

PREVENTING DEPRESSION IN ADOLESCENTS:
A PROSPECTIVE TRIAL OF TWO UNIVERSAL
PREVENTION PROGRAMS

By

Jason L. Horowitz

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Approved:

Professor Judy Garber

Professor Steven D. Hollon

Professor David Cole

Professor Bruce Compas

Professor Bahr Weiss

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CHAPTER I

INTRODUCTION

Depression is a common disorder with increasing rates from childhood to adolescence. Whereas pre-pubertal children show prevalence rates of about 1 to 2% (Cohen et al., 1993; Costello et al, 1996), the point prevalence of adolescent depression is estimated to be between 3 and 8% (Fleming & Offord, 1990; Kovacs, 1996; Lewinsohn, Clarke, Seeley, & Rohde, 1994; Lewinsohn, Hops, Roberts, Seeley, & Andrews, 1993). Adolescent depression has a chronic, episodic course marked by frequent recurrence and considerable impairment that accounts for a substantial proportion of the health care costs incurred by this age group (Birmaher et al., 1996; Birmaher, Ryan, Williamson, Brent, & Kaufman, 1996). Moreover, depression in adolescence is associated with such negative outcomes as substance abuse, academic problems, cigarette smoking, high-risk sexual behavior, physical health problems, impaired social relationships, and a 30-fold increased risk of completed suicide (Birmaher et al., 1996a; Brent et al., 1988; 1993; Harrington, Fudge, Rutter, Pickles, & Hill, 1990; Le, Munoz, Ippen, & Stoddard, 2003; Rohde, Lewinsohn, & Seeley, 1994; Stolberg, Clark, & Bongar, 2002).

In addition, an episode of depression in childhood or adolescence increases the risk of subsequent depressive episodes (Harrington, et al., 1990; Lewinsohn, Rohde, Klein, & Seeley, 1999). Children with mood disorders have recurrent episodes during adolescence (Emslie et al., 1997) and adulthood (Garber, Kriss, Koch, & Lindholm, 1988; Harrington et al., 1990; Weissman et al., 1999); adolescents have recurrences later

in adolescence (Lewinsohn et al., 1994; McCauley et al., 1993) and in adulthood (Lewinsohn et al., 1999b; Rao, Hammen, & Daley, 1999; Weissman et al., 1999). Recurrence rates have ranged from 45% to 72% over 3 to 7 years (Emslie et al., 1997; Harrington et al., 1990; Lewinsohn et al., 1999; McCauley et al., 1993).

Depressive disorders are associated with serious dysfunction, and depressive symptoms, even at the sub-threshold level also are a substantial concern in children and adolescents. Gillham, Shatté, and Freres (2000) summarized a growing literature on the effects of sub-clinical depressive symptoms in children and adolescents, including increased risk of drug and alcohol use, academic failure, dropout, and teen pregnancy. Moreover, moderate levels of depression have been found to persist for years in some children (Twenge & Nolen-Hoeskema, 2002), and sub-clinical levels of depressive symptoms constitute one of the most significant risk factors for the subsequent onset of depressive disorders (Clarke et al., 1995; Pine, Cohen, Cohen, & Brook, 1999). Thus, prevention of depressive symptoms, even at a sub-clinical level, is an important and worthwhile goal.

Because of the high costs associated with depressive symptoms and disorders in children and adolescents, the last ten years has seen a growing emphasis on depression prevention. This shift has been catalyzed by a mandate from the Institute of Medicine (IOM; Mrazek & Haggerty, 1994), and it also comes as a natural downward extension of treatment research (Gladstone & Beardslee, 2000). The IOM report (Mrazek & Haggerty, 1994) classified prevention programs into three distinct categories based on the population groups to whom the interventions are directed. A universal preventive intervention is administered to all members of a target population. Selective prevention

programs are given to members of a subgroup of a population whose risk is deemed to be above average. Finally, indicated preventive interventions are given to individuals who manifest sub-clinical signs or symptoms of a given disorder.

There are advantages associated with each of these prevention approaches. Results from a recent meta-analysis showed that selective and indicated (i.e., targeted) prevention programs have reported significantly larger effect sizes than universal prevention programs (Horowitz & Garber, 2005). Programs for targeted samples have the advantage of reaching those youth most in need. In addition, when delivered in a group format, children selected for certain risk factors (e.g., parental depression) are likely to find peers with whom they can relate and draw support. Such commonalities among group members may help further the group process. Moreover, the program can be tailored to the particular risk factors shared by group members.

Universal programs also have several different kinds of advantages. First, they are designed to reach large numbers of children or adolescents without having to undergo a time consuming screening process. Particularly important is that universal programs avoid the potential stigma of identifying children as being at risk for developing depression. For this reason, school administrators often prefer programs that can be delivered to all children as part of a class curriculum. In addition, universal interventions can reach the “false negatives,” that is, children who may be at risk but who are not identified through screening. Universal interventions also may alter the context in which children live and function, thereby reducing the environmental risk for high-risk children (Coie, et al., 1993). Furthermore, universal interventions have been associated with

lower drop-out and greater participation rates than selective and indicated interventions (Shochet et al., 2001).

There are also analytical advantages to using universal samples. These samples often contain within them children who are at increased risk, and separate analyses can be done examining the effects of the intervention for this important subgroup of participants. For example, Spence, Sheffield, and Donovan (2003) used this method to draw conclusions about their intervention with regard to both the sample at large and adolescents specifically identified as being at high risk for depression. Therefore, the present study used a universal format to compare two different active prevention programs to a no intervention, assessment only control condition.

Most of the effective depression prevention programs implemented to date have used cognitive-behavioral techniques (e.g. Clarke et al., 2001, Gillham, Reivich, Jaycox, & Seligman, 1995, Reivich, 1996). These programs have taught children cognitive restructuring strategies, such as identifying and challenging automatic negative thoughts, and social problem-solving skills, such as perspective taking, goal-setting, and decision-making. Some programs (e.g. Ialongo et al., 1999) also have used behavioral and educational interventions.

There also is some evidence that an interpersonal approach to depression prevention may be effective, particularly for girls. Forsyth (2000) found a large effect for an interpersonally oriented program in a sample of mostly female college students. Recently, Young et al. (2005) conducted a pilot study of an interpersonal depression prevention program and found a positive effect for girls in middle school.

In contrast to interpersonal approaches, which appear particularly effective for girls, cognitive-behavioral interventions may be more suitable for boys. Clarke, Hawkins, Murphy, & Sheeber (1993) found that their behaviorally based program resulted in short-term improvement in symptoms for boys, but not for girls. They suggested that such a mechanistic approach to preventing depression may have been in line with the natural coping tendencies of boys more than with that of girls. In addition, two school-based universal interventions (Ialongo et al., 1999; Kellam, Rebok, Mayer, Ialongo, & Kalodner, 1994) designed to prevent depression by improving school achievement and mastery learning have been found to be more effective for boys than for girls

Reivich (1996) and Shatté (1996) found that the Penn Optimism Program (POP) was effective for boys but not girls, whereas the Penn Enhancement Program (PEP) was more effective for girls than boys. POP is a cognitive-behavioral, skills training program that involves a logical approach to dealing with emotions and a problem-solving focus that may suit boys better than girls. In contrast, although not based in interpersonal theory, PEP is by nature a more interpersonal and social program. Sessions center on discussions in which participants are encouraged to share feelings and experiences. This approach may better suit girls, who are particularly likely to value a sense of interpersonal connection and social support (Barbee, Cunningham, Winstead, & Derlega, 1993; Cyranowski, Frank, Young, & Shear, 2000; Elliott, 1982).

Other studies, however, have not found this gender effect. The Penn State Adolescent Study (Petersen, Leffert, Graham, Alwin, & Ding 1997), which used primarily a cognitive-behavioral approach, reported improvement among girls and

increased symptoms among boys post-treatment. Both these effects, however, were no longer present at the six-month follow-up. Similarly, Seligman, Schulman, DeRubeis, & Hollon (1999) found that college women benefited more from a cognitive-behavioral program than did men. They cautioned, however, that the difference could have been due to a floor effect for the males. That is, in their control group, women had significantly higher rates of depression than men, making a preventive effect in men more difficult to detect.

In addition to gender, personality may contribute to differential responses to cognitive-behavioral versus interpersonal interventions. The personality orientation of sociotropy, defined as the degree to which an individual's sense of self is dependent on his or her interpersonal relationships, might be particularly relevant to interpersonal approaches. According to the specific vulnerability hypothesis (Beck, 1982), individuals vary in the extent to which they are affiliative or achievement oriented. Moreover, there is some evidence that matching treatment techniques with individual differences leads to better outcomes (Beutler, Engle, Mohr, & Daldrup, 1991; Shea, Elkin, & Sotsky, 1999). Thus, it is possible that highly affiliative or sociotropic individuals, regardless of gender, will benefit more from interpersonal approaches to prevention. In addition, highly achievement oriented individuals may respond better to the more structured and problem-focused cognitive-behavioral approach.

Analysis of mechanisms of change in prevention studies also is important for several reasons. First, mediation analysis serves as a manipulation check for the intended effects of the prevention programs. That is, it allows researchers to examine whether the intervention actually affected the processes it was designed to change. Second, such

analyses can help identify aspects of programs that may need to be strengthened. If a proposed mediating factor is found not to be affected by a program, that element of the program could be revised or augmented. Third, effects on hypothesized mediators without significant effects on outcome variables may indicate either that outcome effects will emerge later or that the hypothesized mediator was not the active ingredient for changing behavior. Finally, identifying the critical mechanisms of change should help make prevention programs more effective and less costly (MacKinnon & Dwyer, 1993).

Few studies of programs for preventing depression, however, have successfully identified mechanisms of change. Some have found changes in the hypothesized mediators without showing a significant effect on depressive symptoms (Ialongo et al., 1999; Wolchik et al., 1993). Other studies have reported a significant effect on depression without identifying the mechanisms by which the program was effective (e.g. Clarke et al., 2001). The current study measured several possible mechanisms by which the programs might work including cognitions (e.g., attributional style, dysfunctional attitudes), coping, and quality of interpersonal relationships. We hypothesized that whereas cognitions and coping would mediate the relation between the cognitive-behavioral intervention and change in depressive symptoms, relationship quality would mediate the relation between the interpersonal program and depression.

Finally, the present study provided an opportunity to test the stress generation hypothesis and the extent to which interventions may moderate the relation between depressive symptoms and stressful life events. The stress generation hypothesis (Hammen, 1991) states that depressed individuals generate adverse events for themselves through their symptoms, behaviors, and characteristics; thus, they are more likely to

experience stressful events than are non-depressed individuals. It is possible, however, that the skills acquired through the interventions may help adolescents avoid stressful events they otherwise might have generated. If this is true, we would expect that prior depressive symptoms would predict subsequent stressful events for participants in the control group, but not for those in the active intervention groups.

In summary, the present study tested the following hypotheses:

Outcome: Hypothesis 1 -- The cognitive-behavioral and interpersonal therapy prevention programs would be significantly better than the no-intervention control group in preventing depressive symptoms post-intervention and at the 6-month follow-up.

Moderators: Hypothesis 2a -- Gender would moderate the effects of the interventions on outcome such that for girls, IPT-AST would be better than CB, whereas the reverse would be true for boys. Hypothesis 2b -- Sociotropy would moderate the effect of the interventions on depressive symptoms; the effect of IPT-AST on depressive symptoms was expected to be stronger for those high versus low in sociotropy.

Mediators: Hypothesis 3a -- The relation between CB and depressive symptoms would be mediated by a decrease in negative cognitions and an increase in coping.

Hypothesis 3b: The relation between IPT-AST and depressive symptoms would be mediated by improvements in interpersonal relationships.

Stress Generation: Hypothesis 4 -- Depressive symptoms at baseline would predict increases in negative life events for students in the no intervention groups, but not for either intervention group.

CHAPTER II

METHOD

Participants

All students participating in Wellness classes in three suburban/rural Tennessee high schools in two consecutive semesters were invited to participate. Parental consent and student assent were obtained for 380 out of a possible 600 students (63%). Most were freshmen (94%); the average age was 14.43 (SD = .70); 54% of the sample was female. The ethnic breakdown of the group was as follows: 79% Caucasian, 13% African-American, 2% Latino, 1% Asian-American, 1% Native American, 3% Mixed Heritage, and 1% Other.

Measures

Depressive Symptoms. Depressive symptoms were measured using the Children's Depression Inventory (CDI; Kovacs, 1985) and the Center for Epidemiological Studies-Depression scale (CES-D; Radloff, 1977). The CDI is a self-report measure that assesses a wide range of depressive symptoms. Students respond to 27 items that ask them to choose between three levels of a given symptom. In this study, the item regarding suicidal ideation was removed due to concerns expressed by the participating schools, leaving 26 items. Thus, total scores could range from 0 to 52. The CDI has good

reliability and validity (Kovacs, 1985, Smucker, Craighead, Craighead, & Green, 1986). Internal consistency of the CDI in this sample was .89.

The CES-D is a 20-item self-report measure of depressive symptoms. Participants rate the frequency of each item in the past week from “rarely or none of the time (0)” to “most or all of the time (3).” Total scores can range from 0 to 60. The CES-D also has good reliability and validity for use with adolescents (Roberts, Andrews, Lewinsohn, & Hops, 1990; Roberts, Lewinsohn, & Seeley, 1991). Coefficient alpha in this sample was .86.

Analyses were run on depressive symptoms using a composite measure derived from both the CDI and the CES-D. This variable was created by standardizing both the CDI and the CES-D and adding the z-scores together. The CDI and CES-D were significantly correlated ($r = .81, p < .001$) and the composite measure demonstrated a high level of reliability [$r_{YY} = .93$ (Nunnally & Bernstein, 1994)].

Sociotropy and Achievement Orientation. Sociotropy and achievement orientation were measured using the Sociotropy-Achievement Scale for Children (SASC; Little & Garber, 2000). The SASC yields scores on two interpersonal factors, Neediness and Connectedness, and two achievement factors, Self-criticism and Individualistic Achievement; it also produces overall scores for Sociotropy (Affiliativeness) and Achievement Orientation. Respondents indicate how much they agree with each of the 53 items using a 5-point scale anchored from 1 = totally disagree to 5 = totally agree. Items were based on the adult Sociotropy-Autonomy Scale (SAS; Beck, Epstein, & Harrison, 1983) and the Personal Style Inventory (Robins et al., 1994). Items were

rewritten or dropped to make the measure appropriate for younger samples. The SASC subscales have adequate reliability and validity (Little & Garber, 2000). Coefficient alphas for the Sociotropy and Achievement Orientation scales in this sample were .90 and .86, respectively.

Cognitions. Attributional style was measured using the Children's Attributional Style Questionnaire (CASQ; Seligman et al., 1984; Thompson, Kaslow, Weiss, & Nolen-Hoeksema, 1998). The CASQ assesses dimensions of attributions derived from the reformulated learned helplessness model (Abramson, Seligman, & Teasdale, 1978). The current version contained 36 forced choice items describing both positive and negative events. Each item varies on one causal dimension (locus, stability, and globality) while holding the other two dimensions constant. Scores on the CASQ have been found to be stable over a six-month period (Nolen-Hoeksema, Girgus, & Seligman, 1986; Seligman et al., 1984) and to correlate with self-reported depressive symptoms (Gladstone & Kaslow, 1995). Coefficient alphas for overall positive and negative composite scores of the CASQ in this sample were .56 and .54, respectively. The total score was derived by subtracting the negative from the positive composite scores with lower total scores reflecting a more depressive or negative attributional style. Coefficient alpha for the total composite score was .81.

The Dysfunctional Attitudes Scale (DAS; Weissman & Beck, 1978) assessed attitudes and beliefs about the self and relationships with others. The DAS presents statements rated on a 5-point scale, from "totally agree" to "totally disagree." Statements represent depressive beliefs, such as "I should have to please everybody." The current

version had ten items yielding total scores ranging from 0 to 40, with higher scores indicating more maladaptive beliefs. The DAS has high test-retest reliability and good internal consistency (Dobson & Breiter, 1981; Oliver & Baumgart, 1985). Coefficient alpha for the DAS in this sample was .74.

Quality of Relationships. Adolescents' relationships with parents were measured using the Conflict Behavior Questionnaire (CBQ; Prinz, Foster, Kent, & O'Leary 1979). The CBQ originally was a 75-item measure assessing adolescents' perceptions of the degree of conflict and negative communication with their parents (Prinz et al., 1979). Each item is endorsed either as "yes" or "no", with higher scores indicating greater conflict. The 20-item short form was used in this study (Robin & Foster, 1989). The short and long forms of the CBQ have been shown to correlate at .96 (Robin & Foster, 1989). Adolescents completed forms assessing perceptions of conflict with mothers and fathers separately. Coefficient alpha for this sample was .87 regarding mothers and .88 about fathers.

Stressful Life Events. Stressful life events were assessed using an index based on several life event inventories developed for adolescents (Compas, Davis, Forsythe, & Wagner, 1987; Johnson & McCutcheon, 1980; Masten, Garmezy, Tellegen, Pellegrini, & Larkin, 1988). Adolescents indicated whether each of the 50 events (e.g., health, conflict, moving, school, finances, and legal issues) had occurred in the previous 6 months.

Coping. The Coping Orientation to Problems Experienced Inventory (COPE: Carver, Scheier, & Weintraub, 1989) is a multi-dimensional assessment of coping style that asks respondents to choose how often they do each of 60 possible things when experiencing a stressful event. For each item, they can choose one of four levels from “Not at all” to “A lot.” The COPE yields 14 different subscales, each representing a different method of coping (e.g., seeking social support, turning to religion, planning, focusing on emotions, denial), and three major scales representing rational, emotional, and avoidance coping styles. The COPE has demonstrated good reliability and validity (Carver et al., 1989). Coefficient alphas for the major scales were as follows: .86 for the rational coping scale, .84 for the emotional coping scale, and .70 for the avoidance coping scale.

Curriculum Knowledge. Questionnaires were created based on the curriculum of each program. Leaders of each program helped write the questions to assess how much of the core information from the programs was obtained by participants. There were 7 multiple choice questions relating to each course, with four choices each. Scores for CBT knowledge and IPT-AST knowledge were computed separately, with the range of total scores being 0 through 7, with higher scores indicating greater knowledge.

Copies of all measures are provided in Appendix A.

Interventions

The cognitive-behavioral program (CB) was based on the *Coping with Stress Course* (Clarke & Lewinsohn, 1995), which is a psycho-educational, cognitive-

behavioral intervention for the prevention of depression in adolescents. The theoretical orientation of the course is based on the multi-factorial model of depression proposed by Lewinsohn, Hoberman, Teri, and Hautzinger (1985) and Beck's (1967, 1976; Beck, Rush, Shaw & Emery, 1979) cognitive model. Lewinsohn et al. suggested that several diverse factors influenced the likelihood of developing depression such as negative cognitions, stressful events, predisposing risk factors (e.g. depression history, being female), and immunities to depression (e.g. high self esteem, coping skills). Beck's model emphasizes recognizing the connections between activating events (A), beliefs (B), and consequences (C) including affect, and behaviors. The intervention teaches the A-B-C model of identifying, realistically evaluating, and revising negative thoughts, and problem-solving skills and strategies to help immunize teens against future depression.

The course consists of eight 90-minute sessions, which can be delivered at school during or after regular school hours. The course includes topics such as education about the nature and risk for depression, identifying and changing negative thought patterns, identifying activating events, discovering and challenging negative beliefs, and problem-solving to cope with stressful events. The sessions include active guidance by the group leader and structured activities for all participants. A participant workbook includes items for daily practice outside of the group. A session by session outline of the course is included in Appendix B.

The Interpersonal Psychotherapy-Adolescent Skills Training Program (IPT-AST; Young & Mufson, 2003) was created as an extension of interpersonal therapy that has been found to be effective in the treatment of depression in adolescents (Mufson, Weissman, Moreau, & Garfinkle, 1999; Mufson et al., 2004). IPT-AST was designed

originally for use with adolescents between 7th and 10th grade who were experiencing elevated symptoms of depression but did not meet criteria for a depressive disorder.

IPT-AST is based on the idea that mood is related to interpersonal events; it seeks to prevent depression by promoting more communicative, positive relationships by teaching skills necessary to develop and maintain such relationships. Three general problem areas common in adolescence are emphasized: (a) *Interpersonal role transitions* are targeted when an adolescent reports having difficulty adjusting to a life change that requires a new or different role, or when the adolescent's family may be having trouble adjusting to his or her new role in the family or developmentally; (b) *interpersonal role disputes* occur when the adolescent and another significant person have non-reciprocal expectations for their relationship that lead to frequent conflicts; (c) *interpersonal deficits* are identified when an adolescent lacks the social and communication skills needed to initiate and maintain relationships.

IPT-AST is built on two pre-group individual sessions and eight 90-minute group sessions. The pre-group sessions are used for the leader to get to know the adolescent, to assess depression symptoms, to provide education about depression, to explain the structure of the program, and to conduct an interpersonal inventory. In the current study, due to the large number of participants, it was not possible to conduct individual pre-group sessions; materials typically covered during these individual sessions were incorporated into the first group session.

The IPT-AST group sessions are divided into three phases. The first phase (sessions 1 through 3) provides an opportunity for group members to get to know each other and feel comfortable in the group setting. These sessions are educational and

general in focus, allowing, but not requiring, group members to discuss personal situations. The middle phase focuses on applying the general skills learned in the first phase to individual situations reported by group members. These sessions are essentially unscripted, relying on the group leader to facilitate discussion around the issues raised by the group members. Role play is a common technique, and group members often act as coaches for one another as they practice dealing with interpersonal issues. The last two sessions comprise the final phase, which centers on establishing the group members' sense of competence and preparing them for dealing with interpersonal problems on their own.

Procedure

All screening and group participation was done during the Wellness class period at three suburban/rural high schools. Participants were randomly assigned by class to the Cognitive Behavior Program (CBP) (n= 112), the Interpersonal Psychotherapy-Adolescent Skills Training (IPT-AST) (n=99), or an assessment only control condition (n=169). All participants completed questionnaires in groups the week prior to beginning the groups. Nonparticipating students remained in their classroom doing school work.

The group sessions met weekly for 8 consecutive weeks. All three participating schools were on a 90-minute block class schedule, so no adaptations were necessary to make the interventions fit the school schedule. Groups were mixed gender and had between 8 and 15 students, with a median size of 11. Group leaders were Masters level clinical psychology graduate students or recent clinical psychology Ph.Ds. Group co-leaders were either another graduate student or an undergraduate honors student. Follow-

up questionnaires were completed by participants in all conditions a week after the last group session. Follow-up assessments were conducted again 6 months post intervention.

Assessments were conducted during school hours whenever possible. If students were not present or had changed schools, questionnaire packets were left for them at their schools or mailed to their homes. If students still failed to return the packets, they were contacted by phone and encouraged to do complete the forms. If students were contacted by phone, measures of depressive symptoms were obtained over the phone. Thus, for ten students, only information about symptoms was obtained at follow-up.

CHAPTER III

RESULTS

Data Analytic Plan

For analyses predicting depressive symptoms based on intervention group status or another categorical variable, ANCOVA was used with pre-intervention symptoms as a covariate. When predicting depressive symptoms using a continuous variable, linear regression was used with pre-intervention symptoms in the first step and other predictors of interest in subsequent steps. Mediation analyses were done following the recommendations of Baron and Kenny (1986), Sobel (1982), and MacKinnon and colleagues (MacKinnon & Dwyer, 1993; MacKinnon, Warsi, & Dwyer, 1995).

Interactions between continuous and categorical variables were analyzed using linear regression following the suggestions of Aiken and West (1991). In the case of therapy group for example, dummy variables were created to contrast each of the active therapy conditions with the control condition. Interaction terms were created using the product of each of the dummy coded therapy condition variables with a centered version of the other independent variable in question. Both interaction terms were then entered in the final step of the regression.

Attrition

Of the 380 participants assessed at pre-intervention, 375 completed the post-intervention evaluation and 316 completed the six-month follow-up. Those who did not

complete questionnaires at the six month follow-up did not differ by intervention group, $F(1,377) = .92, p = .40$, or on level of depressive symptoms at either pre-intervention, $F(1,374) = 1.20, p = .27$, or post-intervention, $F(1,365) = 2.12, p = .15$.

Efficacy of the Interventions

At pre-intervention, the three intervention groups did not differ significantly in terms of level of depressive symptoms, $F(2,373) = 1.64, p = .20$. Controlling for depressive symptoms pre-intervention, there was a significant main effect for intervention group on depressive symptoms at post-intervention, $F(2,350) = 5.76, p = .003$. Both the CB group [Effect Size (ES) = .37] and the IPT-AST group (ES = .26) had significantly lower levels of depressive symptoms than the control group. The CB group and the IPT-AST group were not significantly different from each other. No group differences were found at the six-month follow-up, $F(2,308) = .091, p = .91$. Mean scores and standard deviations for all groups on the composite depression measure are presented in Table 1.

Table 1. Means and standard deviations on the composite measure of depressive symptoms for each intervention group at each time point.

Group	Pre-intervention	Post-intervention	6-month Follow-up
CB	-.242 (1.70)	-.399 (1.58)	-.157 (1.88)
IPT-AST	-.003 (1.81)	-.164 (1.50)	-.010 (1.86)
Control	.179 (2.08)	.400 (2.15)	.086 (1.98)

Figure 1 shows the CES-D scores for all three intervention groups at pre- and post-intervention.

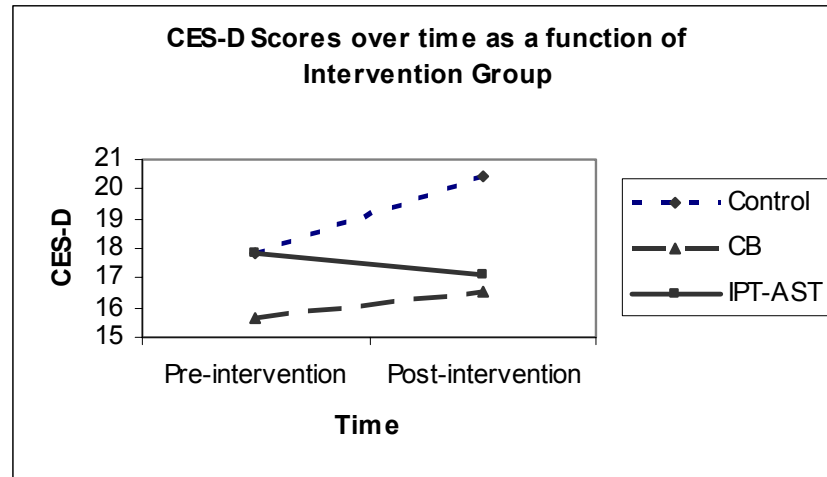


Figure 1. CES-D scores at pre- and post-intervention as a function of intervention group.

Because composite scores are standardized and dependent on one another, a decrease in scores for one group would be mirrored by an increase for other groups. Therefore, CES-D scores are presented here in lieu of the depression composite scores to give specific meaning to the scale.

Moderators

Gender. Controlling for pre-intervention depressive symptoms, there was a marginally significant effect for gender on depressive symptoms at post-intervention, $F(1,351) = 3.40, p = .07$. Levels of depression were higher for girls than boys. No gender differences were found at the six-month follow-up, $F(1,309) = .431, p = .51$. Gender did

not moderate the effect of the interventions at post-intervention or at six-month follow-up.

Sociotropy and Achievement Orientation. There was a significant interaction at post-intervention between group and sociotropy (see Table 2), and between group and achievement orientation (see Table 3). Controlling for pre-intervention depression scores, higher levels of baseline affiliativeness (i.e., sociotropy) predicted higher levels of depressive symptoms at post-intervention for participants in the IPT-AST group, but lower levels of depressive symptoms for participants in the CB group (see Figure 2). No relation between baseline affiliativeness and depressive symptoms was found for the control group.

Regarding achievement orientation, higher levels of baseline achievement orientation predicted higher levels of post-intervention depressive symptoms for participants in the IPT-AST group, but lower levels of depression for participants in the CB group or the control group (see Figure 3). At the six-month follow-up, there was a significant main effect for sociotropy, $t = -2.71, p = .007$, such that higher levels of baseline sociotropy predicted lower levels of depressive symptoms six months later, controlling for baseline depressive symptoms. No interactions were found at follow-up.

Mechanisms of Change

The effect for group on attributional style (CASQ total composite score) was marginally significant, $F(1,340) = 3.57, p = .06$, such that participants in the CB group demonstrated a less depressive attributional style at post-intervention, controlling

Table 2. The interaction of intervention group and affiliativeness predicting depressive disorders at post-intervention, controlling for pre-intervention depression.

Predictors	Beta	<i>t</i>	Significance	ΔR^2
Time 1 Depressive Symptoms	.773	22.289	.000	
Dummy Coded CB Group Contrast	-.104	-2.837	.005	
Dummy Coded IPT-AST Group Contrast	-.090	-2.479	.014	
Affiliativeness (Centered)	.013	.248	.804	
CB x Affiliativeness	.043	1.005	.316	
IPT-AST x Affiliativeness	-.093	-2.230	.026	
Final $F(6, 339) = 93.94$			<.001	.62

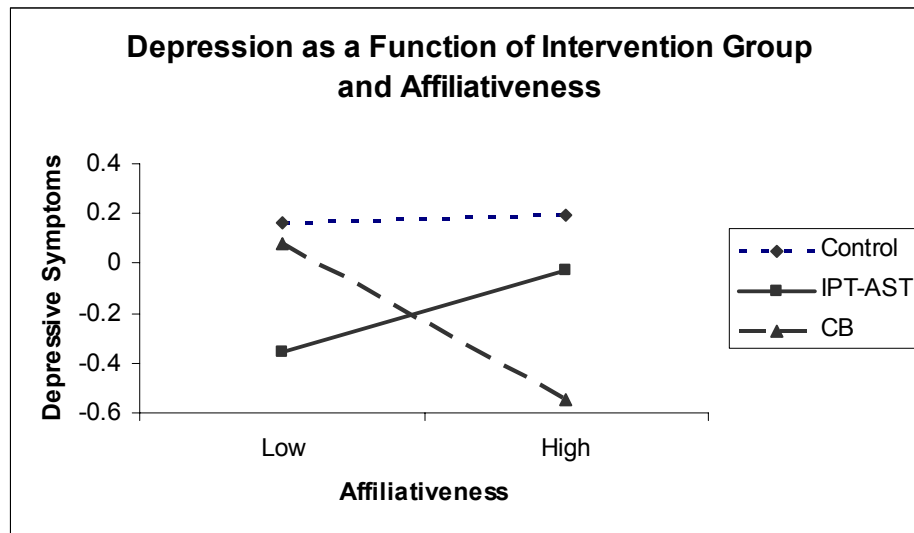


Figure 2. Depression as a function of intervention group and affiliativeness.

Table 3. The interaction of intervention group and baseline achievement orientation predicting depressive symptoms at post-intervention, controlling for pre-intervention depression.

Predictors	Beta	<i>t</i>	Significance	ΔR^2
Time 1 Depressive Symptoms	.712	19.410	.000	
Dummy Coded CB Group Contrast	-.124	-3.115	.002	
Dummy Coded IPT-AST Group Contrast	-.105	-2.759	.006	
Achievement Orientation (Centered)	-.170	-3.136	.002	
CB x Achievement Orientation	.127	2.778	.006	
IPT-AST x Achievement Orientation	-.004	-.085	.933	
Final $F(6, 339) = 81.14$			<.001	.59

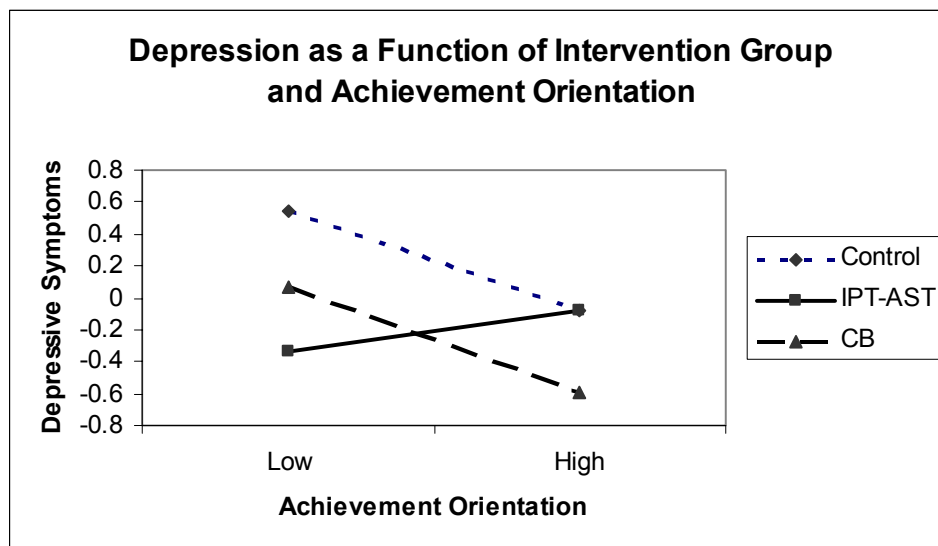


Figure 3. Depression as a function of intervention group and achievement orientation.

for pre-intervention scores than did participants in both the IPT-AST group ($ES = .26$) and the control group ($ES = .31$). In addition, controlling for pre-intervention depressive symptoms, post-intervention attributional style predicted depressive symptoms at post-intervention, $t = -8.06, p < .001$. That is, a less depressive attributional style was associated with lower levels of depressive symptoms. Using the Sobel method, attributional style partially mediated the positive effect on depressive symptoms for CB, $z = 2.58, p = .01$, but not IPT-AST, $z = .03, p = .97$.

No significant effects for intervention group were found on depressive attitudes (DAS) at post-intervention, $F(2,344) = .38, p = .69$, or at follow-up, $F(2,344) = .38, p = .69$. There also was no effect for group at post-intervention on coping, as measured by the COPE composite scales for rational/active coping, $F(2,341) = .39, p = .68$, emotion-based coping, $F(2,343) = .20, p = .82$, or avoidance coping, $F(2,340) = 2.25, p = .11$. There was, however, a marginally significant effect at follow-up on rational/active coping, $F(2,286) = 2.49, p = .08$. Controlling for pre-intervention coping scores, participants in the CB group showed higher levels of rational and active coping at post-intervention than did participants in IPT-AST or the control group.

Controlling for Time 1 measures, there was no effect for intervention group on conflict (CBQ) with mothers at post-intervention, $F(2,335) = .11, p = .90$, or at the six-month follow-up, $F(2,282) = .42, p = .68$, or on conflict with fathers at post-intervention, $F(2,319) = 2.17, p = .12$, or at six-month follow-up, $F(2,271) = .18, p = .83$.

Knowledge Questionnaires

There were significant group differences for each of the two curriculum quizzes. Participants in the CB group answered more questions correctly on the CB quiz than participants in either the IPT-AST or the control condition at post-intervention, $F(2,362) = 36.79, p < .001$, and at follow-up, $F(2,312) = 5.53, p = .004$. Participants in the IPT-AST group answered more questions correctly on the IPT-AST quiz than participants in either the CB or the control condition at post-intervention, $F(2,362) = 5.96, p = .003$. At follow-up, the difference between the groups was marginally significant, $F(2,312) = 2.61, p = .08$, indicating a trend for participants in both the IPT-AST and the CB groups to answer more questions about IPT correctly than participants in the control group. These data show that participants in the groups were gaining the knowledge that the groups were designed to impart.

Study Factors and Demographics

Controlling for depressive symptoms at pre-intervention, there was no effect of group leader on depressive symptoms at post-intervention, $F(6,193) = .66, p = .69$ or at follow-up, $F(6,164) = .43, p = .86$. There was no effect for school at post-intervention, $F(2,350) = .16, p = .86$, or at follow-up, $F(2,308) = .67, p = .51$. There was no effect for students' ethnicity at post-intervention, $F(6,345) = .22, p = .97$, or at follow-up, $F(6,304) = 1.81, p = .10$.

Stress Generation Hypothesis

Controlling for stressful life events (LEQ) at pre-intervention, depressive symptoms at pre-intervention predicted stressful life events at post-intervention, $t = 2.37$,

$p = .02$, and at follow-up, $t = 2.12$, $p = .04$. Results varied, however, by intervention group. The stress generation hypothesis was supported at post-intervention for the control group, $t = 2.05$, $p = .04$, such that for student receiving no intervention, higher levels of depressive symptoms at baseline significantly predicted higher levels of stressful life events at post-intervention. There was no relation, however, between initial depressive symptoms and subsequent stressful life events for adolescents in either CB, $t = 1.12$, $p = .27$, or IPT-AST, $t = .31$, $p = .76$.

High Risk Adolescents

Participants who scored at least one standard deviation above the mean on the composite depression measure at pre-intervention were considered at high risk ($n=96$). An additional set of separate analyses were run for these adolescents. Controlling for pre-intervention depressive symptoms, there was a significant main effect for intervention group on depressive symptoms at post-intervention, $F(2,87) = 7.51$, $p = .001$. Both the CB group ($ES = .89$) and the IPT-AST group ($ES = .84$) had significantly lower levels of depressive symptoms than the control group at post-intervention. There was no difference between the CB group and the IPT-AST group. Figure 4 shows the pre- and post-intervention CES-D scores for those adolescents categorized as high-risk in the three conditions.

Within the high risk group, there was no main effect for gender at post-intervention, $F(1,88) = 1.97$, $p = .16$ or at follow-up, $F(1,73) = .01$, $p = .94$. Gender did not moderate the effect of the interventions at post-intervention or at follow-up.

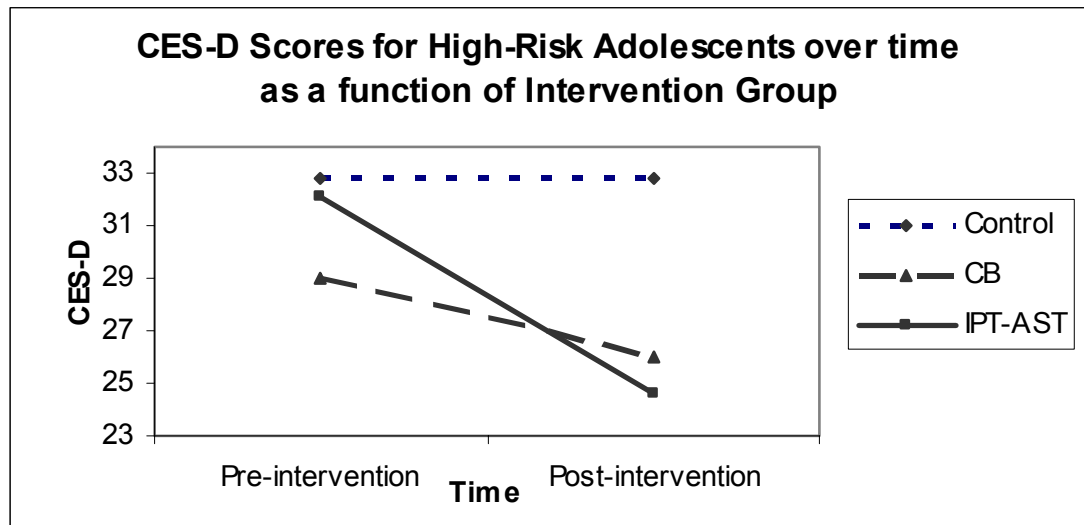


Figure 4. CES-D scores for high-risk adolescents at pre- and post-intervention as a function of intervention group.

There was a significant effect for group on post-intervention attributional style (CASQ total composite score), $F(1,84) = 12.30, p = .001$, such that participants in the CB group had a less depressive attributional style at post-intervention than did participants in both the IPT-AST group ($ES = .95$) and the control group ($ES = .80$). In addition, controlling for pre-intervention depressive symptoms, attributional style predicted depressive symptoms at post-intervention, $t = -2.36, p = .02$. That is, a less depressive attributional style was associated with lower levels of depressive symptoms. Using the Sobel method, there was a nonsignificant trend for attributional style to partially mediate the positive effect of CB on depressive symptoms at post-intervention, $z = -1.89, p < .06$, but not for IPT-AST, $z = -1.33, p = .18$.

At follow-up, there was still a nonsignificant trend for intervention group on attributional style, $F(2,67) = 2.67, p = .08$. Participants in the CB group continued to

demonstrate a less depressive attributional style than those in either the IPT-AST ($ES = .71$) or control groups ($ES = .39$).

Among high risk students, there were no effects on dysfunctional attitudes (DAS) at post-intervention, $F(2,85) = .74, p = .48$ or at follow-up, $F(2,67) = 1.68, p = .19$, or on the COPE composite scales at post-intervention for rational/active coping, $F(2,82) = .74, p = .48$, emotion-based coping, $F(2,84) = .19, p = .83$, or avoidance coping, $F(2,83) = 1.59, p = .21$. There were significant group differences at follow-up, however, for rational/active coping, $F(2,62) = 5.44, p = .01$, and emotion-based coping, $F(2,64) = 3.42, p = .04$. Participants in the IPT-AST group reported engaging in less of each style of coping than participants in either the CB or control group. There was no group difference at follow-up on avoidance coping, $F(2,62) = 2.08, p = .13$,

Controlling for Time 1 measures, there was no effect for group at post-intervention on conflict with mothers (CBQ) at post-intervention, $F(2,80) = .22, p = .80$, or at follow-up, $F(2,63) = .54, p = .58$, or on conflict with fathers at post-intervention, $F(2,71) = .75, p = .47$ or at follow-up, $F(2,58) = .58, p = .56$.

CHAPTER IV

DISCUSSION

The current study compared the efficacy of two universal depression prevention programs to each other and to a no-intervention control condition. The two programs were a cognitive-behaviorally oriented (CB) and an interpersonally-oriented Interpersonal Psychotherapy – Adolescent Skills Training Program (IPT-AST). A significant, but modest effect was found for both CB (ES = .37) and IPT-AST (ES = .26) compared to controls for the entire sample. For adolescents at high risk for depression based on elevated levels of depressive symptoms, both CB (ES = .89) and IPT-AST (ES = .84) had much stronger effects. In addition, attributional style partially mediated the positive effect of CB. The overall group effects were not maintained at follow-up; no significant differences were found between the two active intervention conditions at any time point.

When conducting prevention research, it is important to distinguish between prevention and treatment effects. Confusion in the prevention literature has resulted from the fact that a positive effect size could be produced in multiple ways. That is, an increase in depressive symptoms in the control group and no change in symptoms in the intervention group could produce an identical effect size as a decrease in symptoms in the intervention group and no change in the control group. Gillham, Shatté, and Freres (2000) suggested that the term “prevention” be reserved for those programs that result in a diminished expected increase in symptoms or disorders relative to controls. In contrast, interventions that result in a decline in the level of depression relative to controls should

be called “treatment.” Horowitz and Garber (2005) showed that many studies that reported significant prevention effects were better characterized as treatment of sub-clinical depressive symptoms. Although both prevention and treatment of symptoms are worthwhile, the distinction between them is important to understanding the nature of the effect of the intervention.

The present study found evidence of a true prevention effect for the sample as a whole. Figure 1 shows the CES-D scores for all three intervention groups at pre- and post-intervention. Whereas there was negligible change in depression scores for participants in both intervention groups, there was a significant increase in level of depressive symptoms for adolescents in the control group. Thus, this pattern of results is consistent with a prevention effect.

In contrast, conclusions are different with regard to comparisons of the high-risk participants only. Figure 2 shows the pre- and post-intervention CES-D scores for these high risk adolescents in the three conditions. There was virtually no change in level of symptoms for high risk participants in the control group, whereas high risk students in both CB and IPT-AST experienced significant reductions in symptoms. Thus, for adolescents with sub-threshold levels of depressive symptoms, the effect of these programs is best described as the treatment of these symptoms.

There is a debate in the literature about whether universal, selective, or indicated samples are most appropriate for prevention research (Coie et al., 1993). Proponents of both universal and targeted (selective and indicated) prevention will find support in the results of this study. On one hand, this study showed that universal programs can produce significant preventive effects. This is the first universal study to date that has

produced evidence of depression prevention for its entire sample by the criteria described above. [Given that such programs can be effective, they have other advantages as well. They can reach large numbers of adolescents in a relatively time- and cost-effective manner. Schools often find it more convenient to provide a program to all students so high risk students do not need to lose valuable academic instruction time more than their peers; universal programs also avoid the stigma of identifying children as being at risk for depression. In addition, universal programs can reach the “false negatives,” children who may be at risk but are not identified through screening. Finally, universal interventions have been associated with lower drop-out and greater participation rates than selective and indicated interventions (Shochet et al., 2001). This may be partially due to the fact that universal program are typically administered in schools, from which students are less able to escape.

Some support also was found for a targeted approach to depression prevention. The effect sizes produced in this study for high-risk adolescents were much greater than those for the sample as a whole. Thus, those students with the greatest need based on their initial levels of depressive symptoms showed the greatest benefit, and therefore should be targeted in future prevention efforts. This result is consistent with the finding from a recent meta-analysis of the depression prevention literature (Horowitz and Garber, 2005) that in general, indicated and selective prevention programs produce greater effect sizes than universal programs.

Furthermore, anecdotal reports from group leaders suggested that the most engaged groups were those in which more students had significant problems to address. Although this was not systematically tested in the current study, it is likely that children

with common problems will feel more comfortable discussing such concerns in a group of peers experiencing similar issues who can provide support and advice to each other. Selecting participants based on a common risk factor such as sub-threshold depressive symptoms or a family history of depression may facilitate the group process and thereby increase the potential effects of the intervention.

To date, most depression prevention programs have focused on cognitive-behavioral techniques and strategies. This study was the first to directly compare a prevention program with a different conceptual approach to an established cognitive-behavioral program. The fact that both programs produced significant effects compared to no intervention is encouraging and suggests multiple approaches can prevent depression. The efficacy of a program that combines the active ingredients of both CB and IPT-AST into a single intervention should be examined next. Also, further research needs to identify who is most likely to benefit from which type of program.

The present study investigated whether sociotropy (affiliativeness) and achievement orientations moderated the effects of the interventions on depressive symptoms. According to the specific vulnerability hypothesis (Beck, 1982), individuals vary in the extent to which they are affiliative or achievement oriented, although it is possible to be both. Such personality characteristics might increase the likelihood of an individual responding positively to one type of intervention more than another. If matching treatments to individual differences can lead to better outcomes (Beutler et al., 1991; Shea, Elkin, & Sotsky, 1999), then it would make sense to identify which individual characteristics predict improvement with which program.

Both sociotropy and achievement orientation moderated the effects of the prevention programs on outcome. High achievement orientation measured at baseline predicted lower levels of depressive symptoms in the CB group, whereas lower achievement orientation predicted lower depressive symptom scores in the IPT-AST group. The CB intervention is a more class-like program with concrete skills to learn and practice, and activities and homework to complete. Adolescents with a high achievement orientation may be attracted to the structure of this program and the way it provides a series of opportunities to succeed through the in-session and home-based activities. This may result in greater participation and increased benefits. It also is possible that highly achievement motivated students have higher academic functioning and therefore are better able to comprehend and use the cognitive strategies taught in CB. Interestingly, higher levels of achievement orientation at baseline also predicted lower levels of depression at post-intervention for the control group. It is possible that adolescents who are driven to achieve may have more success and mastery experiences (i.e. good grades, athletic achievements), which then foster positive self-esteem and lead to lower levels of depressive symptoms.

Contrary to expectations, higher levels of affiliativeness predicted lower levels of depressive symptoms in CB, but higher levels of depressive symptoms in IPT-AST. IPT-AST has a workshop-like environment that requires participants to openly discuss problems in their relationships. Role playing and experiential learning are incorporated, and adolescents are encouraged to disclose personal information to the group. It is possible that adolescents highly concerned about their relationships and how they are viewed by peers would experience more discomfort in IPT-AST due to its self-disclosing

nature and social performance demands. These adolescents may be less apt to participate fully in the group and therefore may benefit less. These results are consistent with the finding in the adult treatment literature that sometimes matching interventions to certain individual difference characteristics does not lead to better outcomes (Rude & Rehm, 1991; Sotsky et al., 1991). That is, individuals with problems in the very characteristics that are the primary focus of the intervention (e.g., negative cognitions, interpersonal communication) might have the *most* difficulty responding to interventions geared to change these very deficits. It may require more powerful interventions that directly and intensively target the specific deficits that characterize these personality orientations in order to change them.

Regarding sex differences, there was a gender main effect such that girls were more likely than boys to experience an increase in depressive symptoms over time. This is consistent with studies that have found higher rates of depression in adolescent girls than boys starting around this age (Hankin et al., 1998). There was not evidence, however, that gender moderated the effects of the prevention programs. That is, the relation between the prevention programs and depressive symptoms was not significantly different for girls and boys. Although there is some evidence that females respond better to interpersonal approaches and males respond better to cognitive-behavioral programs (e.g. Clarke et al., 1993; Forsyth, 2000; Reivich, 1996; Shatté, 1996), other studies have found that females respond better than males to cognitive approaches (e.g., Peterson et al., 1997; Seligman et al., 1999). The reasons for these different findings are not clear, but indicate that the issue of gender differences in response to depression prevention programs should be explored further. Studies that test the effects of these different

interventions delivered in same versus mixed gender groups would be particularly interesting.

This study also examined possible mechanisms by which the prevention programs had their effect including cognitions (e.g., attributional style, dysfunctional attitudes), coping, and quality of parental relationships. Attributional style partially mediated the positive effect of CB, but not that of IPT-AST. This is in keeping with the content of the CB program, which includes identifying negative thought patterns, looking for alternative explanations for negative events, and challenging negative beliefs particularly with regard to their accuracy. This result adds to the literature of prevention and treatment studies that have found that changes in attributional style partially mediate the effect of cognitive preventive and therapeutic interventions (Hollon, Evans, & DeRubeis, 1990; Hollon, Stewart, & Strunk, 2005; Seligman et al., 1999).

No significant effects were found for the other hypothesized mediators. It is possible that the measures used were not sensitive to the changes the programs produced. For example, the conflict measure (CBQ) asks broad questions about parental relationships, such as whether or not the adolescent enjoys spending time with his or her parent. For teens with problematic parental relationships, IPT-AST may have helped them learn ways of dealing with those problems and keeping them from affecting her mood, but may not have produced a change in the relationship quickly enough to be captured by the items on the CBQ. The measure of coping (COPE) used in the present study may be too general and stable, and was not as good a measure of change in responses to specific stressors as has been found with more recently developed measures of responses to stress (e.g., Connor-Smith, Compas,

Wadsworth, Thomsen, and Saltzman, 2000). It is also possible, however, that the programs worked through mechanisms different from those hypothesized. Non-measured nonspecific factors, such as attention and a compassionate and supportive environment, may have helped adolescents in the programs feel better compared to controls.

Finally, the current study found some support for the stress generation hypothesis (Hammen, 1991). Higher initial levels of depressive symptoms predicted more subsequent stressful life events at post intervention for adolescents in the no intervention group, but not in the two prevention programs. It is possible that the skills learned in the CB and IPT-AST programs helped adolescents to not engage in behaviors that typically would increase their likelihood of experiencing stressful events. If so, then future programs aimed at reducing depression might benefit even more from including a module that explicitly teaches adolescents about their possible role in generating stress and its relation to subsequent depression.

Limitations and Future Directions

Limitations of the current study provide important directions for future research. First, due to the large number of participants in this study, it was not possible to conduct individual diagnostic interviews. Nevertheless, depressive symptoms alone comprise a meaningful outcome, as sub-clinical depressive symptoms in children and adolescents predict an increased risk of drug and alcohol use, academic failure, dropout, and teen pregnancy (Gillham et al., 2000). Sub-clinical levels of depressive symptoms also constitute a risk for subsequent depressive disorders (Clarke et al., 1995; Pine et al., 1999).

Information about both depressive diagnoses and symptoms would be useful. Although depressive symptoms and diagnoses are often correlated (e.g. Clarke et al., 2001), one cannot assume that a preventive effect on symptoms would necessarily affect diagnoses. Indeed, some studies have shown significant effects for symptoms but not disorders (e.g. Seligman et al., 1999). Future studies should measure both outcomes.

Other potential predictors and moderators of outcomes were not examined such as child comorbidity and parental psychopathology. Given that parental psychopathology has been found to predict a worse outcome in treatment studies of depressed youth (Birmaher et al., 2000; Emslie et al., 1997), it should be measured as well. The extent to which other child and family characteristics influence the outcome of depression prevention programs should be explored so that such programs can be modified to address these additional factors.

Sixty-one participants were lost between the beginning of the study and the six-month follow-up. Most did not participate in the follow-up because they had changed schools and did not answer solicitations by mail. Many of these were not reachable by telephone. Although the differences were not significant, there was a trend for those participants to have had higher levels of depressive symptoms at post-intervention. It is possible that the group effects found at post-intervention would have been maintained at follow-up had these participants remained in the study.

An important issue is how to design prevention programs to have a more sustained effect over time. This study and others (e.g. Clarke et al., 1995; Spence, Sheffield, & Donovan, 2003), have been successful in producing positive short-term effects but have been less successful maintaining those effects over time. One approach

may be to provide periodic booster sessions to help preserve the benefits provided by the interventions. Indeed, some treatment studies have found that continuation cognitive-behavioral therapy reduces the likelihood of relapse of depression (Jarrett et al., 1998; Kroll, Harrington, Jayson, & Fraser, 1996). For example, Kroll et al. reported that the cumulative risk for adolescent depressed patients who continued in CBT for 6 months after the acute phase was significantly lower (0.2) than it had been in the comparison group that had not received the continuation therapy (0.5). The addition of booster sessions, or supplemental information and reminders delivered periodically by telephone, mail, or e-mail should be evaluated in long-term follow-up studies in the future.

In summary, this study compared the efficacy of a cognitive-behavioral (CB), an interpersonal (IPT-AST) program, and a no-intervention control group for preventing depressive symptoms in adolescents. Small to moderate positive effects were found for both interventions compared to controls, and large positive effects were found for both interventions compared to controls for adolescents with high initial levels of depressive symptoms (high risk). Affiliativeness and achievement orientation moderated the effects of the interventions. Changes in attributional style partially mediated the effect of CB on depression; evidence for other hypothesized mediators was not found, however. Future studies should assess both symptoms and diagnoses and focus on methods to help maintain the positive effects of interventions over extended periods of time.

Appendix A: Measures

CDI

For each group of three statements, please check the one sentence that best describe your feelings and thoughts in the **past two (2) weeks**:

1. I am sad once in a while.
 I am sad many times.
 I am sad all the time.
2. Nothing will ever work out for me.
 I am not sure if things will work out for me.
 Things will work out for me ok.
3. I do most things ok.
 I do many things wrong.
 I do everything wrong.
4. I have fun in many things.
 I have fun in some things.
 Nothing is fun at all.
5. I am bad all the time.
 I am bad many times.
 I am bad once in a while.
6. I think about bad things happening to me once in a while.
 I worry that bad things will happen to me.
 I am sure that terrible things will happen to me.
7. I hate myself.
 I do not like myself.
 I like myself.
8. All bad things are my fault.
 Many bad things are my fault.
 Bad things are usually not my fault.
9. I feel like crying every day.
 I feel like crying many days.
 I feel like crying once in a while.

continue on the next page

10. _____ Things bother me all the time.
_____ Things bother me many times.
_____ Things bother me once in a while.
11. _____ I like being with people.
_____ I do not like being with people many times.
_____ I do not want to be with people at all.
12. _____ I cannot make up my mind about things.
_____ It is hard to make up my mind about things.
_____ I make up my mind about things easily.
13. _____ I look ok.
_____ There are some bad things about my looks.
_____ I look ugly.
14. _____ I have to push myself all the time to do my schoolwork.
_____ I have to push myself many times to do my schoolwork.
_____ Doing schoolwork is not a big problem.
15. _____ I have trouble sleeping every night.
_____ I have trouble sleeping many nights.
_____ I sleep pretty well.
16. _____ I am tired once in a while.
_____ I am tired many days.
_____ I am tired all the time.
17. _____ Most days I do not feel like eating.
_____ Many days I do not feel like eating.
_____ I eat pretty well.
18. _____ I do not worry about aches and pains.
_____ I worry about aches and pains many times.
_____ I worry about aches and pains all the time.
19. _____ I do not feel alone.
_____ I feel alone many times.
_____ I feel alone all the time.
20. _____ I never have fun at school.
_____ I have fun at school only once in a while.
_____ I have fun at school many times.

continue on the next page

21. _____ I have plenty of friends.
_____ I have some friends but I wish I had more.
_____ I do not have any friends.
22. _____ My schoolwork is alright.
_____ My schoolwork is not as good as before.
_____ I do very badly in subjects I used to be good in.
23. _____ I can never be as good as other kids.
_____ I can be as good as other kids if I want to.
_____ I am just as good as other kids.
24. _____ Nobody really loves me.
_____ I am not sure if anybody loves me.
_____ I am sure that somebody loves me.
25. _____ I usually do what I am told.
_____ I do not do what I am told most times.
_____ I never do what I am told.
26. _____ I get along with people.
_____ I get into fights many times.
_____ I get into fights all the time.

CES-D

Circle the number for each statement that best describes how you felt or acted DURING THE PAST WEEK:	Rarely or none of the time	Some or a little of the time	A moderate amount of time	Most or all of the time
1. I was bothered by things that usually don't bother me.	0	1	2	3
2. I did not feel like eating; my appetite was poor.	0	1	2	3
3. I felt that I could not shake off the blues, even with help from family or friends.	0	1	2	3
4. I felt that I was just as good as other people.	0	1	2	3
5. I had trouble keeping my mind on what I was doing.	0	1	2	3
6. I felt depressed.	0	1	2	3
7. I felt that everything I did was an effort.	0	1	2	3
8. I felt hopeful about the future.	0	1	2	3
9. I thought my life had been a failure.	0	1	2	3
10. I felt fearful, anxious, or worried.	0	1	2	3
11. My sleep was restless; I had trouble sleeping	0	1	2	3
12. I was happy.	0	1	2	3
13. I talked less than usual.	0	1	2	3
14. I felt lonely.	0	1	2	3
15. I thought people were unfriendly to me.	0	1	2	3
16. I enjoyed life.	0	1	2	3
17. I had crying spells.	0	1	2	3
18. I felt sad.	0	1	2	3
19. I felt that people disliked me.	0	1	2	3
20. I could not get "going".	0	1	2	3

SASC

Listed below are a number of statements concerning personal characteristics and traits. Read each item and decide whether you agree or disagree and how much.

			Neither		
	Totally		Agree nor		Totally
	Disagree	Disagree	Disagree	Agree	Agree
1. It upsets me when other people say bad/mean things about me.	1	2	3	4	5

2. I think it is more important to be yourself than to be like everyone else.	1	2	3	4	5

3. I think about my friends and/or family often.	1	2	3	4	5

4. I do not stick to goals that are hard to reach.	1	2	3	4	5

5. I find it hard to say “no” when others ask me for something.	1	2	3	4	5

6. When I’m with other people, I check to see if they like me.	1	2	3	4	5

7. I should be able to do well at anything if I try hard enough.	1	2	3	4	5

8. If somebody makes fun of the way I look, I feel I’m not good looking.	1	2	3	4	5

9. I stand up for myself even if it means that other people won’t like me.	1	2	3	4	5

10. If a friend has not called for a while, I get worried that s/he doesn’t like me anymore.	1	2	3	4	5

	Totally Disagree	Disagree	Neither Agree nor Disagree	Agree	Totally Agree
11. I am very critical of myself and put myself down a lot.	1	2	3	4	5
12. Feeling close to other people makes me feel safe and secure.	1	2	3	4	5
13. I feel I should solve other people's problems for them.	1	2	3	4	5
14. I feel I must always try my best.	1	2	3	4	5
15. I care <u>a lot</u> about what other people think of me.	1	2	3	4	5
16. I am often not satisfied with what I have.	1	2	3	4	5
17. It is very hard for me to get over losing a friend.	1	2	3	4	5
18. I worry a lot about hurting other people's feelings.	1	2	3	4	5
19. I hate not to put my best effort into a job.	1	2	3	4	5
20. I want very much to do something good for my school and/or community.	1	2	3	4	5
21. I worry that if people knew my bad points they would not like me.	1	2	3	4	5
22. My knowing I did a good job is more important to me than knowing that other people think I did a good job.	1	2	3	4	5

	Totally Disagree	Disagree	Neither Agree nor Disagree	Agree	Totally Agree
23. I get very upset when a friend doesn't do something we planned.	1	2	3	4	5
24. I don't say things that others will not like.	1	2	3	4	5
25. I often feel like I just can't do things well.	1	2	3	4	5
26. I can't have fun when I feel that nobody really cares about me.	1	2	3	4	5
27. It is hard for me to talk about my feelings and other personal things.	1	2	3	4	5
28. I feel I should always be nice to other people.	1	2	3	4	5
29. It is hard for me to be by myself for more than a couple hours (not home alone).	1	2	3	4	5
30. I usually think of how I did on things as either a complete success or a complete failure.	1	2	3	4	5
31. I find it hard to be away from people I love.	1	2	3	4	5
32. It bothers me when I'm not sure how to act in front of people.	1	2	3	4	5
33. I say I'm sorry more than I need to.	1	2	3	4	5
34. I worry more about having friends than about doing well at things (school, sports).	1	2	3	4	5

	Totally Disagree	Disagree	Neither Agree nor Disagree	Agree	Totally Agree
35. I set higher goals for myself than do other kids my age.	1	2	3	4	5
36. I get upset when something happens to me and there's nobody around to talk to.	1	2	3	4	5
37. I would like to be a better person than I am.	1	2	3	4	5
38. It is very important to me to be liked by others.	1	2	3	4	5
39. I like to know that there is somebody there for me just in case something bad happens to me.	1	2	3	4	5
40. I enjoy working hard.	1	2	3	4	5
41. I do things to please people even if it's not good for me.	1	2	3	4	5
42. It is hard for me show that I am angry at someone.	1	2	3	4	5
43. I worry a lot that people may say bad or mean things about me.	1	2	3	4	5
44. I often find that I don't do as well as I think I should.	1	2	3	4	5
45. It is very important to me that I do my best at whatever I do.	1	2	3	4	5

	Totally Disagree	Disagree	Neither Agree nor Disagree	Agree	Totally Agree
46. I don't like it when I can't tell whether or not someone likes me.	1	2	3	4	5

47. It bothers me when I feel that I am just average and ordinary (not special).	1	2	3	4	5

48. I feel bad if I don't have someone to do things with.	1	2	3	4	5

CASQ

DIRECTIONS: For each of these questions, imagine that you are the person in the sentence and that the situation is really happening to you. Then choose one reason for why the thing in the sentence happened to you. Sometimes both reasons may seem right, but you have to pick the one that you believe is more likely to be the reason. Sometimes neither reason will seem right, but please pick one of the answers. Don't pick both answers and don't skip any questions.

1. You get an "A" on a test.
 - I am smart.
 - I am good in the subject that the test was in.
2. Some kids you know say that they do not like you.
 - Once in a while people are mean to me.
 - Once in a while I am mean to other people.
3. A good friend tells you that s/he hates you.
 - My friend was in a bad mood that day.
 - I wasn't nice to my friend that day.
4. A person steals money from you.
 - That person is not honest.
 - Many people are not honest.
5. Your parents tell you that something you make is very good.
 - I am good at making some things.
 - My parents like some things I make.
6. You break a glass.
 - I am not a careful person.
 - Sometimes I am not careful enough.
7. You do a project with a group of kids and it turns out badly.
 - I don't work well with the people in that particular group.
 - I never work well with groups.
8. You make a new friend.
 - I am a nice person.
 - The people that I meet are nice.
9. You have been getting along well with your family.
 - I am usually easy to get along with when I am with my family.
 - Once in a while I am easy to get along with when I am with my family.
10. You have a substitute teacher and s/he likes you.
 - I was well behaved during class that day.
 - I am almost always well behaved during class.

11. You walk into a door and you get a bloody nose.
 - o I wasn't looking where I was going.
 - o I have been careless lately.
12. You have a messy room.
 - o I did not clean my room that day.
 - o I usually do not clean my room.
13. Your mother makes you your favorite dinner.
 - o There are a few things that my mother will do to please me.
 - o My mother usually likes to please me.
14. A team that you are on loses a game.
 - o The team members usually don't help each other when they play together.
 - o That day the team members didn't help each other.
15. You hit a home run in a ball game.
 - o I swung the bat just right.
 - o The pitcher threw an easy pitch.
16. You go to an amusement park and you have a good time.
 - o I usually enjoy myself at amusement parks.
 - o I usually enjoy myself in many activities.
17. You go to a friend's party and you have fun.
 - o Your friend usually gives good parties.
 - o Your friend gave a good party that day.
18. You get a bad grade in school.
 - o I am not a good student.
 - o Teachers give hard tests.
19. You make your friends happy.
 - o I I am usually a fun person to be with.
 - o Sometimes I am a fun person to be with.
20. You put a hard puzzle together.
 - o I am good at putting puzzles together.
 - o I am good at doing many things.
21. You try out for a sports team and do not make it.
 - o I am not good at sports.
 - o The other kids who tried out are very good at sports.
22. You fail a test.
 - o Most tests are hard.
 - o That test was hard.

23. You do not get your chores done at home.
- o I was lazy that day.
 - o Many days I am lazy.
 - o
24. You do the best in your class on a paper.
- o The other kids in my class did not work hard on their papers.
 - o I worked hard on the paper.
25. Your pet gets hit by a car.
- o I did not take good care of my pet.
 - o The driver was not careful enough.
26. You tell a joke and no one laughs.
- o I do not tell jokes well.
 - o The joke is not very funny.
27. Your teacher gives a lesson and you do not understand it.
- o I did not pay attention to anything that day.
 - o I did not pay attention when my teacher was talking.
28. You gain a lot of weight and start to look fat.
- o The good my mother gave me is fattening.
 - o I like to eat fattening foods.
29. A grown-up yells at you.
- o That grown-up yelled at the first person s/he saw that day.
 - o That grown-up yelled at a lot of people that day.
30. You try to sell candy, but no one will buy any from you.
- o Lately a lot of kids have been selling things, so people have not wanted to buy anything else from kids.
 - o People usually do not like to buy things from kids.
31. You twist your ankle in gym class.
- o Lately the sports in gym class have been dangerous.
 - o Lately I have been clumsy in gym class.
32. You take a bus that arrives so late that you missed doing something you wanted to do.
- o The past few days there have been problems with buses being on time.
 - o The buses are almost never on time.
33. Your teacher asks you a question and you give the wrong answer.
- o I usually get nervous when I have to answer questions.
 - o That day I got nervous when I had to answer questions.
34. You have a fight with a friend.
- o I was in a bad mood that day.
 - o My friend was in a bad mood that day.

35. You try to convince a friend to go to the movies with you, but s/he will not go with you.

- o That day my friend did not feel like doing anything.
- o That day my friend did not feel like going to the movies.

36. You have been trying to get into a club and you don't get in.

- o There are a lot of things I am not good at.
- o I am not good at the things that the people in the club do.

DAS

Indicate how much you disagree or agree with each of the following statements. There is no right or wrong answer. We just want to know what you think.

0 = Totally Disagree 1 = Disagree Somewhat 2 = Neither disagree nor agree
 3= Agree Somewhat 4= Totally Agree

		Disagree		Agree		
		Totally	Some		Some	Totally
1.	I should be able to please everybody.	0	1	2	3	4
2.	My life is wasted unless I am a success.	0	1	2	3	4
3.	My value as a person depends greatly on what other people think of me.	0	1	2	3	4
4.	If a person has to be alone for a long period of time, it follows that he/she has to feel lonely.	0	1	2	3	4
5.	If a person is not a success, then his/her life is meaningless.	0	1	2	3	4
6.	If someone does a selfish act, this means he/she is a selfish person.	0	1	2	3	4
7.	All of the important people in my life must approve of what I do.	0	1	2	3	4
8.	If I do well, it is probably due to luck; if I do badly, it is probably because I messed up.	0	1	2	3	4
9.	Turning to someone else for advice or help means you are weak.	0	1	2	3	4
10.	If I am not doing as well as someone else, it means I am not as good as he or she is.	0	1	2	3	4

CBQ Adolescent Version Regarding Mother

DIRECTIONS: Think back over the last 2 weeks at home. The statements below have to do with you and your MOTHER. Read the statement, and then decide if you believe the statement is true. If it is true then fill in the bubble for True, and if you believe the statement is not true, fill in the bubble for False. Please fill in either true or false, but never both for the same item. Please answer all items. Your answers will not be shown to your parents.

Your answers are about your ___ **Biological Mother** ___ **Step-mother**

- | | | |
|---|----------------------------|-----------------------------|
| 1. My mother doesn't understand me | <input type="radio"/> True | <input type="radio"/> False |
| 2. My mother and I sometimes end our arguments calmly | <input type="radio"/> True | <input type="radio"/> False |
| 3. We almost never seem to agree | <input type="radio"/> True | <input type="radio"/> False |
| 4. I enjoy the talks my mother and I have | <input type="radio"/> True | <input type="radio"/> False |
| 5. When I state my own opinion, she gets upset | <input type="radio"/> True | <input type="radio"/> False |
| 6. At least three times a week, mother and I get angry at each other | <input type="radio"/> True | <input type="radio"/> False |
| 7. My mother listens when I need someone to talk to | <input type="radio"/> True | <input type="radio"/> False |
| 8. My mother is a good friend to me | <input type="radio"/> True | <input type="radio"/> False |
| 9. She says I have no consideration for her | <input type="radio"/> True | <input type="radio"/> False |
| 10. At least once a day we get angry at each other | <input type="radio"/> True | <input type="radio"/> False |
| 11. My mother is bossy when we talk | <input type="radio"/> True | <input type="radio"/> False |
| 12. My mother understands me | <input type="radio"/> True | <input type="radio"/> False |
| 13. The talks we have are frustrating | <input type="radio"/> True | <input type="radio"/> False |
| 14. My mother understands my point of view, even when she doesn't agree with me | <input type="radio"/> True | <input type="radio"/> False |
| 15. My mother seems to be always complaining about me | <input type="radio"/> True | <input type="radio"/> False |

16. In general, I don't think we get along very well True False

17. My mother yells a lot True False

18. My mother puts me down True False

19. If I run into problems, my mother helps me out True False

20. I enjoy spending time with my mother True False

CBQ Adolescent Version Regarding Father

DIRECTIONS: Think back over the last 2 weeks at home. The statements below have to do with you and your FATHER. Read the statement, and then decide if you believe the statement is true. If it is true then fill in the bubble for True, and if you believe the statement is not true, fill in the bubble for False. Please fill in either true or false, but never both for the same item. Please answer all items. Your answers will not be shown to your parents.

Your answers are about your ___ **Biological Father** ___ **Step-father**

- | | | |
|--|----------------------------|-----------------------------|
| 1. My father doesn't understand me | <input type="radio"/> True | <input type="radio"/> False |
| 2. My father and I sometimes end our arguments calmly | <input type="radio"/> True | <input type="radio"/> False |
| 3. We almost never seem to agree | <input type="radio"/> True | <input type="radio"/> False |
| 4. I enjoy the talks my father and I have | <input type="radio"/> True | <input type="radio"/> False |
| 5. When I state my own opinion, he gets upset | <input type="radio"/> True | <input type="radio"/> False |
| 6. At least three times a week, my father and I get angry at each other | <input type="radio"/> True | <input type="radio"/> False |
| 7. My father listens when I need someone to talk to | <input type="radio"/> True | <input type="radio"/> False |
| 8. My father is a good friend to me | <input type="radio"/> True | <input type="radio"/> False |
| 9. He says I have no consideration for him | <input type="radio"/> True | <input type="radio"/> False |
| 10. At least once a day we get angry at each other | <input type="radio"/> True | <input type="radio"/> False |
| 11. My father is bossy when we talk | <input type="radio"/> True | <input type="radio"/> False |
| 12. My father understands me | <input type="radio"/> True | <input type="radio"/> False |
| 13. The talks we have are frustrating | <input type="radio"/> True | <input type="radio"/> False |
| 14. My father understands my point of view, even when he doesn't agree with me | <input type="radio"/> True | <input type="radio"/> False |
| 15. My father seems to be always complaining about me | <input type="radio"/> True | <input type="radio"/> False |

16. In general, I don't think we get along very well True False

17. My father yells a lot True False

18. My father puts me down True False

19. If I run into problems, my father helps me out True False

20. I enjoy spending time with my father True False

LEQ

DIRECTIONS: Please indicate by filling in the circle (Yes or No) if the event mentioned happened to you in the last _____ months.

Health and Loss	Yes	No
1. You were seriously ill or injured, hospitalized, or had surgery.	<input type="radio"/>	<input type="radio"/>
2. A close family member was seriously ill or injured, hospitalized, or had surgery.	<input type="radio"/>	<input type="radio"/>
3. A close friend was seriously ill or injured, hospitalized, or had surgery.	<input type="radio"/>	<input type="radio"/>
4. A close family member died.	<input type="radio"/>	<input type="radio"/>
5. A close friend died.	<input type="radio"/>	<input type="radio"/>
6. A close friend moved away.	<input type="radio"/>	<input type="radio"/>
7. A pet died, ran away, or had to be given away.	<input type="radio"/>	<input type="radio"/>
8. A close family member had serious emotional problems.	<input type="radio"/>	<input type="radio"/>
9. A close friend had serious emotional problems.	<input type="radio"/>	<input type="radio"/>

Arguments or Conflict	Yes	No
10. Increase in arguments/conflict between your parents.	<input type="radio"/>	<input type="radio"/>
11. Your parents separated or divorced.	<input type="radio"/>	<input type="radio"/>
12. Increased arguments/conflicts between you and your parents.	<input type="radio"/>	<input type="radio"/>
13. Increased arguments/conflicts between you and your siblings.	<input type="radio"/>	<input type="radio"/>
14. Increased arguments/conflicts between your siblings and parents.	<input type="radio"/>	<input type="radio"/>
15. Increased arguments/conflicts between you and a friend or friends.	<input type="radio"/>	<input type="radio"/>
16. Increased arguments/conflicts between you and your boyfriend/girlfriend.	<input type="radio"/>	<input type="radio"/>
17. You and your boyfriend/girlfriend broke-up.	<input type="radio"/>	<input type="radio"/>
18. Peers bullied you, teased or rejected you, spread rumors about you, or were mean to you.	<input type="radio"/>	<input type="radio"/>

Moves and Changes	Yes	No
19. Your family moved to a new home or apartment.	<input type="radio"/>	<input type="radio"/>
20. Your family was evicted from your home or apartment.	<input type="radio"/>	<input type="radio"/>
21. Your home was seriously damaged (e.g., fire, flood, tornado).	<input type="radio"/>	<input type="radio"/>
22. One of your parents remarried.	<input type="radio"/>	<input type="radio"/>
23. You changed schools.	<input type="radio"/>	<input type="radio"/>
24. You moved away from your family (write to where _____ e.g., foster care, live with other parent, college, etc.)	<input type="radio"/>	<input type="radio"/>

School and Job	Yes	No
25. You received a failing grade on a report card.	<input type="radio"/>	<input type="radio"/>
26. You failed the year and had to attend summer school or repeat the year.	<input type="radio"/>	<input type="radio"/>
27. You were not picked for something you really wanted (e.g., sports team, cheerleading, school play, class representative, college of your choice, etc.).	<input type="radio"/>	<input type="radio"/>
28. Increased arguments/conflicts with a teacher or a coach.	<input type="radio"/>	<input type="radio"/>
29. You got into serious trouble at school (e.g., suspended, expelled).	<input type="radio"/>	<input type="radio"/>

30. You were unable to find a job after looking for a while.	<input type="radio"/>	<input type="radio"/>
31. You were fired from a job.	<input type="radio"/>	<input type="radio"/>
32. You got into serious trouble at work.	<input type="radio"/>	<input type="radio"/>
33. Increased arguments/conflicts with your boss.	<input type="radio"/>	<input type="radio"/>

Finances

Yes No

34. You or your family had serious financial problems (e.g. bankrupt, purchases repossessed).	<input type="radio"/>	<input type="radio"/>
35. Your family had less money for important things (e.g., food, electricity, rent, couldn't pay bills).	<input type="radio"/>	<input type="radio"/>
36. You could not do something you really wanted to do because you did not have enough money (e.g. college, prom, class trip, vacation).	<input type="radio"/>	<input type="radio"/>
37. A parent was fired or laid off from a job.	<input type="radio"/>	<input type="radio"/>

Crime and Legal Issues

Yes No

38. You were the victim of a crime (e.g. robbed, attacked).	<input type="radio"/>	<input type="radio"/>
39. You witnessed violence.	<input type="radio"/>	<input type="radio"/>
40. You were the victim of abuse.	<input type="radio"/>	<input type="radio"/>
41. A close family member was the victim of a crime or abuse.	<input type="radio"/>	<input type="radio"/>
42. A close friend was the victim of a crime or abuse.	<input type="radio"/>	<input type="radio"/>
43. You got into serious trouble with the law.	<input type="radio"/>	<input type="radio"/>
44. A close family member got into serious trouble with the law.	<input type="radio"/>	<input type="radio"/>

Other

Yes No

45. A close friend got into serious trouble with the law.	<input type="radio"/>	<input type="radio"/>
46. Females: You became pregnant. Males: A girl became pregnant by you.	<input type="radio"/>	<input type="radio"/>
47. You became engaged.	<input type="radio"/>	<input type="radio"/>
48. You got married.	<input type="radio"/>	<input type="radio"/>
49. A close relative or close friend in the armed services was sent into active duty (e.g., went to Iraq).	<input type="radio"/>	<input type="radio"/>
50. You were in a car accident.	<input type="radio"/>	<input type="radio"/>
51. Any other events that happened to you that were not mentioned here:	<input type="radio"/>	<input type="radio"/>

COPE

We are interested in how people respond when they confront difficult or stressful events in their lives. There are a lot of ways to try to deal with stress. This questionnaire asks you to indicate what you generally feel when you experience certain events. Obviously, different events bring out somewhat different responses, but think about what you *usually* do when you are under a lot of stress.

Then respond to each of the following items by blackening one number on your answer sheet for each, using the response choices listed below. Please try to respond to each item *separately in your mind from each other item*. Choose your answers thoughtfully and make your answers as true FOR YOU as you can. Please answer *every* item. There are no "right" or "wrong" answers, so choose the most accurate answer for YOU--not what you think most people would say or do. Indicate what YOU usually do when YOU experience a stressful event.

	<u>Not at all</u>	<u>A little</u>	<u>Medium</u>	<u>A lot</u>
1. I try to grow as a person as a result of the experience.	1	2	3	4
2. I turn to work or other substitute activities to take my mind off things.....	1	2	3	4
3. I get upset and let my emotions out.	1	2	3	4
4. I try to get advice from someone about what to do.....	1	2	3	4
5. I concentrate my efforts on doing something about it.....	1	2	3	4
6. I say to myself, "This isn't real."	1	2	3	4
7. I put my trust in God.....	1	2	3	4
8. I laugh about the situation.....	1	2	3	4
9. I admit to myself that I can't deal with it and quit trying.....	1	2	3	4
10. I restrain myself from doing anything too quickly.	1	2	3	4
11. I discuss my feelings with someone else.	1	2	3	4
12. I use alcohol or drugs to make myself feel better.	1	2	3	4
13. I get used to the idea that it happened..	1	2	3	4
14. I talk to someone to find out more about the situation.....	1	2	3	4
15. I keep myself from getting distracted by other thoughts or activities.....	1	2	3	4
16. I daydream about things other than this.	1	2	3	4

	<u>Not at all</u>	<u>A little</u>	<u>Medium</u>	<u>A lot</u>
17. I get upset and am really aware of it.....	1	2	3	4
18. I seek God's help.....	1	2	3	4
19. I make a plan of action.....	1	2	3	4
20. I make jokes about it.....	1	2	3	4
21. I accept that this has happened and that it can't be changed.....	1	2	3	4
22. I hold off doing anything about it until the situation permits.....	1	2	3	4
23. I try to get emotional support from friends or relatives.....	1	2	3	4
24. I just give up trying to reach my goal.....	1	2	3	4
25. I take additional action to try to get rid of the problem.....	1	2	3	4
26. I try to lose myself for a while by drinking alcohol or using drugs.....	1	2	3	4
27. I refuse to believe that it has happened.....	1	2	3	4
28. I let out my feelings.....	1	2	3	4
29. I try to see it in a different light, to make it seem more positive.....	1	2	3	4
30. I talk to someone who could do something concrete about the problem.....	1	2	3	4
31. I sleep more than usual.....	1	2	3	4
32. I try to come up with a strategy about what to do.....	1	2	3	4
33. I focus on dealing with this problem and if necessary let other things slide a little.....	1	2	3	4
34. I get sympathy and understanding from someone.....	1	2	3	4

35. I drink alcohol or use drugs in order to think about it less.	1	2	3	4
36. I kid around about it.	1	2	3	4
37. I give up the attempt to get what I want.	1	2	3	4
38. I look for something good in what is happening.	1	2	3	4
39. I think about how I might best handle the problem.	1	2	3	4
40. I pretend it hasn't really happened.	1	2	3	4
41. I make sure not to make matters worse by acting too soon.	1	2	3	4
42. I try hard to prevent other things from interfering with my efforts at dealing with this.	1	2	3	4
43. I go to the movies or watch TV, to think about it less.	1	2	3	4
44. I accept the reality of the fact that it happened.	1	2	3	4
45. I ask people who have had similar experiences what they did.	1	2	3	4
46. I feel a lot of emotional distress and I find myself expressing those feelings a lot.	1	2	3	4
47. I take direct action to get around the problem.	1	2	3	4
48. I try to find comfort in my religion.	1	2	3	4
49. I force myself to wait for the right time to do something.	1	2	3	4
50. I make fun of the situation.	1	2	3	4
51. I reduce the amount of effort I'm putting into solving the problem.	1	2	3	4
52. I talk to someone about how I feel.	1	2	3	4
53. I use alcohol or drugs to help me get through it.	1	2	3	4

54. I learn to live with it.....	1	2	3	4
55. I put aside other activities in order to concentrate on this.	1	2	3	4
56. I think hard about what steps to take.....	1	2	3	4
57. I act as though it hasn't ever happened.....	1	2	3	4
58. I do what has to be done, one step at a time...	1	2	3	4
59. I learn something from the experience.....	1	2	3	4
60. I pray more than usual.....	1	2	3	4

Knowledge Questionnaire

Circle the ONE correct answer (a, b, c, or d) for each question.

- 1) Which of the following demonstrates an “I” statement?
 - a. “I don’t like your tone of voice!”
 - b. “I’m going to the park after school.”
 - c. “I don’t understand why you won’t listen to me”
 - d. “I feel angry when you talk to me that way.”

- 2) Which of the following is not a good technique for communicating with other people?
 - a. Strike while the iron is hot.
 - b. Have solutions in mind.
 - c. Put yourself in their shoes.
 - d. Be specific.

- 3) What is a healthy number of realistic or positive thoughts to have, compared to negative or unrealistic thoughts?
 - a. 1:1
 - b. 2:1
 - c. 3:1
 - d. 4:1

- 4) Which of the following statements is most correct?
 - a. Our relationships affect the way we feel.
 - b. The way we feel affects our relationships.
 - c. Both a and b are true.
 - d. Neither a nor b are true.

- 5) What do you call an event that happens before an automatic thought?
 - a. A Pre-thought Event
 - b. An Activating Event
 - c. A Primary Event
 - d. An Interpersonal Event

- 6) If Jimmy thinks he should be allowed to go to his friend’s house when he wants to and his parents think he should have to do chores, this is an example of which of the following?
 - a. A role transition
 - b. A role dispute
 - c. An interpersonal deficit
 - d. A role play

- 7) Which of the following is NOT one of the 6 helpful questions for examining a belief?
 - a. What is the evidence for or against this belief?
 - b. What are other possible interpretations for this situation?

- c. Even if this is true, will it make a big difference?
 - d. How long have I had this belief?
- 8) Which of the following is commonly associated with someone who is expressing anger?
- a. Using a lower tone of voice than usual
 - b. Using more hand gestures than usual
 - c. Speaking more slowly than usual
 - d. Speaking more calmly than usual
- 9) Which of the following is a thought stopping technique?
- a. The rubber band technique
 - b. The 1-2-3 technique
 - c. The red light technique
 - d. The mental leash technique
- 10) Which of the following symbols accurately represents how automatic thoughts are related to underlying Core Beliefs?
- a. Triangle
 - b. Circle
 - c. Onion
 - d. Carrot
- 11) Which of the following is NOT a main step in problem solving?
- a. Pros and Cons
 - b. Put yourself in the other person's shoes
 - c. Brainstorm
 - d. Try and try again
- 12) Which of the following is a purpose of role playing?
- a. Practicing communication skills to prepare for a conversation.
 - b. Developing acting skills for a theater career.
 - c. Learning new vocabulary.
 - d. Understanding negative thoughts.
- 13) What does the phrase, "Strike while the iron is cold" refer to?
- a. Making yourself feel better when you are sad.
 - b. Getting someone to stop saying bad things about you.
 - c. Working out problems with parents.
 - d. Picking the right time to talk to someone.
- 14) Which of the following is NOT an example of one of the three sides of the triangle?
- a. Thinking "I'm so stupid."
 - b. Feeling sad.
 - c. Asking the teacher for help.
 - d. Getting a bad grade on a test.

Appendix B: Outline of Sessions for the CB Intervention

Session 1

- I. Get-acquainted Activity (30 min.)
- II. What is Stress? (15 min)
- III. What is Depression? (15 min)
- IV. Personal Goals (5 min.)
- V. Mood Diary (10 min.)
- VI. Practice Assignment (5 min.)
- VII. Sharing Activity (10 min.)

Session 2

- I. Review (10 min)
- II. Guidelines for this Group (10 min)
- III. Identifying Negative Thoughts (40 min)
- IV. Feelings about the Group (7 min)
- V. Mood Questionnaire (7 min)
- VI. Practice Assignment (5 min.)
- VII. Sharing Activity (10 min.)

Session 3

- I. Review (5 min.)
- II. Identifying Activating Events (35 min.)
- III. Increasing Positive Thinking (30 min)
- IV. Personal Goals Revisited (5 min)
- IV. Practice Assignment (5 min.)
- V. Sharing Activity (10 min.)

Session 4

- I. Review (5 min)
- II. Practice Identifying Unrealistic Thoughts (25 min)
- III. Changing Unrealistic Thinking to Realistic Thinking (45 min)
- IV. Practice Assignment (5 min.)
- VI. Sharing Activity (10 min)

Session 5

- I. Review (5 min.)
- II. Discovering Underlying Negative Beliefs (35 min)
- III. Is it Really about Me? (35 min)
- IV. Practice Assignment (5 min.)
- V. Sharing Activity (10 min)

Session 6

- I. Review (5 min)
- II. More A-B-C Practice or Sources of Beliefs (30 min)
- III. Using Problem Solving to Cope with Activating Events (35 min)
- IV. Practice Assignment (5 min.)
- V. Sharing Activity (10 min)

Session 7

- I. Review (5 min)
- II. Techniques for Interrupting Unrealistic Thoughts(20 min)
- III. Using A-B-C in your Life (15 min)
- IV. Prompts (15 min)
- V. Balloon Exercise (20 min)
- VI. Practice Assignment (5 min)
- VII. Sharing Activity (10 min)

Session 8

- I. Emergency Planning (35 min)
- II. Maintaining your Gains (25 min)
- III. Questionnaires (10 min)
- IV. Last Sharing Activity (10 min)
- V. Ending the Weekly Meetings (10 min)

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