

DEVELOPMENTAL CHANGES IN COPING AND ADJUSTMENT IN CHILDREN

by

PATRICIA SINPEI CHENG

Under the direction of Ronald L. Blount, Ph.D.

ABSTRACT

Developmental differences in the relationship between coping and adjustment were examined. Participants were fourth, sixth, and eighth grade children and adolescents. Participants completed a self-report measure of their approach and avoidant coping behaviors, and their teachers completed a measure of participants' psychosocial adjustment as measured by both positive and negative indicators. Results indicated that there were developmental differences in participants' use of approach and avoidant coping strategies, with eighth graders using more avoidant strategies than the fourth and sixth graders. Additionally, use of approach strategies was related to more positive adjustment across the three age levels. Individual approach and avoidant coping strategies associated with greater positive adjustment are identified. This study has implications for the development of coping skills interventions.

INDEX WORDS: Coping, Adjustment, Development, Children, Adolescents

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CHAPTER 1

INTRODUCTION

Children and adolescents face a myriad of stressors on a daily basis. From peer and academic difficulties to dealing with parents' divorce or separation, children are continually faced with challenges and stressors. However, not all children react to stressors in the same way; while some children adapt to certain stressors easily, other children are significantly debilitated when confronted with stressors. Research has indicated that coping processes may mediate the relationship between stressor and psychosocial functioning. However, while there is extensive research investigating adult reactions to stress and the adult coping process, our understanding of child and adolescent coping is relatively meager.

Sources of Children's and Adolescents' Stress

In order to understand the process of coping in children and adolescents, it is important to first understand the types of stressors they face. Research indicates that children and adolescents face a wide range of stressors. In the area of school stressors alone, children and adolescents face a variety of stressful situations including those related to academics as well as interpersonal stressors. Romano (1997) found that in a sample of fourth and fifth graders, children listed events involving some aspect of the academic experience as their top four most stressful situations. These stressors included taking tests, general academic achievement, peer relationships, and athletic performances. Research has also focused on school stressors such as peer pressure, boredom with

school, academic competition, and school violence (Farrell, Peguero, Lindsey, & White, 1988).

Family stressors such as parents' divorce or sibling rivalry have also been found to be a source of stress for children and adolescents (Romano, 1997). Healy, Stewart, and Copeland (1993) found that parental divorce has both short- and long-term effects on children's behavior problems, social skills, and academic achievement. Difficulties with parents such as having arguments or issues concerning control have also been found to be significant stressors for children and adolescents (Spirito, Stark, Grace, & Stamoulis, 1991).

Children and adolescents also encounter medical stressors. While all children must undergo stressful and potentially frightening immunizations or dental care, some children must cope with more serious and chronic medical conditions. There is evidence that children as young as 5 years old can provide detailed descriptions of their pain as well as accurately recall painful experiences and associate pain with their feelings of fear and anxiety (Rudolph, Dennig, & Weisz, 1995). Chronic medical stressors can affect children in other areas of their life such as adjusting to school. There has been evidence that children with cancer experience problems with school such as chronic absenteeism (Lansky, Cairnz, & Zwartjes, 1983) and school phobia (Lansky, Lowman, Vats, & Gyulay, 1975).

The Effects of Stress on Children and Adolescents

Stress has been shown to have significant negative effects on children and adolescents in a variety of areas including emotional, behavioral, and physical functioning. Helms and Gable (1990) found that fear, shyness, and loneliness were

emotional symptoms of stress. They also found talking back to teachers and hurting others as behavioral symptoms of stress in children. Rudolph et al. (1995) found that for children dealing with medical stressors, feelings of anger, fear, anxiety, and embarrassment were associated with their painful experiences. Ebata and Moos (1991) examined psychological distress as indicated by depression and anxiety ratings in adolescents as related to stress. Irritability, attention and concentration deficits, impulsive behavior, and social withdrawal have also been cited as symptoms of stress in children and adolescents (Brenner, 1984; Helms & Gable, 1990).

School and academic performance, as well as the quality of interpersonal relationships, can also suffer when children and adolescents are under stress. Feelings of being overwhelmed can often significantly interfere with a child's ability to concentrate and perform subtle cognitive tasks. Sylwester (1983) found that physical symptoms such as headache, fatigue, stomachaches, and the exacerbation of chronic medical conditions such as asthma and diabetes were related to experiencing school stress.

The Approach/Avoidance Model of Coping

While there is evidence that children and adolescents experience a wide variety of stressors and that these stressors can have a strong negative impact on children, not all children react to stress in the same manner. Recently, much research has been conducted on the role of individual differences, risk factors, and resiliency factors in explaining why some children and adolescents react more negatively than others to stress. Specific coping behaviors have recently been explored as an important factor in how children and adolescents differentially deal with stress.

Coping is difficult to define both conceptually and operationally. Lazarus and Folkman (1984) state that coping is a dynamic process of both cognitive and behavioral responses working to reduce or eliminate stress or distress. This rather broad definition emphasizes that coping is a process, and thus not easily translated into more concrete terms. This is apparent from the literature as there are numerous models used to conceptualize coping. Several models conceptualize individuals' coping behavior into consistent, dichotomized coping styles. These models include: emotion-focused versus problem-focused coping (Band & Weisz, 1988) primary versus secondary control coping (Rothbaum, Weisz, & Snyder, 1982), and active versus passive coping (Ebata & Moos, 1991).

One prominent model, and the categorization used in this study, examines coping style as approach or avoidance (Billings & Moos, 1981). Approach strategies involve both focusing attention on the stressor itself and/or the effects of the stressor. Cognitive approach strategies, such as gathering information about the stressor, involve changing one's way of thinking about the problem. Behavioral approach strategies involve attempting to actively deal with the stressor or its effects through methods such as seeking social support or making efforts to change the stressor. Avoidant strategies involve focusing attention away from the stressor or its effects. Cognitive strategies involve attempts to cope by denying or minimizing the threat of the stressor, while behavioral strategies involve avoiding confrontation with the stressor through means such as playing with toys as a distraction.

Developmental Differences in Coping

The development of specific coping behaviors has been demonstrated to be related to children's developmental level. Losoya, Eisenberg, and Fabes (1998) conducted a study with children ages 4 to 6 years old and followed them longitudinally for six years until they were ages 10 to 12 years old. They found that avoidant coping was used more often and more consistently across situations as the children increased in age. Altshuler and Ruble (1989) examined developmental changes in coping for children at three different age levels ranging from 5 to 11 years old. Their findings indicate that the number of avoidant coping strategies used increased with age, but there were no age differences in the relative use of approach coping strategies. Compas, Malcarne, and Fondacaro (1988) examined sixth, seventh, and eighth grade students coping with academic and interpersonal stressors. Their results were similar in that the proportionate use of avoidant coping strategies increased with age while there was no change in the use of approach coping over age.

Band (1990) examined children of two different age groups with diabetes and assessed the strategies they employed to cope with diabetes-related stressors. Findings indicated that children at earlier levels of cognitive development relied more on approach strategies than did the more cognitively mature children. The children at the more mature developmental level relied more on avoidant coping strategies. Reid, Dubow, and Carey (1995) found that in their comparison of differential coping behaviors of children and adolescents coping with diabetes- and peer-related stressors, children relied more on approach coping strategies than did the adolescents.

Research suggests that the general developmental pattern involves approach and avoidant coping emerging at different points. In general, approach coping behaviors appear to be acquired earlier and remain relatively stable across age. Avoidant coping behaviors, however, appear to be acquired later and then tend to increase with age. One possible explanation for these developmental differences is that approach coping strategies, such as information seeking, emerge earlier because they are generally overt and thus more readily acquired by modeling adult behavior (Compas, Banez, Malcarne, & Worsham, 1991). Because avoidant coping strategies are often less overt, they are less easily acquired through observation.

Many avoidant strategies, such as cognitive distraction, require more advanced abstract reasoning skills as well as self-control skills. Altshuler and Ruble (1989) demonstrated that younger children tended to rely more on concrete behavioral methods of distraction (e.g., watching television) than more abstract cognitive methods of distraction (e.g., thinking about something else fun). Also, studies suggest that younger children may be less aware of their internal emotional states and may also not realize that their emotional states can be brought under their own control. Hence, younger children may not understand avoidant strategies such as cognitive distraction in a logical manner.

Situational Differences in Coping

Many studies have attempted to identify the situations in which children and adolescents apply particular coping strategies. However, the findings are contradictory and very little consensus regarding situational differences in coping strategy use have been established. For instance, Compas et al. (1988) found that for children ages 10 to 14 approach coping was used more often for academic stressors than for interpersonal

stressors. However, Brodzinsky et al. (1992) found that in a similarly aged sample of children, approach strategies were used more often for peer problems than for academic problems.

Reid et al. (1995) examined differences in how children and adolescents with diabetes coped with both a health-related and a peer-related stressor. Their findings indicate that approach coping strategies were used more often in the peer-related situation and avoidant strategies were used more commonly in the diabetes-related situation. Band and Weisz (1988) examined how children ages 6, 9, and 12 coped with six common, hypothetical stressors including medical, interpersonal, and school stressors. Similarly, they found that children reported using avoidant strategies for medical stressors.

Clearly, children and adolescents use a variety of coping strategies when confronted with different stressful events. There does not appear to be a definite relationship between situation or type of stressor and coping strategy use. Therefore, it is essential to include events from a broad range of stressful domains in order to attain responses which are representative of children's overall coping.

Coping and Adjustment

There are several studies which examine the relationship between the relative efficacy of approach and avoidant coping strategies by examining various measures of children's and adolescents' adjustment. Generally, these studies support the notion that approach coping strategies lead to better adjustment when dealing with stressful situations than do avoidant coping strategies. Compas et al. (1988) examined the types of coping strategies children and adolescents use when dealing with academic and interpersonal stressors. Their results found that the use of approach coping strategies for

the interpersonal stressor was negatively related to maternal and child self-reports of emotional and behavioral problems. Children and adolescents who used more avoidant and fewer approach coping strategies displayed poorer adjustment than those who used a greater number of approach coping strategies and fewer avoidant strategies.

Ebata and Moos (1991) had similar findings in their study of coping in four groups of adolescents. Adolescents with rheumatic disease, conduct problems, depression, and a control group were asked to report how they coped with the most important stressor they had faced during the past year. The findings indicated that depressed adolescents and those with conduct disorder used more avoidant coping than did adolescents with rheumatic disease or those in the healthy control group. Importantly, coping was shown to be related to psychosocial functioning after controlling for group membership.

This pattern of coping efficacy has also been found for individuals coping with medical stressors. Reid et al. (1995) investigated the coping behavior of children with diabetes in medical and peer related situations. Higher levels of approach coping strategy use and lower levels of avoidant strategy use for the peer situation was related to positive adjustment as indicated by self-reports of depressive symptomatology and grade point average.

Bunke and Blount (2000) examined the coping behaviors of fourth and eleventh grade students in relation to measures of both positive and negative adjustment. Results indicated that there were no differences between the fourth and eleventh graders in their use of approach and avoidant coping strategies. However, for the eleventh grade adolescents' use of both approach and avoidant coping strategies was related to better

adjustment. In contrast, for the fourth grade children only the use of approach coping strategies was associated with better adjustment. Fourth grade children who used low rates of approach and avoidant coping and those who were high in avoidant coping but low in approach coping were less well adjusted than those who used high rates of approach coping. In their recent review, Compas et al. (2001) stated that, in general, approach coping strategies appear to be related to better psychosocial adjustment. This finding was found across samples of children and adolescents and was true for measures of externalizing and internalizing problems and social competence.

However, avoidant coping strategies do appear to be efficacious in certain types of stressful situations. From the results of their meta-analysis, Suls and Fletcher (1985) conclude that while approach coping is more effective for long-term coping and positive adaptation, avoidant strategies do appear to be effective for short-term relief from stressors. Also, in their review of interventions to help children cope during hospitalizations, Blount, Smith, and Frank (1999) indicate that for acute stressors, such as injections, avoidant coping strategies appear to be more effective. In their examination of coping with chronic versus recent-onset pain, Holmes and Stevenson (1990) found that use of approach coping led to better adjustment in terms of somatic, behavioral, and psychological adjustment for those individuals with chronic pain. However, recent-onset pain patients showed better adjustment using avoidant strategies.

Powers, Blount, Bachanas, Cotter, and Swan (1993) also found that training pediatric oncology patients and their parents to engage in distraction prior to and during painful injections was related to decreased signs of distress in the child. Nurses also rated children as being more cooperative during and after this distraction training. Blount,

Sturges, and Powers (1990) found that certain avoidant coping strategies may be useful when considered within a specific phase of a painful medical procedure. Specifically, during the early, non-painful phases of a procedure, children tended to engage in nonprocedural talk and humor to distract themselves from their anticipatory distress. Later, more active coping strategies, such as deep breathing, were preferred.

There is also evidence that avoidant coping strategies are more effective when faced with stressors that the individual perceives as uncontrollable or unchangeable. Approach focused coping appears to be related to individual's feelings of perceived control over a stressor, while avoidant coping is associated with internal cues of distress (Compas, Banez, Malcarne, & Worsham 1991). Compas, Malcarne, and Fondacaro (1988) found that children and adolescents generated approach coping strategies to match their appraisals of the controllability of the stressor.

Although approach coping strategies appear to be related to better overall adjustment, avoidant strategies are efficacious in certain situations. Having access to both approach and avoidant strategies would thus appear to be essential to positive adjustment. Lazarus and Folkman (1984) state that effective adaptation is characterized by an individual's ability to apply a variety of coping techniques in relation to the demands of different stressors or to the same stressor as it changes over time. Individuals who not only have a broad range of coping strategies in their repertoire, but also are able to accurately appraise the demands of a situation and apply an effective coping strategy should be better adjusted than those who do not have this access.

In their discussion of children's and adolescents' coping, Spivack, Platt, and Shure (1976) describe the ability to generate alternative solutions to stressful situations as

an important skill when dealing with interpersonal challenges. A child who has only one or two possible solutions available for any stressful situation will be less successful in dealing with that challenge than a child who has numerous alternative solutions. For instance, if the first solution a child attempts to apply to a stressful situation does not work, the child will have alternative solutions with which to attempt to resolve the problem. Spivack and Shure (1982) demonstrate that this ability to generate alternate solutions is related to social adjustment in children and adolescents.

The Current Study

Although it is apparent that children and adolescents face many stressors in a variety of life domains, our understanding of how children and adolescents deal with stressors is lacking. While individual differences seem to be a key in children's differential reactions to stress, there is relatively little research in this area that helps clarify the coping process of youth. This proposed study expands upon the existing literature in several important ways. In particular, this study attempts to replicate and expand upon the work of Bunke and Blount (2000) who examined the relationship between use of coping strategies and adjustment in fourth and eleventh grade children and adolescents. These researchers did not find differences in the number of approach or avoidant coping strategies that the fourth and eleventh graders used. However, they found a remarkably strong relationship between coping and adjustment for both groups. For the fourth graders approach coping was highly associated with adjustment. Avoidant coping did not contribute further to the prediction of adjustment. For the eleventh graders, approach coping strategies contributed a significant amount of the variance. Avoidant coping also contributed to the prediction of adjustment. It should be noted that

children completed the coping measure and their teachers completed the measure of child adjustment, thus eliminating common rater variance. Previous studies examining this relationship have found R^2 values as high as .42 (Ebata & Moos, 1991) and .57 (Gamble & McHale, 1989), whereas Bunke and Blount found values ranging from .75 to .91. Therefore, an attempt to replicate the findings of this study should be undertaken.

Although Bunke and Blount's work, along with several other studies, examines the role of age in coping, few have looked in detail at multiple age groups to provide a picture of the underlying developmental pattern. This study addresses that gap by including a sample of children and adolescents ranging in age from 9 to 14 years in approximately two-year intervals. This more comprehensive sample will provide a more complete understanding of the role of development in coping and should more precisely indicate the age at which the effective use of avoidant coping strategies begins to emerge.

Previous studies in this area have also failed to consider both problem and adaptive behavior as measures of psychosocial adjustment. Studies have focused primarily on measuring children's difficulty in adapting to stressors by examining variables such as depression, anxiety or conduct problems (e.g., Ebata & Moos, 1991; Swearingen & Cohen, 1985). However, adjustment is a reflection of both positive and negative behaviors. Positive indicators can provide useful information about children who are adjusting to stressors in a healthy manner.

There has been some evidence that coping behaviors may vary in relation to the overall level of stress in a child's life (Ebata & Moos, 1991; Holahan & Moos, 1987). However, most studies have either not considered general level of stress, do not control for stress effects in the design of the study, or have controlled for stress in an inadequate

manner. This study examines the role of general level of life stress by including a measure of children's and adolescents' recently experienced stressful life events.

Developing a better understanding of the process involved in children's and adolescents' coping has important implications for the development of interventions teaching adaptive coping skills. Understanding the underlying developmental pattern of coping behaviors and the relative efficacy of certain coping behaviors helps clarify the relationship between children's and adolescents' coping and adjustment. With a clearer conceptualization of the types of coping behaviors associated with better adjustment and the developmental pattern involved, interventions can be developed which are specifically geared to teach adaptive coping skills appropriate to children's developmental level. Also, because this study considers children's and adolescents' coping behaviors across a variety of stressors and situations, these findings can be applied to a wide-range of settings such as schools, mental health centers, and hospitals.

Hypotheses

1. In general, the use of avoidant coping strategies will increase as children get older. Thus, significant differences are expected between the overall proportion of avoidant strategies will by fourth and sixth graders when compared to eighth graders. No further differences in the use of avoidant coping strategies are expected among the different grade levels.
2. There will be no association between grade level and the use of approach coping strategies.
3. For the eighth grade children, use of both approach and avoidant coping strategies will be related to better psychosocial adjustment as measured by the dependent

variables of externalizing problems, internalizing problems, school problems, and adaptive skills.

4. The effects of approach and avoidant coping strategies on the dependent variables, as indicated in Hypothesis 3, will be supported even after accounting for the effects from level of stressful life events experienced.
5. For the fourth and sixth grade children, only use of the approach coping strategies will be related to better adjustment. The avoidant coping strategies are not expected to be significantly related to better adjustment.
6. The findings for Hypothesis 5 will be supported even after accounting for the effects from level of stressful life events experienced.
7. Greater levels of general life stress will be related to poorer adjustment as measured by the dependent variables.

CHAPTER 2

METHOD

Subjects

The participants in this study were 69 fourth graders (34 males and 35 females), 55 sixth graders (24 males and 31 females), and 57 eighth graders (25 males and 32 females) recruited from schools in the Cobb County, Georgia school district. Table 1 displays the demographic characteristics of the participants. The mean age of the fourth grade participants was 9 years and 11 months ($SD = 5$ months), the mean age of the sixth graders was 11 years and 6 months ($SD = 6$ months), and the mean age for eighth graders was 13 years and 8 months ($SD = 7$ months). For the fourth grade group, there were 45 Caucasian participants (65%), 12 African American participants (17%), and 12 participants of other or mixed race (17%). There were 39 Caucasian (71%), 13 African American (24%), and 3 other or mixed race participants (5%) in the sixth grade group. The eighth grade group consisted of 39 Caucasian (68%), 10 African American (18%), and 8 other or mixed race participants (14%). Socioeconomic status was calculated based on the Hollingshead two-factor classification (1957), with 1 = lowest socioeconomic class and 5 = highest socioeconomic class. The mean socioeconomic status was 3.17 ($SD = .99$) for the fourth graders, 3.21 ($SD = .94$) for the sixth graders, and 3.35 ($SD = .89$) for the eighth graders.

Procedure

Letters describing this research project and requesting informed consent and data regarding parental socioeconomic status were given to all students in the fourth, sixth,

and eighth grades at two public elementary schools and one public middle school in the Cobb County school district. Teachers distributed the letters to students who were to then deliver the letters to their parents. Teachers also collected the completed consent forms. There was an approximately 25% return rate for fourth graders, and 6% return rate for sixth graders, and an 12% return rate for eighth graders. Because the original return rate was low for the sixth grade group, additional sixth grade participants were recruited during the following academic year. These participants were recruited in the same manner as the initial group of sixth graders, and an additional 27 sixth grade participants were recruited.

Students who obtained parental permission to participate in this study completed the Kidcope and the Life Events Record. Students completed the measures at school during one 30-minute session. In order to assure that all students properly completed the measures and were able to ask questions if needed, the measures were administered to small groups of approximately ten students at one time. For the Kidcope, participants were instructed to think of and write down one problem they had experienced in the past month in each of the following four problem domains: academic, peer, parent, and medical problems. Participants were then instructed to indicate which coping strategies they used to help cope with each of the four problems. Participants then completed the LER. For this measure, participants were instructed to indicate whether or not each of the listed stressful life events had occurred in their lives during the past year. The measure of each participant's adjustment was then collected by having the participant's homeroom teacher complete the Behavioral Assessment System for Children- Teacher Report Form (BASC-TRF).

Measures

Demographic Information. Participants completed a demographic questionnaire (see Appendix A). Demographic information included the child's age, gender, and race.

Kidcope. Children and adolescents completed the Kidcope (Spirito, Stark, & Williams, 1988) a self-report measure of coping strategy use as well as overall approach and avoidant coping style. There are two versions of the Kidcope. The 15-item child version is appropriate for children ages 7 to 12, while the 10-item version is for children and adolescents ages 13 to 18 version (see Appendix B). Fourth and sixth graders completed the younger child version, while the eighth graders completed the older child version.

The Kidcope assesses use of 10 specific coping strategies including: distraction, social withdrawal, cognitive restructuring, self-criticism, blaming others, problem solving, emotional regulation, wishful thinking, social support, and resignation. Eight of these items are then categorized in order to assess overall approach (cognitive restructuring, problem solving, social support, and emotional regulation) and avoidant (distraction, blaming others, wishful thinking, and resignation) coping. The Kidcope has been shown to have moderate to high test-retest reliability with coefficients ranging from .56 to .75. Moderate to high concurrent validity with the Coping Strategies Inventory as well as the Adolescent Coping Orientation for Problem Experiences Inventory has also been reported (Spirito et al., 1988).

The version of the Kidcope for younger children includes 15 items in which five of the ten coping strategies are represented by two items. Using two items on some of the coping strategies assists younger children in better understanding the strategy. The

children use a “yes” or “no” response to indicate whether or not they used a particular strategy to cope with the problem they reported. The participant receives a score of 1 for a yes response and a score of 0 for a no response. For strategies represented by 2 items, a yes response on one or both of the two items is scored as a 1, indicating endorsement of that strategy.

The version of the Kidcope for older children contains 10 items, with each item representing one of the specific coping strategies. Participants on this version respond to the frequency with which they employ each coping strategy using a likert scale with 0 = *not at all*, 1 = *sometimes*, 2 = *a lot of the time*, and 3 = *almost all of the time*. For this study, participants received a score of 0 if they responded that they did not use the strategy at all. A score of 1 was given if a participant replied that they employed a strategy sometimes, a lot of the time, or almost all of the time. The item representing the emotional regulation strategy is broken down into two parts. If the participant responds with sometimes, a lot of the time, or almost all of the time to one or both parts, the strategy is scored with a 1 as being endorsed. Overall approach and avoidant coping scores are calculated by summing the scores for each of the four specific strategies that comprise approach coping and avoidant coping (Spirito et al., 1988).

Each participant receives a total approach and total avoidant coping score ranging from 0 to 4 for each KidCope problem domain. In order to evaluate participant’s overall reliance on approach and avoidant coping strategies, composite approach and avoidance scores will be calculated by summing participants’ total approach and avoidance scores over the four problem domains (peer, parental, academic, and medical). Thus, summed

over the four problem domains participants will have a composite coping score ranging from 0 to 16 for both approach and avoidant coping.

Life Events Record (LER). Children also completed the Life Events Record (Coddington, 1972). This self-report scale provides a measure of the number and severity of stressors a child or adolescent has experienced in the past year. There are three versions of this scale. A 35-item version for elementary school children, a 40-item version for junior high school students, and a 42-item version for high school students (see Appendix C). The versions are similar with the exception of additional, age-relevant items for the junior and high school versions. Each item represents either a positive or negative life event which would require some amount of adjustment from the individual.

Participants are asked to indicate whether or not each event occurred in their life during the past year. Each item on the scale is assigned a life change unit score which quantifies the significance and amount of adjustment the event would require for the specific age group. For instance, the item “mother beginning to work” has a life change unit of 44 for elementary school children, but a score of 26 for high school students. Possible life change units per item range from a low of 21 reflecting little readjustment required, to a high of 101 reflecting a great amount of readjustment required. For each participant, an overall life events stress score is obtained by summing the total life change units for all items endorsed.

These life change unit scores were originally derived from the responses of 243 raters consisting of teachers, pediatricians, and mental health workers who were given a list of events and asked to rate each in regards to the average amount of social readjustment necessary for the event for four different age groups. Social readjustment

was meant to reflect both degree of adjustment needed as well as the amount of time required to accomplish this adjustment. Mean adjustment ratings were then computed and life change units were determined by dividing the rating by the constant 10 and rounding out the specific numbers.

The LER has been widely used and has shown convergent validity with a range of variables of life stress such as specific illnesses (Heisel, Ream, Raitz, Rappaport, & Coddington, 1973; Jacobs & Charles, 1980), accident frequency (Padilla, Rosenow, & Bergman, 1976), and chronic illness (Bedell, Giordani, Amour, Tavomina, & Boll, 1977). It has also been shown to have strong test-retest reliability with test-retest coefficients of .69, .67, and .56 at 3-, 7-, and 11-month correlations respectively. High interrater reliability ratings have also been produced with correlations ranging from .55 to .66 (Garrison, 1978).

Behavior Assessment System for Children-Teacher Rating Scales (BASC-TRS).

The BASC-TRS (Reynolds & Kamphaus, 1992) is a measure of child and adolescent psychosocial functioning as perceived by the teacher. There are two versions of the BASC-TRS with a form for children ages 6 to 11 and a form for adolescents ages 12 to 18 (see Appendix D). Teachers of fourth and sixth grade students completed the younger child form, while teachers of eighth grade students completed the adolescent form. Teachers completed the BASC-TRS assessing the children and adolescents on both adaptive and problem behaviors. Teachers responded to the frequency of each behavior for the child or adolescent by indicating on a four-point scale of *never*, *sometimes*, *often*, and *almost always*.

The BASC-TRS assesses for problem behaviors in the following domains: externalizing problems (aggression, hyperactivity, conduct problems subscales), internalizing problems (anxiety, depression, somatization subscales), and school problems (attentional problems, learning problems subscales). Adaptive behaviors are represented by an adaptive skills dimension (leadership, social skills, study skills, adaptability-not included on the older version subscales).

The BASC-TRS has been shown to have internal consistency with alpha levels ranging from .80 to .90 for both the child and adolescent versions. Strong test-retest reliability has been demonstrated with median values of .91 for the child form and .82 for the adolescent form. Interrater reliability ranges from .63 to .71 for the scaled scores and .70 to .90 for the composite scores. Construct validity has also been shown with other similar measures such as the Child Behavior Checklist, Behavior Rating Profile, and Burks' Behavior Rating Scale (Reynolds and Kamphaus, 1992).

CHAPTER 3

RESULTS

Preliminary Analyses

Because participants from the sixth grade group were collected at two separate time periods, data from the sixth graders collected during the first data collection period ($N = 28$) were compared with the data from the sixth graders collected during the second data collection period ($N = 27$). The demographic characteristics of the two sets of sixth grade participants are presented in Table 2. No demographic differences were found between the two groups on race or gender. Results did indicate that participants in the first sample had a higher socioeconomic status level than the second sample. However, because socioeconomic status was not related to the dependent or independent variables for either of the two samples, this finding was not considered to be an influential difference in the two samples. Additionally, the two samples do not differ significantly on their scores on the dependent variables or the independent variables. Therefore, it was determined that these two samples are similar enough to be considered in combination.

Composite total approach and total avoidant coping scores were calculated by summing participants' approach and avoidant scores over the four domains of stress (peer, academic, parent, medical) assessed by the Kidcope. Total approach and avoidant coping scores range from 0 to 4 for each of the Kidcope situations; therefore composite total approach and total avoidant coping scores have a possible range of 0 to 16. Composite scores for each of the four approach (problem solving, emotional regulation,

social support, cognitive restructuring) and four avoidant coping strategies (distraction, blaming others, wishful thinking, resignation) were also calculated by summing participants' scores for each coping strategy over the four domains of stress. The composite score for each of the individual coping strategies has a possible range of 0 to 4. Because the total approach and total avoidant composite scores were formed by summing over the four different domains of stress, coefficient alphas were calculated to assess the internal consistency of these scores. Alphas for the total avoidant coping scores ranged from .74 to .77 for the three grade groups. The coefficient alphas for the total approach scores were .69, .68, and .45 for fourth, sixth, and eighth graders, respectively.

The relationship between participants' approach and avoidant coping strategy use was also examined. The correlation between total approach and total avoidant coping scores was significant for both the fourth ($r = .34, p \leq .01$) and the eighth graders ($r = .44, p \leq .001$). However, total approach and total avoidant coping strategy use was not significantly correlated for the sixth grade group. The degree of intercorrelation among the individual approach and avoidant coping strategies was then examined. These correlations are presented in Table 3. For each of the three grade levels there appears to be a moderate degree of intercorrelation among the approach coping strategies and between the approach coping and avoidant coping strategies. However, little intercorrelation was found among the avoidant coping strategies.

Demographic Variables

In order to examine possible differences in demographic characteristics for participants in each of the three age groups, one-way analysis of variance (ANOVA) procedures were conducted with the three demographic variables gender, race, and

socioeconomic status (SES), and the four dependent variables measuring externalizing problems, internalizing problems, school problems, and adaptive skills. No significant SES group differences were found with any of the dependent variables for any of the three grade levels. Additionally, no significant gender or racial group differences for any of the dependent variables were found for the fourth grade group. There were significant gender differences in the dependent variables for both the sixth and eighth grade groups. For externalizing problems ($F [1, 53] = 5.08, p \leq .05$) and school problems ($F [1, 53] = 5.59, p \leq .05$), sixth grade males ($M = 49.54, SD = 11.50$; $M = 49.54, SD = 11.23$, respectively) appeared to experience more than females ($M = 44.29, SD = 5.31$; $M = 43.58, SD = 7.37$, respectively). However, on adaptive skills ($F [1, 53] = 3.90, p \leq .05$) females ($M = 53.26, SD = 9.15$) scored higher than males ($M = 47.67, SD = 11.86$). For the eighth grade group, there was a significant gender difference on the school problems variable ($F [1, 55] = 21.47, p \leq .001$), with males ($M = 54.28, SD = 10.13$) experiencing more school problems than females ($M = 43.72, SD = 7.07$).

There were also significant racial group differences for the dependent variables for the sixth and eighth graders. Significant group differences found using ANOVA were then subjected to further evaluation using post hoc analyses with Bonferroni correction. For the sixth grade group, there were racial differences on the adaptive skills variable ($F [2, 52] = 5.85, p \leq .01$) with post hoc analyses indicating that Caucasian participants ($M = 52.90, SD = 10.34$) scored significantly higher on the adaptive skills variable than African American participants ($M = 42.92, SD = 7.80$). The eighth graders demonstrated a significant racial group difference on the internalizing problems variable ($F [2, 54] = 4.47, p \leq .01$). Post hoc analyses revealed that participants who were of other racial

heritage (i.e., Hispanic, Native American, or Bi-racial; $M = 53.38$, $SD = 9.88$) demonstrated more internalizing problems than Caucasian participants ($M = 44.56$, $SD = 6.18$).

The relationship between the demographic variables and participants' approach and avoidant coping strategy use was also examined. No gender differences in total approach and total avoidant coping strategy use were present for the fourth and sixth grade groups. However, gender differences were present for the eighth grade group ($F [1,55] = 5.12$, $p \leq .05$), with females ($M = 12.50$, $SD = 3.06$) reporting significantly more approach coping strategy use than males ($M = 10.44$, $SD = 3.82$). No racial group differences or differences in socioeconomic status and approach and avoidant coping strategy use was found for any of the three grade levels.

ANOVAs were also conducted to examine possible gender, race, and socioeconomic status group differences in participants' experience of stressful life events based on their scores from the LER. There were no significant gender or racial group differences in LER scores for any of the three grade levels. There were also no differences in life events scores based on participants' socioeconomic status for the fourth and sixth grade groups. There was a significant socioeconomic status group difference for the eighth grade group ($F [3,51] = 3.93$, $p \leq .01$) Post hoc analyses indicated that participants in the second highest socioeconomic class ($M = 501.42$, $SD = 227.40$) experienced more life events during the past year than participants in the fourth highest socioeconomic class ($M = 272.80$, $SD = 100.91$).

The Role of Life Events in Coping and Adjustment

In order to examine the relationship between stressful life events and coping style, correlations between LER scores and total approach and total avoidant composite coping scores were conducted for each of the three grade levels. Findings indicated that for the sixth graders, life events were positively correlated with total approach ($r = .29, p \leq .05$) and total avoidant ($r = .28, p \leq .05$) coping strategy use. No significant associations between life events and total approach and avoidant coping strategy use were found for the fourth or eighth grade group.

The relationship between life events and the individual approach and avoidant coping strategies was then examined. No significant correlations were found for the fourth grade group. However, for the sixth graders, the approach coping strategies of problem solving ($r = .28, p \leq .05$) and emotional regulation ($r = .35, p \leq .01$) were both positively correlated with experiencing stressful life events. For the eighth graders, the avoidant coping strategy blaming others was positively correlated with stressful life events ($r = .35, p \leq .01$).

In order to examine the relationship between life events and adjustment, correlational analyses were conducted for LER scores and participants' scores on the four dependent variables. For the fourth graders, experience of life events was positively correlated with externalizing problems ($r = .25, p \leq .05$), while experiencing stressful life events was inversely related to adaptive skills ($r = -.29, p \leq .05$). No significant correlations were found for the sixth grade group. For eighth graders, experiencing stressful life events was positively correlated with externalizing ($r = .37, p \leq .01$), internalizing ($r = .29, p \leq .05$), and school problems ($r = .54, p \leq .001$).

Age Differences in Use of Coping Strategies

In order to examine possible age differences in use of approach and avoidant coping strategies, ANOVAs were performed for the three grade levels with the total approach and total avoidant coping strategy composite scores as well as the composite approach and avoidant coping scores for each of the four domains of stress. Results of these analyses are presented in Table 4. Results indicated that there were no differences in total approach coping strategy use for the three grade levels. However, there were differences among the three grade levels in total avoidant coping strategy use ($F [2,178] = 12.82, p \leq .001$). Post hoc analyses revealed that eighth graders reported using a greater number of total avoidant coping strategies than both fourth and sixth graders.

Differences in use of the specific approach and avoidant coping strategies for the three grade levels was also examined using ANOVA procedures with post hoc analyses. Results of this analysis are presented in Table 5. Differences among the three grade levels were found for the approach coping strategy cognitive restructuring, with both fourth and sixth graders reporting greater use than eighth graders. Both fourth and eighth graders reported greater use of the avoidant strategy wishful thinking than sixth graders. Eighth graders reported significantly greater use of the avoidant strategies resignation and blaming others and the approach strategies social support and emotional regulation than both fourth and sixth graders.

The Relationship Between Coping and Adjustment

Correlational Analyses

Overview. Bivariate correlational analyses were conducted to examine the relationship between participants' use of approach and avoidant coping strategies and

their psychosocial adjustment as measured by the four dependent variables for each of the three grade levels. This analysis was completed by correlating composite total approach and total avoidant coping scores, as well as total approach and total avoidant coping scores for each of the individual domains of stress from the Kidcope, with the four dependent variables. The relationship between participants' use of the individual coping strategies and their adjustment was examined by correlating each of the four approach (cognitive restructuring, emotional regulation, social support, and problem solving) and four avoidant (distraction, blaming others, wishful thinking, and resignation) coping strategy scores summed over the four domains of stress, with the four dependent variables. Results from preliminary analyses indicated that there were gender differences on the externalizing problems, school problems, and adaptive skills variables for the sixth and the school problems variable for the eighth graders. Therefore, separate correlations were conducted for sixth and eighth grade males and females for these dependent variables.

Correlational Analyses. Results of the correlational analyses indicated that no significant relationships between variables measuring adjustment and composite total approach and total avoidant coping scores were present for the fourth graders. For the sixth graders, no significant relationships were found between coping and the internalizing problems variable. Because gender differences were found in the externalizing problems, school problems, and adaptive skills dependent variables for the sixth graders, separate correlations were conducted for males and females for these variables. No significant correlations were found for the sixth grade males on any of these dependent variables. However, for the sixth grade females, there was a positive

correlation between total avoidant coping and school problems ($r = .38, p \leq .05$). For the eighth graders, results indicated that total approach coping was positively related to adaptive skills ($r = .31, p \leq .05$). No significant correlations were found between coping and externalizing problems or internalizing problems for the eighth grade group. Because gender differences were found on the school problems variable, separate correlations were conducted for the eighth grade males and females. For the eighth grade females, total approach coping was inversely related to school problems ($r = -.40, p \leq .05$). There were no significant correlations for the eighth grade males between total approach or total avoidant coping and school problems.

When individual coping strategies were considered, no significant relationships were found with the externalizing problems or internalizing problems variables for any of the three grade levels. For the school problems dependent variable, use of the approach coping strategy problem solving was negatively related to school problems ($r = -.28, p \leq .05$) for fourth graders. However, for sixth grade females, use of social support was positively associated with more school problems ($r = .47, p \leq .01$). For the eighth grade females, both social support and problem solving were inversely related to school problems ($r = -.34, p \leq .05$ and $r = -.53, p \leq .01$, respectively). The school problems variable was not significantly correlated with individual coping strategies for the eighth grade males.

For the fourth graders, use of the avoidant strategy resignation was positively related to adaptive skills ($r = .29, p \leq .01$). For the sixth grade females, social support was negatively associated with adaptive skills ($r = -.45, p \leq .01$). Adaptive skills were not associated with coping strategy use for the sixth grade males. For the eighth graders,

level of adaptive skills was positively correlated with use of problem solving ($r = .29, p \leq .05$) and use of cognitive restructuring ($r = .27, p \leq .05$).

Regression Analyses

Overview. Hierarchical multiple regression analyses were then employed to examine the relative contribution of the demographic variables of gender, SES, and race; stressful life events; and the individual approach and avoidant coping strategies to adjustment. Results of the regression analyses are presented in Tables 5-8. This analysis was completed separately for each of the four dependent variables for each of the three grade levels. Additionally, because gender differences were found for some of the demographic variables for the sixth and eighth graders, separate regression equations for the males and females were conducted for these variables for the sixth and eighth graders.

The ordering of predictors into the regression equation followed a four-step logic of analysis. Because the demographic variables are suspected to contribute to adjustment, the dependent variable was first regressed on the three variables of gender, SES, and race. Similarly, the experience of stressful life events was expected to be predictive of participants' overall adjustment. Therefore, participants' life events scores from the LER were entered into the regression equation at the second step. The four approach coping strategies were entered together as the third block of predictors, and the four avoidant coping strategies were entered as the fourth and final block of predictors. The approach coping strategies were entered before the total avoidant coping strategies because previous research has generally indicated that approach coping is more highly related to adjustment than avoidant coping (e.g., Powers et al., 1993; Manne et al., 1990).

Non-significant predictors at each step were dropped from the regression equation before entering predictors into the next step.

Regression Analyses. Results of regression analyses for the externalizing problems dependent variable are presented in Table 5. Results indicated that for the fourth grade group, experiencing more stressful life events was predictive of greater externalizing problems, accounting for a significant 6% of the variance in this variable. Separate regression equations were calculated for males and females in the sixth grade for this dependent variable. No statistically significant models were found for the sixth grade males. However, for sixth grade females, the approach coping strategy emotional regulation was predictive of fewer externalizing problems and accounted for 10% of the variance in this variable. The avoidant coping strategy wishful thinking was predictive of greater externalizing problems and accounted for an additional 15% of the variance. These two predictors, therefore, accounted for a total of 25% of the variance in the final model. Findings for the eighth grade group indicate that experiencing more stressful life events was predictive of greater externalizing problems and accounted for 13% of the variance in this variable. Greater use of the approach coping strategy emotional regulation was predictive of fewer externalizing problems and contributed an additional 7% of the variance.

Table 6 presents results of the regression analyses for the internalizing problems dependent variable. No significant predictors were found for the fourth or sixth graders on this variable. For eighth graders, race was a significant predictor accounting for 14% of the variance, with Caucasians experiencing fewer internalizing problems.

Experiencing more stressful life events was also predictive of having more internalizing problems and contributed an additional 5% of the variance in this variable.

Results from regression analyses for the school problems dependent variable are listed in Table 7. For the fourth graders, greater use of the approach coping strategy problem solving was significantly predictive of fewer school problems and accounted for 8% of the variance. For sixth grade males, the demographic variables of SES and race were significant predictors and accounted for 33% of the variance in school problems. Being in a higher socioeconomic class is predictive of fewer school problems while being African American is related to having more school problems. Additionally, use of the approach coping strategy problem solving was predictive of fewer school problems, contributing an additional 5% of the variance. Use of the avoidant coping strategy wishful thinking was predictive of greater school problems, accounting for an additional 16% of the variance, for a total of 54% of the variance. For sixth grade females, greater use of the approach coping strategy social support and of the avoidant coping strategy distraction was predictive of greater school problems and accounted for a total of 32% of the variance with social support accounting for 22% and distraction accounting for an additional 10% of the variance.

Eighth grade males and females were considered separately on the school problems variable. For males, being in a higher socioeconomic class accounted for 10% of the variance and was predictive of fewer school problems, while experiencing more stressful life events accounted for an additional 28% at the next step and was predictive of more school problems. Additionally, the avoidant coping strategies blaming others and resignation accounted for an additional 25% of the variance in school problems, with

greater use of blaming others predictive of more school problems and greater use of resignation predictive of fewer school problems. These four predictors accounted for a total of 63% of the variance in school problems. For eighth grade females, experiencing more stressful life events was predictive of more school problems, accounting for 25% of the variance in this variable. The approach coping strategy of problem solving was predictive of fewer school problems and accounted for an additional 24%, and therefore a total of 49% of the variance in school problems.

Regression analyses were also conducted for the adaptive skills dependent variable. Results of this analysis are displayed in Table 8. For the fourth graders, being in a higher socioeconomic class was positively predictive of greater adaptive skills, accounting for 8% of the variance, while experiencing more stressful life events was negatively related to adaptive skills and accounted for an additional 8% of the variance. Additionally, the avoidant coping strategy resignation was predictive of more adaptive skills and accounted for an additional 6% of the variance, with the final model accounting for a total of 22% of the variance in adaptive skills. For sixth grade males on the adaptive skills variable, race accounted for 22% of the variance. Specifically, being of African American racial heritage was predictive of fewer adaptive skills. Use of the avoidant coping strategy wishful thinking was also predictive of fewer adaptive skills and contributed to account for an additional 14% of the variance. For sixth grade females, race was also a significant predictor accounting for 19% of the variance. Again, being African American was related to fewer adaptive skills. For eighth graders on the adaptive skills variable, use of the approach coping strategy cognitive restructuring accounted for 7% of the variance was predictive of greater adaptive skills.

CHAPTER 4

DISCUSSION

The purpose of this investigation was to examine the underlying developmental course of children and adolescents' coping behavior. In particular, developmental differences in fourth, sixth, and eighth graders' use of approach and avoidant coping strategies, as well as developmental differences in the relationship between coping strategy use and psychosocial adjustment, were examined. This study also attempts to expand upon the existing literature by considering the role of stressful life events in the relationship between coping and adjustment.

Overall, findings supported the hypothesis that there are developmental differences in the pattern of approach and avoidant coping strategy use. When total approach and total avoidant coping use for the composite of the four stressful situations was considered, eighth graders reported greater use of total avoidant coping strategies than both the fourth and the sixth graders. However, no differences were found among the three grade levels in use of total approach coping. These results were consistent with the hypothesis that there would be age level differences in use of avoidant coping, but not in use of approach coping. These findings are consistent with results from previous investigations indicating that avoidant coping strategies appear to be acquired at a later developmental age than approach coping strategies (Altshuler & Ruble, 1989; Reid, Dubow, & Carey, 1995).

When participants' use of individual coping strategies was examined, a more detailed pattern of coping strategy use was revealed. Results indicate that the eighth graders used two of the four approach and two of the four avoidant coping strategies more often than the fourth and sixth graders. In particular, eighth graders reported greater use of the avoidant strategies resignation and blaming others, as well as greater use of the approach strategies social support and emotional regulation than both fourth and sixth graders. These findings suggest that it is important to not only considering differences in global approach and avoidant coping style, but to examine in more detail developmental differences at the level of individual coping strategies.

For the approach coping strategy of cognitive restructuring, both fourth and sixth graders reported greater levels of use than eighth graders. This finding is somewhat contradictory from the results of previous studies. In general, because strategies involving cognitive reappraisals require a greater degree of cognitive maturity, use of cognitive strategies tends to increase with age (Band & Weisz, 1988; Compass, Malcarne, & Fondacaro, 1988). While fourth and sixth graders in this study reported greater use of cognitive restructuring, there were no associations between use of this strategy and their overall adjustment. Therefore, while these younger children may report use of this strategy, it does not appear that they are effectively applying these strategies to cope with stressors. Additionally, fourth graders reported greater use of the avoidant strategy wishful thinking than sixth graders. Evidence suggests that children's maturing cognitive developmental level is related to their ability to conceptualize stressors in a more in-depth and sophisticated manner (Fields & Prinz, 1997). Because wishful thinking is a somewhat less sophisticated coping strategy and may reflect a less cognitively mature

conceptualization of the stressor, it is consistent that younger children more often choose to use this strategy.

While differences were found in coping strategy use between the fourth and eighth graders and between the sixth and eighth graders, fourth and sixth graders differed only in their use of wishful thinking, with fourth graders using this strategy more often. This general pattern may indicate that there are particular developmental changes which occur after the sixth grade that distinguish the coping behaviors of the eighth graders from those of the younger two grade levels. Because the eighth graders have had a greater range of experiences, it could be expected that they have had more opportunities to acquire a broader range of approach and avoidant coping strategies than the fourth or sixth graders. Also, as children get older they may develop a greater understanding of coping strategies and their effects. Therefore, older children have access to a greater range of strategies and it is possible that they can choose to use particular strategies in a more discriminating manner from (Losoya, Eisenberg, & Fabes, 1998).

The associations for demographic variables, experience of stressful life events, and use of coping strategies with participants' positive and negative psychosocial adjustment were also examined. Both correlational and hierarchical multiple regression analyses were used to assess these relationships. The demographic variables of gender, socioeconomic status, and race played a significant role in several areas of participants' psychosocial adjustment. While there was no association between gender and adjustment for the fourth graders, there were significant gender differences in the dependent measures for the sixth graders and eighth graders. These gender differences were generally reflective of poorer adjustment in the areas of externalizing problems and

school problems for males than for females. This finding is consistent with research (Campbell, 1998) indicating greater levels of externalizing problems for males than for females.

The demographic variables of race and socioeconomic status were also predictive of adjustment. In general, for each of the three grade levels, lower socioeconomic status was related to poorer adjustment. Additionally, for the sixth and eighth graders, race was a significant predictor of adjustment. For the sixth graders, African Americans had lower adaptive skills scores than Caucasians, while for eighth graders Caucasians had fewer internalizing problems than individuals who identified as being of other racial heritage (i.e., Hispanic, Native American, or Bi-racial). Results also supported the hypothesis that experiencing greater levels of stressful life events would be related to poorer adjustment. For the fourth and eighth graders, experiencing more stressful life events was related to and predictive of both negative functioning and having lower levels of adaptive skills. However, these associations were not found for the sixth grade group.

These associations are consistent with research indicating that greater levels of life stress adversely affect psychosocial functioning (Ebata & Moos, 1991). Research has also indicated that adolescents from low socioeconomic backgrounds are more likely to experience greater levels of life stress than adolescents from high socioeconomic backgrounds (Gad & Johnson, 1980). Bradley and Corwin (2002) describe decreased access to resources as the primary reason that low socioeconomic status has been linked to increased life stress and poorer socioemotional functioning. Research has also indicated that racial minorities are more likely to experience increased life stress due to factors such as racial discrimination, social isolation, and decreased access to economic

resources (Smith, 1985). Therefore, it can be expected that in some situations and circumstances these individuals would have poorer adjustment.

Correlational data for the four dependent variables with total approach and total avoidant coping scores were examined. In general, the hypothesis that only avoidant strategy use for the fourth and sixth graders and both approach and avoidant coping for the eighth graders would be associated with better adjustment was not supported. Results indicated that there were no significant associations for the fourth graders. Avoidant coping was associated with better adjustment as reflected by fewer school problems for sixth grade females. For the eighth graders, total approach coping was associated with positive functioning as reflected by more adaptive skills and fewer school problems for the eighth grade females. However, there were no associations for the eighth graders with total avoidant coping. Therefore, while the findings for sixth grade females and eighth graders were consistent with expectations, in general, there was an absence of consistent differences in the associations between overall coping style and adjustment for the three grade levels.

However, when the data are examined in more a detailed manner by considering use of individual coping strategies, rather than the more generalized categories of approach and avoidant coping, there is a consistent pattern in the associations between individual coping strategies and psychosocial functioning across the grade levels. After considering the effects of the demographic variables and life stress in participants' adjustment, individual approach and avoidant coping strategies were also moderately predictive of adjustment. Use of the approach coping strategy problem solving appears to be an effective coping technique as it was associated with better adjustment across the

three grade levels. In particular, for fourth graders, sixth grade males, and eighth grade females, use of problem solving was related to fewer school problems. The approach coping strategy emotional regulation also appears to be generally associated with better adjustment, as use of this strategy by both sixth grade females and eighth graders was related to fewer externalizing problems. The approach strategy cognitive restructuring was also related to more positive functioning in terms of greater adaptive skills for the eighth graders. Finally, the avoidant coping strategy resignation was associated with more positive adjustment. Fourth graders who used resignation demonstrated more adaptive skills, while eighth grade males demonstrated fewer school problems.

There were also several coping strategies that were associated with increased negative functioning. The avoidant coping strategy wishful thinking appears to be a particularly ineffective coping strategy to employ. Wishful thinking was associated with more externalizing problems for sixth grade females as well as greater school problems and fewer adaptive skills for sixth grade males. For fourth graders, use of the avoidant strategy distraction was related to more school problems. For eighth grade males, use of the avoidant strategy blaming others was associated with more school problems.

These findings suggest that in general, use avoidant coping strategies tends to be associated to poorer functioning across the three grade levels. Use of the approach coping strategies appears to be associated with more positive functioning across the three grade levels; however, these results are somewhat mixed as for the fourth graders and the eighth grade males use of the avoidant coping strategy resignation was also related to better adjustment. These results appear to be consistent with previous findings as evidence has generally supported the use of approach coping strategies as being more

highly associated with more positive adjustment than use of avoidant coping strategies (Compas et al., 2001; Suls & Fletcher, 1985).

There were less consistent findings across the grade levels for the approach strategy of social support. For eighth graders, use of social support was related to fewer school problems. However, for the sixth grade females, use of social support was related to greater school problems. Previous findings have generally supported the function of turning to other individuals, such as friends or family members, for support as an adaptive coping mechanism (Losoya, Eisenberg, & Fabes, 1998). However, this may only be true if the individual turns to others with whom they have a positive relationship and who can lend effective support. Therefore, for the sixth grade females, the inverse relationship between social support and positive functioning may reflect that they are turning to individuals, such as a maladaptive peer group, who lend ineffective support.

In summary, as hypothesized, developmental differences were found in participants' use of approach and avoidant coping strategies and in the relationship between children and adolescents' coping strategy use and their psychosocial adjustment. However, results indicate that while some differences in coping strategy use and the relationship with adjustment were present across the three age levels, more consistent and detailed findings were present when use of individual coping strategies was considered. These results highlight the importance of looking beyond the categorization of approach and avoidant coping style to consider the relationship between individual coping strategies and adjustment. Therefore, future research should consider the unique developmental attributes that may be involved in the use of specific coping strategies.

Additionally, demographic variables and the experience of stressful life events appeared to play a significant role in the relationship between coping and adjustment. Therefore, it would be important for future investigations to further consider the role that demographic variables such as gender or racial group differences may have in the relationship between coping behaviors and adjustment. Also, because stressful life events appear to influence overall psychosocial adjustment, it would be important to control for this factor when examining the relationship between coping and adjustment.

One purpose of this investigation was to attempt to replicate the findings from a study conducted by Bunke and Blount (2000) in which developmental differences in the associations between coping behavior and adjustment were examined in a sample of fourth and eleventh graders. Results indicated that there were no differences in the usage of approach or avoidant coping between the two age levels. Yet, in the current study, eighth graders reported greater use of total approach coping as well as greater use of two of the approach and two of the avoidant strategies when individual coping techniques were considered. Bunke and Blount also found that there was a high association between approach coping strategy use and positive adjustment, but no associations between avoidant coping and adjustment for the fourth graders. For the eleventh graders, both approach and avoidant coping were related to positive adjustment. However, in the current study these clear, differential patterns in the associations between coping and adjustment were not found.

One reason for the differences between the previous and current study may be the differences in age levels included in the two samples; while Bunke and Blount examined fourth and eleventh graders, the current study attempted to examine coping in children

and adolescents in smaller age intervals so that developmental differences could be more precisely pinpointed. The larger range of ages of the Bunke and Blount study may account to some degree for the more striking differences in the relationship between coping and adjustment found in their study. Additionally, the current study examined the role of stressful life events in coping and adjustment, and findings revealed that for the fourth and eighth graders, stressful life events were significantly related to adjustment. However, the previous study by Bunke and Blount did not consider the role of stressful life events, which may have accounted for some of the variance in their findings attributed to approach and avoidant coping strategy use.

There are several limitations to this current investigation. Because of difficulty in recruiting sixth grade participants during the initial data collection period, half of the participants in the sixth grade group were collected at a later time from the rest of the participants. While the time differences in data collection has the potential to lead to differences in the two sets of sixth graders due to cohort effects, statistical analyses indicated that there were no substantive differences between the two sets of participants in terms of demographic characteristics or differences in their scores on the dependent or independent variables.

Children and adolescents were asked to retrospectively provide self-report information regarding their use of coping strategies during stressful situations. Therefore, there is the possibility that participants' reports are not consistent with their actual behavior when confronted with these stressors. However, because coping is a largely internal process and often difficult to measure through observable behaviors, self-report appears to be a reasonable, if not ideal, method of assessment. Also, self-report

measures have commonly been used in the literature as a method for examining coping in children and adolescents (e.g., Ebata & Moos, 1991; Holmes & Stevenson, 1990; Reid, Dubow, & Carey, 1995). Additionally, allowing the participants to identify stressors within each domain that were personally salient and then having them briefly write about each stressor may have served to establish cues which assisted in their more accurate recall of their coping behaviors.

Finally, the cross-sectional nature of this study prevents a true examination of developmental differences that could be achieved with a longitudinal design. Therefore, future research should focus on further clarifying the true developmental progression of coping by conducting research that is prospective and longitudinal in nature.

This study has several important implications for this area of investigation. While it is now fairly well documented that developmental factors play a role in coping behaviors and their relationship to adjustment (Fields & Prinz, 1997), the exact developmental pattern continues to be unclear. As Compas et al. (2001) indicate in their recent review of the literature in this area, there continues to be a lack of studies with adequate sample sizes that consider coping and adjustment as a function of age. This study, therefore, adds to the existing literature by providing more detailed information on developmental aspects in the relationship between specific coping strategy use and adjustment for children and adolescents ranging from 9 to 14 years of age.

Additionally, consideration of the role of stressful life events further clarifies the relationship between coping and adjustment. Coping is a cognitive or emotional response that attempts to eliminate stress (Lazarus & Folkman, 1984). Therefore, it is important to consider the role the stressful events which elicit coping behavior. While previous

studies have examined the effects of different types of stressors on coping behaviors, they have failed to consider the role of stress in an individual's overall psychosocial adjustment. Results from this study indicated that generally, stressful life events are related to participants' coping behaviors and their level of overall functioning. However, further research should be conducted to clarify the relationships among stressful life events, coping, and psychosocial adjustment.

These findings also have important implications for developing coping interventions for children. Results from this investigation lend further support for the overall efficacy of approach coping strategies over avoidant coping strategies. In particular, problem solving appears to be an effective strategy for all age levels. Additionally, the strategies of emotional regulation and cognitive restructuring appear to be effective mechanisms for older children. Therefore, it may be helpful to incorporate the particular skills involved in these strategies when teaching coping skills or conducting interventions with children and adolescents.

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Table 1

Demographic Characteristics of the Sample

Variable	Grade Level		
	Fourth (<i>N</i> = 67)	Sixth (<i>N</i> = 55)	Eighth (<i>N</i> = 57)
Age (in years)			
<i>M</i>	9.93	11.49	13.67
<i>SD</i>	.40	.50	.55
Gender			
Male	34	24	25
Female	35	31	32
Race			
Caucasian	45 (66%)	39 (71%)	39 (68%)
African American	12 (17%)	13 (24%)	10 (18%)
Other (Hispanic, Asian, South Asian, Native American, Middle Eastern, Bi-racial, or Other race)	12 (17%)	3 (5%)	8 (14%)
SES			
<i>M</i>	3.17	3.21	3.35
<i>SD</i>	.99	.94	.89

Table 2

Demographic Characteristics of the Two Sets of Sixth Grade Participants

Variable	Data Collection Period	
	Spring 2001 (<i>N</i> = 28)	Fall 2001 (<i>N</i> = 27)
Age (in years)		
<i>M</i>	11.83	11.17
<i>SD</i>	.40	.40
Gender		
Male	12	12
Female	16	15
Race		
Caucasian	20	19
African American	6	7
Other (Hispanic, Native American, or	2	1
SES		
<i>M</i>	2.88	3.54
<i>SD</i>	1.03	.71

Table 3

Correlations Among the Approach and Avoidant Coping Strategies

		Coping Strategy						
Coping Strategy	PS	ER	SS	DIST	BO	WT	RES	
Fourth Graders								
CR	.15	.01	.05	-.20	.08	.21	.09	
PS		.42 ^a	.04	.42 ^a	.16	.30 ^b	.12	
ER			.04	.29 ^b	-.16	.30 ^b	.10	
SS				.02	.03	.04	.31 ^b	
DIST					-.19	.11	-.10	
BO						.22	.12	
WT							.27 ^c	
Sixth Graders								
CR	.25	.36 ^b	.01	.18	.37	.44 ^a	.12	
PS		.49 ^a	-.09	.28 ^c	-.13	.32 ^c	.15	
ER			-.05	.34 ^b	-.26 ^c	.42 ^b	.20	
SS				-.12	.31 ^c	-.01	.06	
DIST					-.08	.22	.02	
BO						-.11	-.02	
WT							.16	
Eighth Graders								
CR	.36 ^b	.34 ^b	.48 ^a	.37 ^b	.01	.13	.06	
PS		.17	.65 ^a	.15	.12	.23	.20	
ER			.56 ^a	.32 ^b	.16	.53 ^a	.19	
SS				.35 ^b	.13	.37 ^b	.21	
DIST					-.04	.08	.20	
BO						.10	.10	
WT							.25	

Note. CR = Cognitive Restructuring, PS = Problem Solving, ER = Emotional Regulation, SS = Social Support, DIST = Distraction, BO = Blaming Others, WT = Wishful Thinking, RES = Resignation

^a $p < .001$

^b $p < .01$

^c $p < .05$

Table 4

Means and Standard Deviations for Use of Total Approach and Avoidant Coping and Use of Individual Coping Strategies

	Grade Level					
	Fourth		Sixth		Eighth	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Approach Coping Strategies	11.51	3.55	10.05	3.52	11.60	3.53
Cognitive Restructuring	3.67 ^a	.61	3.53 ^b	.79	2.75 ^{a,}	1.14
Problem Solving	2.84	1.16	2.58	1.23	2.81	1.16
Emotional Regulation	2.41 ^a	1.32	2.05 ^b	1.46	3.33 ^{a,}	1.06
Social Support	1.51 ^a	1.23	1.02 ^b	.99	2.60 ^{a,}	1.36
Avoidant Coping Strategies	9.39 ^a	2.16	8.63 ^b	2.26	10.77 ^{a,}	2.41
Distraction	3.25	1.58	2.98	1.76	2.96 ^b	1.20
Blaming Others	.87 ^a	.92	1.02 ^c	.97	1.60 ^{a, c}	1.21
Wishful Thinking	3.29 ^d	.99	2.80 ^d	1.21	3.25	.87
Resignation	1.17 ^a	1.04	1.04 ^b	.88	2.79 ^{a, b}	1.00

Note. Similar superscripts indicate significant differences in means across grade levels.

^{a, b} $p \leq .001$.

^c $p \leq .01$.

^d $p \leq .05$.

Table 5

Hierarchical Regression Analyses for Estimating Effects of Demographic Variables, Life Events, and Approach and Avoidant Coping Strategies on Externalizing Problems

Variable	Results at each step in the regression analyses					Results in final step	
	Total R^2	df	F	R^2 change	F change	T	B
Fourth Graders							
Life Events	.06	1, 67	4.39 ^c			2.10 ^c	.25
Sixth Grade Females							
Approach Strategy	.10	1, 29	3.19				
Emotional Regulation						-2.46 ^c	-.42
Avoidant Strategy	.25	2, 28	4.59 ^c	.15	5.49 ^c		
Wishful Thinking						2.34 ^c	.40
Eighth Graders							
Life Events	.13	1, 55	8.48 ^b			3.15 ^b	.39
Approach Strategy	.20	2, 54	6.59 ^b	.07	4.20 ^c		
Emotional Regulation						-2.05 ^c	-.25

Note. Four steps were used in the regression analyses. Only those predictors significant in the final model are displayed.

^a $p \leq .001$

^b $p \leq .01$

^c $p \leq .05$

Table 6

Hierarchical Regression Analyses for Estimating Effects of Demographic Variables, Life Events, and Approach and Avoidant Coping Strategies on Internalizing Problems

Variable	Results at each step in the regression analyses				Results in final step		
	Total R^2	df	F	R^2 change	F change	T	B
Eighth Graders							
Demographic Variable	.14	1, 55	8.58 ^b				
Race- Caucasian						-2.70 ^b	-.33
Life Events	.19	2, 54	6.42 ^b	.05	3.82 ^c	1.96 ^a	.24

Note. Four steps were used in the regression analyses. Only those predictors significant in the final model are displayed.

^a $p \leq .001$

^b $p \leq .01$

^c $p \leq .05$

Table 7

Hierarchical Regression Analyses for Estimating Effects of Demographic Variables, Life Events, and Approach and Avoidant Coping Strategies on School Problems

Variable	Results at each step in the regression analyses					Results in final step	
	Total R ²	df	F	R ² change	F change	T	B
Fourth Graders							
Approach Strategy	.08	1, 67	5.58 ^c				
Problem Solving						-2.36 ^c	-.28
Sixth Grade Males							
Demographic Variables	.33	2, 19	4.65 ^c				
SES						-2.27 ^c	-.38
Race- African American						3.47 ^b	.62
Approach Strategy	.38	3, 18	3.63 ^c	.05	1.38		
Problem Solving						-2.09 ^c	-.37
Avoidant Strategy	.54	4, 17	5.05 ^b	.16	6.18 ^c		
Wishful Thinking						2.49 ^c	.47
Sixth Grade Females							
Approach Strategy	.22	1, 29	8.24 ^b				
Social Support						3.48 ^b	.56
Avoidant Strategy	.32	2, 28	6.63 ^b	.10	4.13 ^c		
Distraction						2.03 ^c	.33
Eighth Grade Males							
SES	.09	1, 22	2.18			-3.24 ^b	-.46
Life Events	.38	2, 21	6.38 ^a	.29	9.72 ^b	3.61 ^b	.56
Avoidant Strategies	.63	4, 19	8.10 ^a	.25	6.48 ^b		
Resignation						-3.35 ^b	-.52
Blaming Others						2.42 ^c	.39
Eighth Grade Females							
Life Events	.25	1, 30	10.23 ^b			3.49	.46
Approach Strategy	.49	2, 29	13.90 ^a	.24	13.36 ^a		
Problem Solving						-3.66	-.49

Note. Four steps were used in the regression analyses. Only those predictors significant in the final model are displayed.

^a $p \leq .001$

^b $p \leq .01$

^c $p \leq .05$

Table 8

Hierarchical Regression Analyses for Estimating Effects of Demographic Variables, Life Events, and Approach and Avoidant Coping Strategies on Adaptive Skills

Variable	Results at each step in the regression analyses				Results in final step		
	Total R^2	df	F	R^2 change	F change	T	B
Fourth Graders							
SES	.08	1, 61	5.51 ^c			1.97 ^c	.23
Life Events	.16	2, 60	5.71 ^b	.08	5.50 ^c	-2.43 ^c	-.28
Avoidant Strategy	.22	3, 59	5.51 ^b	.06	4.47 ^c		
Resignation						2.11 ^c	.25
Sixth Grade Males							
Demographic Variable	.22	1, 22	6.28 ^c				
Race- African						-3.29 ^b	-.61
Avoidant Strategy	.37	2, 21	6.09 ^b	.15	1.29		
Wishful Thinking						-2.19 ^b	-.40
Sixth Grade Females							
Demographic Variable	.19	1, 29	6.80 ^b				
Race- African						-3.02 ^b	-.49
Eighth Graders							
Approach Strategy	.07	1, 55	4.15 ^c				
Cognitive						2.08 ^c	.27

Note. Four steps were used in the regression analyses. Only those predictors significant in the final model are displayed.

^a $p \leq .001$

^b $p \leq .01$

^c $p \leq .05$

APPENDIX A
DEMOGRAPHIC QUESTIONNAIRE

Subject ID#

How old are you?: _____ What is your birthday: _____

Gender (circle one): Boy or Girl

Race (circle one):Caucasian

Native American

African American

Hispanic

Asian

South Asian

Middle Eastern

Other Race: _____

APPENDIX B

KIDCOPE

Subject ID
(peer situation)

Think about the most recent thing that has been really hard for you with your friends or classmates, something you really didn't like. It might be when you were picked last for a team or when someone said something that hurt your feelings. It might be when someone was mean to you, didn't treat you fairly, or pressured you into doing something you didn't want to do. Pick just one thing that you think has been the biggest problem for you and write it down in the space below.

Now think about how you handled this problem, how you reacted, what you did about it and answer the questions on the following page.

KIDCOPE
(parental situation)

Think about the most recent thing that has been really hard for you with your parents, something you really didn't like. It might be when they told you that you couldn't do something you wanted to do, when they punished you, or when they didn't listen to you when you were talking. It might be when you had an argument with them, they treated you like a child, or they didn't show up for one of your baseball or soccer games or after school activities. Pick just one thing that you think has been the biggest problem for you and write it down in the space below.

Now think about how you handled this problem, how you reacted, what you did about it and answer the questions on the following page.

KIDCOPE
(medical situation)

Think about the most recent thing that has been really hard for you when you went to your doctor or dentist, something you really didn't like about it. It might be when you got a shot, had blood drawn, or had a tooth pulled. It might be when you had a cavity filled, had surgery, or had a cast put on a broken leg or arm. Pick just one thing that you think has been the biggest problem for you and write it down in the space below.

Now think about how you handled this problem, how you reacted, what you did about it and answer the questions on the following page.

KIDCOPE
(academic situation)

Think about the most recent thing that has been really hard for you with your schoolwork, something you really didn't like. It might be when you didn't know the answer to a question, did poorly on a test, or forgot your homework. It might be when you didn't finish your work, turned an assignment in late, thought the work was too hard, or didn't study for a test. Pick just one thing that you think has been the biggest problem for you and write it down in the space below.

Now think about how you handled this problem, how you reacted, what you did about it and answer the questions on the following page.

KIDCOPE
(Version for ages 7-12)

Did you do this?
(Circle one)

1. I just tried to forget it. YesNo
2. I did something like watch TV YesNo
or played a game to forget it.
3. I stayed by myself. YesNo
4. I kept quiet about the problem. YesNo
5. I tried to see the good side of things. YesNo
6. I blamed myself for causing the problem. YesNo
7. I blamed someone else for causing the problem. YesNo
8. I tried to fix the problem by thinking YesNo
of answers.
9. I tried to fix the problem by doing YesNo
something or talking to someone.
10. I yelled, screamed, or got mad. YesNo
11. I tried to calm myself down. YesNo
12. I wished the problem had never happened. YesNo
13. I wished I could make things different. YesNo
14. I tried to feel better by spending time YesNo
with others like family, grownups, or friends.
15. I didn't do anything because the YesNo
problem couldn't be fixed.

KIDCOPE

(Version for ages 13-18)

How often did you do this?

	Not At all	Some- times	A lot of the time	Almost all the time
1. I thought about something else; tried to forget it; and/or went and did something like watch TV or play a game to get it off my mind.	0	1	2	3
2. I stayed away from people; kept my feelings to myself; and just handled the situation on my own.	0	1	2	3
3. I tried to see the good side of things and/or concentrated on something good that could come out of the situation.	0	1	2	3
4. I realized that someone else caused the problem and blamed myself for causing it.	0	1	2	3
5. I realized that someone else caused the problem and blamed them for making me go through this.	0	1	2	3
6. I thought of ways to solve the problem; talked to others to get more facts and information about the problem and/or tried to actually solve the problem.	0	1	2	3
7a. I talked about how I was feeling; yelled, screamed, or hit something.	0	1	2	3
7b. I tried to calm myself by talking to myself, praying, taking a walk, or just trying to relax.	0	1	2	3
8. I kept thinking and wishing this had never happened; and/or that I could change what had happened.	0	1	2	3
9. Turned to my family, friends, or other adults to help me feel better.	0	1	2	3
10. I just accepted the problem because I knew I couldn't do anything about it.	0	1	2	3

APPENDIX C
LIFE EVENTS RECORD

Subject ID#

(Version for 4th and 6th graders)

Everyone experiences certain events during their lives. We are interested in the types of things that you have experienced recently in your life. Please circle whether or not each of the following items has occurred in your life *during the past year*.

<u>EVENT</u>	<u>Did this occur in past year?</u>
1. Beginning a new school year?	YES NO
2. Changing to a different school?	YES NO
3. Birth or adoption of a brother or sister?	YES NO
4. Brother or sister leaving home?	YES NO
5. Hospitalization of a brother or sister?	YES NO
6. Death of a brother or sister?	YES NO
7. Change of father's job requiring him to be away from home more often?	YES NO
8. Loss of job by parent?	YES NO
9. Marital separation of parents?	YES NO
10. Divorce of parents?	YES NO
11. Hospitalization of parent for a serious illness?	YES NO
12. Death of a parent?	YES NO
13. Death of a grandparent?	YES NO

14. Marriage of a parent to stepparent?	YES	NO
15. Jail sentence of parent for 30 days or less?	YES	NO
16. Jail sentence of parent for 1 year or more?	YES	NO
17. Addition of third adult to family?	YES	NO
18. Change in parent's financial status?	YES	NO
19. Mother beginning to work?	YES	NO
20. Decrease in number of arguments between parents?	YES	NO
21. Increase in number of arguments between parents?	YES	NO
22. Decrease in number of arguments with parents?	YES	NO
23. Increase in number of arguments with parents?	YES	NO
24. Discovery of being an adopted child?	YES	NO
25. Acquiring a visible deformity?	YES	NO
26. Having a visible deformity?	YES	NO
27. Having to be hospitalized?	YES	NO
28. Change in acceptance by peers?	YES	NO
29. Outstanding personal achievement?	YES	NO
30. Death of a close friend?	YES	NO
31. Failing a year in school?	YES	NO
32. Suspension from school?	YES	NO
33. Pregnancy of an unwed teenage sister?	YES	NO
34. Becoming involved in drugs or alcohol?	YES	NO
35. Becoming a member of a church/synagogue?	YES	NO

Life Events Record
(Version for 8th graders)

Everyone experiences certain events during their lives. We are interested in the types of things that you have experienced recently in your life. Please circle whether or not each of the following items has occurred in your life *during the past year*.

<u>EVENT</u>	<u>Did this occur in past year?</u>	
1. Beginning a new school year?	YES	NO
2. Changing to a different school?	YES	NO
3. Birth or adoption of a brother or sister?	YES	NO
4. Brother or sister leaving home?	YES	NO
5. Hospitalization of a brother or sister?	YES	NO
6. Death of a brother or sister?	YES	NO
7. Change of father's job requiring him to be away from home more often?	YES	NO
8. Loss of job by parent?	YES	NO
9. Marital separation of parents?	YES	NO
10. Divorce of parents?	YES	NO
11. Hospitalization of parent for a serious illness?	YES	NO
12. Death of a parent?	YES	NO
13. Death of a grandparent?	YES	NO
14. Marriage of a parent to stepparent?	YES	NO
15. Jail sentence of parent for 30 days or less?	YES	NO

16. Jail sentence of parent for 1 year or more?	YES	NO
17. Addition of third adult to family?	YES	NO
18. Change in parent's financial status?	YES	NO
19. Mother beginning to work?	YES	NO
20. Decrease in number of arguments between parents?	YES	NO
21. Increase in number of arguments between parents?	YES	NO
22. Decrease in number of arguments with parents?	YES	NO
23. Increase in number of arguments with parents?	YES	NO
24. Discovery of being an adopted child?	YES	NO
25. Acquiring a visible deformity?	YES	NO
26. Having a visible deformity?	YES	NO
27. Having to be hospitalized?	YES	NO
28. Change in acceptance by peers?	YES	NO
29. Outstanding personal achievement?	YES	NO
30. Death of a close friend?	YES	NO
31. Failing a year in school?	YES	NO
32. Suspension from school?	YES	NO
33. Pregnancy of an unwed teenage sister?	YES	NO
34. Becoming involved in drugs or alcohol?	YES	NO
35. Becoming a member of a church/synagogue?	YES	NO
36. Not making an extracurricular activity you wanted to be involved in?	YES	NO

- | | | |
|---|------------|-----------|
| 37. Breaking up with a boyfriend/girlfriend | YES | NO |
| 38. Beginning to date? | YES | NO |
| 39. Fathering an unwed pregnancy? | YES | NO |
| 39. Your own unwed pregnancy? | YES | NO |
| 40. Being accepted to a college of your choice? | YES | NO |

Life Events Record
(Version for 11th graders)

Everyone experiences certain events during their lives. We are interested in the types of things that you have experienced recently in your life. Please circle whether or not each of the following items has occurred in your life *during the past year*.

<u>EVENT</u>	<u>Did this occur in past year?</u>	
1. Beginning a new school year?	YES	NO
2. Changing to a different school?	YES	NO
3. Birth or adoption of a brother or sister?	YES	NO
4. Brother or sister leaving home?	YES	NO
5. Hospitalization of a brother or sister?	YES	NO
6. Death of a brother or sister?	YES	NO
7. Change of father's job requiring him to be away from home more often?	YES	NO
8. Loss of job by parent?	YES	NO
9. Marital separation of parents?	YES	NO
10. Divorce of parents?	YES	NO
11. Hospitalization of parent for a serious illness?	YES	NO
12. Death of a parent?	YES	NO
13. Death of a grandparent?	YES	NO
14. Marriage of a parent to stepparent?	YES	NO
15. Jail sentence of parent for 30 days or less?	YES	NO

16. Jail sentence of parent for 1 year or more?	YES	NO
17. Addition of third adult to family?	YES	NO
18. Change in parent's financial status?	YES	NO
19. Mother beginning to work?	YES	NO
20. Decrease in number of arguments between parents?	YES	NO
21. Increase in number of arguments between parents?	YES	NO
22. Decrease in number of arguments with parents?	YES	NO
23. Increase in number of arguments with parents?	YES	NO
24. Discovery of being an adopted child?	YES	NO
25. Acquiring a visible deformity?	YES	NO
26. Having a visible deformity?	YES	NO
27. Having to be hospitalized?	YES	NO
28. Change in acceptance by peers?	YES	NO
29. Outstanding personal achievement?	YES	NO
30. Death of a close friend?	YES	NO
31. Failing a year in school?	YES	NO
32. Suspension from school?	YES	NO
33. Pregnancy of an unwed teenage sister?	YES	NO
34. Becoming involved in drugs or alcohol?	YES	NO
35. Becoming a member of a church/synagogue?	YES	NO
36. Not making an extracurricular activity you wanted to be involved in?	YES	NO

37. Breaking up with a boyfriend/girlfriend	YES	NO
38. Beginning to date?	YES	NO
39. Fathering an unwed pregnancy?	YES	NO
40. Your own unwed pregnancy?	YES	NO
41. Being accepted to a college of your choice?	YES	NO
42. Getting Married?	YES	NO