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Approach and Avoidant Coping: Implications for Adolescent Mental Health

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We conducted a short-term longitudinal study examining the structure of coping behavior and the relationship between coping style and depression during adolescence. The sample consisted of 603 adolescents in Grades 6–11 who were surveyed in the fall of 1989 and again in the fall of 1990. A two-dimensional model of coping was found using confirmatory factor analysis with the factors being approach and avoidant coping. Four cross-sectional and seven longitudinal coping groups were formed to explore group differences in depression. Approach copers reported the fewest symptoms of depression, while avoidant copers reported the most. Subjects who changed over time from approach to avoidant coping evidenced a significant increase in depressive symptoms, whereas subjects who switched from avoidant to approach coping displayed a significant decrease in depression over a one-year period. These findings imply that adolescents who are able to elicit social support, engage in

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problem solving, and cognitively restructure events within a positive light are more likely to successfully negotiate the challenges of adolescence.

INTRODUCTION

Adolescence has been identified as a particularly challenging period of the lifespan (Petersen and Spiga, 1982). For adolescents dealing with multiple changes in all domains of their lives, effective coping is especially important (Petersen and Ebata, 1987). Coping, defined as "cognitive and behavioral efforts to manage external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (Lazarus and Folkman, 1984, p. 141), is conceptualized as an important mediator between negative life events and psychological well-being. As such, coping may be an important determinant of successful adaptation among adolescents.

Unfortunately, we know little about the structure of adolescent's coping behavior, because there has been little consistency in assessing children's and adolescent's coping across various studies. This research has been hindered by a lack of agreement on the conceptualization of coping. Furthermore, most studies have assessed conceptually driven dimensions of coping and have failed to test the empirical fit between the conceptual dimensions and the data. The studies that have used a factor analytic approach (e.g., Glyshaw *et al.*, 1989; Wills, 1986) have generally been exploratory in identifying the possible structure underlying a diverse set of coping items. However, these dimensions are often not theoretically driven and thus make the clear interpretation of their meaning difficult.

Although various categorization systems have been employed, two broad dimensions are repeatedly identified by various coping measures: approach and withdrawal strategies. Despite the variability in their names, these strategies are conceptualized as two distinct modes of dealing with stress. Approach strategies have also been referred to as: information seeking and direct efforts to maintain control (Curry and Russ, 1985), problem-focused coping (Compas *et al.*, 1988), logical analysis and problem solving (Ebata and Moos, 1991), and problem solving (Gamble, 1989; Glyshaw *et al.*, 1988). Avoidant or withdrawal coping has also been labeled as distancing (Causey and Dubow, 1991), emotion-focused coping (Compas *et al.*, 1988), diversionary thinking and defensive reappraisal (Curry and Russ, 1985), and distraction-avoidance (Gamble, 1989). (For a summary of coping classification systems, see Ayers, 1991.) These two orientations represent both cognitive and emotional activity oriented either toward or away from threats. Utilizing this framework with an adult sample, Roth and Cohen (1985) found that individuals showed an inclination toward one orientation and indicated a high degree of consistency

in their coping style over time when dealing with a major life event. Given that many studies are grounded in this basic framework and that these two dimensions appear to have relevance for mental health (Ebata and Moos, 1991; Peterson, 1989), it appears important to test adolescent's coping in terms of these two opposing orientations.

The few available factor analytic studies using an adolescent sample have found multiple dimensions underlying adolescent's coping. For example, Glyshaw *et al.* (1989) found five dimensions (i.e., problem solving, cognitive coping, social entertainment, physical exercise, and peer support) similar to the results of Wills (1986). Seiffge-Krenke and Shulman's (1987) research on coping structure with samples of Israeli and German youth suggest the existence of three forms of coping behavior: active coping (i.e., mobilizing social resources to solve problems), internal coping (i.e., appraisal of the situation and search for a compromise), and withdrawal (i.e., reflecting a fatalistic approach and inability to solve problems). Intercorrelations of the three factors suggest cross-cultural differences in the meaning of the different styles. That is, for German youth, internal coping was related to both active coping and withdrawal; however, for the Israeli youth, internal and active coping appeared highly related and inversely correlated with withdrawal. Thus, a clear differentiation between approach and information-seeking behaviors and avoidant coping emerged for the Israeli youth. However, these studies are limited in that they did not employ a confirmatory approach in an attempt to test the empirical adequacy of a theoretically driven model of adolescent coping. Thus, one goal of the present study is to assess the factor structure of the coping measure used by Seiffge-Krenke and Shulman (1987) on a sample of youth from the United States and to determine the dimensions of adolescents' coping using a confirmatory factor analytic approach.

Coping and Adjustment

Research has not consistently supported the etiological role of stress in predicting concurrent and future adaptation (Dubow *et al.*, 1991; Swearington and Cohen, 1985). Although stress has been linked with adjustment problems during adolescence (Compas, 1987; Colten *et al.*, 1991; Dornbusch *et al.*, 1991; Dubois *et al.*, 1992) the relationship has been modest. One reason for the low magnitude of the correlations is that they do not reflect the effects of coping. Effective coping may decrease the effects of stress, while ineffective coping may exacerbate the effects of stress on adjustment. Our model investigating adolescent mental health proposes that coping responses as well as peer and parent relationships buffer or perhaps enhance the ef-

fects of multiple challenges occurring during the early adolescent transition (Petersen *et al.*, 1991). Our model is grounded in theories of depression (Beck, 1976; Teasdale and Dent, 1987) suggesting that depression may result when an individual responds to normal feelings of sadness in a manner that intensifies rather than diminishes the feeling. For example, Nolen-Hoeksema (1987) has hypothesized that gender differences in depression result from female's reliance on a maladaptive style of coping with daily hassles and feeling "blue." That is, while males attempt to distract themselves, females ruminate on their depressed feelings and thereby amplify them.

Holahan and Moos (1987) posit avoidant coping as a risk factor in their study of risk, resistance, and distress. They assert that avoidant coping may be effective at the onset of a stressor because it allows for an individual to gather resources; however, the continued reliance on avoidant coping prevents one from directly confronting and attempting to solve problems. This research, however, was conducted on adult samples. Ebata and Moos (1991) explored the relation between coping and distress in four groups of adolescents: healthy controls, rheumatic disease, conduct disorder, and depressed. They found that depressed and conduct disorder youth relied on more avoidant coping and that depressed adolescents used significantly less approach-oriented coping than all of the other groups. When examining the links between coping and well-being, they found that in general, approach-oriented coping (i.e., attempts to act on or modify stressors through cognitive or overt behavioral means) was linked with more positive adjustment, while avoidant coping (i.e., attempts to escape from or avoid stressors or to deny their existence) was generally associated with poorer adaptation (Ebata and Moos, 1991). Sandler *et al.* (1993) investigated coping structure and the relationship between coping and psychological adjustment in a sample of 7–13-year-olds. While they found that a four-dimensional model best fit the data (i.e., active coping, avoidant coping, distraction, and support seeking), their research did support a positive association between avoidant coping and depression and anxiety. In addition, Compas *et al.* (1988) found similar associations between problem-focused coping and positive mental health and emotion-focused coping and poor psychological adjustment, as did Petersen *et al.* (1993).

While there have been several studies of the relations between coping and depression in adolescents, the current study advances our understanding in several ways: (1) The present study employs a confirmatory factor analytic approach in assessing the structure of adolescent coping. (2) The present study is a longitudinal investigation of the relation between coping and depression over a one-year period; this allows us to look at the relationship between changes in coping style and changes in adjustment status. (3) While most studies have examined the independent effects of different coping styles

on depression, our study looks at the association between depression and different combinations of approach and avoidant coping. This is important because adolescents engage in a variety of coping behaviors in order to adapt to stress. It is plausible that the effects of a coping strategy such as avoidance may be influenced by the level of a different coping behavior. For example, avoidant coping in the absence of approach coping may be maladaptive because it prevents adolescents from cognitively and behaviorally dealing with the stress. However, avoidant coping in combination with active coping may be adaptive when it provides temporary relief and allows for individuals to gather resources (Lazarus and Folkman, 1984).

METHOD

Subjects

This sample is part of a larger investigation of gender-related mental health outcomes occurring during the early adolescent transition (Petersen, 1991). Subjects in Grades 6–12 were sampled from an entire public school district within a middle-class university town in central Pennsylvania. In addition, 6th graders from a nearby working-class community who were part of a larger longitudinal study of adolescent mental health were included in the sample (Petersen, 1991). A multivariate analysis of variance (MANOVA) comparing the 6th graders in the two communities revealed that they did not differ in terms of their coping and depression measures; thus, the communities were pooled in all of the analyses. Analyses were conducted on the longitudinal sample (i.e., all students who had data for both Time 1 and Time 2) and this sample consists of 603 students: 310 girls and 293 boys. This sample includes 308 sixth graders, 63 seventh graders, 63 eighth graders, 52 ninth graders, 70 tenth graders, and 47 eleventh graders at Time 1. A bias check for the longitudinal sample revealed that those adolescents who dropped out of the study at Time 2 were signifanctly more depressed ($F = 1.42$, $df_1 = 179$, $df_2 = 598$, $p < .05$) and more stressed ($F = 1.32$, $df_1 = 181$, $df_2 = 598$, $p < .05$) than those adolescents who stayed in the study for at least one year. While interpreting the following results, one must bear in mind that the sample under investigation is slightly biased in the direction of more positive mental health.

Analyses were conducted across grades, and no differences were found in parental marital status, parental education, or father's employment status. Sixty-five percent of the students' parents were married and living together, in addition: 5% were separated, 9% divorced, 14% divorced and remarried, and 2% widowed. The sample was predominantly Caucasian

(84%), 5% were African American, 3% Asian, and 1% Hispanic. The majority of parents had at least some college education (61% of mothers and 62% of fathers); in fact, 17% of mothers and 32% of fathers had a graduate or professional degree, probably reflecting the university environment. Fifty-three percent of the mothers worked full time outside of the home, as did 77% of the fathers.

Procedure

Data were collected during the fall of the school year in 1989 and again in the fall of 1990. Informed consent was obtained by students and their parents. Surveys were administered at the schools during a 50-minute classroom period. All students were surveyed during a free period or study hall.

Measures

Coping

Coping was assessed using a modified version of a questionnaire developed by Seiffge-Krenke and Shulman (1987). Two original items that appeared redundant were dropped from the survey (e.g., "I do not worry because usually everything turns out all right" and "I tell myself that there will always be problems"); one item representing internal coping was added (i.e., "I try to see things from another point of view"); and two similar items describing talking about problems when they appeared were merged to form a single item (i.e., "I talk about problems when they appear and do not worry about them later"). Students were asked how often they used each of the 18 coping strategies when they have a problem. Each item was rated on a 5-point Likert-type scale from (0) *not used* to (4) *always used.*

Adjustment

Adjustment was measured using a shortened version of Kovacs' (1983) Childhood Depression Inventory (CDI), based on the short version of the Beck Depression Inventory (BDI), which consists of the 13 items that correlate highest with the total BDI scale (Kovacs and Beck, 1977). Adolescents were asked to choose one sentence from a group of three that best described their feelings within the last two weeks. Responses were summed across the 12 items (1 item on suicide was deleted) so that higher scores

indicate a higher incidence of depressive symptoms. Alpha reliability for this sample was .85 for Time 1 and .85 for Time 2.

RESULTS

The results section begins with an exploration of the coping dimensions and then examines the association between coping styles and depressive symptoms. In order to investigate the dimensions of the coping measure, a factor analytic approach was employed. Seiffge-Krenke and Shulman (1987) found a three-factor solution (i.e., active coping, internal coping, and withdrawal) in their sample of German and Israeli adolescents. The goal of this analysis was to test whether the same factor structure would emerge in the U.S. sample. The same factor structure means that the same variables load on the same factors. (There is no statement regarding the actual size of the loadings involved.) With the help of LISREL VI (Jöreskog and Sörbom, 1986), a confirmatory factor analysis was applied in which the factor loadings of the German sample were entered as starting values in the lambda matrix. For these analyses the lambda matrix which contains the factor loadings was fixed whereas the phi matrix containing the factor intercorrelations was subject to free estimation. The resulting goodness-of-fit index of chi-square = 560, df = 132, p = .000, indicated that the variance-covariance matrix estimation based on the above mentioned restrictions differed significantly from the observed sample variance–covariance matrix, suggesting that a three-factor solution is not appropriate to describe the factor structure of the coping measure used in the U.S. sample. An examination of the three factor solution based on an oblique rotation showed why the North American factor solution was different from the German and Israeli findings. On the largest factor, items that represented internal forms of coping loaded together with items representing active ways of coping (e.g., "I think about the problem and try to find different solutions," loading = .61; "I discuss the problem with my parents/other adults," loading = .61). The second largest factor revealed a clearer pattern. Here, items with high loadings represented a more avoidant style of coping (e.g., "I try not to think about the problem," loading = .58). However, only 2 items loaded highly on the third factor, and they represented active ways of coping via social support ("I try to get help and comfort from people who are in a similar situation," loading = .51; "I try to solve problems with the help of friends," loading = .75).

Based on the above findings, a three-factor solution was rejected. The results of a k = 2 factor analysis with oblique rotation satisfied statistical and theoretical considerations. The two factors accounted for 34% of the

total variance. The factor with the highest eigenvalue was termed *Approach-Oriented Coping* and it explained 24% of the variance. On this factor, items loaded highly that represent both internal and active ways of coping. The second factor was termed *Avoidant Coping*. This factor explained 10% of the variance. Items describing more passive-avoidant behaviors loaded highly on this factor. The factor representing approach-oriented coping consists of 11 items, and the factor representing avoidant coping consists of 6 items. Cronbach's alpha for the two factors were .76 and .54, respectively. The item loadings on each factor are presented in Table I.

The correlation between the two factors was $r = .36$ ($p < .05$). Ratings were summed separately for each scale, and higher scores represented a greater endorsement of the coping style.

Gender and Grade Differences in Coping Style

We conducted a 2 × 2 MANOVA, treating gender and grade as independent variables and coping style as the dependent variable. The multivariate test was significant ($F[11,537] = 2.62$, $p < .01$). These analyses revealed that the overall test for gender was significant for approach-oriented coping ($F[1,537] = 7.41$, $p < .01$) but not for avoidant coping. Females in all grades used higher levels of approach-oriented coping than did males. The MANOVA revealed a significant main effect for grade in approach-oriented coping only ($F[1,537] = 3.48$, $p < .01$); however, no clear pattern regarding grade differences in coping was revealed. No interaction was found for gender and grade. (See Tables II and III).

Group Differences in Depression

Based on a median split on each coping variable, subjects were grouped into four coping groups: Approachers (i.e., high on approach and low on avoidant coping; $N = 137$); Avoiders (i.e., low on approach and high on avoidant coping; $N = 95$); High Generic Copers (i.e., high on both styles of coping; $N = 125$); and Low Generic Copers (i.e., low on both styles; $N = 214$). We conducted a 2 × 4 analysis of variance (ANOVA) with gender and coping group as the independent variables and depression at Time 1 as the dependent variable. Means and standard deviations for boys and girls reports of depression by coping groups are presented in Table IV.

Analyses revealed that the multivariate test was significant ($F[1,571] = 10.69$, $p < .001$). The univariate test for gender was significant ($F[1, 571] = 6.56$, $p < .01$) with girls reporting higher levels of depressive symp-

Table I. Item Loadings on Two Coping Factors[a]

	Coping strategies	Factor 1	Factor 2	Communalities
A.	I discuss the problem with my parents/other adults.	.55		.30
B.	I talk about problems when they appear and do not worry about them later.	.46		.21
C.	I try to get help from professionals (youth welfare offices, school counselors, etc.).			
D.	I accept my limits in the situation.	.44		.20
E.	I try to talk about problems with the concerned person.	.55		.34
F.	I try to let out my feelings (with loud music, riding my motorbike, wild dancing, etc.).		.47	.23
G.	I remind myself how much worse thing could be.	.42		.23
H.	I think about the problem and try to find different solutions.	.67		.45
I.	I compromise by accepting the next best thing to what I want.	.51		.29
J.	I let out my feelings by shouting, crying, banging doors, etc.		.47	
K.	I try to see things from another point of view.	.57		.33
L.	I look for information in magazines, encyclopedias, or books.			
M.	I try not to think about the problem.		.35	.15
N.	I try to forget my problems with alcohol and drugs.			
O.	I try to get help and comfort from people who are in a similar situation.	.46		
P.	I try to solve problems with the help of my friends.	.39		.26
Q.	I withdraw because I cannot change anything anyway.		.39	.16

[a]Loadings ≥ .35.

Table II. Means and Standard Deviations for Coping Style by Gender

	Coping styles		
	Boys *M* (*SD*)	Girls *M* (*SD*)	*F* Value
Approach coping (range 0–44)	20.53 (7.48)	21.82 (7.42)	7.41[a]
Avoidant coping (range 0–24)	5.95 (3.55)	6.28 (4.04)	.05

[a]$p < .01$.

toms than boys, as would be expected based on previous research (Petersen, *et al.*, 1993). A significant main effect for coping group was also revealed for the CDI ($F[3, 571] = 22.75$, $p < .001$). No Sex × Coping group interaction emerged. Overall, Avoiders reported significantly higher levels of depressive symptoms than all other groups, while Approachers reported significantly fewer symptoms of depression than all other groups. In addition, the High Generic Copers reported significantly fewer depressive symptoms than the Low Generic Copers. The pattern of results was similar for both times of data.

Longitudinal coping groups were formed based on the subjects' reported coping response over a one-year period. Seven coping groups were formed, four of which were based on the consistent use of the same style over time: (1) Approachers—subjects who scored high on approach-oriented coping and low on avoidant coping at both time one and time two ($N = 57$); (2) Avoiders—subjects who scored high on avoidant coping and low on approach-oriented coping at both data points ($N = 30$); (3) High Generic Copers—these subjects scored highly on both approach and avoidant coping over the one year period ($N = 61$); and (4) Low Generic Copers—subjects who scored at or below the median on both styles of coping at two intervals of time ($N = 118$). Since Approachers and Avoiders were significantly different from all other groups at Time 1, subjects who changed into Approachers at Time 2 were labeled "Change—positive" ($N = 53$) and subjects who became Avoiders were termed "Change—negative" ($N = 71$). All other adolescents were classified as flexible copers ($N = 181$), since their coping behavior did not reveal a rigid adherence to a single mode of coping nor did they display change toward a group of clinical significance. (These categories are exhaustive; thus, all subjects were included in one of the seven groups.) A 2 × 7 repeated measures ANOVA with gender and coping group as the independent variables and depression

Table III. Means and Standard Deviations for Coping Style by Grade

	Coping style											
	6th Grade		7th Gade		8th Grade		9th Grade		10th Grade		11th Grade	
	M	(*SD*)	*M*	(*SD*)	*M*	(*SD*)	*M*	(*SD*)	*M*	(*SD*)	*M*	(*SD*)	*F* Value
Approach coping (range 0–44)	22.25	(8.03)	20.08	(6.53)	19.80	(6.49)	20.39	(6.43)	19.28	(6.82)	21.36	(7.14)	3.48[a]
Avoidant coping (range 0–24)	6.24	(4.11)	6.27	(4.17)	6.02	(3.11)	5.98	(3.81)	5.86	(3.32)	5.79	(2.69)	11

[a] $p < .01$.

Table IV. Time 1 and Time 2 Means (and Standard Deviations) for the CDI by Coping Group

	Time 1		Time 2	
Coping groups	Boys	Girls	Boys	Girls
Approachers (N = 137)	1.74 (2.56)	1.83 (2.22)	1.86 (2.77)	2.39 (2.69)
Avoiders (N = 95)	5.00 (3.79)	6.34 (5.35)	4.41 (4.83)	5.11 (4.66)
High Generic Copers (N = 125)	2.49 (2.99)	3.54 (3.89)	2.22 (3.01)	3.70 (4.17)
Low Generic Copers (N = 214)	2.96 (3.06)	3.66 (4.08)	2.77 (3.07)	3.88 (4.21)

Table V. Time 1 and Time 2 Means (and Standard Deviations) for the CDI by Longitudinal Coping Group

	Time 1		Time 2	
Coping groups	Boys	Girls	Boys	Girls
Approachers (N = 57)	1.78 (2.94)	1.18 (1.67)	1.83 (2.48)	1.82 (2.32)
Avoiders (N = 30)	6.13 (3.52)	6.53 (4.21)	6.07 (5.90)	4.13 (4.37)
High Generic Copers (N = 61)	2.90 (3.21)	3.38 (4.29)	2.43 (3.28)	4.18 (5.02)
Low Generic Copers (N = 118)	2.82 (2.99)	2.80 (3.11)	2.21 (2.66)	3.02 (3.09)
Change-Negative (N = 71)	3.16 (2.53)	4.40 (4.44)	3.97 (3.92)	5.83 (4.63)
Change-Positive (N = 53)	2.86 (3.30)	3.33 (3.44)	2.00 (2.25)	2.46 (2.98)
Flexible (N = 181)	2.94 (3.50)	4.09 (4.69)	2.74 (2.52)	3.05 (3.51)

as the dependent variable was employed to test for group differences over time. Means and standard deviations are provided in Table V.

Between subject analyses revealed significant main effects for gender and coping group ($F[1, 571] = 8.37, p < .01$; $F[6, 571] = 11.18, p < .001$, respectively). Females reported significantly more symptoms of depression and Avoiders were significantly more depressed than all other groups except the Change—Negative group. Approachers reported fewer symptoms on the CDI than did Avoiders, Flexible Copers, and adolescents in the Change—Negative group. A Time × Coping Group interaction emerged, indicating that coping groups changed differently over time ($F[6, 571] = 3.25, p < .01$). That is, for adolescents who changed from an approach to an avoidant style of coping, their level of depression increased significantly. Furthermore, adolescents who switched from Avoidant to Approach copers reported significant decreases in depression. Subjects in the flexible coping group experienced a decline in depressive symptoms, as well.

DISCUSSION

The discussion will focus on the findings from the factor analysis regarding the existence of distinct modes of coping, as well as the implications of these coping styles for depression. Our findings utilizing a factor analytic approach in exploring coping style differed from the results based on German and Israeli youth in that a three-factor solution was rejected. It appears that for U.S. youth, active and internal forms of coping are indistinguishable, yet they differ from the more avoidant forms of coping. This is similar to the findings of Seiffge-Krenke and Shulman (1987) and Sandler *et al.* (1993). Furthermore, this finding is consistent with the two basic orientations of coping delineated by Roth and Cohen (1986). The approach vs. avoidant framework appears relatively robust across North American samples; however, more cross-cultural research is needed.

Gender and grade differences were found for approach-oriented coping only. Analyses revealed that girls used more approach-oriented coping than did boys in all grades. This supports prior findings suggesting that girls use more active coping and elicit greater social support (Bowker and Hymel, 1991; Seiffge-Krenke and Shulman, 1987). Our findings reveal no clear pattern when examining grade differences in coping style. Prior findings in regard to age differences in coping have been inconsistent. For instance, Seiffge-Krenke and Shulman (1987) found that among German youth, older adolescents had higher rates of cognitive coping, but among Israeli youth, older adolescents had lower scores on all coping styles.

We found that most adolescents could not be characterized as consistent Approachers or Avoiders; in fact most adolescents displayed a more flexible and dynamic approach to coping with stress. However, consistent

with findings from Ebata and Moos (1991), we were able to show that, in general, adolescents who primarily employed an approach-oriented style of coping reported fewer symptoms of depression, while adolescents who continually avoided or denied problems rated themselves as more depressed. Furthermore, subjects who changed their coping style from approach to avoidant or vice versa, experienced significant changes in depression in the expected direction. Thus, these findings suggest that change in coping may be linked with change in depressive symptoms. The present study was also able to look at the effects of different combinations of approach and avoidant coping. Our results suggest that a high use of active coping is important for positive adaptation. It appears that it is not just the lack of avoidant coping that is beneficial but the presence of active cognitive and behavioral efforts. Specifically, adolescents in the high generic coping groups fared better than their counterparts who reported a low frequency of both active and withdrawal strategies. Thus, it appears likely that a high use of avoidance coping may be effective as long as active cognitive or behavioral efforts are initiated as well. A reliance on withdrawal to the exclusion of active efforts appears to have deleterious effects on mental health. These findings lend some support to the contention that avoidance or withdrawal may be beneficial at certain points in the coping process by providing temporary relief from overwhelming emotions or by allowing additional time for individuals to garner coping resources (Ebata and Moos, 1992; Holahan and Moos, 1987; Lazarus and Folkman, 1984).

There are several limitations to this study. This study relied exclusively on adolescent's self-reports of depression and coping behavior. Future studies should incorporate multiple reporters of these constructs. Furthermore, we used a style measure of adolescent coping in contrast to an event-specific measure. Adolescents were asked to report on the behaviors they *usually* use when dealing with stressful events. Thus, these self-reports do not reflect adolescents' coping efforts with actual problems. Another limitation is the way in which the coping groups were formed. We decided to divide subjects at the median in order to include all subjects in the analyses and to examine how different combinations of high/low reports of approach and withdrawal coping related to depression. The advantage of median splits is that well-defined equal-sized groups emerge that can be entered as independent variables in an analysis of variance testing for interactions between copings groups and, for instance, other individual characteristics such a gender or age. The disadvantage of a median split is that subjects with scores close to the median (a little bit above or below the median) are very similar, although they might end up in different groups. Further analyses applying a different grouping (e.g., splits according to the 33rd percen-

tile) or statistical analyses with continous independent variables (e.g., multiple regression) might help validate the obtained findings.

Future research should examine more comprehensively the coping process in order to understand the ways in which approach and avoidant coping may combine to optimize mental health. Longitudinal research that follows subjects as they cope with stress may be particularly advantageous in delineating coping sequences and how they change over time. In addition, research efforts should explore more fully issues concerning individual and contextual characteristics associated with adolescents' coping style. That is, what person or contextual factors influence adolescents' choices of coping strategies and whether these individual differences in adolescents' coping behavior change over time.

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