Aging & Mental Health
Publication details, including instructions for authors and subscription information:
http://www.informaworld.com/smpp/title~content=t713404778

Relationships among dispositional coping strategies, suicidal ideation, and protective factors against suicide in older adults

Meghan A. Marty[a]; Daniel L. Segal[a]; Frederick L. Coolidge[a]
[a] Department of Psychology, University of Colorado at Colorado Springs, Colorado Springs, CO 80933 7150, USA

Online publication date: 09 November 2010

To cite this Article Marty, Meghan A. , Segal, Daniel L. and Coolidge, Frederick L.(2010) 'Relationships among dispositional coping strategies, suicidal ideation, and protective factors against suicide in older adults', Aging & Mental Health, 14: 8, 1015 — 1023
To link to this Article: DOI: 10.1080/13607863.2010.501068
URL: http://dx.doi.org/10.1080/13607863.2010.501068

Aging & Mental Health
Vol. 14, No. 8, November 2010, 1015–1023

Routledge
Taylor & Francis Group

Relationships among dispositional coping strategies, suicidal ideation, and protective factors against suicide in older adults

Meghan A. Marty, Daniel L. Segal* and Frederick L. Coolidge

Department of Psychology, University of Colorado at Colorado Springs, Colorado Springs, CO 80933 7150, USA

(*Received 4 November 2009; final version received 17 March 2010*)

Older adults have a disproportionally high rate of completed suicide as compared to the general population. Whereas a large literature has focused on risk factors related to elder suicide, limited research exists on relationships between coping strategies with protective factors against suicide and suicidal ideation in this population. Community-dwelling older adults ($N = 108$, mean age = 71.5 years, age range = 60–95 years) completed the Coping Orientations to Problems Experienced scale, Reasons for Living inventory, and Geriatric Suicide Ideation Scale (GSIS). Problem- and emotion-focused coping were associated positively with reasons for living and negatively with suicide ideation. Dysfunctional coping was associated positively with suicide ideation, but results did not support the hypothesized negative relationship with reasons for living. Thus, problem- and emotion-focused coping appear to be adaptive, whereas dysfunctional coping appears to be somewhat less related to resilience to suicidal ideation among community-dwelling older adults. Implications of the study are that some coping strategies may serve as protective factors against suicide and that coping strategies should be evaluated as part of a thorough assessment of suicidal risk among older adults. The results also provide some evidence of convergent validity for the recently developed GSIS.

Keywords: suicide; self-efficacy; coping; suicide risk

Introduction

Suicide continues to be a significant public health problem in the older adult population. According to the Centers for Disease Control (CDC) and Prevention, between 2000 and 2006 adults aged 65 years and older in the United States had a substantially higher death rate by suicide (14.8 per 100,000) than the general population (10.9 per 100,000; CDC, 2009). Yet, in spite of the high rate of suicide in older adults, most seniors do not contemplate, attempt, or complete suicide. The reasons why older individuals may or may not become suicidal are multidimensional and complex. Whereas much research exists regarding the risk factors for suicide in older adults, there is relatively little research on protective factors (Heisel, 2006; Heisel & Duberstein, 2005). A thorough suicide assessment requires consideration of both risk factors and preventative factors for suicidal thoughts and behaviors (Heisel & Duberstein, 2005).

The style of coping that one engages in may be one such protective factor in that coping can serve as an internal source of emotional strength used to buffer the effects of perceived stress, ultimately preventing an individual from turning to suicide as a perceived solution to life's problems. In their classic paper, Lazarus and Folkman (1984) described coping as efforts to manage individual and environmental demands that are believed to challenge or surpass an individual's resources. Coping serves multiple functions: *problem-focused coping* is aimed at managing or altering the circumstance that is causing distress, whereas *emotion-focused coping* is aimed at regulating the affective response to distress (Lazarus & Folkman, 1984). Each style of coping includes both behavioral and cognitive strategies and, typically, individuals use some combination of both when handling a stressful problem, depending upon their appraisal of the situation (Lazarus & Folkman, 1984).

Carver, Scheier, and Weintraub (1989) offered an extension of Lazarus and Folkman's (1984) theory of coping and suggested measuring the different factors involved in problem- and emotion-focused coping separately. In addition, they proposed measuring coping strategies that are considered to be ineffective if relied upon for long periods of time or when other strategies are more useful. In general, strategies included in both the problem- and emotion-focused coping clusters are oriented toward engagement and action in the direction of solving or managing a problem, whereas strategies included in the *dysfunctional coping* cluster are oriented toward disengagement and maladaptive avoidance of a problem. One key difference between the latter conceptualization of coping and that of Lazarus and Folkman (1984) is the assertion that coping can be viewed from either a process- or trait-oriented approach (Carver et al., 1989).

Researchers have encountered a number of difficulties with the measurement of coping (for a thorough review, see Coyne & Gottlieb, 2006; also see Parker & Endler, 1992). However, regardless of the specific measure used, there appears to be consensus in the

*Corresponding author. Email: dsegal@uccs.edu

ISSN 1360–7863 print/ISSN 1364–6915 online

DOI: 10.1080/13607863.2010.501068
http://www.informaworld.com

coping literature regarding the nature of problem-focused coping and the basic distinction between problem- and emotion-focused coping (Parker & Endler, 1992). The precise nature of emotion-focused coping, however, is somewhat ambiguous and may simply reflect differences among the scales used to measure this style of coping (Coyne & Gottleib, 2006). Whereas little of this work has focused specifically on older adults, cross-sectional research has documented that individuals of different ages use dissimilar coping strategies (e.g., Segal, Hook, & Coolidge, 2001).

In general, research on the relationship between coping and suicide has focused on deficits in coping abilities among individuals who exhibit suicidal ideation or make a suicide attempt (see Pollock & Williams, 1998 for a review). An assumption of this literature is that suicide is not a reasonable response to problems and suicidal individuals are probably not coping effectively when they consider or attempt suicide. In fact, evidence from several studies suggests that, among younger individuals, those with suicidal ideation or a recent suicide attempt solve problems less effectively than nonsuicidal individuals (Elliot & Frude, 2001; Orbach, Bar-Joseph, & Dror, 1990; Reinecke, 2006; Schotte & Clum, 1987; Schotte, Cools, & Payvar, 1990). Similar results were found among studies examining problem-solving and suicidal risk that included older participants (Pollock & Williams, 2004; Yip et al., 2003). Unfortunately, most of this research has been conducted with young or middle-aged adults and, when older adults were included, the impact of age was not examined specifically, limiting the understanding of this phenomenon in older adults.

The nature of the relationship between suicide and emotion-focused coping is not as straightforward as those of problem-focused coping. Methodological and conceptual differences account for the ambiguous results, as the precise definitions of emotion-focused coping vary across studies. Studies among younger and middle-aged adults suggest that some coping strategies aimed at regulating the emotional response to distress (e.g., avoiding the problem, blaming others for the problem) are associated with increased suicide risk, whereas others (e.g., thinking about the good times one has had) are associated with decreased suicide risk in individuals across the mental health spectrum, ranging from healthy controls to psychiatric inpatients (Edwards & Holden, 2001; Horesh et al., 1996; Josepho & Plutchik, 1994; Wang, Lightsey, Peitruszka, Uruk, & Wells, 2007). Other researchers found that coping strategies such as seeking social support and reappraising a stressor in positive terms were not related to level of hopelessness in a sample of self-poisoners (Elliot & Frude, 2001), indicating that the use of coping strategies directed at emotion regulation did not impact risk for suicide in these individuals.

Research on emotion-focused coping and suicidal risk among older adults is sparse, although some evidence suggests that depressed older adults who attempt to cope by inhibiting unwanted thoughts and emotions may be at increased risk for suicidal predictors such as hopelessness and suicidal ideation (Lynch, Cheavens, Morse, & Rosenthal, 2004). In older adults diagnosed with major depression and at least one personality disorder, focusing on negative emotions associated with stressful events and higher self-reported suppression of unwanted thoughts or emotions were associated with elevated thoughts of suicide and hopelessness, suggesting that it is not adaptive to think about stressful events too much or too little (Cukrowicz, Ekblad, Cheavens, Rosenthal, & Lynch, 2008). In contrast, coping strategies such as trying to obtain more information to help make a decision and reinterpreting the problem were not significant predictors of suicide (Cukrowicz et al., 2008). Again, most of this research has been conducted with young or middle-aged adults, limiting the understanding of this phenomenon in older adults, but it appears that some coping strategies aimed at emotion regulation are more effective than others.

An emerging literature has examined relationships between suicidal ideation and various resiliency factors among older adults. The reasons one has for living is a construct that has been shown to help protect individuals from suicidal thoughts and actions (Linehan, Goodstein, Nielsen, & Chiles, 1983). In a comparison of reasons for living between older adults (aged 60–95 years) and a matched group of undergraduates (aged 17–34 years), older adults reported moral objections and child-related concerns as stronger reasons for not completing suicide (Miller, Segal, & Coolidge, 2001). Malone et al. (2000) studied adult patients diagnosed with depression and found that those who had not attempted suicide had greater feelings of responsibility to family, fear of social disapproval, moral objections to suicide, survival and coping beliefs, and fear of suicide as opposed to those who had attempted suicide. In a sample of adults aged 61–95 years, Kissane and McLaren (2006) found that a higher sense of belonging predicted more reasons to live overall and, specifically, child-related concerns, responsibility to family, and survival and coping beliefs.

Britton et al. (2008) also found that survival and coping beliefs, fear of suicide, and moral objections were negatively associated with the presence of suicide ideation among depressed individuals aged 50 years and older receiving clinical services; however, responsibility to family appeared to strengthen the association between hopelessness and suicide ideation. Britton et al. hypothesized that this finding may indicate that depressed and hopeless older adults may perceive themselves to be burdens on their families.

In a study of coping and reasons for living among community-dwelling older adults, Range and Stringer (1996) found women had higher total reasons for living than men. The self-report measure developed by Carver et al. (1989) was used to quantify coping in this study. Results suggested that overall coping was

positively correlated with reasons for living. However, rather than evaluating the dimensions of problem-focused, emotion-focused, and dysfunctional coping separately as they related to reasons for living, coping was evaluated as a unitary construct, consequently making it difficult to determine which specific coping strategies were related to cognitive deterrents to suicide in these nonsuicidal individuals. To our knowledge, no other studies have investigated the relationship between coping and protective factors against suicide in older adults.

This study sought to extend previous research by examining the associations between diverse *dispositional* coping strategies, suicidal ideation, and protective factors against suicide in community-dwelling older adults. The rationale for this study is twofold. First, studying these relationships among older adults who are not currently at risk for suicide may be informative in understanding the basic processes involved in risk and resilience to suicide and how the majority of older adults successfully cope with life's stressors. The relative effectiveness of coping strategies utilized by nonsuicidal individuals may ultimately help to explain why they are protected from increased risk of suicide. A second rationale was to further explore the convergent and discriminant validity of the Geriatric Suicide Ideation Scale (GSIS), a relatively new and promising research and clinical tool for older adults. We hypothesized that problem- and emotion-focused coping strategies would be positively associated with protective factors against suicide and negatively associated with suicidal ideation. In contrast, we hypothesized that dysfunctional coping strategies would be negatively associated with protective factors against suicide and positively associated with suicidal ideation. Finally, we hypothesized that coping would significantly predict reasons for living and suicidal ideation.

Method

Participants and procedure

Participants were 108 community-dwelling older adults (females, $N = 66$; males, $N = 42$; mean age = 71.5 years, SD = 8.2 years, age range = 60–95 years) recruited through newspaper advertisements and an older adult research registry database. The only recruitment requirements were that participants were at least 60 years old and voluntarily willing to participate. Mean years of education was 14.7 (SD = 3.2). The majority of the sample was European American (89%). Participants completed a self-report questionnaire packet at a university research office. A graduate-level research assistant was available to assist with test administration and to pay participants $15 for their participation. Data from one participant were excluded from analysis because the packet was incomplete. This study was approved by the University of Colorado Institutional Review Board.

Measures

Coping orientations to problems experienced scale

The COPE is a theoretically based 60-item self-report dispositional coping measure designed to assess the different ways in which people typically respond to stress (Carver et al., 1989). The COPE consists of three main clusters of strategies: (1) Problem-focused Coping: Active Coping, Planning, Suppression of Competing Activities, Restraint Coping, and Seeking of Instrumental Support; (2) Emotion-focused Coping: Seeking of Emotional Support, Positive Reinterpretation and Growth, Acceptance, Humor, and Turning to Religion; and (3) Dysfunctional Coping: Focus on and Venting of Emotions, Denial, Behavioral Disengagement, Mental Disengagement, and Drug/Alcohol Abuse. Scale scores may be combined to form cluster scores, but clusters are generally not combined to form an 'overall' coping index. The COPE has been used with older adults in a number of studies (e.g., Fisher, Segal, & Coolidge, 2003; Range & Stringer, 1996; Segal et al., 2001) and Cronbach's alpha coefficients were high in the current sample (Table 1).

Reasons for living inventory

The RFL is a 48-item self-report measure based on a cognitive-behavioral view of suicidal behavior suggesting that cognitive patterns are significant mediators of suicidal behaviors (Linehan et al., 1983). The RFL consists of six subscales: Survival and Coping Beliefs, Responsibility to Family, Child-Related Concerns, Fear of Suicide, Fear of Social Disapproval, and Moral Objections. Respondents indicate, on a six-point scale, the importance of each reason for not completing suicide should the thought occur. The RFL has a solid theoretical base, is extensively used in research, and has ample evidence of reliability and validity (Range, 2005) including several studies with older adults (e.g., June, Segal, Coolidge, & Klebe, 2009; Miller et al., 2001; Segal, Lebenson, & Coolidge, 2008). Mean scores were calculated for each of the subscales and the total score as per Linehan et al. (1983) with higher scores indicating higher reasons for living. Cronbach's alpha coefficients are given in Table 1.

Geriatric suicide ideation scale

The GSIS is a 31-item self-report measure of suicide ideation and related factors in older adults consisting of four subscales: Suicide Ideation, Death Ideation, Loss of Personal and Social Worth, and Perceived Meaning in Life, plus an additional item: 'I have tried ending my life in the past' (Heisel & Flett, 2006) that loads on the total score but not on any subscales. Respondents rate to what extent they agree with each item on a five-point scale. Items on the Perceived Meaning in Life subscale are reverse-scored so that higher scores on the total scale indicate

Table 1. Descriptive statistics for COPE, RFL, and GSIS.

	M	SD	α
COPE Clusters			
Problem-focused (20)	58.50	9.13	0.89
Emotion-focused (20)	55.66	9.62	0.85
Dysfunctional (20)	34.40	5.92	0.77
COPE Subscales			
Active Coping (4)	12.62	2.14	0.68
Planning (4)	13.12	2.51	0.86
Suppression of Competing Activities (4)	10.62	2.16	0.59
Restraint Coping (4)	11.28	2.38	0.64
Seeing Instrumental Support (4)	10.87	2.63	0.78
Seeking Emotional Support (4)	10.36	2.92	0.86
Positive Reinterpretation and Growth (4)	12.64	2.44	0.78
Acceptance (4)	11.99	2.26	0.55
Turning to Religion (4)	11.68	4.69	0.97
Humor (4)	9.12	2.95	0.85
Focus on and Venting of Emotions (4)	9.19	2.22	0.72
Denial (4)	5.39	1.61	0.45
Behavioral Disengagement (4)	7.07	2.33	0.71
Mental Disengagement (4)	8.28	2.05	0.41
Alcohol/Drug Abuse (4)	4.47	1.63	0.96
RFL Inventory			
RFL total (48)	4.09	0.82	0.94
Survival and Coping Beliefs (24)	4.74	0.92	0.94
Responsibility to Family (7)	4.40	1.25	0.86
Child-related Concerns (3)	4.26	1.59	0.78
Fear of Suicide (7)	2.49	1.08	0.78
Fear of Social Disapproval (3)	2.58	1.38	0.81
Moral Objections (4)	3.53	1.69	0.82
GSIS			
GSIS total (31)	50.96	15.36	0.91
Suicide Ideation (10)	13.74	4.72	0.81
Death Ideation (5)	8.85	3.53	0.70
Loss of Personal and Social Worth (7)	13.69	5.18	0.80
Perceived Meaning in Life (8)	13.29	4.60	0.82

Note: Number of items for each subscale is given within parentheses.

higher suicidal ideation. Cronbach's alpha coefficients are given in Table 1.

Results

Mean subscale scores and SDs were calculated for the COPE, RFL, and GSIS (Table 1). The RFL means were generally similar compared to those of other community-dwelling older adults (Kissane & McLaren, 2006; Miller et al., 2001; Range & Stringer, 1996), and represent moderate levels of reasons for living. The GSIS means were similar to those of other community-dwelling older adults, but not psychiatric samples (Heisel & Flett, 2006), and represent a relatively low level of suicidal ideation, with some variation. Pearson correlations were calculated between the COPE problem-focused, emotion-focused, and dysfunctional coping clusters with the RFL total score and the RFL subscales (Table 2). The total RFL was positively associated with both problem-focused and emotion-focused coping. Problem-focused coping had small-to-medium positive correlations with survival and coping beliefs, responsibility to family, and child-related concerns. All COPE subscales in the problem-focused coping cluster were positively related to total RFL. Emotion-focused coping had medium-to-large positive correlations with survival and coping beliefs, responsibility to family, child-related concerns, and moral obligations. All COPE subscales in the emotion-focused coping cluster were positively related to total RFL. Results further indicated that dysfunctional coping was not significantly associated with total RFL. Unexpected findings were that the dysfunctional coping cluster had small-to-medium positive correlations with fear of suicide and fear of social disapproval. More specifically, four out of five dysfunctional coping subscales were positively correlated with the RFL fear of suicide subscale and two out of five dysfunctional coping subscales were positively correlated with the RFL fear of social disapproval subscale. Also unexpectedly, the COPE focus on and venting of emotions subscale had small significant positive correlations with total RFL and four out of six of the RFL subscales.

Table 2. Pearson correlations between COPE and RFL scores.

	RFL total	Survival and coping beliefs	Responsibility to family	Child-related concerns	Fear of suicide	Fear of social disapproval	Moral objections
Problem-focused Cluster	0.33**	0.38**	0.23*	0.28**	−0.12	0.09	0.15
Active Coping	0.26*	0.34**	0.24*	0.26*	−0.23*	0.02	0.12
Planning	0.21	0.25*	0.16	0.24*	−0.19	0.05	0.11
Suppression of Activities	0.22*	0.27*	0.19	0.20	−0.14	0.13	0.07
Restraint Coping	0.24*	0.27*	0.16	0.09	0.02	0.07	0.20
Instrumental Support	0.33**	0.33**	0.16	0.30**	0.04	0.09	0.10
Emotion-focused Cluster	0.53**	0.53**	0.41**	0.39**	−0.01	0.14	0.59**
Emotional Support	0.28*	0.27*	0.24*	0.21	0.11	0.08	0.13
Positive Reinterpretation	0.34**	0.44**	0.35**	0.32**	−0.23*	0.03	0.32**
Acceptance	0.23*	0.27*	0.14	0.08	−0.08	−0.03	0.23*
Religion	0.51**	0.43**	0.31**	0.34**	0.06	0.18	0.83**
Humor	0.16	0.21	0.22*	0.16	0.01	0.05	0.02
Dysfunctional Cluster	0.16	−0.02	0.07	0.04	0.48**	0.26*	0.03
Venting of Emotions	0.31**	0.24*	0.22*	0.23*	0.26*	0.09	0.02
Denial	0.15	0.06	0.09	0.05	0.35**	0.42**	0.10
Behavioral Disengagement	0.07	−0.12	0.02	−0.01	0.39**	0.22*	0.08
Mental Disengagement	0.01	−0.14	−0.03	−0.01	0.25*	0.12	−0.05
Alcohol/Drug Abuse	−0.10	−0.11	−0.13	−0.20	0.16	−0.07	−0.08

Note: *$p < 0.05$; **$p < 0.01$.

Table 3. Pearson correlations between COPE and GSIS scores.

	GSIS total	Suicide ideation	Death ideation	Loss of personal and social worth	Perceived meaning in life
Problem-focused Cluster	−0.24*	−0.19	0.05	−0.21*	−0.38**
Active Coping	−0.33**	−0.32**	−0.06	−0.22*	−0.47**
Planning	−0.21*	−0.15	0.08	−0.20*	−0.34**
Suppression of Activities	−0.15	−0.09	0.01	−0.14	−0.24*
Restraint Coping	−0.07	−0.04	0.15	−0.06	−0.24*
Seeking Instrumental Support	−0.17	−0.13	−0.01	−0.19	−0.20
Emotion-focused Cluster	−0.33**	−0.30**	0.11	−0.27**	−0.53**
Seeking Emotional Support	−0.20	−0.17	0.03	−0.20	−0.29**
Positive Reinterpretation	−0.29**	−0.23*	0.08	−0.23*	−0.53**
Acceptance	−0.15	−0.14	0.07	−0.13	−0.25*
Turning to Religion	−0.22*	−0.23*	0.15	−0.21*	−0.36**
Humor	−0.18	−0.15	−0.02	−0.10	−0.28**
Dysfunctional Cluster	0.31**	0.26*	0.30**	0.33**	0.16
Venting of Emotions	0.09	0.06	0.09	0.19	−0.05
Denial	0.13	0.08	0.05	0.15	0.17
Behavioral Disengagement	0.29**	0.24*	0.25*	0.30**	0.17
Mental Disengagement	0.20**	0.28**	0.26*	0.24*	0.17
Alcohol/Drug Abuse	0.11	0.08	0.23*	0.07	0.04

Notes: Perceived meaning in life subscale is reverse-scored.
*$p < 0.05$; **$p < 0.01$.

Next, Pearson correlations were calculated between the COPE problem-focused, emotion-focused, and dysfunctional coping clusters with GSIS total score and GSIS subscales (Table 3). These results indicated that total GSIS was negatively associated with both problem-focused and emotion-focused coping. Problem-focused coping had small-to-moderate negative correlations with loss of personal and social worth and perceived meaning in life. Emotion-focused coping had medium-to-large negative correlations with suicide ideation, loss of personal and social worth, and perceived meaning in life. It should be noted that the perceived meaning in life subscale is reverse-scored so that higher scores on the total GSIS indicated higher suicidal ideation. Therefore, higher endorsement of problem- and emotion-focused coping strategies is associated with higher perceived meaning in life. Dysfunctional coping was positively related to total GSIS. Dysfunctional coping had small-to-medium positive correlations with suicide ideation, death ideation, and loss of personal and social worth. In contrast, dysfunctional coping was not significantly related to the perceived meaning in life subscale.

Finally, simultaneous multiple regression analyses were used to examine the unique contribution of each of the COPE cluster scores in predicting the RFL (Table 4) and the GSIS total scores (Table 5). Gender was added to both models to evaluate its impact. Regarding the RFL, the total variance explained by the model was 29%, $F(4, 72) = 7.50$, $p < 0.001$, $R = 0.54$,

Table 4. Summary of simultaneous regression analysis for COPE cluster scores and gender predicting RFL total score.

Variable	*B*	SE	β
Problem-focused Coping	<0.01	0.01	0.04
Emotion-focused Coping	0.04	0.01	0.51*
Dysfunctional Coping	0.01	0.01	0.09
Gender	−0.10	0.17	−0.06

Notes: $F(4, 72) = 7.50$, $p < 0.001$, $R = 0.54$, $R^2 = 0.29$, and adjusted $R^2 = 0.26$.
*$p < 0.001$.

Table 5. Summary of simultaneous regression analysis for COPE cluster scores and gender predicting GSIS total score.

Variable	*B*	SE	β
Problem-focused Coping	0.09	0.20	0.05
Emotion-focused Coping	−0.68	0.19	−0.42*
Dysfunctional Coping	0.98	0.26	0.38**
Gender	1.17	3.00	0.04

Notes: $F(4, 87) = 6.97$, $p < 0.001$, $R = 0.49$, $R^2 = 0.24$, and adjusted $R^2 = 0.21$.
*$p < 0.01$; **$p < 0.001$.

$R^2 = 0.29$, and adjusted $R^2 = 0.26$, with the emotion-focused coping cluster as the only significant predictor. Regarding the GSIS, the total variance explained by the model was 24%, $F(4, 87) = 6.97$, $p < 0.001$, $R = 0.49$, $R^2 = 0.24$, and adjusted $R^2 = 0.21$. Two independent variables were statistically significant: emotion-focused coping was a significant negative predictor, whereas dysfunctional coping was a significant positive predictor.

Discussion

This study examined how coping relates to suicidal ideation and, conversely, cognitive deterrents to suicide among nonsuicidal older adults. Correlational analyses indicated that coping strategies oriented toward engagement and action in the direction of finding a resolution to a problem, whether they employ behavioral approaches such as seeking assistance or emotional regulation approaches such as reappraising a stressor in positive terms, are associated with reasons for living. Dysfunctional coping was unrelated to most types of reasons for living, but it was associated positively with suicidal ideation, suggesting that use of coping activities that are oriented toward disengagement and maladaptive avoidance of a problem, such as denial and reducing one's effort to deal with a stressor, may be a risk factor for suicidal thinking. However, due to the correlational analyses, we must be cautious in interpreting the direction of causality.

Regression analyses indicated that coping significantly predicted reasons for living and accounted for almost a third of the variance, with the emotion-focused coping cluster being the only significant (positive) predictor, and that coping significantly predicted suicidal ideation and explained approximately a fourth of the variance. Emotion-focused coping was the only significant positive predictor, whereas dysfunctional coping was the only significant negative predictor, both in the expected direction. Problem-focused coping was notably absent as a significant predictor in these models, indicating that it may be less relevant than emotion-focused coping, which is directed at regulating emotional response to distress.

Unexpectedly, dysfunctional coping was positively related to two specific subscales of reasons for living (i.e., fear of suicide and fear of social disapproval), suggesting that these fear-based deterrents may be more indicative of pathological coping rather than adaptive coping, at least in this sample of community-dwelling older adults. Another unexpected finding was that one dysfunctional coping strategy (i.e., focus on and venting of emotions) was positively related to total reasons for living and several of the reasons for living subscales. Whereas the other subscales in the dysfunctional coping cluster are oriented toward avoidance (e.g., denial, mental disengagement, substance use), the strategy of venting appears oriented toward engagement. One could make the case that disengagement might be an effective coping strategy for some older adults; however, the present data do not support this argument. Any given coping strategy may be adaptive or maladaptive depending upon when and for how long it is used. For example, avoidance can be effective in reducing pain, stress, and anxiety in the short run, but with time, nonavoidant strategies are associated with more positive outcomes (Suls & Fletcher, 1985). It is possible that attending to one's emotions and venting or expressing them may provide an emotional and physical release and may engender support from others. Future studies should be designed to test these hypotheses directly.

The unexpected finding that fear of suicide and fear of social disapproval were positively related to dysfunctional coping is puzzling, but consistent with the findings of studies using the RFL with nonclinical populations of younger adults (Linehan et al., 1983; Osman et al., 1993). One explanation may be that these two RFL subscales are measuring other constructs that are not likely to be protective factors against suicide, such as perceived ineptness, personal worthlessness, or low self-efficacy. Items on these scales may be informative. The fear of suicide subscale includes the items, 'I am a coward and do not have the guts to do it,' 'I am so inept that my method would not work,' 'I am afraid that my method of killing myself would fail,' and 'I could not decide where, when, and how to do it' (Linehan et al., 1983, p. 279). The fear of social disapproval subscale includes the items, 'Other people would think I am weak and selfish,' and 'I would not want people to think I did not have control over my life' (Linehan et al., 1983, p. 279). Alternatively, some

unidentified third variable (e.g., presence of an Axis I or Axis II disorder, level of hopelessness), could possibly impact the relationships between fear of suicide and coping and between fear of social disapproval and coping so that these constructs act as protective factors in one population, but risk factors in another. Future research should investigate this possibility.

The fear of suicide subscale in particular did not appear to be related to protective factors against suicide in this study because of its positive association with dysfunctional coping and unrelated associations with problem- and emotion-focused coping. This finding is consistent with the results from a validity study of the RFL (Osman et al., 1993) in which survival and coping beliefs, fear of suicide, and fear of social disapproval significantly predicted current psychological distress, as measured by the Symptom Checklist-90-R (Derogatis, 1983), with survival and coping beliefs as a negative predictor and fear of suicide and fear of social disapproval as positive predictors. In contrast, other RFL studies have found that fear of suicide is negatively associated with the presence of suicide ideation in adults aged 50 and older receiving treatment for depression (Britton et al., 2008) and is greater in depressed patients who had not attempted suicide as compared to those who had (Malone et al., 2000). This suggests that fears of suicide and disapproval may act as a protective factor against suicide under some circumstances but not under others. A relatively new theory, the interpersonal-psychological theory of attempted and completed suicide, would support the claim that fear of death is a deterrent to suicide (Joiner, Van Orden, Witte, & Rudd, 2009; Van Orden, Merrill, & Joiner, 2005), although this theory has not been tested specifically among older adults.

One implication of the present findings is that different emotion-focused coping strategies should be examined separately by researchers, as suggested by Carver et al. (1989), rather than as a unitary construct. It appears that not all cognitive coping strategies are equal (e.g., positive reinterpretation and growth and mental disengagement) and the simplistic distinction between problem- and emotion-focused coping is not adequate. This distinction between diverse emotion-focused coping strategies may be especially important for older adults for whom many times there is nothing that can be done to actually change the circumstances of some types of problems (e.g., death of a spouse, loss of a physical ability such as eyesight). In many cases, changing how one thinks about a problem may be the only option that would possibly lead to reduced stress and increased psychological well-being.

Although our sample was a nonclinical one, if further research extends these findings to clinical populations, there could be important implications for the assessment and treatment of older adults who are at some risk for suicide. Because coping styles and reasons for living are potentially modifiable, clinicians might consider attempts to bolster or enhance these cognitive deterrents to suicide as part of general suicide prevention efforts. Certainly, a full assessment of coping styles and reasons for living should be part of a thorough assessment of suicidal risk among older adults. It may be useful for therapeutic interventions that are designed to reduce or prevent suicidal behavior in older adults to target coping abilities that are related to protective factors against suicide. In contrast to the findings of previous research, which clearly indicate that problem-focused coping is adaptive but the effectiveness of emotion-focused coping is uncertain, this study suggests emotion-focused coping strategies are also adaptive and may be more relevant to the risk factors for and protective factors against suicidal ideation at least in the present sample of community-dwelling nonpsychiatric older adults. Future research should test the extent to which interventions that strengthen coping skills and reasons for living reduce suicidal ideation and suicidal behaviors among older adults in a prospective design.

Limitations of this study include the self-referred, nonclinical, relatively homogeneous European American sample, which restricts the generalizability of the findings. It would be useful to explore the coping abilities and cognitive processes that increase and decrease suicide risk in other racial and ethnic populations. Indeed, a recent study of reasons for living among older African Americans (June et al., 2009) found that the relationship between religiousness (often considered a form of coping) and reasons for living was stronger for African-Americans than for European Americans. Future research might also include similar analysis of diverse older adults not living independently in the community (e.g., those in long-term care settings) and older adults experiencing current suicidal ideation. In the present sample, there was significant variability in GSIS scores, and in fact 8% of the participants answered *agree* or *strongly agree* to the question 'I have tried ending my life in the past' on the GSIS, but it was not a clinical sample.

In addition, because this study investigated correlational relationships between variables, inferences about causality cannot be determined definitively. Longitudinal studies tracking coping behaviors and suicidal ideation over time or intervention studies targeting coping behaviors might help to determine causality between coping and suicidality. This study did not ask participants to disclose psychiatric diagnoses or whether they had been or were currently in treatment for mental health problems. This information may be have been useful in exploring the differences in coping, risk factors, and protective factors for suicide among these subgroups of community-dwelling older adults, especially with regard to the unexpected findings of this study. Finally, as mentioned earlier, there is disagreement regarding the conceptualization and measurement of coping (Coyne & Gottlieb, 2006) which likely has led to some of the divergent findings in this literature. We chose to use Carver's model of

dispositional coping in a relatively healthy population, emphasizing one's typical responses across situations. An important research question is the extent to which relationships between coping and suicidal thinking remain similar when the same individuals are in a state of urgent suicidal ideation.

Additional research on the psychometric performance of the RFL in nonclinical populations of older adults is certainly warranted. Notably, an Older Adult version of the RFL has recently been developed and validated (Edelstein et al., 2009), and future studies should explore the clinical utility of this new measure. Further investigation regarding the psychometric properties of the GSIS would also be useful, as the pattern of correlations found in this study between the COPE and the GSIS provide emerging evidence of validity for the GSIS.

The results from this study add to the current body of knowledge regarding the cognitive factors that mitigate late-life suicide risk and how risk and protective factors combine in nonsuicidal older adults. Given the elevated risk for suicide among older adults and the increasing average age of individuals in the United States, the need for a better understanding of this phenomenon is critical. Expanding upon the strengths of older adults who are aging successfully and do not turn to suicide as a solution to life's problems may help to inform the assessment and treatment of older adults who might be vulnerable to suicide.

References

Britton, P.C., Duberstein, P.R., Conner, K.R., Heisel, M.J., Hirsch, J.K., & Conwell, Y. (2008). Reasons for living, hopelessness, suicide ideation among depressed adults 50 years or older. *American Journal of Geriatric Psychiatry, 16*, 736–741.

Carver, C.S., Scheier, M.F., & Weintraub, J.K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology, 56*, 267–283.

CDC (2009). Centers for Disease Control and Prevention, National Centers for Injury Prevention and Control. *Web-based Injury Statistics Query and Reporting System (WISQARS) Injury Mortality Report, 1999–2006*. Retrieved from http://www.cdc.gov/injury/wisqars/index.html

Coyne, J.C., & Gottlieb, B.H. (2006). The mismeasure of coping by checklist. *Journal of Personality, 64*, 959–991.

Cukrowicz, K.C., Ekblad, A.G., Cheavens, J.S., Rosenthal, M.Z., & Lynch, T.R. (2008). Coping and thought suppression as predictors of suicidal ideation in depressed older adults with personality disorders. *Aging and Mental Health, 12*, 149–157.

Derogatis, L.R. (1983). *SCL-90-R: Administration, scoring, and procedures manual II*. Towson, MD: Clinical Psychometric Research.

Edelstein, B.A., Heisel, M.J., McKee, D.R., Martin, R.R., Koven, L.P., Duberstein, P.R., & Britton, P.C. (2009). Development and psychometric evaluation of the Reasons for Living-Older Adults Scale: A suicide risk assessment instrument. *The Gerontologist, 47*, 736–745.

Edwards, M.J., & Holden, R.R. (2001). Coping, meaning in life, and suicidal manifestations: Examining gender differences. *Journal of Clinical Psychology, 59*, 1133–1150.

Elliot, J.L., & Frude, N. (2001). Stress, coping styles, and hopelessness in self-poisoners. *Crisis, 22*, 20–26.

Fisher, B.M., Segal, D.L., & Coolidge, F.L. (2003). Assessment of coping in cognitively impaired older adults: A preliminary study. *Clinical Gerontologist, 26*, 3–12.

Heisel, M.J. (2006). Suicide and its prevention among older adults. *Canadian Journal of Psychiatry, 51*, 143–154.

Heisel, M.J., & Duberstein, P.R. (2005). Suicide prevention in older adults. *Clinical Psychology: Science and Practice, 12*, 242–259.

Heisel, M.J., & Flett, G.L. (2006). The development and initial validation of the Geriatric Suicide Ideation Scale. *American Journal of Geriatric Psychiatry, 14*, 742–751.

Horesh, N., Rolnick, T., Iancu, I., Dannon, P., Lepkifker, E., Apter, A., & Kotler, M. (1996). Coping styles and suicide risk. *Acta Psychiatrica Scandinavica, 93*, 489–493.

Joiner, T.E., Van Orden, K.A., Witte, T.K., & Rudd, M.D. (2009). *The interpersonal theory of suicide: Guidance for working with suicidal clients*. Washington, DC: American Psychological Association.

Josepho, S.A., & Plutchik, R. (1994). Stress, coping, and suicide risk in psychiatric inpatients. *Suicide and Life-Threatening Behavior, 24*, 48–57.

June, A., Segal, D.L., Coolidge, F.L., & Klebe, K. (2009). Religiousness, social support and reasons for living in African American and European American older adults: An exploratory study. *Aging and Mental Health, 13*, 753–760.

Kissane, M., & McLaren, S. (2006). Sense of belonging as a predictor of reasons for living in older adults. *Death Studies, 30*, 243–258.

Lazarus, R.S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.

Linehan, M.M., Goodstein, J.L., Nielsen, S.L., & Chiles, J.A. (1983). Reasons for staying alive when you are thinking of killing yourself: The reasons for living inventory. *Journal of Consulting and Clinical Psychology, 51*, 276–286.

Lynch, T.R., Cheavens, J.S., Morse, J.Q., & Rosenthal, M.Z. (2004). A model predicting suicidal ideation and hopelessness in depressed older adults: The impact of emotion inhibition and affect intensity. *Aging and Mental Health, 8*, 486–497.

Malone, K.M., Oquendo, M.A., Haas, G.L., Ellis, S.P., Li, S., & Mann, J.J. (2000). Protective factors against suicidal acts in major depression: Reasons for living. *American Journal of Psychiatry, 157*, 1084–1088.

Miller, J.S., Segal, D.L., & Coolidge, F.L. (2001). A comparison of suicidal thinking and reasons for living among younger and older adults. *Death Studies, 25*, 357–365.

Orbach, I., Bar-Joseph, H., & Dror, N. (1990). Styles of problem solving in suicidal individuals. *Suicide and Life-Threatening Behavior, 20*, 56–64.

Osman, A., Gifford, J., Jones, T., Lickiss, L., Osman, J., & Wenzel, R. (1993). Psychometric evaluation of the reasons for living inventory. *Psychological Assessment, 5*, 154–158.

Parker, J.D.A., & Endler, N.S. (1992). Coping with coping assessment: A critical review. *European Journal of Personality, 6*, 321–344.

Pollock, L.R., & Williams, J.M.G. (1998). Problem solving and suicidal behavior. *Suicide and Life-Threatening Behavior, 28*, 375–387.

Pollock, L.R., & Williams, J.M.G. (2004). Problem-solving in suicide attempters. *Psychological Medicine, 34*, 163–167.

Range, L.M. (2005). The family of instruments that assess suicide risk. *Journal of Psychopathology and Behavioral Assessment, 27*, 133–140.

Range, L.M., & Stringer, T.A. (1996). Reasons for living and coping abilities among older adults. *International Journal of Aging and Human Development, 43*, 1–5.

Reinecke, M.A. (2006). Problem solving: A conceptual approach to suicidality and psychotherapy. In T.E. Ellis (Ed.), *Cognition and suicide: Theory, research, and therapy* (pp. 237–260). Washington, DC: American Psychological Association.

Schotte, D.E., & Clum, G.A. (1987). Problem-solving skills in suicidal psychiatric patients. *Journal of Consulting and Clinical Psychology, 55*, 49–54.

Schotte, D.E., Cools, J., & Payvar, S. (1990). Problem-solving deficits in suicidal patients: Trait vulnerability or state phenomenon? *Journal of Consulting and Clinical Psychology, 58*, 562–564.

Segal, D.L., Hook, J.N., & Coolidge, F.L. (2001). Personality dysfunction, coping styles, and clinical symptoms in younger and older adults. *Journal of Clinical Geropsychology, 7*, 201–212.

Segal, D.L., Lebenson, S., & Coolidge, F.L. (2008). Global self-rated health status predicts reasons for living among older adults. *Clinical Gerontologist, 31*, 122–132.

Suls, J., & Fletcher, B. (1985). The relative efficacy of avoidant and nonavoidant coping strategies: A meta-analysis. *Health Psychology, 4*, 249–288.

Van Orden, K.A., Merrill, K.A., & Joiner, T.E. (2005). Interpersonal-psychological precursors to suicidal behavior: A theory of attempted and completed suicide. *Current Psychiatry Reviews, 1*, 187–196.

Wang, M., Lightsey, O.R., Peitruszka, T., Uruk, A.C., & Wells, A.G. (2007). Purpose in life and reasons for living as mediators of the relationship between stress, coping, and suicidal behavior. *The Journal of Positive Psychology, 2*, 195–204.

Yip, P.S.F., Chi, I., Chiu, H., Wai, K.C., Conwell, Y., & Caine, E. (2003). A prevalence study of suicide ideation among older adults in Hong Kong SAR. *International Journal of Geriatric Psychiatry, 18*, 1056–1062.