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Specific Coping Behaviors in Relation to Adolescent Depression and Suicidal Ideation

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Abstract

The coping strategies used by adolescents to deal with stress may have implications for the development of depression and suicidal ideation. This study examined coping categories and specific coping behaviors used by adolescents to assess the relation of coping to depression and suicidal ideation. In hierarchical regression models, the specific coping behaviors of behavioral disengagement and self-blame were predictive of higher levels of depression; depression and using emotional support were predictive of suicidal ideation. Results suggest that specific behaviors within the broad coping categories of emotion-focused coping (e.g., self-blame) and avoidant coping (e.g., behavioral disengagement) account for these categories' associations with depression and suicidal ideation. Specific problem-focused coping strategies did not independently predict lower levels of depression or suicidal ideation. It may be beneficial for interventions to focus on eliminating maladaptive coping behaviors in addition to introducing or enhancing positive coping behaviors.

Keywords

coping; depression; suicidal ideation; stress; adolescents

At any given point in time, approximately 4–6% of adolescents ages 13–17 are clinically depressed (Costello, Erkanli, & Angold, 2006). Furthermore, lifetime prevalence rates for depression have been estimated to be as high as 25% (Lewinsohn, Rohde, & Seely, 1998). Findings from the nationally representative Youth Risk Behavioral Survey indicate that 6.3% of high school students had attempted suicide once or more in the previous year and 13.8% had considered suicide over the same period (Centers for Disease Control and Prevention, 2010). Suicidal ideation, suicide attempts and depression significantly increase in adolescence, making it a crucial period for prevention efforts (Galaif, Sussman, Newcomb, & Locke, 2007).

Although stress exists at every stage of human development, adolescence can be especially stressful, due to the biological and social changes that accompany this developmental period (Arnett, 1999). There are considerable changes in the brain during adolescence, specifically in the hippocampus and pre-frontal cortex. Stress exposure during the development of these

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two structures may make adolescents especially susceptible to depression (Andersen & Teicher, 2008). In a study focused on suicidal ideation, Huff (1999) reported that the degree and recency of stress were significant predictors of suicidal ideation. Coping strategies are potentially important moderators and mediators in the bidirectional relation of psychosocial stress to depression and suicidal ideation (Seiffge-Krenke, 2004).

Coping has been defined by Lazarus (1993) as a process in which cognitive or behavioral efforts are made to manage specific internal and/or external sources of psychological stress. Research on coping among children and adolescents has lagged behind studies of coping in adults—in part due to the lack of consensus among researchers on the nature and categorization of coping in children and adolescents. Further research is critical, as the coping styles that emerge in adolescence have long-term consequences that influence coping styles and outcomes in adulthood (Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001).

The most widely used categories of coping are problem-focused and emotion-focused coping (for a review, see Compas et al., 2001). Problem-focused coping is when an individual takes action to change the circumstances causing stress; emotion-focused coping is when an individual works to alter their own experience of negative emotion resulting from a stressful source. These categories are broad and sometimes confounded; a specific coping behavior may be both problem-focused and emotion-focused. For example, walking away from a fight may be used both to calm down (emotion-focused) and to change the setting of a conflict (problem-focused). Avoidant coping has also been examined as a coping category and refers to coping responses that are oriented away from the source of stress (e.g., withdrawal or denial; Compas et al., 2001). The breadth of these categories has led to individual research on many specific coping behaviors, including: problem solving, cognitive restructuring, catastrophizing, physical activities, self-criticism, humor, social withdrawal, resigned acceptance, alcohol or drug use, seeking social support, use of religion, etc. (Compas et al., 2001). The inconsistency in researchers' categorizations of these specific behaviors prevents accurate comparisons between studies.

There has been a great deal of research on the relation between coping and depression in adolescents. The use of emotion-focused coping has been linked with greater depressive symptoms (e.g., Elliott & Frude, 2001; Rafnsson, Jonsson, & Windle, 2006). Conversely, problem-focused coping has been found to be negatively associated with depression (e.g., Li, DiGiuseppe, & Froh, 2006) and hopelessness (e.g., Elliott & Frude, 2001). A study by Seiffge-Krenke and Klessinger (2000) found that the use of avoidant coping at one time point was linked with greater depressive symptoms even after two years. There has been little research on how coping relates to suicidal ideation in adolescents; however, studies conducted with adult populations indicate that the use of emotion-focused and avoidant coping are associated with higher levels of suicidal ideation (e.g., Edwards & Holden, 2001; Marusic & Goodwin, 2006; Pienaar, Rothmann, & Van De Vijver, 2007).

Despite research suggesting that the use of problem-focused coping is beneficial, and the use of emotion-focused and avoidant coping is harmful, there may be specific behaviors within these broad coping categories that are most pertinent to healthy functioning. Consistent with this view, rather than examining coping strictly in terms of these broad categories, the Brief COPE developed by Carver (1997) examines fourteen specific coping behaviors that are either theoretically or empirically grounded. The specific coping behaviors are distinguished by: 1) whether they are emotion-focused or problem-focused; 2) whether the behavior occurs in primary or secondary appraisal; and 3) whether the coping behavior is cognitive or behavioral (Carver, Scheier, & Weintraub, 1989).

The relation of several specific coping behaviors to depression and suicidal ideation has also been examined with adolescents and adults. Specific problem-focused strategies such as active coping (Gonzales, Tein, Sandler, & Friedman, 2001), help-seeking (Gould et al., 2004), and planning (Aldridge & Roesch, 2008) have been associated with positive outcomes. Behavioral disengagement, which involves giving up the attempt to deal with a situation, is a risk factor for and symptom of depression in adolescents (Kaminsky, Robertson, & Dewey, 2006; Wadsworth & Compas, 2002). Previous research has also implicated hopelessness, theoretically related to behavioral disengagement, as a predictor of suicide attempts in adolescents (Huth-Bocks, Kerr, Ivey, Kramer, & King, 2007; Terzi-Unsal & Kapci, 2005). Self-blame has been associated with depression in adolescents (Fear et al., 2009; Tilghman-Osborne, Cole, Felton, & Ciesla, 2008) and suicidal ideation in adults (Ullman & Najdowski, 2009). Denial has also been shown to relate to depressive symptoms in adults (Burker, Evon, Losielle, Finkel, & Mill, 2005; Kortte, Wegener, & Chwalisz, 2003). Apter et al. (1997) found that suicidal adolescents were more likely to use denial as an ego defense mechanism. Adolescents may use alcohol or drugs to regulate negative mood (Turner, Larimer, Sarason, & Trupin, 2005), and the use of either significantly increases the risk for suicidal ideation and attempts (R. A. King et al., 2001).

The present study seeks to enhance our understanding of the relation of specific coping behaviors to depression and suicidal ideation in adolescents. It improves upon previous research by addressing both the broad coping categories and the specific coping behaviors within these categories that may account for associations with depression and suicidal ideation. Furthermore, this study adds to the limited research on adolescent coping behaviors as they relate to suicidal ideation. This research may inform prevention and treatment programs that focus on teaching effective coping responses to stress.

It is hypothesized that the use of planning, active coping, and instrumental support will be negatively associated with depression and suicidal ideation, whereas behavioral disengagement, self-blame, denial, and substance use will be positively associated with depression and suicidal ideation. Consistent with previous studies (e.g., Baker & Berenbaum, 2007; Folkman & Lazarus, 1980), it is also hypothesized that females will use more emotion-focused coping than males and that males will use more problem-focused coping than females.

Method

Participants

Participants were 140 adolescents (83 females, 57 males), ages 13–17 years (M = 15.47, SD = 1.42), seeking pediatric emergency services at a midwestern university hospital emergency department (ED). Exclusion criteria included a life-threatening condition (level 1 trauma) or an inability to provide written informed consent (e.g., moderate to severe cognitive impairment). Over the six month recruitment period, 243 adolescents presented to the ED and were approached for participation in a multi-component adolescent mental health screening project. 70.4% (n = 171) agreed to participate in the first component (C. A. King, Hill, Wynne, & Cunningham, 2010) and 81.9% of those (n = 140) agreed to complete the additional questionnaire required by the present study. The final sample of 140 participants was not significantly different, with regard to age or gender, from the 103 adolescents who presented to the ED and did not complete all the questionnaires for this study. The racial distribution of this study's sample was: 80.7% (n = 113) white, 20.0% (n = 28) African American/Black, 11.4% (n = 16) American Indian or Alaskan Native, 2.9% (n = 4) Asian, 0.7% (n = 1) Native Hawaiian or Pacific Islander, and 3.6% (n = 5) "other". (Note: The totals are greater than 100% as participants were able to identify multiple races.) In addition, 4.3% (n = 6) identified their ethnicity as Hispanic/Latino.

Measurements

Depression—The 10-item self-report Reynolds Adolescent Depression Scale 2nd Edition, Short Form (RADS-2:SF) was used for measuring depression (Reynolds, 2008). The RADS-2:SF assesses frequency and severity of depressive symptoms (e.g., "I feel sad", "I feel lonely") on a 4-point Likert scale from "Almost never" to "Most of the time". In this sample, the RADS-2:SF had an internal consistency (Chronbach's alpha) of .85.

Suicidal ideation—The Suicidal Ideation Questionnaire-Junior (SIQ-JR) is a 15-item self-report questionnaire that assesses a wide range of suicidal thoughts (e.g., "I thought about how I would kill myself", "I wished I were dead") on a 7-point time referential scale ranging from "I never had this thought" to "Almost every day". It has excellent test-retest reliability (Reynolds, 1988). Multiple regression analysis of criterion-related validity confirmed a significant relationship with test scores to suicidal ideation determined in a clinical assessment (Reynolds & Mazza, 1999). In the current sample, the SIQ-JR had an internal consistency of .92.

Coping styles—The Brief COPE (Carver, 1997) is a 28-item measure of coping strategies derived from the larger COPE inventory (Carver et al., 1989) and is answered on a 4-point scale ranging from "I don't do this at all" to "I do this a lot". The COPE inventory has demonstrated discriminant and convergent validity (Carver et al., 1989) and has been found to be reliable when used with adolescent samples (Phelps & Jarvis, 1994). The Brief COPE has good internal reliability and a factor structure consistent with the COPE inventory (Carver, 1997). Participants are asked to indicate what they usually do when they experience a stressful event. Example items include: "I refuse to believe it has happened" (denial), and "I learn to live with it" (acceptance). The internal consistencies of the 14 two-item subscales (specific coping behaviors) in this sample ranged from .49 (venting) to .98 (substance use), with 13 of the 14 subscales above .62. The 14 subscales were then classified into 3 higher order subscales (broad coping categories): Emotion-focused coping (substance use, use of emotional support, venting, positive reframing, humor, acceptance, religion, and self-blame), problem-focused coping (active coping, use of instrumental support and planning), and avoidant coping (distraction, denial, and behavioral disengagement) as categorized previously by Wilson, Pritchard, and Revalee (2005). Venting was removed from all analyses due to low internal consistency.

Procedure

IRB approval was attained. Parent/guardian written informed consent was obtained in addition to adolescent written informed assent. Data were collected during late afternoons and evenings from November 2009 through April 2010. Participants were offered two one-dollar gift items as a token of appreciation for their participation.

Data Analysis

Initial analyses consisted of group comparisons to test for significant differences between males and females using *t*-tests for depression, suicidal ideation, and coping styles. Correlations were computed to examine bivariate relations between depression, suicidal ideation and specific coping behaviors. Rather than using raw SIQ-JR scores in regression analyses, a transformation of the SIQ-JR using square root values was computed to obtain a more normal distribution. Age and gender were controlled for in the first step of all regressions. Backward selection procedures were used to develop the models involving specific coping behaviors. The initial models contained: age, gender, specific coping behaviors correlated to the outcome variable, and the interactions of the specific coping behaviors with age and gender. The variable with the highest *p*-value was removed from

each subsequent model, provided that it was not necessary for an existing interaction variable (e.g., "denial" was removed from the model only after the interactions involving denial were removed). This process was repeated until the *p*-values for the remaining variables were <.05, with the exception of control variables and variables involved with a significant interaction. This method was used to achieve a concise regression model with the most significant predictors of depression or suicidal ideation. Although the optimal method for variable selection is considered to be the method of best subsets (all possible regressions), this method was unavailable in the SPSS software we used for analysis. Barring that, the backwards selection procedure is considered to be an acceptable method, and superior to forward selection. To reduce the likelihood of a type I error, an alpha level of .01 was used for all statistical tests.

Results

Demographic Differences in Coping Behaviors and Outcome Variables

In an examination of gender differences, females used more emotion-focused coping than males, but only at the trend level, $t(138) = 2.36$, $p < .05$. Contrary to hypotheses, males did not use more problem-focused coping than females. As displayed in Table 1, there were significant differences in the frequency of use for specific coping behaviors. Females were significantly more likely to report use of emotional support, $t(136) = 4.20$, $p < .001$, and instrumental support, $t(135) = 2.68$, $p < .01$. Coping behaviors significantly correlated with older age included: active coping, use of emotional support, planning, acceptance and self-blame.

There were significant differences in self-reported depression and suicidal ideation between males and females. Females reported greater depression scores on the RADS-2:SF, $t(137.1) = 2.67$, $p < .01$, and suicidal ideation scores on the SIQ-JR, $t(125.0) = 2.65$, $p < .01$.

Broad Coping Categories in Relation to Depression and Suicidal Ideation

Based on previous research indicating that problem-focused coping protects against depression, a hierarchical regression model was created. Age and gender were entered in the first step of the model, which was significant, together accounting for 6.0% of the variance in depression (see Table 2). Problem-focused coping was added in the next step to determine whether it had an incremental protective effect on depression. This model was also significant and accounted for an additional 2.5% of the variance in depression. However, problem-focused coping was not a significant independent predictor within the model. Emotion-focused coping and avoidant coping were added in the third step to assess whether all three coping categories predicted depression. All three coping categories were significant independent predictors of depression in the final model, which accounted for an additional 28.0% of the variance.

This process was replicated in a hierarchical regression model predicting suicidal ideation; in addition, depression was included in the model due to its known predictive relationship with suicidal ideation (see Table 2). The first step included age, gender, and depression. This model was significant, accounting for 54.8% of the variance in suicidal ideation. Problem-focused coping was added in the second step and was not a significant independent predictor of suicidal ideation, though the model remained significant. Emotion-focused coping and avoidant coping were added in the final step. Even though emotion-focused and avoidant coping were not significant independent predictors of suicidal ideation, the final model was significant and the strongest, accounting for 55.0% of the variance.

Specific Coping Behaviors in Relation to Depression and Suicidal Ideation

Correlations between specific coping behaviors and concurrent depression and suicidal ideation were analyzed and are presented in Table 3. The specific coping behaviors that were significantly and positively correlated with depression scores for either males, females, or both include: denial, substance use, use of emotional support, behavioral disengagement, and self-blame. These five specific coping behaviors were also the behaviors significantly and positively correlated with scores of suicidal ideation.

Each specific coping behavior that correlated with depression was entered into a hierarchical regression model (see Table 4). Age and gender were entered in the first step and the model was significant, accounting for 5.5% of the variance in depression. The second step included: use of emotional support, behavioral disengagement, self-blame and the interaction of emotional support by gender. Behavioral disengagement, self-blame, and the interaction between emotional support and gender were significant independent predictors in this final model, which was significant and accounted for an additional 49.7% of the variance in depression.

This process was replicated in a hierarchical regression predicting suicidal ideation. Age, gender, and depression were entered in the first step and the model was significant, accounting for 49.4% of the variance in suicidal ideation. The second step included use of emotional support and substance use. Use of emotional support was a significant independent predictor in the final model, whereas substance use predicted suicidal ideation only at the trend level. These two coping behaviors accounted for an additional 4.2% of the variance in suicidal ideation. This model is also presented in Table 4.

Discussion

This study identified both broad coping categories and specific coping behaviors associated with depression and suicidal ideation among adolescents. All three broad coping categories were independent predictors of depression scores. However, problem-focused coping only accounted for an additional 2.5% of the variance in depression after taking age and gender into account. Emotion-focused and avoidant coping, in contrast, accounted for an additional 28% of the variance in depression scores. It may be that depressed teens use slightly less problem-focused coping than non-depressed teens, but significantly more maladaptive coping, such as avoidant coping (e.g., behavioral disengagement) or emotion-focused coping (e.g., self-blame).

These finding are consistent with the work of Liu, Gentzler, George, and Kovacs (2009) on adaptive and maladaptive styles of mood repair. They found that young adults with mood disorders used significantly more maladaptive response strategies and significantly fewer adaptive response strategies than did the control group. The difference in levels of maladaptive strategies had a greater effect size than the difference in adaptive response strategies and may also have been of greater clinical significance. Thus, teaching problem-focused and adaptive coping styles may be insufficient in the attempt to combat depression and reduce suicidal ideation. Instead, elimination of maladaptive coping styles may be a necessary supplement to teaching new adaptive styles in reducing depression and suicidal ideation.

None of the three broad coping categories (problem-focused, emotion-focused, and avoidant coping) were significant independent predictors of suicidal ideation. This may have been a result of potential confounds, such as the variable influences of specific behaviors within these categories. To help offset the limitations of using broad coping categories, this study examined thirteen specific coping behaviors within the three categories. There were several

specific coping behaviors that accounted for a significant proportion of the variance in depression and suicidal ideation, whereas other specific coping behaviors within the same broader categories accounted for little or no variance, thus limiting the ability of broad categories to accurately capture the effects of different coping strategies.

Emotion-focused Coping

The hypothesis that self-blame would be positively related to depression was confirmed, as it was a significant independent predictor of depression in the regression model. This finding is consistent with previous research indicating a positive relationship between self-blame and depressive symptoms (Fear et al., 2009; Tilghman-Osborne et al., 2008). However, despite past research linking self-blame and suicidal ideation (Ullman & Najdowski, 2009), self-blame was not found to be a significant predictor of suicidal ideation. It is possible that self-blame is associated with suicidal ideation only by means of its relationship with depression.

Substance use as a coping behavior was correlated with depression, but was not an independent predictor in the analyses. This is surprising, given the extensive literature about the association between adolescent alcohol use and depression (Galaif et al., 2007; Mason et al., 2008; Sher & Zalsman, 2005). The lack of an independent relationship may be a result of substance use having significant correlations with two other coping behaviors, behavioral disengagement and self-blame, which did independently predict depression. Despite not accounting for variance in depression, substance use was a predictor of suicidal ideation at the trend level in the regression model. The use of substances as a coping behavior is especially dangerous and has been shown to have implications for increased risk for suicidal ideation and attempts (R. A. King et al., 2001).

Though not hypothesized, use of emotional support was found to be a significant predictor of suicidal ideation in this study. Due to the interpersonal nature of using emotional support, it is possible that this relationship is explained by instances wherein the effort to seek emotional support results in rejection. This is akin to the concept of thwarted belongingness, which the Interpersonal-Psychological Theory of suicide posits is a key contributor to the desire for death, evidenced here as suicidal ideation (Joiner, 2005). An alternate explanation of this relationship is that suicidal ideation may precede the use of emotional support.

Using emotional support was found to interact with gender in the prediction of depression. While males and females who reported minimal use of emotional support had similarly low depression scores, females who reported higher levels of emotional support had higher depression scores than males who reported higher levels of emotional support. This finding converges with research indicating that depressive symptoms in adolescent females are associated prospectively with greater reassurance-seeking behaviors (Prinstein, Borelli, Cheah, Simon, & Aikins, 2005). The use of emotional support may reflect a need for reassurance, which has also been associated with low self-esteem (Joiner, Katz, & Lew, 1999).

Avoidant Coping

Results confirmed the hypothesis that behavioral disengagement would predict depression in a regression model, as other studies have found it to be a significant predictor of and risk factor for depression (Kaminsky et al., 2006; Wadsworth & Compas, 2002). Unfortunately, it is unknown whether behavioral disengagement influences depressive symptoms or depression influences the use of behavioral disengagement. Regardless, behavioral disengagement, when in use, could be indicative of depression. Additional research, using longitudinal designs, is needed to identify the causal nature of this relationship. Contrary to

our hypothesis, behavioral disengagement did not predict suicidal ideation, as was expected based on previous literature (Votta & Manion, 2004). Though behavioral disengagement and suicidal ideation were strongly correlated, the association was not significant when depression was taken into account.

Denial was correlated with depression and suicidal ideation but, contrary to our hypothesis, was not a predictor of depression or suicidal ideation. The use of denial as a coping strategy has been associated with depression (Burker et al., 2005; Kortte et al., 2003; Panayiotou & Papageorgious, 2007) and suicidal ideation (Apter et al., 1997). However, only Apter and colleagues focused on adolescents and it is possible that the use of denial as a coping strategy may have different outcomes for adolescents and adults. A study by Miotto and Preti (2008) found the use of denial to be protective of suicidal ideation in a school-aged population. It may be that denial serves as a protective coping style in circumstances beyond adolescents' control, such as the death or illness of a family member, parental conflict, or poverty. Given that an adolescent has little or no control over these situations, problem-focused coping may not realistically alleviate stress, and denial may become a viable alternative. However, long-term outcomes cannot be inferred from our data, and the possibility remains that the persistent use of denial in adolescence may have negative consequences in adulthood.

Problem-focused Coping

The broad category of problem-focused coping predicted lower levels of self-reported depression in our regression model. Yet, contrary to our hypothesis, the specific coping behaviors of active coping, planning and use of instrumental support were not inversely associated with depression or suicidal ideation. The absence of these specific coping behaviors from the final models may be due to maladaptive behaviors having a stronger influence on depression than adaptive strategies.

Gender Differences

An examination of gender differences and coping showed that, at the trend level, females used greater amounts of emotion-focused coping than males. While this finding is consistent with the results of past studies (Baker & Berenbaum, 2007), the current study did not find that males used more problem-focused coping than females. Females also reported using emotional support and instrumental support significantly more than males. The notion that males use more problem-focused coping might be a result of perceived gender roles or as a contrast to the finding that females use more emotion-focused coping.

Study Limitations

The present sample is derived from a predominately white, Midwestern region, and responses may not be generalizable to other populations. Moreover, only 57.6% of potentially study-eligible adolescents participated. Though these participants were not different with regard to age or gender from non-participants, there may be selection biases we were unable to detect, such as an effect of volunteerism. Since this study was cross-sectional, we were unable to determine causal influences. In addition, although the Brief COPE aims to assess what people usually do in stressful situations, adolescents' responses may be influenced by recent or salient stressors, and may vary by environmental context. It is recommended that future research in this area use a longitudinal design and consider addressing how adolescents respond to stress in variable contexts or circumstances.

Conclusions

Study results indicate that problem-focused coping only accounts for a small percentage of the variance in depression, whereas emotion-focused and avoidant coping account for much more. The implications are substantial for prevention strategies and interventions attempting to teach positive coping skills as a means to combat teen depression and suicidal ideation. Should future studies replicate these findings, it is imperative that prevention and intervention strategies include a focus on reducing maladaptive coping behaviors, in addition to the enhancement of problem-focused strategies. Additionally, this study has identified specific elements within the broad emotion-focused and avoidant coping categories that account for their relationship with depression (behavioral disengagement and self-blame) and suicidal ideation (substance use and use of emotional support). In the future, these broad coping categories should be more prudently generalized, as not all emotion-focused (e.g., religion) and avoidant coping behaviors (e.g., distraction) were associated with negative outcomes.

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Table 1

Descriptive statistics for primary study variables

	Overall Mean (*SD*)	Male Mean (*SD*)	Female Mean (*SD*)	Age Pearson's *r*
n	140	57	83	---
RADS-2:SF	18.37 (5.1)	17.09 (4.1)	19.25 (5.5)**	.193*
SIQ-JR	6.78 (9.6)	4.52 (5.4)	8.34 (11.4)**	.112
Brief COPE specific items				
Self Distraction	5.55 (1.6)	5.61 (1.8)	5.51 (1.5)	.213*
Active Coping	5.54 (1.6)	5.45 (1.6)	5.60 (1.6)	.229**
Denial	3.05 (1.4)	2.95 (1.2)	3.12 (1.5)	−.011
Substances	2.30 (1.1)	2.31 (1.3)	2.30 (1.0)	.184*
Emotional Support	5.30 (1.6)	4.63 (1.5)	5.76 (1.6)***	.244**
Instrumental Support	5.28 (1.7)	4.82 (1.6)	5.61 (1.7)**	.153
Disengagement	3.32 (1.4)	3.00 (1.1)	3.54 (1.5)*	.113
Positive Reframing	4.95 (1.7)	4.74 (1.7)	5.10 (1.6)	.101
Planning	5.05 (1.6)	4.88 (1.8)	5.17 (1.5)	.264**
Humor	4.58 (2.0)	4.68 (2.1)	4.51 (2.0)	.124
Acceptance	5.58 (1.6)	5.44 (1.7)	5.68 (1.6)	.222**
Religion	4.11 (2.0)	3.79 (1.7)	4.33 (2.1)	.139
Self-Blame	4.15 (1.9)	3.75 (1.7)	4.44 (2.0)*	.267**
Brief COPE subscales				
Emotion-focused coping	4.43 (0.9)	4.20 (1.0)	4.58 (0.9)*	.321***
Problem-focused coping	5.30 (1.4)	5.06 (1.4)	5.47 (1.3)	.241**
Avoidant coping	3.98 (1.0)	3.89 (1.1)	4.03 (1.0)	.139

Note:

* *p*-value < .05;

** *p*-value < .01;

*** *p*-value < .001

Table 2

Hierarchical regression for coping categories predicting depression

Variable	*β*	SE *β*	B
Regression 1: Predicting Depression			
Step 1 [$F(2,137) = 5.45$, $p < .01$] $R^2 = .060$			
Age	.614	.294	.173*
Gender	1.969	.849	.192*
Step 2 [$F(3,136) = 5.29$, $p < .01$] $R^2 = .085$ $\Delta R^2 = .025$			
Age	.761	.298	.214*
Gender	2.204	.845	.215*
Problem-focused coping	−.926	.427	−.183*
Step 3 [$F(5,134) = 16.97$, $p < .001$] $R^2 = .365$ $\Delta R^2 = .280$			
Age	.440	.254	.124
Gender	1.790	.709	.174*
Problem-focused coping	−1.954	.450	−.386***
Emotion-focused coping	1.386	.527	.274**
Avoidant coping	2.032	.407	.401***
Regression 2: Predicting Suicide Ideation			
Step 1 [$F(3,136) = 57.06$, $p < .001$] $R^2 = .548$			
Age	.034	.064	.031
Gender	.252	.184	.080
Depression	.220	.018	.719***
Step 2 [$F(4,135) = 42.75$, $p < .001$] $R^2 = .546$ $\Delta R^2 = -.002$			
Age	.023	.066	.021
Gender	.231	.187	.073
Depression	.223	.019	.726***
Problem-focused coping	.064	.094	.042
Step 3 [$F(6,133) = 29.33$, $p < .001$] $R^2 = .550$ $\Delta R^2 = .004$			
Age	.020	.066	.018
Gender	.257	.187	.081
Depression	.200	.022	.653***
Problem-focused coping	−.012	.124	−.008
Emotion-focused coping	.063	.139	.040
Avoidant coping	.168	.114	.108

Note:

* *p*-value < .05;

** *p*-value < .01;

*** *p*-value < .001

Table 3

Correlations of coping behaviors and scores of depression, suicide ideation

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. RADS-2:SF	---														
2. SIQ-JR	.68***	---													
3. Distraction	.10	.09	---												
4. Active	−.18*	−.097	.29**	---											
5. Denial	.37***	.39***	.16	−.037	---										
6. Substances	.23**	.24**	.167	.076	.099	---									
7. EmoSupport	.29**	.34***	.29**	.27**	.16	.08	---								
8. InstSupport	.06	.02	.23**	.31***	.06	.09	.59***	---							
9. Disengage	.70***	.57***	.09	−.22**	.39***	.17*	.31***	.11	---						
10. Reframing	−.09	−.07	.37***	.54***	.11	.01	.26**	.40***	−.11	---					
11. Planning	−.09	−.13	.42***	.64***	−.05	−.03	.34***	.47***	−.09	.60***	---				
12. Humor	.16	.03	.44***	.23**	.18*	.23**	.23**	.17	.06	.33***	.20*	---			
13. Acceptance	.02	−.02	.42***	.55***	−.02	.10	.22*	.26**	−.07	.43***	.51***	.38***	---		
14. Religion	.05	−.04	.24**	.19*	.11	−.09	.13	.21*	.06	.26**	.30***	.11	.24**	---	
15. Self-blame	.59***	.45***	.27**	.13	.28**	.21*	.35***	.11	.55***	.06	.13	.26**	.14	.01	---
16. Female RADS-2:SF	---	.67**	.04	−.23*	.38**	.22*	.30**	−.04	.77**	−.12	−.12	.15	−.01	.01	.64**
17. Female SIQ-JR	---	---	.04	−.17	.41**	.22	.26*	−.10	.60**	−.15	−.25*	−.02	−.14	−.12	.44**
18. Male RADS-2:SF	---	.66**	.22	−.13	.34*	.29*	.14	.12	.48**	−.11	−.10	.23	.04	.07	.42**
19. Male SIQ-JR	---	---	.29*	.05	.36**	.41**	.37**	.22	.44**	.04	.06	.22	.24	.10	.44**

Note: RADS-2:SF = Reynolds Adolescent Depression Scale 2: Short Form; SIQ-JR = Suicidal Ideation Questionnaire Junior; Distraction= Self-distraction; EmoSupport= Emotional support; InstSupport= Instrumental support; Disengage= Behavioral disengagement; Reframing= Positive reframing;

* *p*-value < .05;

** *p*-value < .01;

*** *p*-value <.001

Table 4

Hierarchical regressions for specific coping behaviors predicting depression, suicide ideation

Variable	*β*	SE *β*	B
Regression 1: Predicting Depression			
Step 1 [$F(2,130) = 4.83$, $p = .010$] $R^2 = .055$			
Age	.577	.291	.169*
Gender	1.790	.831	.183*
Step 2 [$F(6,126) = 28.15$, $p < .001$] $R^2 = .552$ $\Delta R^2 = .497$			
Age	.135	.210	.039
Gender	.552	.614	.054
Behavioral Disengagement	2.700	.358	.529***
Self-Blame	1.420	.258	.291***
Emotional Support	−.908	.509	−.189
Emotional Support by Gender	1.655	.618	.260**
Regression 2: Predicting Suicide Ideation			
Step 1 [$F(3,132) = 44.98$, $p < .001$] $R^2 = .494$			
Age	.048	.063	.048
Gender	.215	.184	.073
Depression	.204	.019	.680***
Step 2 [$F(5,130) = 32.23$, $p < .001$] $R^2 = .536$ $\Delta R^2 = .042$			
Age	−.004	.062	−.004
Gender	.104	.184	.036
Depression	.181	.019	.606***
Substance Use	.226	.088	.157*
Emotional Support	.255	.094	.177**

Note:

* *p*-value < .05;

** *p*-value < .01;

*** *p*-value < .001