chen, & Tse, 2009), and cancer patients (Erci, 2008; Park, Edmondson, Fenster, & Blank, 2008) as opposed to psychiatric samples. The current study evaluated life meaning in a clinical sample of depressed veterans, many of whom had a prior suicide attempt and were currently experiencing an intense level of hopelessness.

Results are also in contrast with Petrie and Brook (1992) who concluded that, among psychiatric inpatients, life meaning was a strong predictor of future suicidal behavior. In contrast with the current study in which the follow-up assessment was conducted 18 weeks (i.e. approximately four and a half months) after the initial assessment, Petrie and Brook (1992) re-evaluated patients six months following their initial assessment. Because of the severity of psychiatric symptoms and prevalence of
additional psychosocial stressors in the present sample, a longer follow-up interval may
have been necessary to observe more significant change in the depressed participants.
Among chronically depressed adults, life meaning may be an indicator of the long-term
course of their disorder; although, this speculation was not evaluated in the current study.
Perhaps a six month or one year follow-up would reveal a more robust influence of life
meaning on future depression, hopelessness, and suicidal ideation, than the 18 week
follow-up implemented in the present study.

The assessment of life meaning is a demanding task. Identifying an appropriate
and accurate definition of life meaning has been challenging (Klinger, 1998). Vague
terms and rich conceptual ideas that are strongly influenced by older psychological
theories make for difficult systematic evaluation. Useful measures of life meaning are
lacking. Meaning researchers are encouraged to embrace the meaning-making model
(Park & Folkman, 1997), because it provides a theoretical approach that includes
consistent terminology and operationalized definitions. The meaning-making model
(Park & Folkman, 1997) may facilitate more rigorous investigations of life meaning, as
compared to previous meaning research. A subjective element of life meaning was not
evaluated in the current study, because it may not be relevant to the definition of global
life meaning (Park, 2010), and it closely overlaps with affective states. The current
study evaluated two specific facets of life meaning. Findings suggest that two
components of life meaning, beliefs and goals, are distinct constructs. The goals aspect
of life meaning has been primarily absent from past empirical studies (Park, 2010).
Researchers are encouraged to improve the development of adequate measures of life
meaning.
Additional limitations of the present study include difficulties associated with evaluating change over time. Traditional change scores are strongly criticized because of unreliability in measurement and the phenomenon of regression to the mean (Cronbach & Furby, 1970). In order to address these limitations, the present study calculated residualized change scores which address this bias by ignoring the portion of change that is expected (Streiner & Norman, 2003). However, all assessment instruments are more sensitive to large effects than small effects (Steiner & Norman, 2003). It is possible that the follow-up analyses in the current study may not have had enough statistical power to detect the influence of life meaning on future depression, hopelessness, and suicidal ideation. A larger sample size would likely increase power and allow for more sophisticated analyses, such as structural equation modeling. Furthermore, comments regarding treatment are speculative, as the current study did not evaluate an intervention. Thus, treatment recommendations should be taken with caution.

Psychology, as a field, has been hesitant to explore life meaning in research and psychotherapy (Park & Paloutzian, 2005). However, the idea of meaning as an important concept in human life is widely accepted. In the current study, a lack of life meaning was strongly related to greater depressive symptoms, more intense hopelessness, and more severe suicidal ideation in a high risk psychiatric sample. Life meaning explained a significant percentage of the variance in suicidal ideation that was unexplained by commonly recognized diagnostic risk factors. Treatment with chronically depressed adults should certainly focus on suicide risk assessment and symptom management, as they are central components of effective treatment. Reducing depressive symptoms, hopeless thoughts, and suicidal urges may predict short-term improvement in functioning.
In addition to traditional elements of psychotherapy, therapists are encouraged to occasionally shift their focus to from reducing symptoms to cultivating growth, resilience, and life meaning in their clients. Embracing meaning in research and psychotherapy will help clarify the impact of life meaning on the development and maintenance of depressive disorders.
Table 1. *Characteristics of Total Sample of Depressed Veterans (N=110), Day Hospital Patients (n=29), and Outpatients (n=81)*

<table>
<thead>
<tr>
<th></th>
<th>Day Hospital Patients</th>
<th>Outpatients</th>
<th>Comparison Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, M (SD)</td>
<td>49.76</td>
<td>53.22</td>
<td>t (108) = 1.56</td>
</tr>
<tr>
<td>Gender (% male) a</td>
<td>86.21</td>
<td>92.59</td>
<td>χ² (1) = 1.05</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% African-American</td>
<td>51.72</td>
<td>69.14</td>
<td>χ² (2) = 4.99</td>
</tr>
<tr>
<td>% Caucasian</td>
<td>48.28</td>
<td>27.16</td>
<td></td>
</tr>
<tr>
<td>% Other</td>
<td>0.00</td>
<td>3.70</td>
<td></td>
</tr>
<tr>
<td>Marital Status (% married)</td>
<td>13.79</td>
<td>28.40</td>
<td>χ² (6) = 7.99</td>
</tr>
<tr>
<td>Employment (% employed)</td>
<td>3.45</td>
<td>19.75</td>
<td>χ² (1) = 4.35*</td>
</tr>
<tr>
<td>Self-reported physical health</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% poor or moderately poor</td>
<td>44.83</td>
<td>35.80</td>
<td>χ² (1) = 0.74</td>
</tr>
<tr>
<td>% average or good</td>
<td>55.17</td>
<td>64.20</td>
<td></td>
</tr>
<tr>
<td>Suicide History (% ever attempted)</td>
<td>41.38</td>
<td>30.86</td>
<td>χ² (1) = 1.06</td>
</tr>
<tr>
<td>Psychiatric Hospitalization (% yes)</td>
<td>58.62</td>
<td>41.98</td>
<td>χ² (1) = 2.38</td>
</tr>
</tbody>
</table>

*One female participant is transgender.

* p < .05.
Table 2.

Intercorrelations, Means, and Standard Deviations for Time 1 Study Measures (N = 110)

<table>
<thead>
<tr>
<th>Measure</th>
<th>M</th>
<th>SD</th>
<th>BDI</th>
<th>BHS</th>
<th>BSSI</th>
<th>LRI</th>
<th>PMP</th>
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</thead>
<tbody>
<tr>
<td>Beck Depression Inventory</td>
<td>27.53</td>
<td>12.12</td>
<td>--</td>
<td>.65**</td>
<td>.50**</td>
<td>-.57**</td>
<td>-.51**</td>
</tr>
<tr>
<td>Beck Hopelessness Scale †</td>
<td>10.59</td>
<td>6.20</td>
<td>--</td>
<td>.48**</td>
<td>-</td>
<td>-.71**</td>
<td>-.75**</td>
</tr>
<tr>
<td>Beck Scale for Suicidal Ideation  †</td>
<td>4.91</td>
<td>7.67</td>
<td>--</td>
<td>-</td>
<td>.47**</td>
<td>-</td>
<td>-.33*</td>
</tr>
<tr>
<td>Life Regard Index – framework subscale</td>
<td>27.43</td>
<td>6.38</td>
<td>--</td>
<td>-</td>
<td>-</td>
<td>.62**</td>
<td>-</td>
</tr>
<tr>
<td>Personal Meaning Profile</td>
<td>230.06</td>
<td>69.02</td>
<td>--</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

*a n = 109 for correlations that include the Beck Hopelessness Scale.

*b n = 109 for correlations that include the Beck Scale for Suicidal Ideation.

*p < .01. **p < .001.
Table 3. Hierarchical Regression Analysis Predicting Time 2 Depression Severity in 60 Depressed Veterans

<table>
<thead>
<tr>
<th>Step</th>
<th>Predictors</th>
<th>B</th>
<th>SEB</th>
<th>β</th>
<th>$R^2$ change</th>
<th>$F$ change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Marital status</td>
<td>-6.95</td>
<td>3.59</td>
<td>-.13</td>
<td>.23</td>
<td>5.43**</td>
</tr>
<tr>
<td></td>
<td>Employment status</td>
<td>-8.39</td>
<td>4.35</td>
<td>-.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Physical health</td>
<td>-8.56</td>
<td>3.61</td>
<td>-.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Time 1 Beck Depression Inventory</td>
<td>.40</td>
<td>.16</td>
<td>.36*</td>
<td>.11</td>
<td>9.38**</td>
</tr>
<tr>
<td>3</td>
<td>Time 1 Personal Meaning Profile</td>
<td>.00</td>
<td>.03</td>
<td>.01</td>
<td>.00</td>
<td>.01</td>
</tr>
<tr>
<td>4</td>
<td>Time 1 Life Regard Index – framework subscale</td>
<td>-.07</td>
<td>.37</td>
<td>-.03</td>
<td>.00</td>
<td>.04</td>
</tr>
</tbody>
</table>

*$p < .05$. **$p < .01$.  
Table 4. Hierarchical Regression Analysis Predicting Time 2 Hopelessness in 60 Depressed Veterans

<table>
<thead>
<tr>
<th>Step</th>
<th>Predictors</th>
<th>B</th>
<th>SEB</th>
<th>β</th>
<th>R² change</th>
<th>F change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Marital status</td>
<td>-1.68</td>
<td>1.47</td>
<td>-.11</td>
<td>.11</td>
<td>2.25</td>
</tr>
<tr>
<td></td>
<td>Employment status</td>
<td>-3.29</td>
<td>1.80</td>
<td>-.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Physical health</td>
<td>-.87</td>
<td>1.54</td>
<td>-.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Time 1 Beck Hopelessness Scale</td>
<td>.45</td>
<td>.22</td>
<td>.43*</td>
<td>.38</td>
<td>38.62***</td>
</tr>
<tr>
<td>3</td>
<td>Time 1 Personal Meaning Profile</td>
<td>.01</td>
<td>.02</td>
<td>.08</td>
<td>.00</td>
<td>.02</td>
</tr>
<tr>
<td>4</td>
<td>Time 1 Life Regard Index – framework subscale</td>
<td>-.34</td>
<td>.18</td>
<td>-.32</td>
<td>.03</td>
<td>3.40†</td>
</tr>
</tbody>
</table>

*p < .05.  ***p < .001.  †p ≤ .07.
Table 5. *Hierarchical Regression Analysis Predicting Time 2 Suicidal Ideation in 60 Depressed Veterans*

<table>
<thead>
<tr>
<th>Step</th>
<th>Predictors</th>
<th>$B$</th>
<th>$SEB$</th>
<th>$B$</th>
<th>$R^2$ change</th>
<th>$F$ change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Marital status</td>
<td>2.71</td>
<td>1.47</td>
<td>.20</td>
<td>.10</td>
<td>2.04</td>
</tr>
<tr>
<td></td>
<td>Employment status</td>
<td>-.48</td>
<td>1.77</td>
<td>-.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Physical health</td>
<td>-.08</td>
<td>1.55</td>
<td>-.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Time 1 Beck Scale for Suicidal Ideation</td>
<td>.48</td>
<td>.12</td>
<td>.51***</td>
<td>.29</td>
<td>25.27***</td>
</tr>
<tr>
<td>3</td>
<td>Time 1 Personal Meaning Profile</td>
<td>.01</td>
<td>.01</td>
<td>.15</td>
<td>.00</td>
<td>.31</td>
</tr>
<tr>
<td>4</td>
<td>Time 1 Life Regard Index – framework subscale</td>
<td>-.31</td>
<td>.16</td>
<td>-.32†</td>
<td>.04</td>
<td>3.89†</td>
</tr>
</tbody>
</table>

***$p < .001$. †$p < .05$
### Appendix A:

<table>
<thead>
<tr>
<th>Description of Research by Investigator</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Purpose of the Study</td>
</tr>
<tr>
<td>II. Description of the Study</td>
</tr>
<tr>
<td>III. Inconveniences</td>
</tr>
<tr>
<td>IV. Discomforts/Risks/Side Effects</td>
</tr>
<tr>
<td>V. Benefits</td>
</tr>
</tbody>
</table>

**TO POTENTIAL PARTICIPANTS:** Federal regulations require written informed consent before participation in a research study. This is to be certain that research volunteers know the nature and risks of the study, so they can make an informed decision about participation. You are asked to read the following information and discuss it with the investigator, so that you understand this research study and how it may affect you. Your signature on this form means that you have been fully informed and that you freely give your consent to participate. It is also important that you read and understand these principles that apply to all individuals who agree to participate in the research project below:

1. Taking part in the research is entirely voluntary.

2. You may not personally benefit from taking part in the research but the knowledge obtained may help the health care professionals caring for you to better understand the disease/condition and how to treat it.

3. You may withdraw from the study at any time without penalty or loss of any benefits to which you are otherwise entitled.

4. If, during your participation in the research project, new information becomes available concerning your condition (disease) or concerning better therapies, which may affect your willingness to continue in the research project, your doctor will discuss the new information with you and will help you make a decision about continuing in the research.

5. The purpose of the research, how it will be done, and what your part in the research will be, is described below. Also described are the risks, inconveniences, discomforts, and other

---

**Subject Identification:** ID plate or name (last, first, middle)
<table>
<thead>
<tr>
<th>Subject Name:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title of Study: Exploring the Recovery from Depression</td>
<td></td>
</tr>
<tr>
<td>Principal Investigator: James C. Creecholmer, Ph.D.</td>
<td>VAMC - Cleveland (541)</td>
</tr>
<tr>
<td>Consent Version Date: June 2008</td>
<td></td>
</tr>
</tbody>
</table>

Important information, which you need to make a decision about whether or not you wish to participate. You are urged to discuss any questions, concerns, or complaints you have about this research with the research staff members.

I. PURPOSE OF THE STUDY:

We are asking you to participate in a research study investigating depression. You are being asked to participate in this study because it is our understanding that you may be experiencing symptoms of depression. The purpose of this research involves gathering information about the optimal assessment and treatment of depression. Information used by this research study includes your medical record (chart), the information packets that you will be asked to complete, and the information discussed in the brief interview.

II. DESCRIPTION OF STUDY:

If you agree to participate in this study, it will last for approximately one hour today and will take place at the Louis Stokes Cleveland Department of Veterans Affairs Medical Center (LSCDVAEMC). Participation in this study involves completing several questionnaires and a short interview about depression and other psychological problems. The first part of the study involves a series of yes/no questions pertaining to depression or other psychological problems that you may have encountered. The second part of today’s meeting involves the completion of questionnaires pertaining to depression, hopelessness, coping, and life meaning. You will be contacted by phone in approximately three months to schedule the second phase of the study which may occur by phone or in person at your next outpatient visit. The follow-up involves the completion of questionnaires similar to the questionnaires that you will complete today. Your participation today does not require you to participate in the follow-up scheduled in three months. If you do agree to participate in the follow-up, you will be asked to provide your first name and phone number on a separate sheet.

III. INCONVENIENCES:

The information requested from you today will take approximately one hour to complete. In addition to the information collected today, you will be contacted in three months (via telephone or in person) for a brief re-evaluation of your depressive symptoms and about the treatment you received. The interview will last approximately 20 minutes. Your consent now simply allows the
investigators to contact you later. At that time, you can decide whether or not you want to continue with the interview.

IV. DISCOMFORTS / RISKS / SIDE EFFECTS:

The risks of your participation in this study primarily involve talking about emotional issues and protecting your confidentiality. Although it is unlikely that you will be exposed to any risks by participating in this study, you will be asked a variety of questions about your life and emotions. Some of the questions may force you to confront various emotions as you discuss these different issues. If you experience distress during the initial interview you may discontinue with the study and will have the opportunity to discuss your thoughts and feelings with the research assistant. If you experience distress after the interview you may contact any of your primary providers in the outpatient psychiatric clinic to discuss your issues/concerns.

V. BENEFITS:

You will not directly benefit from participating in this study.

VI. ALTERNATIVE PROCEDURE(S) / TREATMENT(S):

Because this study offers no direct benefits to participants, your only alternative is to not participate.

VII. PRIVACY, CONFIDENTIALITY, AND USE OF RESEARCH RESULTS:

By joining this study, you give the investigators your permission for them to collect data from your medical records to determine if you are eligible and if you remain eligible to participate in the study.

Any information obtained about you in this study will be treated as confidential and will be safeguarded in accordance with the Privacy Act of 1974. The only personally identifying information that will be attached to the information packets will be your first name. Research records will be kept indefinitely and kept in a locked file. In order to comply with federal regulations, records identifying you may be reviewed by authorized representatives of the Institutional Review Board of the LSCDVAMC, VA, authorized representatives of the

VA FORM 10-1086
8-2007
VA RESEARCH CONSENT FORM  
(Continuation Page 4 of 6) 

Subject Name: ___________________________ Date: ___________________________

Title of Study: Exploring the Recovery from Depression

Principal Investigator: James C. Overholser, Ph.D. VAMC - Cleveland (541)

Consent Version Date: June 2008

Institutional Review Board of Case Western Reserve University, Dr. Overholser, students authorized by him, or other federal regulatory officials responsible for oversight of human subject protection. By signing this document, you consent to such inspection.

Findings from this study may be presented at a professional meeting or published in a professional journal; however, no names or any other information that would allow for subjects to be identified will be included in the presentations.

VIII. SPECIAL CIRCUMSTANCES:

Financial Considerations
Your participation in this research study will be done at no cost to you. You will be paid for your time and effort for being in this research project. You will be paid $10.00 in cash for completion of both the initial interview and the information packet. If you withdraw from the study without completing both the interview and the information packet, you will not be paid $10.00 in cash. The payment of $10.00 in cash will be handed to you by the study personnel when you complete and hand the information packet to the study personnel. In addition, you will be paid an additional $10.00 in cash if you are contacted and complete the follow-up interview. Again, the money will be handed to you when you turn in the completed information packet. If you complete both the initial interview and the follow-up interview, you will have received $20.00 total.

Ending Participation
You may stop your participation in the study at anytime. In addition, the investigators may stop your participation in this study without your consent, for example, if they think that it will be in your best interest, if you do not follow the study plan, if you experience a study-related injury, or for any other reason.

Voluntary Participation
If you are a student, resident, or employee of (LSCDVAMC, UH, Case, etc.), your scholastic or employment evaluations will be conducted by a rater who is not involved with, and most likely totally unaware of this study. In no way will your job or position be affected by your decision to join or not join this study.

IX. CONTACT INFORMATION

VA FORM 10-1086

0-2007
<table>
<thead>
<tr>
<th>Subject Name:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title of Study: Exploring the Recovery from Depression</td>
<td></td>
</tr>
<tr>
<td>Principal Investigator: James C. Overholser, Ph.D.</td>
<td></td>
</tr>
<tr>
<td>VAMC: Cleveland (541)</td>
<td></td>
</tr>
<tr>
<td>Consent Version Date: June 2008</td>
<td></td>
</tr>
</tbody>
</table>

The following is a list of contact names and phone numbers.

To obtain answers to questions about the research contact the following:

- **During the Day:** [Dr. James Overholser at 216-368-2686 or Dr. Josephine Ridley at 216-791-3800 x5730]
- **After Hours:** [Dr. James Overholser at 216-368-2852 or call the VA Medical Center operator at 216-791-3800 then dial 0 and have Dr. Josephine Ridley paged]

To voice concerns or complaints about the research contact the following:

- The Research Compliance Office at (216) 791-3800 ext. 4625, or
- The LSCDVAMC Patient Representative at (216) 791-3800 ext. 4026

To obtain answers to questions about your rights as a research participant contact the following:

- The Research Compliance Office at (216) 791-3800 ext. 4625 or
- The LSCDVAMC Institutional Review Board Office at (216) 791-3800 ext. 4658

In the event that you sustain a research related injury contact the following:

- **During the Day:** [Dr. James Overholser at 216-368-2686 or Dr. Josephine Ridley at 216-791-3800 x5730]
- **After Hours:** [Dr. James Overholser at 216-368-2852 or call the VA Medical Center operator at 216-791-3800 then dial 0 and have Dr. Josephine Ridley paged]

In the event the study staff could not be reached contact the following:

- **During the Day:** [WP Psychiatric Emergency Room at (216) 791-3800 ext 6042]
- **After Hours:** [WP Psychiatric Emergency Room at (216) 791-3800 ext 6042]

In the event you wish to talk with someone other than the study staff contact the following:

- The LSCDVAMC Institutional Review Board Office at (216) 791-3800 ext. 4658

To provide input concerning the research process contact the following:

- The LSCDVAMC Institutional Review Board Office at (216) 791-3800 ext. 4658

To check whether a study is being conducted at the LSCDVAMC and whether study staff are permitted to represent the study contact the following:

- The LSCDVAMC Institutional Review Board Office at (216) 791-3800 ext. 4658

---

VA FORM 10-1086
8-2007

Approved
9/14/16
Cloud-based VAMC
RESEARCH SUBJECTS' RIGHTS: I have read or have had read to me all of the preceding information.

Dr./Mr./Ms. ________________________ has explained the study to me and answered all of my questions. I have been told of the risks or discomforts and possible benefits of the study. I have been told of other choices of treatment available to me.

I understand that I do not have to take part in this study, and my refusal to participate will involve no penalty or loss of rights to which I am entitled. I may withdraw from this study at any time without penalty or loss of VA or other benefits to which I am entitled.

The results of this study may be published, but I will not be identified in publications by name, photograph, or other identifiers. My records, including my name and results of my participation, may be revealed as required by laws and regulations of state and federal agencies.

I understand my rights as a subject, and I voluntarily consent to participate in this study. I understand what the study is about and how and why it is being done. I will receive a signed consent form or a photocopy of it. I understand that in signing this consent form I do not waive my legal rights nor release the LSCD/VAMC from liability for negligence.

Subject's Signature __________________________ Date ______

Signature of Witness (not associated with study) __________________________ Date __________
Witness (print) __________

Signature of Person Obtaining Consent __________________________ Date ______

Signature of Investigator __________________________ Date ______
Appendix B:

Progress Note

Study Title: Exploring the Recovery from Depression

Person Obtaining Consent: ________________________________

Date when Subject Entered into Study: ____________

Date when Subject’s Participation Is Completed: ____________

Date when Subject’s Participation is Terminated: ____________

Please initial each statement below.

_____ The subject or subject’s legally-authorized representative was capable of understanding the consent process.

_____ The study was clearly explained to the subject.

_____ The subject had the opportunity to ask questions.

Approved

7/15/16

Cleveland VAMC
Institutional Review Board
Appendix C:  

**SCID DSM-IV DEPRESSION DIAGNOSIS**

_____ Age of first depressive episode?

_____ No. of previous depressive episodes (not counting current episode)?

_____ (weeks) How long have you been feeling depressed? {2 weeks minimum for MDD}

{For MDD must have 5 of 9 of the following with either item 1 or 2 endorsed}

1. Yes No Depressed mood throughout most of the day?

2. Yes No Reduced interest or pleasure in most activities?

3A. Yes No Change in appetite: Increased appetite AND/OR □ Decreased appetite

3B. Yes No Change in weight: Lost weight AND/OR □ Gained weight

4. Yes No Sleep Disturbance: Insomnia AND/OR □ Hypersomnia

5. Yes No Psychomotor: Retardation AND/OR □ Agitation

6. Yes No Fatigue, loss of energy nearly every day?

7A. Yes No Low self-worth?

7B. Yes No Excessive or inappropriate guilt?

8A. Yes No Poor concentration?

8B. Yes No Indecisiveness?


**Exclusion Criteria**

Yes No History of manic episodes?

Yes No Is depression due to a medical problem or drug use?

Yes No Is depression due to bereavement?
Melancholia Specifier

{Either of the following}

1. Yes  No  Reduced interest or pleasure in most activities?

2. Yes  No  Lack of reactivity, pleasant events do not even temporarily improve mood?

{3 or more of the following}

3. Yes  No  Distinct quality of mood, different from severe sadness or bereavement?

4. Yes  No  Diurnal variation with depression regularly worse in mornings?

5. Yes  No  Early morning awakenings?

6. Yes  No  Psychomotor retardation or agitation?

7. Yes  No  Significant anorexia or weight loss?

8. Yes  No  Excessive or inappropriate guilt?

Dysthymia

1. Yes  No  Depressed mood for most of the day w/o 2 mos of remission of symptoms.

{2 or more of the following}

2. Yes  No  Poor appetite or overeating?

3. Yes  No  Insomnia or hypersomnia?

4. Yes  No  Low energy or fatigue?

5. Yes  No  Low self-esteem?

6. Yes  No  Poor concentration or difficulty making decisions?

7. Yes  No  Feelings of hopelessness?
**DIAGNOSIS**

1=MDD, single, with melancholia  
2=MDD, single, without melancholia  
3=MDD, recurrent, with melancholia  
4=MDD, recurrent, without melancholia  
5=Dysthymia  
6=Adjustment Disorder

**Comorbid Diagnoses**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Presence Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mania</td>
<td>Never Present</td>
</tr>
<tr>
<td>Psychosis</td>
<td>Never Present</td>
</tr>
<tr>
<td>Alcohol Abuse</td>
<td>Never Present</td>
</tr>
<tr>
<td>Drug Abuse</td>
<td>Never Present</td>
</tr>
<tr>
<td>Anxiety Disorders</td>
<td>Never Present</td>
</tr>
<tr>
<td>Somatoform</td>
<td>Never Present</td>
</tr>
<tr>
<td>Eating Disorders</td>
<td>Never Present</td>
</tr>
</tbody>
</table>

Possible Diagnosis based on screening questions:

{Indicate symptoms present or absent}  Yes  No  Meets Diagnosis Criteria?

Possible Diagnosis based on screening questions:

{Indicate symptoms present or absent}  Yes  No  Meets Diagnosis Criteria?

Possible Diagnosis based on screening questions:

{Indicate symptoms present or absent}  Yes  No  Meets Diagnosis Criteria
Chart Diagnosis:  

Axis III Diagnosis:  

Psychological Treatment Since Initial Visit:
This copy of the Beck Depression Inventory-II has been removed for potential copyright issues.
This copy of the Beck Depression Inventory-II has been removed for potential copyright issues.
This copy of the Beck Depression Inventory-II has been removed for potential copyright issues.
This copy of the Beck Scale for Suicide Ideation has been removed for potential copyright issues.
This copy of the Beck Scale for Suicide Ideation has been removed for potential copyright issues.
This copy of the Beck Scale for Suicide Ideation has been removed for potential copyright issues.
This copy of the Beck Hopelessness Scale has been removed for potential copyright issues.
This copy of the Beck Hopelessness Scale has been removed for potential copyright issues.
Appendix G:

Life Regard Index – R, Framework Subscale

<table>
<thead>
<tr>
<th>Statement</th>
<th>DO NOT AGREE</th>
<th>NO OPINION</th>
<th>AGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel like I have found a really significant meaning for leading my life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. I really don’t have much of a purpose for living, even for myself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. There honestly isn’t anything that I totally want to do.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>4. I have really come to terms with what’s important for me in my life.</td>
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<td>2</td>
<td>3</td>
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<tr>
<td>5. I need to find something that I can really be committed to.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. I just don’t know what I really want to do with my life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. Other people seem to have a better idea of what they want to do with their lives than I do.</td>
<td>1</td>
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<td>3</td>
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<tr>
<td>8. I have some aims and goals that would personally give me a great deal of satisfaction if I could accomplish them.</td>
<td>1</td>
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<tr>
<td>9. I really don’t believe in anything about my life very deeply.</td>
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<tr>
<td>10. I have a philosophy of life that really gives my living significance.</td>
<td>1</td>
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<tr>
<td>11. I get confused when I try to understand my life.</td>
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<tr>
<td>12. I have a clear idea of what I’d like to do with my life.</td>
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<tr>
<td>13. There are things that I devote all my life’s energy to.</td>
<td>1</td>
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<tr>
<td>14. I have a system or framework that allows me to truly understand my being alive.</td>
<td>1</td>
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<td>3</td>
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</tbody>
</table>
**Appendix H: Personal Meaning Profile**

<table>
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</thead>
<tbody>
<tr>
<td><strong>Not at all</strong></td>
<td><strong>Moderately</strong></td>
<td><strong>A Great Deal</strong></td>
<td></td>
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<tr>
<td>1. I have a good family life.</td>
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<td>2. I believe I can make a difference in the world.</td>
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<td>3. I am at peace with God.</td>
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<td>4. I have learned that setbacks and disappointments are an inevitable part of life.</td>
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<td>5. I believe that life has an ultimate purpose and meaning.</td>
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<td>6. I engage in creative work.</td>
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<td>7. I am successful in achieving my aspirations.</td>
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<td>8. I pursue worthwhile objectives.</td>
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<tr>
<td>9. I strive to achieve my goals.</td>
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<td>10. I care about other people.</td>
<td>1</td>
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<tr>
<td>11. I have someone to share intimate feelings with.</td>
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<tr>
<td>12. I believe in the value of my pursuits.</td>
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<td><strong>13.</strong> I seek to actualize my potentials.</td>
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<tr>
<td><strong>14.</strong> I have found that there is rough justice in this world.</td>
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<td><strong>15.</strong> I strive to make this world a better place.</td>
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<tr>
<td><strong>16.</strong> I am at peace with myself.</td>
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<td><strong>17.</strong> I have confidants to give me emotional support.</td>
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<td><strong>18.</strong> I relate well to others.</td>
<td>1</td>
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<td><strong>19.</strong> I have a sense of mission or calling.</td>
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<td><strong>20.</strong> I seek to do God’s will.</td>
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<td><strong>21.</strong> I like challenge.</td>
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<td><strong>22.</strong> I believe that human life is governed by moral laws.</td>
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<td><strong>23.</strong> It is important to dedicate my life to a cause.</td>
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<td><strong>24.</strong> I take initiative.</td>
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<td><strong>25.</strong> I am able to make full use of my abilities.</td>
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<td><strong>26.</strong> I strive to do my best in whatever I am doing.</td>
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<td><strong>27.</strong> I have a number of good friends.</td>
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<td><strong>28.</strong> I am trusted by others.</td>
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<td><strong>29.</strong> I am committed to my work.</td>
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<td><strong>30.</strong> I have a purpose and direction in life.</td>
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<td><strong>31.</strong> I seek higher values – values that transcend self-interests.</td>
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<td><strong>32.</strong> I am higher regarded by others.</td>
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<tr>
<td><strong>33.</strong> I seek to glorify God.</td>
<td>1</td>
<td>2</td>
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<td><strong>34.</strong> I am enthusiastic about what I do.</td>
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<td><strong>35.</strong> Life has treated me fairly.</td>
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<td><strong>36.</strong> I accept my limitations.</td>
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<td><strong>37.</strong> I am at peace with my past.</td>
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<td><strong>38.</strong> I have a mutually satisfying love relationship.</td>
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<tr>
<td>39. I have a sense of coherence and continuity in my life.</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>40. I do not give up when I encounter setbacks or obstacles.</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>41. I am altruistic and helpful.</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>42. I am liked by others.</td>
<td>1 2 3 4 5 6 7</td>
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<td>43. I have found someone I love deeply.</td>
<td>1 2 3 4 5 6 7</td>
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<td>44. I strive toward personal growth.</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>45. I bring happiness to others.</td>
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<tr>
<td>46. I accept what cannot be changed.</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>47. I am persistent and resourceful in attaining my goals.</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>48. I value my work.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>49. I make a significant contribution to society.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
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<tr>
<td>50. I contribute to the well-being of others.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
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<tr>
<td>51. I believe in afterlife.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
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<tr>
<td>52. I believe that one can have a</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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</table>
personal relationship with God.

53. I attempt to leave behind a good and lasting legacy.

54. I believe that there is order and purpose in the universe.

55. I am treated fairly by others.

56. I have received my fair share of opportunities and rewards.

57. I have learned to live with suffering and make the best of it.
Appendix I:

Please note: Compensated and effects of depression study investigating the causes of anxiety in a research. Please call 216-368-3520 for more information regarding the study.

Please call Abby or Lauren.

Please note: Compensated and effects of depression study investigating the causes of anxiety in a research. Please call 216-368-3520 for more information regarding the study.

Please call Abby or Lauren.

Please note: Compensated and effects of depression study investigating the causes of anxiety in a research. Please call 216-368-3520 for more information regarding the study.

Please call Abby or Lauren.

Are you:  

- Disorder: 

  - Understanding of this disorder: 
    - Interested in: 
      - Depression: 
        - Suffering from: 
          - 18 years of age or less? 

Are you:  

- Disorder: 

  - Understanding of this disorder: 
    - Interested in: 
      - Depression: 
        - Suffering from: 
          - 18 years of age or less? 

Are you:  

- Disorder: 

  - Understanding of this disorder: 
    - Interested in: 
      - Depression: 
        - Suffering from: 
          - 18 years of age or less?
Exploring the Recovery from Depression

Are you:

✓ 18 years of age or older?
✓ Suffering from depression?
✓ Interested in contributing to the understanding of this disorder?

Please call Abby or Lauren at 216-368-5350 for more information regarding participating in a research study investigating the causes and effects of depression.

**Compensation will be provided**
Appendix J:

Suicidal History

Date___________
ID#__________

Attempted Suicide:  ____ Never
                   ____ Recently (past month)
                   ____ Sometime in the Past  ____ months ago

Most Recent Suicide Method Used:  ____ Drug OD – drug used = __________
                   How much=__________
                   ____ Gunshot
                   ____ Cutting wrists
                   ____ Hanging
                   ____ CO poisoning
                   ____ Other (describe)

Location of Suicide Act:  Home  Garage  Car  Other_______

Wrote a suicide note?  Yes  No  Wrote a will? Yes  No

Did you tell anyone before  Yes  No  or after  Yes  No  you attempted?

Did anyone accidentally disrupt your attempt? Yes  No

Were you hoping that someone would find you and help you after the attempt? Yes  No

*Suicide Precipitant:*  _____ chronic medical problems

Interpersonal problems:
                   ____ divorce or break-up  ____ separation  ____ bereavement

Recent interpersonal conflict:
                   ____ with spouse  ____ with family member  ____ with peers

Recent job problems:
                   ____ financial problems  ____ lost job  ____ conflict on the job
Drunk or high at the time of the suicidal act?  Yes  No
Did you need any kind of medical attention after the attempt?  Yes  No
Were you alone at the time of the attempt?  Yes  No
Prescribed antidepressant medications prior to the suicidal act?  Yes  No
Have you ever been previously hospitalized for psych problems?  Yes  No
How many times? ___
Appendix K:

ID #: ______________________

Age: ________________

Date: ______________________

Race: 1=White 2=Asian 3=Black 4=Hispanic 5=Other___________

Are you employed: 1=Full-time 2=Part-time 3=Unemployed 4=Other___________

Occupation: __________________________________________________________

Marital Status:

1=Single, never been married
2=Married, first marriage length of marriage (years): _______
3=Married, remarried length of marriage (years): _______
4=Separated
5=Divorced how long divorced? (years): _______
6=Widowed
7=Cohabiting, living together

Q1. In general would you say your physical health is:

1=Poor 2=Moderately Poor 3=Average 4=Moderately good 5=Very good

Q2. During the past month, how much have your work and school activities been impaired by the problems that brought you in for treatment?

1=Not at all 2=A little bit 3=Somewhat 4=Quite a lot 5=Very much

Q3. During the past month, how much have your social life and leisure activities been impaired by the problems that brought you in for treatment?

1=Not at all 2=A little bit 3=Somewhat 4=Quite a lot 5=Very much
Q4. During the past month, how much have your **family life and home responsibilities** been impaired by the problems that brought you in for treatment?

1=Not at all  2=A little bit  3=Somewhat  4=Quite a lot  5=Very much

Q5. During the past month, how much have your **OVERALL work and social functioning** been impaired by the problems that brought you in for treatment?

1=Not at all  2=A little bit  3=Somewhat  4=Quite a lot  5=Very much
**Appendix L:**

Has you MOTHER ever had problems with alcohol or drug abuse?  
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<tr>
<th></th>
<th>Yes</th>
<th>No</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>depression?</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>attempted suicide?</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>other mental illness?</td>
<td>Yes</td>
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</tbody>
</table>

Has your FATHER ever had problems with alcohol or drug abuse?  
<table>
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<tr>
<th></th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td></td>
<td>depression?</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>attempted suicide?</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>other mental illness?</td>
<td>Yes</td>
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</table>

Have your BROTHERS or SISTERS had problems with alcohol/drugs?  
<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td></td>
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<td>Yes</td>
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<tr>
<td></td>
<td>other mental illness?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Yes  No  Have you ever attempted suicide?  
Yes  No  Have you been thinking about suicide lately?  
Yes  No  Have you ever seriously injured another person?  
Yes  No  Have you been thinking about harming someone else lately?  
Yes  No  Have you gotten drunk or high in the past week?  
Yes  No  Do you currently use illegal drugs (marijuana, cocaine, etc)?  
Yes  No  Have you ever been convicted of a crime?  
What crime:_______________________
Appendix M:

(RECEIPT OF PAYMENT FOR STUDY PARTICIPATION)

I __________________________ have participated in the study entitled, "Exploring the

(please print name)

Recovery from Depression" on ________________

(today's date)

I have received compensation in the amount of:

$10 cash $10 Walmart gift card

Today's visit is the: initial appointment follow-up appointment

X __________________________ Date: ________________

(signature)

Approved

6/14/18

Cleveland VAMC
Institutional Review Board
Appendix N:

VA Adult Data Follow-up Phone Information Sheets

Name of participant: ________________________________

Date of Initial Testing: ________________

Treatment program: Day Hospital Program  Outpatient Department

Projected date of follow-up: ________________

Phone number: ________________________________

Participant contacted:  Y  N  Date: ________________

Follow-up method:  Phone  In-person interview
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