Coping and thought suppression as predictors of suicidal ideation in depressed older adults with personality disorders

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Abstract
Suicide rates are higher among older adults than any other age group and suicidal ideation is one of the best predictors of completed suicide in older adults. Despite this, few studies have evaluated predictors of suicidal ideation and other correlates of death by suicide (e.g., hopelessness) among older adults. Even fewer studies on this topic have been conducted among samples characterized as poor responders to treatments (e.g., depressed individuals with co-occurring personality disorder). The purpose of this study was to examine coping styles and thought suppression as predictors of a suicide risk composite score in a sample of depressed older adults with co-occurring personality disorders. Based on the extant literature, it was hypothesized that maladaptive coping (i.e., emotional and avoidance coping) and chronic thought suppression would significantly predict suicide risk. The results of this study indicated that elevated emotional coping and thought suppression were associated with increased suicide risk. Contrary to hypotheses, lower avoidance coping was associated with increased risk, although this finding is moderated by Axis II diagnosis. Thus, treatments that focus on decreasing emotional coping and chronic thought suppression may result in decreased suicidal ideation and hopelessness for older adults with depression and Axis II pathology.

Introduction
Incidence rates of suicide among older adults in the US are higher than that of any other age group (National Center for Injury Prevention and Control [NCIPC], Centers for Disease Control and Prevention [CDC], 2006). This is likely at least partially a result of increased lethality of attempts by and more fragile physical state of older adults. For example, the number of suicide attempts prior to death by suicide for adults over age 65 is four-to-one, compared to an estimated 100–200-to-one for adolescents and young adults (NCIPC, CDC, 2006). Among all age groups, an average of four males die by suicide for every female death by suicide (NCIPC, CDC, 2006). Thus, older Caucasian males have among the highest risk of death by suicide of any age, gender, or ethnic group in the US. The suicide rate of Caucasian males age 65 and older was 32 per 100,000 in 2003 compared to 3.8 for women in this age group; 9.1 for non-white males of all ages; and 19.5 for Caucasian males across all ages (NCIPC, CDC, 2006). Depression has consistently been reported as the most common psychiatric risk factor among older adults who complete suicide (e.g., Conwell & Brent, 1995); therefore, an improved understanding of factors that contribute to suicidal ideation in depressed samples may lead to decreased suicide risk. Specific personality factors in older adults such as low openness to experience and high neuroticism have been associated with greater suicide risk (Duberstein et al., 2000; Heisel et al., 2006). In addition, the presence of personality disorder in older adults has been linked to poor treatment response for depression (e.g., Fiorot, Boswell, & Murray, 1990) and older depressed patients with personality disorder were almost four times more likely to experience maintenance or re-emergence of depressive symptoms than those without personality disorder diagnoses (Morse & Lynch, 2004). Considering the strong link between depression and suicide in older adults, it is reasonable to expect that the presence of personality disorder would exacerbate...
suicidal risk, either directly or indirectly via the influence of unremitting depression.

Among variables associated with suicide risk in older adults, suicidal ideation is one of the most commonly studied and has been shown to be a robust predictor of suicide attempts and completed suicide. Previous studies have found that suicidal ideation in older adults is significantly related to both previous suicide attempts and severity of depression (Alexopoulos, Bruce, Hull, Sirey, & Kakuma, 1999; Szanto et al., 2002). In a sample of older adult suicide attempters, DeLeo et al. (2002) found that suicidal desire and ideation differentiated repeat attempters from non-repeaters. After an initial suicide attempt, older adult attempters with higher suicidal ideation were more likely to attempt again. These findings are consistent with Witte et al. (2006), who found that suicidal desire and ideation predicted previous attempt status, severity of depression and hopelessness among older adult psychiatric inpatient and outpatients. Interestingly, despite these strong associations, older adults endorse suicidal ideation less frequently than younger adults (Duberstein et al., 1999). In older adult samples, there is a discrepancy between decreasing reporting of suicidal ideation and fewer suicide attempts on the one hand, and higher rates of death by suicide on the other hand. Thus, some investigators have suggested that the mere presence of suicidal ideation in older adults is an indicator of more severe risk for lethal behavior (Witte et al., 2006).

An extensive literature also has documented the robust relation between hopelessness and suicide. Hopelessness has been associated with suicidal ideation and suicide attempts among older adults (Heisel, Flett, & Besser, 2002; Lynch, Cheavens, Morse, & Rosenthal, 2004; Szanto, Reynolds, & Conwell, 1998). Among these studies of older adults, hopelessness correlates between 0.45 and 0.70 with suicidal ideation. In a study of depressed, older patients treated with pharmacotherapy, Szanto and colleagues (1998) examined the association between hopelessness and varying levels of suicide risk: non-suicidal, suicide ideators, and those with a past suicide attempt. Results indicated that patients with past suicide attempts continued to have higher levels of hopelessness following treatment for depression than other older adults. Taken together, these results suggest that studies designed to investigate suicide among older adults would benefit from the inclusion of hopelessness as a proximal risk factor for suicide, in addition to suicidal ideation.

Given the high rate of suicide among older adults, examining variables associated with the onset or presence of suicidal ideation and hopelessness may improve our understanding of suicide in older adults, with the ultimate goal of advancing treatments for those at high-risk for suicide. Therefore, it is especially important to investigate modifiable variables (i.e., likely to change secondary to treatment) associated with risk for suicidal ideation and suicide in older adults (Lynch et al., 2004). In the present study, we examine the characteristic ways in which individuals cope with stressful events as a set of variables that are amenable to treatment.

Coping styles

Lazarus and Folkman (1984) have defined coping as the behavioral and cognitive efforts individuals use to manage demands associated with stressful situations. According to these authors, the coping strategies selected by an individual are specific to situations and may change over time. Problem-focused coping, considered an adaptive coping strategy, includes direct efforts to alter or manage the source of the problem (e.g., planning ways to solve the problem, finding positive ways to view the problem; Folkman & Lazarus, 1980). In contrast, emotional coping includes efforts to regulate emotions through processes such as rumination, blaming oneself, and venting of negative emotions. Avoidant coping includes efforts to reduce emotional contact with the stressful situation (e.g., denial, avoidance, disengagement). Previous research with young and middle-aged adults has indicated that problem-focused coping strategies are associated with psychological health, whereas emotional and avoidance coping strategies are associated with psychological distress (Ben-Zur, 2005; Ben-Zur, Gilbar, & Lev, 2001), high levels of depression (Li, Selzter & Greenberg, 1999) and negative affect (Ben-Zur, 2002).

Emotional coping. A recent meta-analysis examining the relation between coping efforts and psychological and physical health in young and middle-aged adults indicated that symptoms of depression are highly correlated with self-reports of emotional coping (e.g., ‘criticize or blame myself’, ‘take my frustrations out on the people closest to me’: Penley, Tomaka, & Wiebe, 2002). This is consistent with studies suggesting that middle-aged individuals experiencing mood disorders (i.e., major depression, dysthymia) are prone to report using emotional coping strategies to deal with life stressors (Folkman & Lazarus, 1986). Some investigators have found that personality disorder diagnosis is associated with less problem-focused and more avoidant and emotional coping (e.g., Watson & Sinha, 1999); however, this line of research has not been extended to older adults. Research also has indicated that reports of the use of emotional coping strategies are positively correlated with suicidal ideation, suicide attempts and self-reported likelihood of future suicidal behavior in clinical and non-clinical samples (D’Yurilla, Chang, Nottingham, & Faccini, 1998; Edwards & Holden, 2001). In a recent study of middle-age and older adult male medical inpatients,
Marusic and Goodwin (2006) found that suicidal ideation was associated with self-reports of high emotional coping and lower rational and detached coping strategies.

Avoidance coping. In addition, avoidance coping (i.e. pretending that nothing is wrong, daydreaming, etc.) has been found to be more frequently endorsed than problem-focused coping strategies among moderately to severely depressed older adults with physical illness or limitations (e.g. HIV-positive: Heckman, Kochman, Sikkema, & Kalichman, 1999). Catanzaro, Horaney and Creasey (1995) assessed older adults to determine whether specific coping strategies (e.g. avoidance coping) are associated with negative mood regulation expectancies (i.e. the expectation that a particular behavior or thought will relieve negative mood). The results of this study indicated that negative mood regulation expectancies were inversely correlated with use of avoidance coping strategies. This suggests that individuals who report avoiding problems also are more likely to believe that they cannot regulate their mood in an adaptive way. Several studies also have found that, among older adults, those who endorse thoughts of suicide or deliberate self harm are more likely to use escape or avoidance coping strategies compared to those who did not report thoughts of suicide or self harm (Kalichman, Heckman, Kochman, Sikkema & Bergholte 2000; Marusic & Goodwin, 2006).

Thought suppression. Thought suppression is an experiential avoidance strategy in which individuals attempt to not experience unpleasant cognitions. This strategy often results in a 'rebound effect', in which the to-be suppressed thoughts may subsequently be experienced more frequently (Abramowitz, Tolin, & Street, 2001). Chronic thought suppression is associated with higher distress and psychopathology in both younger and older adults (e.g. Lynch et al., 2004; Rosenthal, Cheavens, Lejuez, & Lynch, 2005; Rosenthal, Cheavens, Lynch, & Follette, 2006). Thought suppression may play an important role in mood disorders and suicide through the paradoxical increase of to-be-avoided unpleasant cognitions, including thoughts associated with suicide. In a recent study, Lynch et al. (2004) found support for a model whereby the relationship between the temperamental variable negative affectivity (i.e. intensity and reactivity of negative affect) and two predictors of suicide in depressed older adults (i.e. suicidal ideation and hopelessness) was mediated by self-reported attempts to inhibit emotional experience and expression. In a study with younger patients with Borderline Personality Disorder (BPD), thought suppression fully mediated the relation between negative affect intensity/reactivity and BPD symptoms (Rosenthal et al., 2005); however, these relations have not been examined among older adults with personality disorders.

The role of coping and thought suppression in suicide risk among older adults with personality disorders

Attempting to regulate emotions through the use of maladaptive coping strategies and thought suppression may play an important role in the development of suicide risk factors for depressed older adults with personality disorders. Individuals with personality disorders who have high negative-affect intensity may try to decrease negative emotions by attempting to avoid or control these unpleasant internal experiences or by excessive focus on the problem. In this context, individuals who engage in these patterns are likely to experience heightened emotion dysregulation. Over time, chronic avoidance may inhibit opportunities to learn how to effectively manage unpleasant internal experiences, leading to hopelessness and thoughts for suicide. The nature of these relations may differ for older adults with different personality disorders. Among studies of younger adults with personality disorders (especially BPD), suicidal behavior (e.g. rumination about suicide, intentional self harm) is conceptualized as a means of attempted emotion regulation (Linehan, 1993). Thought suppression and other types of maladaptive coping may be related to these suicidal behaviors.

Purpose

Research examining coping styles and thought suppression in adults with personality disorders has focused primarily on younger adults; therefore, research examining older adults with depression and personality disorders may yield new information regarding the contribution of these factors to suicidal ideation. This extension is especially important given that emotion dysregulation and difficulty with regulating emotions is a core problem for older adults with some personality disorders (Lynch, 2000; Morse & Lynch, 2004) and the presence of suicidal ideation in older adults may signal risk for high lethality suicide attempts (Witte et al., 2006). The purpose of this study was to examine self reported coping strategies and thought suppression as predictors of suicide risk in depressed older adults with personality disorders. A composite score for suicide risk was computed that included suicidal ideation and hopelessness, both predictors of eventual death by suicide (Beck, Steer, Kovacs, & Garrison, 1985; Conwell, Duberstein, & Caine, 2002). Based on previous studies, it was hypothesized that higher emotional and avoidance coping, as well as higher thought suppression, would be significant predictors of suicide risk.
Methods

Participants

Participants in this study were 69 older adults, ranging in age from 55–73 years old. Participants were recruited from the Duke University Medical Center and all met full diagnostic criteria for Major Depressive Disorder and at least one personality disorder (see Table 1). The mean age was 61.32 years (SD = 5.22) and 43.5% of participants were female. The racial composition was 91.3% Caucasian, 5.8% African American, 1.4% Asian and 1.5% Other. Nearly half of the sample was married (49.3%), 26.1% were divorced or separated, 10.1% were single, 8.7% were widowed and 4.3% were living with a partner. The sample was highly educated: 30.4% had an advanced degree, 26.1% had a college degree, 29% had attended some college, 10.1% had completed high school or its equivalent and only two participants (2.9%) had completed less than a high school education.

Measures

Structured Clinical Interview for DSM-IV Personality Disorders (SCID-II: First, Spitzer, Gibbon, Williams, & Benjamin, 1997). The SCID-II was used to diagnose personality disorders. Participants first completed a 119-item questionnaire responding ‘yes’ or ‘no’ to questions regarding specific symptoms of each personality disorder. Following completion of the questionnaire, a trained assessor conducted an interview with the participant. The assessors for this project held either a Bachelors Degree or a Masters Degree in Psychology. The assessor received extensive training on the administration of the SCID-II by a Ph.D. level psychologist. Because studies suggest a low false-negative rate for items individuals do not endorse on the SCID-II (Jacobsberg, Perry, & Frances, 1995), the interview consisted of further evaluation on those items the participant did endorse on the questionnaire. This two-stage process is a common method for the diagnosis of personality disorder (Jacobsberg et al., 1995).

Modified Hamilton Rating Scale for Depression (HAM-D: Miller, Bishop, Norman, & Maddever, 1985). The 17-item HAM-D is a commonly used semi-structured interview for rating the severity of depressive symptomatology. Miller et al. (1985) reported adequate reliability and validity for this measure and it is one of the most frequently used clinical interview measures of the severity of depressive symptoms (Reynolds & Kobak, 1995). The same assessors administered the HAM-D as the SCID-II.

The White Bear Suppression Inventory (WBSI: Wegner & Zanakos, 1994). The WBSI measures the tendency to try not to think about unpleasant thoughts. Respondents rate the extent to which they strongly disagree (1) or strongly disagree (5) with each of the statements on the measure on a five-point Likert-type scale. A sample item from the WBSI is, ‘I have thoughts that I cannot stop’. Previous studies have found that higher scores on the WBSI are significantly positively correlated with symptoms of depression and anxiety, including obsessive-compulsive disorder (Wegner & Zanakos, 1994) and individuals with high WBSI scores report greater number of intrusive cognitions than those with low WBSI scores (e.g. Muris, Mervick, & Horserenberg, 1996). Previous studies have indicated that the WBSI has high internal reliability (Cronbach alpha of 0.87–0.89 across several studies) and high test-retest reliability (0.69: Wegner & Zanakos, 1994). In the present study, the WBSI had a Cronbach alpha of 0.87.

Coping Style Questionnaire (CSQ: Roger, Jarvis, & Najarian, 1993). The CSQ is a 60-item measure of differing response tendencies individuals may have when confronted with a stressor. Individuals are asked to rate the degree to which they use each item on a 0 = never to 3 = always, Likert-type scale. All items on the CSQ concern the respondent’s typical responses to stressful events. For the current study, we assessed all four subscales of the CSQ: emotional coping (e.g. ‘Criticize or blame myself’), avoidance coping (e.g. ‘Try to forget the whole thing’), rational coping (e.g. ‘Try to find out more information to help make a decision about things’) and detached coping (e.g. ‘See the problem as something separate from myself so I can deal with it’). The authors of the CSQ suggested that emotion focused and avoidance coping styles are often maladaptive, while rational and detached coping are seen as adaptive. The authors report that each of these subscales offers adequate internal consistency (Cronbach’s alphas: emotional coping = 0.73; avoidance coping = 0.69; rational coping = 0.85; and detached coping = 0.89). In the present study, Cronbach alpha estimates were adequate for the CSQ subscales: emotional coping = 0.76;
Table II. Partial correlations (controlling for HAM-D) and descriptive statistics for variables associated with suicidal ideation.

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Notes: n = 69; *p < 0.05, **p < 0.01, ***p < 0.001; HAM-D = Hamilton Rating Scale for Depression, ASIQ = Adult Suicidal Ideation Questionnaire, BHS = Beck Hopelessness Scale, EMOCOP = Emotional Coping, AVCOP = Avoidance Coping, RATCOP = Rational Coping, DETCOP = Detached Coping, WBSI = White Bear Suppression Inventory.

Avoidance coping = 0.67; rational coping = 0.82; and detached coping = 0.75.

Adult Suicidal Ideation Questionnaire (ASIQ: Reynolds, 1991). The ASIQ is a 25-item measure used to assess the degree and frequency with which a person may be thinking about and/or planning a suicide attempt. Participants respond to items using a Likert-type scale ranging from 0–6 with higher scores representing greater suicidal ideation and suicide risk. The ASIQ has demonstrated high internal reliability with a Cronbach alpha coefficient of 0.96 for persons with major depression and a coefficient of 0.97 for psychiatric diagnoses other than depression and anxiety. Test-retest reliability for the ASIQ has been assessed with a psychiatric outpatient sample of varying diagnoses, yielding a reliability coefficient of 0.95. The Cronbach alpha for the ASIQ in this study was 0.96.

Beck Hopelessness Scale (BHS: Beck & Steer, 1988). The BHS is a 20-item true/false measure used to assess negative expectancies for the future. Scores are derived by summing items keyed in the hopeless direction. Previous studies have supported the psychometric properties of this instrument in multiple populations (Beck & Steer, 1988; Beck, Weissman, Lester, & Trexler, 1974). In addition, multiple studies have supported the BHS as a predictor of eventual death by suicide (e.g. Beck, Brown, Berchick, Stewart, & Steer, 1990; Brown, Beck, Steer, & Grisham, 2000). The Cronbach alpha for the BHS in this sample was 0.90.

Procedure
Participants completed all measures included in this study at the baseline assessment of a treatment study for depression in older adults with personality disorders. Participants completed the SCID-II interview and HAM-D during an in-person baseline assessment. Following interviews, participants completed self-report measures or, for those who requested, self-report measures were completed at home and returned by mail within one week. All in-person assessments occurred within the laboratory of the last author.

Analysis plan
A suicide risk composite was computed by summing z scores for suicidal ideation (ASIQ) and hopelessness (BHS). To examine the influence of coping strategies (CSQ subscales) and thought suppression (WBSI) on suicide risk (composite of ASIQ and BHS), hierarchical regression analyses were conducted. Specifically, we evaluated the prediction of variance in suicide risk composite scores attributable to CSQ subscale scores and WBSI scores. Due to gender differences in suicide rates in older adults, gender was entered as a predictor in all analyses. To control for the potential influence of depression on the suicide composite score, HAM-D scores were entered as a covariate in step one of each regression analysis.

Results
An evaluation of assumptions of normality, multicolinearity, singularity, homoscedasticity of residuals, homogeneity of variance, linearity and homogeneity of regression indicated no violations of statistical assumptions. Correlations between variables and descriptive statistics are presented in Table II.

The regression analysis included HAM-D in the first step as a covariate, gender, coping subscale scores from the CSQ and thought suppression score from the WBSI as predictor variables in the second step, and the suicide risk composite as the criterion variable. This regression equation was significant in the first step, $R^2 = 0.14$, $F (1, 66) = 10.83$, $p = 0.002$ (see Table III). This regression equation also was significant in the second step, $R^2 = 0.41$, $\Delta R^2 = 0.26$, $F (7, 66) = 5.76$, $p < 0.001$. Examination of significant individual predictors indicated that emotional coping ($\beta = 0.33$, $t = 2.73$, $p < 0.01$), avoidance coping
(β = -0.25, t = -2.29, p < 0.05) and thought suppression (β = 0.30, t = 2.72, p < 0.01) were each significant predictors of the suicide risk composite, after controlling for variance accounted for by depressive symptoms. Gender was not a significant predictor of suicide composite score. These results indicate that self-reported emotional coping, avoidance coping and thought suppression were significantly associated with suicide risk above and beyond depressive symptoms for both men and women; however, neither rational coping nor detached coping were significant predictors of suicide risk. Whereas self-reported emotional coping and thought suppression were positively associated with suicide risk, avoidance coping was negatively associated with suicide risk. Taken together these results suggest that individuals who self-report chronically trying not to think about unpleasant thoughts, using more emotional coping and using less avoidance coping are more likely to experience greater hopelessness and thoughts of suicide.

**Discussion**

The results of this study largely supported the hypothesis that higher thought suppression and maladaptive coping styles would be significant predictors of suicide risk in depressed older adults with co-occurring personality disorders. The variance accounted for by emotional coping suggests that focusing on the negative emotions associated with stressful events is related to suicidal ideation and hopelessness. Our finding that suicidal ideation and hopelessness is predicted by emotional coping is consistent with existing data.

Additionally, the results of this study indicate that chronic thought suppression is an important predictor of indices of suicide risk in this sample. These findings suggest that higher self-reported efforts to intentionally suppress unwanted thoughts or emotions was associated with elevated thoughts of suicide and hopelessness. Previous research has suggested that, among older adults, a personality style characterized by such a lack of openness is associated with suicide (Duberstein et al., 2000; Heisel et al., 2006). One possibility is that chronic thought suppression may be a style of responding to unpleasant negative affect that is especially likely to be problematic for individuals with specific personality styles. As can be seen from Table I, the personality disorders most prevalent in this sample were Obsessive Compulsive Personality Disorder, Avoidant Personality Disorder, Paranoid Personality Disorder and BPD. The first three of these personality disorders are characterized by lack of openness and rigid responding. Thus, it is possible that thought suppression as an emotion regulation or coping strategy may be a modifiable marker of a larger, more trait-based vulnerability related to lack of openness and rigidity of responding.

Interestingly, findings from this study indicate that lower avoidance coping was associated with higher suicide risk. Although contrary to previous studies reporting that greater reliance on avoidant or escape strategies is associated with higher suicide risk in older adults, our results point to the possibility that, among depressed older adults with personality disorders, the use of avoidance coping may confer reduced risk for suicide. There are several considerations to take into account when interpreting the finding that avoidance coping was correlated with decreased suicide risk. First, avoidance coping in older adults may be a protective factor for some personality disorders. For example, Mather and Carstensen (2003) found that older adults avoid processing negative stimuli more than younger adults. Therefore, it may be that aging is associated with an increase in avoidance coping or that, as individuals age, more avoidance coping becomes more adaptive. Third, significantly elevated avoidance coping in depressed older adults with personality disorders may be associated with more proximal correlates of suicide (e.g., attempts) as opposed to suicidal ideation and hopelessness. Consistent with this hypothesis, Marusic and Goodwin (2006) found that higher avoidance coping on the CSQ was associated with deliberate self-harm. The discrepancy in the direction of the relationship between suicide risk with avoidance coping and both emotional coping and thought suppression warrants further investigation before firm conclusions can be made.
The results of this study did not yield gender differences in suicidal ideation and hopelessness. This was somewhat surprising given the dramatic differences in rates of death by suicide between older men and women (i.e. 32 per 100,000 for Caucasian men over 65 compared to 3.8 for women in this age group). We suspect that this finding may parallel findings that older adults endorse suicidal ideation less frequently than younger adults. Specifically, older adult men (especially those with low Openness to Experience [Duberstein et al., 2000]) may be reluctant to disclose thoughts of suicide; therefore, it is possible that the thought suppression finding in the current study reflects an overall approach in older adults to minimize awareness or suppress thoughts of suicide related experiences.

Future research should examine whether treatments that promote alternative emotion regulation strategies (e.g. cognitive restructuring, mindful awareness) result in decreased suicidal ideation and hopelessness for older adults. Specifically, promoting strategies that focus on generating solutions to problematic situations (when such solutions are available), while discouraging rumination or thought suppression, may be beneficial. This approach is consistent with treatment strategies used in Dialectical Behavior Therapy, Cognitive Behavior Therapy and Interpersonal Psychotherapy. Changes in coping and emotion regulation strategies should then be examined as possible mediators of treatment effects.

This preliminary study contains a number of limitations. For example, the small sample size precludes any firm conclusions about important considerations, such as gender differences. The lack of a significant gender difference may have been the result of the greater standard deviation in suicidal ideation for women in this sample. A sample with greater variation in demographic characteristics would also increase the extent to which these results would be generalizable. Particularly, given the relatively high income and education level of many of our participants, the sample in this study may not be typical of older persons with co-occurring depression and personality disorder. Future research should include a larger sample size with greater heterogeneity of participant characteristics. In addition, future research should further explore the pattern of relations between coping styles, thought suppression and suicide risk among individuals with different personality disorder(s). This study included post-hoc analyses of differences between personality disorder groups (see Notes); however, conclusions based on these analyses should be interpreted with caution given the small sample sizes in each group and the post-hoc nature of the analyses.

Further, this study relied on self-reported coping strategies, which may reflect more about the beliefs that individuals have about coping styles than the strategies they actually use or attempt during stressful situations. A number of studies and reviews have provided critiques of traditional self-report strategies, indicating that these scales reflect individuals' beliefs about coping and retrospective biases rather than their actual coping responses during the situation (e.g. Stone et al., 1998). Importantly, despite this limitation, numerous studies have found that such self-reported beliefs about coping predict important outcomes with regard to psychological well-being and psychological stress or distress over six-month to one-year longitudinal follow-up intervals (Carver et al., 1993; Sweet, Savoie, & Lemyre, 1999). A final limitation is that reliability of diagnoses of depression and personality disorders using the HAM-D and SCID-II were not ascertained; however, assessors were extensively trained in the administration of these instruments.

Given the troubling statistics on the high incidence of suicide in older adults and the increasing average age of persons in our society, there are several key implications that can be drawn from our study. Building on previous research, this study further our understanding of the clinical relevance of emotion focused coping, avoidance coping and thought suppression in the prediction of suicidal ideation and hopelessness, which are believed to ultimately be predictive of suicide. The current study uniquely contributes to the literature by highlighting the importance of particular coping strategies specifically in their contribution to suicidal ideation in older adults with depression and co-occurring personality disorders.

**Acknowledgements**

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**Note**

1. To ascertain whether the prediction of suicide risk by CSQ subscale scores and WBSI scores was consistent across different personality disorders, post-hoc partial correlations were computed separately for participants meeting criteria for each personality disorder. The authors decided to conduct partial correlations rather than multiple regression analyses by group due to the small n for each group, which would have resulted in underpowered regression models. Further, we remained concerned regarding the representativeness of the relatively small groups of participants with each personality disorder. Finally, many participants were diagnosed with more than one personality disorder, rendering by-group analysis problematic. The partial correlations controlled for the influence of depressive symptoms on the relations between the suicide
composite score, self-reported coping styles and thought suppression.

These analyses indicated that emotional coping was positively related to suicide risk. The magnitude of this relation was 0.53 for BPD (n = 9); 0.49 for Avoidant Personality Disorder (n = 19); 0.45 for Paranoid Personality Disorder (n = 11) and 0.21 for Obsessive-Compulsive Personality Disorder (n = 33). Partial correlations were not computed for the other personality disorders due to limited sample size (i.e. degrees of freedom of one or zero). Partial correlations indicated that avoidance coping was negatively associated with suicide risk for many of the personality disorders. The magnitude of this relation was 0.41 for BPD; -0.21 for Avoidant Personality Disorder; -0.48 for Paranoid Personality Disorder; and -0.28 for Obsessive-Compulsive Personality Disorder. A similar pattern of positive and negative relations was found for detached coping (0.26 for BPD; -0.33 for Avoidant Personality Disorder; -0.38 for Paranoid Personality Disorder; and -0.23 for Obsessive-Compulsive Personality Disorder). Partial correlations also indicated that rational coping was negatively associated with suicide risk for all personality disorders. The magnitude of this relation was -0.34 for BPD; -0.28 for Avoidant Personality Disorder; -0.18 for Paranoid Personality Disorder; and -0.08 for Obsessive-Compulsive Personality Disorder. Finally, thought suppression was positively correlated with most personality disorders. The magnitude of this relation was -0.21 for BPD; 0.22 for Avoidant Personality Disorder; 0.33 for Paranoid Personality Disorder; and 0.46 for Obsessive-Compulsive Personality Disorder.

Taken together, these post-hoc analyses indicate that while emotional coping is consistently positively correlated with suicide risk; the influence of avoidance and thought suppression may depend somewhat on the personality disorder experienced by the participant. In particular, the negative relation between avoidance coping and suicide risk appears to hold for Avoidant, Paranoid and Obsessive-Compulsive personality disorders, but not for BPD. Similarly, the association between thought suppression and suicide risk was consistently positive for Avoidant, Paranoid and Obsessive-Compulsive personality disorders.

References


