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**Cognitive Diathesis-Stress Theories and
Depression among Adolescents in a
Residential Treatment Facility and a School Setting**

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Residential Treatment Facility and a School Setting**

by

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Dedication

I gcuimhne grámhar
do mo dheartháir Éireannach,
Seán Seamus O Maolalaidh

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**Cognitive Diathesis-Stress Theories and
Depression among Adolescents in a
Residential Treatment Facility and a School Setting**

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This investigation examined the constructs of two diathesis-stress models of depression: Beck's (1967, 1972) cognitive theory of depression and Abramson, Seligman, and Teasdale's (1978) learned helplessness/hopelessness model (Abramson, Metalsky, & Alloy, 1989). In a diathesis-stress model, a stressor is an important factor in the onset of depression, but also requires a vulnerability, or diathesis. Two possible diatheses are the cognitive triad (Beck, 1967, 1972; Clark et al., 1999) and a negative explanatory style (Abramson et al., 1989). This study evaluated whether measures of

these constructs would differentiate groups of adolescents with depressive disorders, externalizing disorders, both depressive and externalizing disorders (comorbid), and no diagnoses.

Participants included 64 adolescents (34 male, 30 female), 12 to 17 years old, from a residential treatment center and a school population (who were not experiencing any psychological disorders). Participants (and their parents or guardians, if available) were interviewed using the Schedule for Affective Disorders and Schizophrenia for School-Age Children (K-SADS; Puig-Antich & Ryan, 1986). Participants completed the Cognitive Triad Inventory for Children (CTIC; Kaslow et al., 1992), the Children's Attributional Scale Questionnaire (CASQ; Kaslow et al., 1978; Seligman et al., 1984), and the Life Events Checklist (LEC; Johnson & McCutcheon, 1980).

Adolescents' views of self, the world, and the future differentiated the depressive disorder and comorbid disorder groups from the externalizing disorder group and the control group. A negative view of self appeared to be specific to depressive disorders, whether alone or combined with externalizing disorders. A negative view of the world appeared to be nonspecific to psychopathology or descriptive of depressive and externalizing disorders. No differences in adolescents' attributional style were found among the groups. Finally, adolescents in the depressed and comorbid groups reported the most severe negative events, followed by the externalizing group, with the control group reporting the fewest severe negative events. This study supported

previous research of adolescent depression and diathesis-stress theories in finding a stress (negative life events) and possible diathesis (cognitive triad). Implications are discussed for child and adolescent depression and cognitive styles or vulnerabilities.

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CHAPTER I: INTRODUCTION

Depression is one of the most frequently occurring psychiatric disorders in children and adolescents. Experiencing depression during childhood can not only terribly disrupt a child's development, but also can have effects on the child's view of the world and can predispose a child to future episodes of depression. Children's negative views of themselves and their world are integral concepts in childhood depression. Beck's (1967, 1972) cognitive theory of depression and Abramson, Seligman, and Teasdale's (1978) learned helplessness/hopelessness model are both diathesis-stress models of depression that emphasize the role of cognition in etiology, course, treatment, and recurrence of depression. Specifically, early life events or experiences lead to the development of trait-like patterns or attributions, which can then predispose an individual to developing depression.

Beck's (1967, 1972) cognitive theory of depression hypothesizes that an individual's negative and distorted thinking is responsible for both the development and maintenance of depression. Hence, individuals with depression have negative attitudes and beliefs and they engage in errors and biases in thinking. They selectively perceive and process information pertaining to their self, the world, and the future in a negative and distorted manner. In persons suffering from depression, this triad manifests negatively and involves incorrect and faulty perceptions where a positive interpretation is just as valid. Individuals with depression soon learn to expect the worst of the world and their futures and consider themselves to be

failures (Alford & Beck, 1997; Beck, 1967, 1972). Beck (1967, 1976) also proposed a cognitive content-specificity hypothesis, whereby each emotional disorder is characterized by a specific cognitive disturbance. According to this theory, different diagnoses may therefore be characterized by their self-schema patterns and cognitive distortions (Alford & Beck, 1997).

Similarly, the reformulated learned helplessness theory (Abramson, Seligman, & Teasdale, 1978) maintains that a depressogenic attributional style mediates the impact of negative life events and depressive symptoms (Abramson, Metalsky, and Alloy, 1989; Seligman, Peterson, Kaslow, Tanaman, Alloy, & Abramson, 1984). This assumes that stable, global, and internal attributions of negative events are trait-like tendencies that cause depression or are at least paramount in predisposing an individual to depression (Abramson et al., 1978, 1989). Attributional styles may serve as filters for information processing (Asarnow, Carlson, & Guthrie, 1987; Seligman et al., 1984). Children who demonstrate negative reactions or learned helplessness responses to negative situations are at risk in many areas, such as lower academic achievement, more difficulties in peer interactions, lower self-esteem, and higher incidences of depressive episodes as compared to children with more positive views (Seligman, 1995).

Most studies that support these cognitive theories have investigated self-schemas and information processing for adults (e.g., Derry & Kuiper, 1981; Kuiper, Derry, & MacDonald,

1982). While not as substantial as the adult literatures, the number of studies that support cognitive theories for children and adolescents with depression are increasing (Asarnow & Bates, 1988; Cole, 1991; Cole & Jordan, 1995; Garber, 1992; Hammen et al., 1988; Quiggle, Garber, Panak, & Dodge, 1992; Tems et al., 1993; Turner & Cole, 1994).

Children have displayed a pattern similar to that of adults in which they recalled negative self-descriptive information suggesting the existence of negative self-schemas (Hammen & Zupan, 1984; Jaenicke et al., 1987; Zupan et al., 1987). These negative self-schemas may lead to selective attention to negative events, or the blocking of positive events, and affect the acquisition of new, positive information (Prieto et al., 1992; Whitman & Leitenburg, 1990). Furthermore, this negative style of processing self-evaluative information appears to reflect a distortion in active information processing (Kendall, Stark, & Adam, 1990).

Children and adolescents who experience high levels of depressive symptoms are likely to demonstrate a more pessimistic attributional style than are their nondepressed peers (Gladstone & Kaslow, 1995). Additionally, nondepressed children and adolescents with such a pessimistic explanatory style are at increased risk for the development of depressive symptoms, particularly in response to negative life events (Nolen-Hoeksema, Girgus, & Seligman, 1992; Robinson, Garber, & Hilsman, 1995). Children with depression have demonstrated more cognitive errors, more negative attributions, and lower self-esteem and have exhibited increased hopelessness, increased negative perceptions, more depressive

attributional styles (Gladstone, Kaslow, Seeley, Lewinsohn, 1997), and negative self-perceptions (Asarnow & Bates, 1988; Hammen, Adrian, Hiroto, 1988; Quiggle, Garber, Panak, & Dodge, 1992; Tems et al., 1993).

The diathesis-stress component of these two cognitive theories implies an individual's vulnerability in a specific area in which a negative event occurs (Abramson, Alloy, Metalsky, 1995; Beck, 1967; Clark, Beck, Alford, 1999; Metalsky, Abramson, Seligman, Semmel, & Peterson, 1982). Studies seeking to investigate the diathesis-stress component of these theories of depression have found that both stress and a stress-attributional style interaction predicted change in depressive symptoms in school children (Nolen-Hoeksema et al, 1986), that daily hassles predicted depressive symptoms while attributional style did not (Dixon & Aherns, 1992), and that a depressogenic attributional style led to an unimproved continued dysphonic mood after receiving poor grades on an exam (Metalsky, Halberstadt, & Abramson, 1987).

Additionally, clinically depressed children often present with co-occurring diagnoses (Asarnow & Bates, 1988; Carlson & Cantwell, 1979; Hinshaw & Anderson, 1996), making treatment and diagnosis more complex. Childhood comorbidity, with rates far higher than that of adults (Angold & Costello, 1993), makes accurate assessment and effective treatment development difficult. Children with dual diagnoses are at a much higher risk for future academic, emotional, and behavioral problems (Cole & Carpentieri, 1990).

While the research in the area of cognitive styles has centered on depression, some research has begun to focus on externalizing disorders as well. Children and adolescents with depression or disruptive behavior disorders who demonstrated hostile problem solving skills and conflicts with peer exchanges leading to peer rejection, also demonstrated cognitive distortions (Cole & Carpentieri, 1990; Joiner, 1994; Rudolph, 1994; Weiss, 1994). School children who have demonstrated chronic aggressive behavior have been shown to attend to fewer social cues than nonaggressive children (Dodge & Newman, 1981). Rudolph (1994) has found that adolescents with depression and/or conduct disorder often suffer from social impairment. Much of the past research on cognitive styles has focused on depression to the exclusion of externalizing disorders. The impact of the development of negative schema and attributional styles is an important factor to investigate in externalizing disorders as well as in depressive disorders (Toth, Cicchetti, & Kim, 2002).

The present study therefore sought to investigate three factors in further understanding depression in adolescents: the cognitive triad, negative events, and attributional style. Utilizing a clinical and nonclinical setting, the cognitive triad, negative events, and attributional style of adolescents with depression, externalizing disorders, comorbid depression/externalizing disorders, and no diagnosis will be examined and compared. By further comprehending the cognitive attributes adolescents experience with clinical depression, externalizing disorders, and without these disorders, we can better identify, treat, and prevent these disorders in the future. Moreover, children and adolescents with more positive views of themselves and the

world have been shown to be less vulnerable to future episodes of depression as well as more successful in academics, peer relationships, and even more healthy in physical aspects (Peterson, Vailant, & Seligman, 1988; Seligman, 1990, 1995). Perhaps most importantly, cognitive views learned in childhood can carry over into adulthood, creating lifelong attributions that can affect future vulnerabilities or protection from depressive episodes (Beck, 1967, 1976; Beck et al., 1979; Seligman, 1995).

CHAPTER II: ANALYSES of the LITERATURE

Depression in Childhood and Adolescence

Depression during childhood has not always been recognized as possible or as a clinical disorder (e.g. Lefkowitz & Burton, 1978; Rie, 1966). Many experts in the field believed childhood depression to be extremely rare or fleeting. Symptoms of depression in children were seen as a normal and short-lived phase of childhood development, where symptoms were “masked” more than expressed directly (Essau & Petermann, 1999; Gotlib & Hammen, 1992; Gotlib & Sommerfield, 1999). Depression in childhood was also thought to be a wholly separate phenomenon from adult clinical depression (Essau & Petermann, 1999). Even the Diagnostic and Statistical Manual for Mental Disorders (e.g., DSM-II; American Psychological Association, 1968) paid little attention to childhood disorders. Not until the DSM-III (APA, 1980) did a section appear that described specific disorders that first manifest in infancy, childhood, and adolescence. This stimulated research of many psychiatric disorders that affected children and adolescents. The current classification manual (DSM-IV-TR; APA, 2000) includes diagnoses first found in childhood and adolescence as well as differential symptom criteria for children and adolescents for depression (Essau & Petermann, 1999). In recent years, the research and understanding of depression in children and adolescents continues to increase. Children and adolescents are capable of experiencing the symptoms and associated clinical features of depression, while varying from adults in terms of

developmental differences and symptom expression, but with all the severity of adult depression. Depression in childhood and adolescence has since been recognized as a severe emotional disturbance that can manifest in different ways and negatively impact many aspects of a child's life, development, and risk for further episodes.

Diagnostic Criteria and Symptoms

A child may exhibit depressive *symptoms* or unhappy or sad moods without actually suffering from the disorder. This is often related to specific events in the child's life (Cantwell, 1990; Kazdin, 1990). The Diagnostic and Statistical Manual of Mental Disorders - Fourth Edition Text Revision (DSM-IV-TR; APA, 2000) defines depression as a *disorder*, or a constellation of behaviors and emotions that occur together for a minimum duration of time. Major Depression, Dysthymic Disorder, and Depressive Disorder - Not Otherwise Specified are the three major diagnostic categories for unipolar depression; the number, severity, and duration of symptoms differentiating them (APA, 2000). Depressive disorders are associated with significant impairment in an individual's current functioning (APA, 2000).

To receive a diagnosis of a Major Depressive Disorder, a child must exhibit at least five symptoms that are present for at least a two-week period. The symptoms must include at least one of the two main symptoms: 1) a depressed mood or irritability, or 2) loss of interest or pleasure. The remaining seven symptoms are: 3) significant weight loss or failure to make expected weight gain, 4) insomnia or hypersomnia, 5) psychomotor agitation or retardation, 6) fatigue or loss of energy, 7) excessive feelings of worthlessness or guilt, 8) difficulty with

concentration or decision making, 9) suicidal ideation or planning (APA, 2000). Although children may manifest symptoms differently at different age levels, under the DSM-IV-TR, a diagnosis is applied when the core criteria have been met. How an adult may exhibit psychomotor agitation, fatigue, or feelings of worthlessness may be qualitatively differently than a child. While some criteria have been adapted to include child specific symptoms, such as “irritable mood”, such an adaptation is only a minor consideration of developmental differences (Kazdin, 1990).

Dysthymic disorder is characterized by at least two years of depressed mood and additional depressive symptoms that do not meet the criteria for major depressive disorder. Dysthymic disorder is differentiated from major depressive disorder by severity, chronicity, and persistence. Depressive disorder not otherwise specified is diagnosed when a child manifests depressive symptoms but does not meet the criteria for all other depressive disorders (APA, 2000).

Prevalence of Depressive Disorders

Depression is one of the most frequently occurring psychiatric disorders in children and adolescents (Essau & Dobson, 1999). The prevalence rates of depressive disorders appear to increase with age, dramatically so at the time of puberty (Peterson, Compas, Brooks-Gunn, Stemmler, Ey, & Grant, 1993). In adults, anywhere from 10% to 25% of women and 5% to 12% of men may experience a depressive episode during their lifetime (APA, 2000). Community samples of adults have varied from 5% to 9% for women and

from 2% to 3% for men (APA, 2000). The DSM-IV does not specifically address prevalence rates for children or adolescents (APA, 2000). The sex difference in depression prevalence appears in adolescence, but during childhood the ratio is approximately even (Kazdin, 1990).

Diagnosed major depressive disorders in preschool are less than 1% (Kashani & Carlson, 1987; Kashani, Holcomb, & Orvaschel, 1986). Prevalence for major depression increases to 2% in school age children (Anderson, Williams, McGee, & Silva, 1987). When considering other depressive disorders, between 5% and 7% of a general school population in grades four to seven may be experiencing a depression (Stark, 1990). At the junior and senior grades of high school, this figure levels off to approximately 10% (Essau & Dobson, 1999; Stark, 1990). Examples of lifetime prevalence rates of a major depressive disorder for adolescents have ranged from 6.8% (Deykin, Levy, & Wells, 1987) to 9.4% (Reinherz, Giaconia, Pakiz, Silverman, Frost, & Lefkowitz, 1993) to 18.4% (Lewinsohn, Hops, Roberts, Seeley, & Andrews, 1993). That adolescent rates of depression match adult rates may indicate that adult depression has roots in adolescence (Gotlib & Sommerfeld, 1999). In fact, childhood and adolescent depression is considered a serious risk factor for adult depression (Kovacs, 1990; Lewinsohn, Hoberman, & Rosenbaum, 1988).

Within clinical and community populations, prevalence rates vary from study to study. To date there have been no comprehensive studies on depression in adolescents from national representative epidemiological samples (Peterson et al., 1993). However, Peterson and

colleagues (1993) found that 5% of nonclinical adolescents and an average of 42% of clinical populations fell within the clinical range for a depressive disorder. Other studies report prevalence rates from 6.2% to 17.8% (Essau & Dobson, 1999) of adolescent psychiatric patients were depressed, while from 26% (Asarnow, 1988) to 58% (Carlson & Cantwell, 1980) of inpatient children were depressed.

Much of the epidemiological research on childhood depression reports on major depression and may overlook dysthymic disorder, thus underreporting true depression rates for children and adolescents (Stark, Sommer, Bowen, Goetz, Doxey, & Vaughn, 1997). Dysthymic disorder can be long-lasting and therefore detrimental to a child's development and put a child at risk for future episodes of major depression as dysthymia is often resistant to treatment (Essau & Petermann, 1999; Kovacs, Gatsonis, Paulauskas, & Richards, 1985). Studies which have included dysthymic disorder with major depressive disorder in their community sample studies of children and adolescents have increase their overall, current prevalence rates of depression from .5% to 2.1% (Anderson, Williams, McGee, & Silva, 1987), 2.6% to 3.1% (Lewinsohn, Rohde, Seeley, & Hops, 1991), and 4.7% to 8.0% (Kashani, Beck, Hooper, 1987). Lewinsohn and colleagues (1991) also found a lifetime prevalence rate of 18.4% to increase from 18.4% to 21.6% when considering dysthymic disorder in addition to major depressive disorder.

Developmental Considerations in Childhood Depression

The depressive symptoms a child may display are more varied than in adults. Hence, depressive symptoms may manifest themselves differently according to age and developmental levels (Gotlib and Sommerfeld, 1999; Kazdin 1990). During preschool years, depression may manifest as increased crying, irritability, hyperactivity or hypoactivity, loss of interest, loss of appetite, and insomnia (APA, 2000). By the early elementary school years, children with depression may experience helplessness, withdrawal, hopelessness, and sadness. In adolescence, a child may experience physical symptoms, guilt, pessimism, and suicidal ideation (APA, 2000).

Understanding these developmentally related differences in depression is vital to recognizing, diagnosing, treating and preventing this serious disorder (Gotlib and Sommerfeld, 1999). In school-aged children, a lack of such understanding and ability to identify depression continues to be a serious obstacle in effective treatment and education. In general, disorders like Attention-Deficit/Hyperactivity Disorder (ADHD) and conduct disorder present with overt and disruptive behaviors that are more difficult to ignore or overlook by teachers than typical depressive symptoms of sadness and withdrawal (Stark, 1990). Moreover, depression at any age level may include distractibility, a decreased ability to concentrate, and psychomotor agitation (APA, 2000). Such symptoms may easily be confused with ADHD.

According to the DSM-IV-TR, depression often occurs with accompanying symptoms or features may be present across all developmental levels or age-dependent. At

any age, an individual diagnosed with depression may also exhibit an increase in fearfulness, anxiety, and physical concerns. In children, separation anxiety may occur (APA, 2000). While adults may have difficulty with work, children and adolescents may experience problems in school. Additionally, children and adolescents who are suffering from depression may experience and display other maladaptive emotional and behavioral concerns. Running away from home is a common behavior for some depressed adolescents as well as irritability, anger, difficulties in social situations, and difficulties interacting with adults or following rules at home and school. These possible symptoms and behaviors combined with other depressive symptoms such as withdrawal, loss of interest, feelings of guilt, perceptions of being unworthy or unlovable, fatigue, and possible suicidal ideation show that depression in childhood and adolescence impacts so many aspects of a child's life, performance, and overall development.

Externalizing Disorders in Childhood and Adolescence

Diagnostic Criteria and Prevalence for Conduct Disorder and Oppositional Defiant Disorder

Conduct disorder and oppositional defiant disorder are considered disruptive behavior disorders. Current research, however, cannot agree whether oppositional defiant disorder represents a developmental antecedent to conduct disorder (APA, 2000) or a distinct disorder (Loeber, Lehey, and Thomas, 1991). Oppositional defiant disorder usually appears in childhood and no later than early adolescence while conduct disorder first manifests no earlier than early adolescence (APA, 2000). These two disorders will be discussed in detail.

The DSM-IV-TR (APA, 2000) defines conduct disorder as a “repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated” (p. 85). The four main diagnostic groups for conduct disorder behaviors include (1) aggression to people or animals, (2) nonaggressive destruction to property, (3) deceitfulness and theft, and (4) serious violations of rules. The DSM-IV-TR differentiates between the childhood-onset (prior to age ten) and adolescent-onset (no criteria prior to age ten) subtypes. Childhood-onset subtype is much more common in males. Males with a diagnosis of conduct disorder tend to display fighting, stealing, vandalism, and school discipline problems, while females are more likely to display lying, truancy, running away, substance abuse, and prostitution (APA, 2000). Those with childhood-onset conduct disorder often have had a diagnosis of oppositional defiant disorder.

The DSM-IV-TR (APA, 2000) defines oppositional defiant disorder as “a recurrent pattern of negativistic, defiant, disobedient, and hostile behavior toward authority figures that persists for at least 6 months” (p. 91). Four of the following eight criteria must be present for a diagnosis: (1) losing temper, (2) arguing with adults, (3) actively defying or refusing to comply with the requests or rules of adults, (4) deliberately doing things that will annoy other people, (5) blaming others for his or her own mistakes or behaviors, (6) being touchy or easily annoyed by others, (7) being angry and resentful, and (8) being spiteful or vindictive (APA, 2000). Symptoms usually emerge by 8 years and not later than early adolescence. The diagnosis of conduct disorder overrides the diagnosis of oppositional defiant disorder (APA,

2000). If the individual is 18 years or older and meets the criteria for antisocial personality disorder, neither oppositional defiant disorder nor conduct disorder is diagnosed.

Prevalence rates for Conduct Disorder appear to be higher in urban settings. Rates vary depending on the population and method of assessment. For males under 18 years, the rates range from 6% to 16%, while for females the rates range from 2% to 9% (APA, 2000). Prevalence rates for oppositional defiance disorder range from 2% to 16% (APA, 2000). Many individuals diagnosed with conduct disorder, particularly with childhood-onset, are at risk for developing anti-social personality disorder as an adult, which can be diagnosed at age 18 years (APA, 2000).

Many researchers have posited the question of whether opposition defiant disorder and conduct disorder represent a continuum or two discrete disorders (APA, 2000; Angold & Costello, 1994; Hinshaw & Anderson, 1996). As DSM-IV-TR diagnoses are based on the absence or presence of the criterion behaviors, whether opposition defiant represents a qualitatively different diagnosis rather than a lesser form of conduct disorder is not clear.

Diagnostically, the disorders are quite similar in terms of behavioral symptoms. Characteristic behaviors of oppositional defiant disorder are less severe than conduct disorder. Oppositional defiant disorder must also be first diagnosed in childhood, no later than early adolescence, while conduct disorder may not be first diagnosed before early adolescence (APA, 2000). Hence, some researchers speculate that conduct disorder is a developmental extension of oppositional defiant disorder (Angold & Costello, 1994).

Diagnostic Criteria and Prevalence of Attention-Deficit/Hyperactivity Disorder

Central to a diagnosis of Attention-Deficit/Hyperactivity Disorder (ADHD) is a persistent pattern of impulsivity-hyperactivity and/or inattentiveness that is more severe than the majority of children within the same developmental level (DSM-IV-TR, 2000). The diagnostic criteria for ADHD consist of two groups: Inattention and Hyperactivity-Impulsivity. Symptoms must be present, “for at least six months to a degree that is maladaptive and inconsistent with developmental level (DSM-IV-TR, 2000, p. 92). To meet the eligibility for Inattention, a child must exhibit six or more of the following symptoms: (1) often fails to give close attention to details or makes careless mistakes in schoolwork, work, or other activities, (2) often has difficulty sustaining attention in tasks or play activities, (3) often does not seem to listen closely when spoken directly to, (4) often does not follow through on instruction and fails to finish school work, chores, or duties in the workplace (not due to oppositional behavior or failure to understand instructions), (5) often has difficulty organizing tasks and activities , (6) often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (such as schoolwork or homework), (7) often loses things necessary for tasks or activities (e.g., toys, school assignments, pencils, books, or tools), (8) is often easily distracted by extraneous stimuli, and (9) is often forgetful in daily activities (DSM-IV-TR, 2000).

To meet the eligibility for the Hyperactivity-Impulsivity group, a child must exhibit six or more of the following symptoms: Hyperactivity – (1) often fidgets with hands or feet or squirms in seat, (2) often leaves seat in classroom or in other situations in which remaining

seated is expected, (3) often runs about or climbs excessively in situation in which it is inappropriate (in adolescents or adults, may be limited to subjective feeling of restlessness), (4) often has difficulty playing or engaging in leisure activities quietly, (5) is often “on the go” or often acts as if “driven by a motor,” (6) often talks excessively; Impulsivity – (7) often blurts out answers before questions have been completed, (8) often has difficulty awaiting turns, and (9) often interrupts or intrudes on others (e.g., butts into conversations or games) (DSM-IV-TR, 2000).

Some symptoms must have been present before age seven years and impair the individual across two or more settings. Children who meet the symptom requirements of both criterion groups are considered to be “Combined Type,” while those who meet the criterion of one group are either “Predominantly Inattentive Type” or “Predominantly Hyperactive-Impulsive Type” (DSM-IV-TR, 2000, p. 93).

Symptoms of ADHD are often most visible during the elementary grade years, often due to difficulty in schoolwork or following rules. Inattentive signs may be less visible, but may also manifest in difficulty with school performance. Males are more likely to be diagnosed with ADHD than females (with ratios ranging from two-nine to one), especially for the Combined and Predominantly Hyperactive-Impulsive subtypes and in clinic settings. Prevalence rates vary from 3% to 7% in school-age children, depending on assessment method and sample population. Data on adolescent and adult prevalence rates are limited (APA, 2000).

Beck's Cognitive Model of Depression

Overview

Beck defines cognition as “that function that involves inferences about one’s experiences and about the occurrence and control of future events (Alford & Beck, 1995, p. 14).” Early in Beck’s (1963, 1976) clinical work, he noticed his patients’ “negative automatic thoughts” and a general negativity towards the self and future (pessimism). From this, Beck began to formulate his cognitive theory of depression. Central to Beck’s theory are three interconnected elements: the self-schemas, cognitive distortions in information processing, and the cognitive triad.

Self-Schemas

Schemas are the meaning-making structures of cognition (Alford & Beck, 1995; Beck, 1967). These cognitive mechanisms filter incoming information and affect the efficiency and accuracy of the received information. Individuals with depression often misinterpret positive information as negative, even with evidence to the contrary (Beck, 1967). Beck’s concept of cognitive schemas serves to answer why depressed individuals continue to view their world and experiences as negative. Negative schemata are the organized culmination of past, early experiences, which are presumably negative and/or have been interpreted as such, and are considered by Beck to be relatively stable (Beck, 1967, 1976; Beck, Rush, Shaw, & Emery, 1979). Hence, individuals with depression not only interpret their world negatively, but also generalize negative experiences, judge themselves using absolute or extreme

characteristics, and ignore positive aspects and focus on negative details. These dysfunctional global perspectives and schemata generate automatic, negative thoughts (Beck, 1967, 1976; Beck et al., 1979). When these maladaptive schemata are activated, they act as a filter and aid in processing information in a negative, distorted fashion, leading to intrusive and believable (to the individual with depression), negative cognitions (Beck, 1967, 1976; Beck et al., 1979). An individual's self-schemas are hypothesized to guide the individual's cognitions. A depressed individual's self-schema drives the depressed thinking about oneself. According to Markus (1977), "Self-schemata are cognitive generalizations about the self, derived from past experience, that organize and guide the processing of the self-related information contained in an individual's social experiences (p. 64)."

Information-Processing

According to Beck's (1967, 1976) information-processing model, depressed individuals engage in errors and biases in thinking, or cognitive distortions, leading to negative automatic thoughts. An individual with depression may therefore draw negative conclusions from events and information without the presence of sufficient or necessary information or with the presence of contradictory evidence. Overall negative conclusions may also be drawn with the presence of only one negative aspect of a situation. An adolescent may, for example, extend failure (perceived or actual) on one quiz to an entire class or subject (Gotlib & Sommerfeld, 1999). Errors may also be overgeneralized and magnified. These errors in processing information maintain a negative cognitive triad (Beck, 1967).

The Cognitive Triad

The cognitive triad is the core element of Beck's cognitive model of depression and will be the focus of Beck's model for the purposes of this study (Kaslow, Stark, Printz, Livingston, & Tsai, 1992). Beck postulates a negativity hypothesis whereby, "Depression is characterized by the presence of absolute and pervasive negative self-referent thinking about the self, world, and future (Clark, Beck, & Alford, 1999, p. 116)." The cognitive triad involves how individuals interpret events in their lives and consists of three elements: the view of the self, view of the world, and view of the future. Cognitive triads also develop early in life. These three elements reflect patterns of an individual's assessment of events and interactions pertaining to his or her self, world, and future (Beck, 1967). Beck states of the cognitive triad that when maladaptive meanings are, "constructed regarding the self, the environmental context (experience), and the future (goals)," psychopathology results (Alford & Beck, 1995, p. 16).

In persons suffering from depression, this triad manifests negatively and entails incorrect and faulty perceptions where a positive interpretation is just as valid. Individuals with depression, according to this model, sustain a negative sense of self, soon expect the worst of the world and their futures, and consider themselves to be disappointments and unworthy. This extension of their current state of depression to their futures and the world leads to a sense of hopelessness (Beck, 1967).

Studies in Support of Beck's Theory

Beck's model of depression and theory of the cognitive triad has received much less attention in child research studies than for adult populations. Kaslow and colleagues (1992) found an association between the self, world, and future subsets of the depressive cognitive triad and the severity of depressive symptoms in children. Kaslow and colleagues also showed that the negative cognitive triad differentiated children with depressive disorders, anxiety disorders, and no diagnoses, thus supporting Beck's hypothesis that each emotional disorder is characterized by a different pattern of cognitive disturbance.

While negative content has been found to characterize depressives' self-schemas (Segal, Hood, Shaw, & Higgins, 1988), negative content may actually reflect the activation of negative aspects within a self-structure (Segal & Vella, 1990). Such an interpretation of self-schema may be useful describing comorbid depression with an externalizing disorder. Other research has found that aggressive adolescents are more likely to utilize negative self-schemas in interpreting others' and are guided by aggressive self-schemas in their interpretation of events (Dodge & Tomlin, 1987). Problematic self-schemas are linked to depression in children and adolescents (Prieto, Cole, & Tageson, 1992) and to aggressive behavior in adolescents (Dodge & Tomlin, 1987). The complexity of self-schemas and the relationship of self-schema to different psychological disorders, as well as comorbidity, highlight the importance of examining these influences. The role of the self in the expression and regulation of affect and behavior in the individual is an important area of investigation (Markus, 1977).

Studies conducted with children and adolescents have found significant relationships between depression and self-schemas. Using an incidental recall task for nonclinical school children, Hammen and Zupan (1984) found that nondepressed children recalled primarily positive content words. Children rated as relatively depressed recalled both positive and negative content words, demonstrating a mixed pattern or mixed self-schema. Jaenicke and colleagues (1987) grouped children as high and low risk for depression and found that the low risk group demonstrated significantly stronger recall of positive self-referential information than the high risk group. Hence, children with depression may also lack a positive self-schema. The high-risk group, however, did not display recall significantly more negative self-referential information. How depression was measured and the severity of depression of the high-risk group is unknown. Zupan and colleagues (1987) extended the previous study to include children diagnosed as clinically depressed, whereby sixty percent of the high-risk group had a recent or current episode of an affective illness. This time the clinically depressed group (high risk) displayed a relatively negative view of themselves and recalled more negative self-descriptive traits, indicating negative self-schemas. The nondepressed group (low risk) also demonstrated a relatively positive view of themselves and recalled more positive self-descriptive traits, indicating positive self-schemas. Such results support the negative self-schema, content-specificity, and distortions in information processing components of Beck's hypotheses.

Most theoretical orientations of depression either provide a link to Beck's self-schema theory or include the concept of multiple sources of causality for such as a complex disorder. Beck's theories of depression help to explain cognitive processes and how they may be different for each disorder. This helps to examine comorbidity in depression with other disorders and the self-schema patterns of different diagnostic groups. Oppositional defiant and conduct disorders and depressive disorders may appear opposites in terms of behavioral manifestations. Depression is considered an *internalizing* disorder while oppositional defiant disorder and attention deficit disorders are considered *externalizing*. Yet these disorders often co-occur (Weiss, 1994; Wolfe et al., 1987). Hence, analyses of the cognitive triad and attributions may help to elucidate whether these disorders, diagnosed alone or comorbidly, have distinct or similar cognitive patterns.

Summary

Negative self-schemas have been shown to strongly predict depression in children (Cole, 1991; Cole & Jordan, 1996; Hammen & Zupan, 1984; Jaenicke et al., 1987; Prieto et al., 1992; Zupan et al., 1987). Similarly, having negative cognitive attributions are related to disruptive behavior disorders (Peterson et al., 1993; Weiss, 1994). Negative cognitive attributions also appear to affect the acquisition of new, positive information (Prieto et al., 1992). Yet these negative distortions in processing self-referential information do not appear to be deficits in information processing (Kendall et al., 1990).

Learned Helplessness/Hopelessness Model of Depression

Overview

Abramson, Seligman, and Teasdale (1978) improved upon Seligman's (1977) original learned helplessness theory of depression with a reformulated attribution theory, or the learned helplessness/hopelessness model of depression (Abramson, Metalsky, Alloy, 1989).

Abramson and colleagues hypothesized that a depressogenic attributional style mediates the impact of negative life events and depressive symptoms. Hence, a negative event is not sufficient to produce depression. The event must be perceived as uncontrollable. This theory includes three aspects of attribution: personalization (internal or external), permanence (stable and unstable), and pervasiveness (global or specific).

Personalization

The first component of the learned helplessness model of depression (Abramson, Seligman, Teasdale, 1978) involves when an individual makes internal or external attribution to an event. An internal attribution to a negative event, such as, "I got a bad grade on the quiz because I am a bad student" is based on self-blame and detrimental to self-worth. Individuals who attribute such situations to external factors, however, are not likely to suffer the same detriments, as they externalize or even "blame" outside sources for their failures. Such people who "blame" feel better about themselves and feel less guilt (Seligman, 1995). Similarly, a person can attribute positive events to internal or external factors. For example, someone who thinks, "I made an A on the test because I am a smart student" is more likely to have

higher self-worth and think they have an impact on the occurrence of positive events.

Alternatively, thinking, “I got an A on the test because the teacher was easy on me” leads to the inability to feel capable of or lacking in positive qualities for positive events.

Permanence

Permanence involves attributing a stable or unstable feature to events. For example, attributing a negative event as stable may lead a person to think that they performed poorly on one test because they always perform poorly in school. Such stable attributions to negative events often persist and can lead to feelings of helplessness (Abramson, Seligman, & Teasdale, 1978). This belief implies that negative events are a constant. Indeed, such individuals think in terms of the extremes of “never” and “always” and when depressed, will feel that the depression will last “always” (Seligman, 1995). Individuals who feel that they scored a poor grade on one test because they had an off day tend to feel more able to move beyond negative events, because the events are temporary but their positive characteristics are more stable. On the other hand, individuals who assign a temporary quality to positive events may view successes as quirks rather than an example of their ability or characteristics. Such individuals are

more prone to giving up or not trying than individuals who see positive events as stable and recurring.

Pervasiveness

The third element of the learned helplessness model of depression attributes events to global or specific terms. Individuals who attribute negative events as global are at risk for developing helplessness, as they always interpret events as pervasive or generalize negative experiences to future events. “I scored badly on the test because all tests are hard” reveals a pessimistic view and creates an expectancy of future negative events across different situations. Thinking that, “I scored badly on the test because this test was hard” creates the possibility of change or the expectancy of positive events in the future. The pessimistic view also attributes positive events to specific situations and therefore positive events are conditional and not usually frequent. This creates more opportunity for depression and feelings of helplessness. The more optimistic individual is able to attribute positive events and feelings across a variety of situations, and therefore is less vulnerable to depression and feelings of helplessness (Seligman, 1995).

A depressive attribution style is therefore one that attributes negative life events to internal, stable, and global causes and attributes positive life events to external, unstable, and specific causes. This assumes that stable, global, and internal attributions of negative events are trait-like tendencies that cause depression or are at least paramount in predisposing an individual to depression (Abramson et al., 1978, 1989). Attributional styles

filters for information processing (Asarnow et al., 1987; Seligman et al., 1984). Additionally, this pessimistic style creates vulnerabilities to depression, while the opposite, optimistic style serves as a protection against depression and helplessness (Seligman, 1995).

Studies in Support of the Reformulated Learned Helplessness/Hopelessness Theory

There is an increase in studies showing an indication of a relationship between cognitive distortions and depression in childhood as well as some underlying process to the development of these cognitions or schemas (Asarnow & Bates, 1988; Garber, 1992; Hammen et al., 1988; Quiggle, Garber, Panak, & Dodge, 1992; Tems et al., 1993). Tems et al. (1993) found that children with depression showed more cognitive errors, more negative attributions, and lower self-esteem. However, with symptomatic improvement, distortions in cognitions normalized. Asarnow and Bates (1988) found that children with depression exhibited increased hopelessness, increased negative perceptions, increased dysfunctional attributional styles, and negative self-perceptions across a wider variety of domains. The cognitive distortions were also not detectable after remission of depressive symptoms. Yet some studies have found that a pessimistic explanatory style persists, even after remission of the child or adolescent's depressive symptoms, thus placing the youth at increased risk for future depressive episodes (Gladstone & Kaslow, 1995; Gotlib, Lewinsohn, Seeley, Rohde, & Redner, 1993; Nolen-Hoeksema et al., 1992). Hence, whether negative attributions are mood dependent or stable is still questioned.

Children do appear to develop a consistent attributional style, or characteristic way of explaining events that occur in their lives, by the age of 9 or middle childhood (Nolen-Hoeksema & Girgus, 1995). In two longitudinal studies, children with more depressive attributional styles were more likely to be depressed at a later time (Nolen-Hoeksema et al., 1986, 1992). Children who display depressive symptoms are more likely to attribute their failures to causes which are internal, stable, and global (Gladstone & Kaslow, 1995; Seligman et al., 1984). Similarly, depressed children are more likely to attribute their successes to external and unstable causes. As compared to peers with a nondepressive attributional style, adolescents at risk for developing and manifesting depressive symptoms are more likely to blame themselves for a negative events, view the cause of the event as consistent over time, and generalize across situations (e.g., Garber, Weiss, & Shanley, 1993; Kaslow, Rehm & Siegel, 1984; Lewinsohn et al., 1994; Nolen-Hoeksema et al., 1992; Seligman et al., 1984).

Summary

The reformulated helplessness/hopelessness theory of depression postulates that individuals who attribute negative life events to internal, stable, and global will be more vulnerable to depression than those that attribute negative life events to external, unstable, specific causes (Abramson et al., 1978, 1989). In recent years the amount of research has grown to support the link between attributional style and depression in youths. Some studies found that the negative attributional styles were not detected upon relief of depressive symptoms (Asarnow & Bates, 1988; Tems et al., 1993), while others found that a negative

attributional style persisted (Gladstone & Kaslow, 1995; Gotlib, Lewinsohn, Seeley, Rohde, & Redner, 1993; Nolen-Hoeksema et al., 1992).

Cognitive Functioning in Conduct Disorder and Oppositional Defiant Disorder

Much of the research on cognitive styles has focused on depression to the exclusion of externalizing disorders. The impact of the development of negative schema and attributional styles is an important factor to investigate in externalizing disorders as well (Toth, Cicchetti, & Kim, 2002).

School children who have demonstrated chronic aggressive behavior have been shown to attend to fewer social cues than nonaggressive children (Dodge & Newman, 1981). Hence, these children who attend to fewer cues have also gathered less information upon which to make social decisions. Moreover, aggressive children tend to interpret social cues with a social bias (Dodge, 1993; Dodge & Frame, 1982; Gouze, 1987). By assessing free recall of previously presented hostile and nonhostile cues, Dodge and Frame (1982) found attention to hostile cues correlated with hostile attributions about intent of the other person and a subsequent aggressive response.

Children and adolescents with oppositional defiant disorder and conduct disorder often display behaviors such as lying, bullying, and aggression; hence, several researchers have investigated social interaction correlates and information processing biases with these disorders. Rudolph (1994) found that adolescents with internalizing and externalizing disorders displayed social dysfunction, maladjusted social problem-solving styles, conflict

negotiation and affect regulation deficits, and were rejected by peers. Children and adolescents with depression or disruptive behavior disorders have cognitive distortions that can manifest as hostile problem solving and conflict with peer exchanges leading to peer rejection (Cole & Carpentieri, 1990; Joiner, 1994; Rudolph, 1994; Weiss, 1994). These distortions in information processing lead to selective attention to hostile cues, which worsens as peer rejection, real or perceived, increases (Dodge, 1993). Rudolph (1994) has found that adolescents with depression and/or conduct disorder often suffer from social impairment. A hostile information processing bias and self-schema of threat lead to aggression (Dodge & Tomlin, 1987; Randolph, 1994).

Children who show lower levels of social skills than peers do not attend as well to social cues from others (Dodge et al., 1995). Aggressive (Dodge, 1993) and incarcerated boys (Wong and Cornell, 1999) have demonstrated a bias to attribute the intentions of others as hostile. Matthys, Walterbos, Van Engeland, and Koops (1995) found that boys with disruptive behavior disorders, such as ODD and CD, focused on concrete and external qualities and took on a self-focused bias in describing their peers. Matthys, Cuperus, and Van Engeland (1999) performed a laboratory study of social problem-solving with boys with disruptive behavior disorders and boys with ADHD. Both groups had problems encoding social cues and generating responses, but the disruptive behavior disorders group selected aggressive responses to problems more often and demonstrated more confidence in their ability to carry out an aggressive response (Matthys et al., 1999).

Summary

Children and adolescent who have demonstrated aggressive behavior over time have been shown to attend to fewer social cues and to interpret social cues with hostile attributions (Dodge, 1993; Dodge & Frame, 1992; Dodge & Newman, 1981). Hostile attributions about the intent of others as well as hostile information processing bias and a self-schema of threat led to subsequent aggressive behavior (Dodge & Frame, 1982; Dodge & Tomlin, 1987; Randolph, 1994). Children and adolescents with both internalizing and externalizing disorders had difficulty with social problem-solving, conflict negotiation, and affect regulation and often resulted in peer rejection (Cole & Carpentieri, 1990; Joiner, 1994; Rudolph, 1994; Weiss, 1994). While internalizing and externalizing disorders groups have some similarities, externalizing groups usually display more hostile attributions and aggressive behavior than internalizing groups.

Comorbidity of Depression with Externalizing Disorders

Other disorders often accompany depression in adults (Maser, Weise, & Gwirtsman, 1995). This pattern has also been seen in children and adolescents (Anderson & McGee, 1994; Angold & Costello, 1993; Nottelmann & Jesnen, 1999). Clinically depressed children often present with co-occurring diagnoses (Asarnow & Bates, 1988; Carlson & Cantwell, 1979; Hinshaw & Anderson, 1996), making treatment and diagnosis more complex. The mechanisms involved in comorbidity are unclear, yet an earlier age of onset of a depressive

disorder appears to be related to an increased level of comorbidity (Angold & Costello, 1993; Essau & Petermann, 1999).

Comorbidity rates for depressive disorder have been reported at 42% and higher for adolescent clinical populations (e.g., Rohde, Lewinsohn, Seeley, 1991). Rhode and colleagues (1991) reported a lifetime comorbidity rate for depressed groups of 12%. Many clinical populations of depressed youths have a high rate of comorbidity for conduct disorder (Ryan et al., 1987). Cole and Carpentieri (1990) reported a correlation of .73 between conduct disorder symptoms and depression. Conduct disorder is often seen with a comorbid diagnoses of a depressive disorder at a higher than chance rate (Cole & Carpentieri, 1990; Hinshaw & Anderson, 1996). Among adolescents, the presence of a depressive disorder and a comorbid conduct disorder is considered a major risk factor in suicide attempts (Brock & Sandoval, 1997).

One study of 136 children (mean age of 11.5 years) referred to a pediatric clinic and diagnosed with major depressive disorder reported on the comorbid diagnoses made with attention-deficit/hyperactivity disorder (77%), with conduct disorder (24%), and with oppositional defiant disorder (60%) (Biederman, Faraone, Mick, & Lelon, 1995). Biederman, Faraone, Mick, and Lelon (1995) also reported that comorbidity for severe major depression and ODD (73%) and CD (27%), was higher than in mild major depression cases with ODD (47%) and CD (20%). Other clinical studies report similar levels of children and adolescents with comorbid depression and externalizing disorders (see Essau & Petermann, 1999; Ferro, Carlson, Grayson, & Klein, 1994; Goodyer, Herbert, Sacher, & Pearson, 1997).

Beck's Cognitive Content-Specificity Hypothesis

Beck's cognitive content-specificity hypothesis provides some guidance in predicting how adolescents with a diagnosis of comorbid depression and an externalizing disorder and adolescents with a diagnosis of an externalizing disorder alone might differ in their cognitions (Beck, 1967; Beck, Brown, Eidelson, Steer, & Riskind, 1987). This content-specificity hypothesis states that specific types of cognitive distortions characterize each disorder. Unless modified, such disorder specific cognitive distortions will determine and maintain the type of disorder in a given individual. Hence, different types of thinking that are guided by early maladaptive self-schemas will characterize each disorder (Young, 1994).

For example, depressive disorders are associated with cognitions of loss while anxiety disorders are associated by cognitions of threat. Different diagnoses may therefore be characterized by their self-schema patterns or cognitive distortions. Cognitive content specificity is related to the cognitive triad in that each clinical disorder has characteristic maladaptive meaning associated with each component of the triad (Alford & Beck, 1995). In depression, all three components are interpreted negatively. Alford and Beck (1995) state that in disorders involving anger and paranoia, "the self is interpreted as mistreated or abused by other, and the world is seen as unfair and opposing one's interest (p. 16)."

The presence of a negative self-schema has been found in depressed children and adolescents (Beck, 1967, 1976; Dykman et al., 1991; Hammen & Goodman-Brown, 1990) and in the interpersonal functions of aggressive children (Dodge & Tomlin, 1987). As

discussed above when examining studies of comorbidity, children with conduct disorder or oppositional defiant disorder are more likely to utilize aggressive and “hostile world” self-schemas and attributions (Dodge, 1993; Dodge & Frame, 1982; Dodge & Tomlin, 1987; Randolph, 1994) and depressed children are more likely to utilize negative, depressogenic self-schemas (Hammen & Goodman-Brown, 1990; Prieto et al., 1992). The early maladaptive self-schema domain hypothesized to be related to depressive disorders is an undesirability self-schema while the early maladaptive self-schema domain hypothesized to be related to conduct disorder and oppositional defiant disorder is an impaired limits self-schema.

Children and adolescents with comorbid diagnoses of CD and depression have shown higher levels of cognitive dysfunction and maladjustment. In a study of adolescents in an inpatient psychiatric setting, Kempton, Van Hasselt, Bukstein, and Null (1994) found that adolescents with diagnoses of both depression and conduct disorder committed the most cognitive errors. In making cognitive errors, the depression-only group was the most similar to the comorbid group, and these two groups were significantly different from all other diagnostic groups (Kempton et al., 1994). In a study of twins diagnosed with depression and/or CD and control participants, the combination of the two diagnoses related to more serious maladjustment, particularly in the areas of school success and substance abuse (Marmorstein & Iacono, 2003). The comorbid group’s maladjustment was more severe than would be expected if only one disorder had been present. Occurrence of these disorders by late adolescence indicated a likelihood of recurrence by early adulthood, as indicated by

longitudinal data (Marmorstein & Iacono, 2003).

Cognitive styles or cognitive patterns are still not clear in children with comorbid diagnoses. One study found that attributions of external control, or the belief that an external force controlled events in their lives, resulted in both external and internal symptomatology (Weiss, Susser, & Cantron, 1998). In a sample of clinic-referred children, children with internal and external symptomatology displayed self-critical beliefs about their conduct (Han, Weisz, & Weiss, 2001). These children had an awareness of their behavioral difficulties, but believed they could not control their own behaviors.

Summary

Comorbidity in children and adolescents with depressive disorders has been observed at rates higher than chance, although the mechanisms involved in comorbidity are still unclear (Angold & Costello, 1993; Cole & Carpentieri, 1990; Essau & Petermann, 1999).

Adolescents with depressive disorder and a comorbid conduct disorder are considered to be at risk for suicide attempts (Brock & Sandoval, 1997) and for a recurrence of the disorders by early adulthood (Marmorstein & Iacono, 2003). Moreover, children and adolescents with comorbid diagnoses of CD and depression have shown higher levels of cognitive dysfunction.

Beck's content-specificity hypothesis states that specific types of cognitive distortions characterize each disorder. While studies showed errors in cognition for both groups, depressed groups tended to focus on depressogenic cognitions of loss and failure, while externalizing groups focused on cognitions of hostility and aggression (Dodge, 1993; Dodge &

Frame, 1982; Dodge & Tomlin, 1987; Hammen & Goodman-Brown, 1990; Prieto et al., 1992; Randolph, 1994).

Beck's Theory and The Reformulated Learned Helplessness/Hopelessness Theory as Diathesis-Stress Models

Many studies have sought to investigate the interaction and impact of stressful events and depression in the lives of children (Cole & Turner, 1993; Dixon & Aherns, 1992; Hammen et al., 1988; Nolen-Hoeksema et al, 1986). Nolen-Hoeksema and colleagues followed school children for a year in order to evaluate the interactive effect of stress and attributional style on depressive symptoms. Stress alone predicted change in depressive symptoms during two of five intervals of assessment, while the stress-attributional style interaction predicted change in depressive symptoms in one interval. On the other hand, Dixon and Aherns (1992) found that daily hassles predicted depressive symptoms while attributional style did not; yet the interaction of the two variables did significantly predict depression scores. Moreover, stress had a greater impact on depressive symptoms for those children with negative attributional styles. Hammen and colleagues (1988) found that for children of parents with depression, stress and attributional style failed to predict depression over eight months. Metalsky, Halberstadt, and Abramson (1987), however, found that of the adolescents receiving poor grades on an exam, those with a depressogenic attributional style continued to show a dysphonic mood while other students' moods improved after five days.

A positive sense of self appears to develop naturally as a major developmental task of middle childhood (Cole & Jordan, 1995; Harter, 1992a). This process also involves the development of positive cognitive processes such as selective attention, storage and encoding, and retrieval of self-referential information (Cole & Jordan, 1995; Hammen & Zupan, 1984). A depressive episode or a disruptive behavior disorder can disrupt this development and may create negative cognitive biases (Beck, 1967; 1976; Beck, Rush, Shaw, & Emery, 1979). Construction of negative self-schemas during a child's development could lead to a strengthening of this negative cognitive style, which could then serve as a diathesis to generate depression (Abramson et al., 1989; Dixon & Aherns, 1992; Nolen-Hoeksema et al., 1986; Turner & Cole, 1994).

The diathesis-stress component of these theories implies an individual's vulnerability in a specific area in which a negative event occurs (Abramson, Alloy, Metalsky, 1995; Beck, 1967; Clark, Beck, Alford, 1999; Metalsky, Abramson, Seligman, Semmel, & Peterson, 1982). In hopelessness depression theory, the depressogenic attributional style is the diathesis and a distal contributory cause of the depression that *only* occurs in the presence of the negative events or the stress (Abramson et al., 1995). Similarly, a component of Beck's theory includes the *stability hypothesis*: "The latent cognitive structures and content that contribute to susceptibility to depression are relatively stable across time, situations, and mood states, although they will remain inaccessible unless activated by a priming stimulus (Clark, Beck, & Alford, 1999, p. 267)."

Summary

A diathesis-stress model for depression is one in which a stressor or stressful event triggers a vulnerability, which then leads to depressive symptoms. The original Learned Helplessness Model and Beck's Cognitive Model of Depression may have seemed to be distinct models upon their origins (see previous sections); however, with the further development of the models and further definition of the diathesis-stress component, these models are now more similar than distinct.

Research Study

The past few decades have seen an increase in the research on the relationship between cognitive variables and depression in childhood. Such research is an effort to examine both Beck's cognitive model of depression (1967, 1976; Beck, Rush, Shaw, & Emery, 1979) and Abramson's et al. (1978, 1989) learned helplessness model of depression. Studies have supported attributional style for self-reported and clinical depression in children and adolescents (see Gladstone & Kaslow, 1995; Joiner & Wagner, 1995). Other studies have supported Beck's model of depression (Beckham et al., 1986), showing that children with depression, for example, have lower perceived competence (Asarnow & Bates, 1988; Asarnow, Carlson, & Guthrie, 1987), less positive self-schema (Hammen & Zupan, 1984; Zupan, Hammen, & Jaenicke, 1987), a more negative self-schema than nondepressed youths (Prieto, Cole, & Tageson, 1992), and a more negative cognitive triad (Kaslow et al., 1992).

Yet compared to the literature on depression in adults, there is deficiency of research and still a great need for further understanding of the interaction of cognitive variables in childhood depression as well as other disorders of childhood (Nottlemann & Jensen, 1999).

Clinically depressed children often present with co-occurring diagnoses (Asarnow & Bates, 1988; Carlson & Cantwell, 1979; Hinshaw & Anderson, 1996), making treatment and diagnosis more complex. Childhood comorbidity, with rates far higher than that of adults (Angold & Costello, 1993), makes accurate assessment and effective treatment development difficult. Children with dual diagnoses are at a much higher risk for future academic, emotional, and behavioral problems (Cole & Carpentieri, 1990).

The current study sought to investigate whether clinically depressed adolescents are more likely to endorse a depressive attributional style and a negative, depressive cognitive triad profile than adolescents with externalizing disorders and with no diagnoses. Further, the study sought to investigate whether a comorbid depression/externalizing disorder group of adolescents are more likely to endorse a depressive attributional style and a cognitive triad profile more similar to the depression only group or the externalizing disorder group. Also, the study sought to determine the impact of negative life events in differentiating these groups. The goal of the study was to further clarify the role of the cognitive triad, attributional style, and negative life events in childhood functioning, as relevant to disorders such as depression. Additionally, providing research that is informative with regards to depressive comorbidity and

cognitive disturbances may assist in further development of more applicable prevention and treatment.

Hypotheses of the Investigation

This study utilized four groups based on diagnoses: Depressed only, Externalizing Disorder only, Depressed/Externalizing Disorder (Comorbid), and a Control or No Diagnosis Group.

Hypothesis One

The Depressed group and Comorbid group will endorse a more negative (or less positive) view of the Self, World, and Future, as measured by the CTIC subscale scores and the Total score than the Externalizing Disorder and Control groups. The Externalizing Disorder group will endorse a more negative (or less positive) view of the Self, World, and Future than the Control group.

Hypothesis 1a

Participants in the Depressed group and the Comorbid group will endorse a more negative View of the Self items from the CTIC (Kaslow, Stark, Prinz, Livingston, & Tsai, 1992), resulting in lower View of Self scores. Participants in the Externalizing Disorder group will endorse a more negative View of the Self items than the Control group, resulting in lower View of Self scores than the Control group.

Hypothesis 1b

depression in adults, there is deficiency of research and still a great need for further understanding of the interaction of cognitive variables in childhood depression as well as other disorders of childhood (Nottlemann & Jensen, 1999).

Clinically depressed children often present with co-occurring diagnoses (Asarnow & Bates, 1988; Carlson & Cantwell, 1979; Hinshaw & Anderson, 1996), making treatment and diagnosis more complex. Childhood comorbidity, with rates far higher than that of adults (Angold & Costello, 1993), makes accurate assessment and effective treatment development difficult. Children with dual diagnoses are at a much higher risk for future academic, emotional, and behavioral problems (Cole & Carpentieri, 1990).

The current study sought to investigate whether clinically depressed adolescents are more likely to endorse a depressive attributional style and a negative, depressive cognitive triad profile than adolescents with externalizing disorders and with no diagnoses. Further, the study sought to investigate whether a comorbid depression/externalizing disorder group of adolescents are more likely to endorse a depressive attributional style and a cognitive triad profile more similar to the depression only group or the externalizing disorder group. Also, the study sought to determine the impact of negative life events in differentiating these groups. The goal of the study was to further clarify the role of the cognitive triad, attributional style, and negative life events in childhood functioning, as relevant to disorders such as depression. Additionally, providing research that is informative with regards to depressive

comorbidity and cognitive disturbances may assist in further development of more applicable prevention and treatment.

Hypotheses of the Investigation

This study utilized four groups based on diagnoses: Depressed only, Externalizing Disorder only, Depressed/Externalizing Disorder (Comorbid), and a Control or No Diagnosis Group.

Hypothesis One

The Depressed group and Comorbid group will endorse a more negative (or less positive) view of the Self, World, and Future, as measured by the CTIC subscale scores and the Total score than the Externalizing Disorder and Control groups. The Externalizing Disorder group will endorse a more negative (or less positive) view of the Self, World, and Future than the Control group.

Hypothesis 1a

Participants in the Depressed group and the Comorbid group will endorse a more negative View of the Self items from the CTIC (Kaslow, Stark, Prinz, Livingston, & Tsai, 1992), resulting in lower View of Self scores. Participants in the Externalizing Disorder group will endorse a more negative View of the Self items than the Control group, resulting in lower View of Self scores than the Control group.

Hypothesis 1b

The Externalizing Disorder group will have a lower Positive Composite (CP) score on the CASQ than the Control group.

Hypothesis 2c

Participants in the Control group responses on the CASQ will have a higher Positive Composite (CP) score and lower Negative Composite (CN) score than the other three groups. The Externalizing Disorder group will have a higher Positive Composite (CP) score and lower Negative Composite (CN) score on the CASQ than the Control group.

Rationale

The attributional style theory has received support for adolescent populations; moreover, attributions appear to be relatively stable by adolescence (Asarnow & Bates, 1988; Burns & Sleigman, 1989; Peterson et al., 1982; Nolen-Hoeksema, Girgus, & Selgiman, 1992). Children with more pessimistic attributional styles report more depressive symptoms (Kaslow, Rehm, & Siegel, 1984; Nolen-Hoeksema et al., 1986, 1992; Seligman et al., 1992). Externalizing disorders have also been related to a negative attributional style (Peterson et al., 1993; Weiss, 1994).

Hypothesis Three

The Depressed group and Comorbid group will endorse more negative events and rate them to have a more negative effect on the LEC than the Externalizing Disorder and Control groups. The Externalizing Disorder will endorse more negative events and rate them to have a more negative effect on the LEC than the Control group.

Hypothesis 3a

Participants in the Depressed group and Comorbid group will endorse more negative events on the LEC than the Externalizing Disorder and Control groups. The Externalizing Disorder will endorse more negative events on the LEC than the Control group.

Hypothesis 3b

Participants in the Depressed group and Comorbid group will rate their negative events to have a more negative effect on the LEC than the Externalizing Disorder and Control groups. The Externalizing Disorder will rate their negative events to have a more negative effect on the LEC than the Control group.

Rationale

Negative life event have been shown to be related to emotional and behavioral problem in children (Attar, Guerra, Tolan, 1994). Therefore the Control group, not having any identified emotional or behavioral disorders, would be expected not to have a significant number of negative life events.

CHAPTER III. METHOD

Adolescents from a residential treatment center with psychological/psychiatric disorders and from a public school completed a semi-structured diagnostic interview and three paper-and-pencil measures that assessed the adolescents' self-schema and attributional style.

Participants

The sample included 64 adolescents (34 male, 30 female), who were part of a larger research project investigating cognitive, behavioral, and family factors in the development of childhood depression, and disruptive behavior disorders. For the school population, a random sample of volunteer adolescents, matched as closely in age as possible to the clinical group, were selected to participate. These participants were paid a one-time fee of \$20 for their time to participate.

Participants were ages 12 to 17 years old ($M = 14.77$, $SD = 1.39$) who were receiving psychological and psychiatric services at a residential treatment center and a group from a public school who were not experiencing any psychological disorders. The four diagnostic categories included Depressive Disorder ($n = 13$), Externalizing Disorders ($n = 15$), Depressive Disorders and Externalizing Disorders ($n = 10$), and No Diagnosis Controls ($n = 26$). Average age for the four groups ranged from 14.50 to 15.00 years. Average length of stay at the treatment center was less than a month. Participants from the public school were matched as well as possible to the other three groups' demographic characteristics, including age, gender, and grade. See Table 1 for

the demographic characteristics of the sample. A majority of the participants were Caucasian ($n = 48$), with four Hispanics, two African American, one Asian, and nine other participants identifying themselves as “Mixed” race or “Other.” The same percentages for Caucasian were generally consistent across the diagnostic groups, with 84.6% for the Depressed group, 80.0% for Externalizing, 80.0% for Comorbid, and 65.4% for the Control group. The Control group had a larger number of participants who identified themselves as a minority ($n = 9$), with 11.5% participants identifying themselves as “Hispanic,” 3.8% as “African American,” and 19.2% as “Mixed/Other.” No diagnostic group had a strong majority of males or females. The Depressed group had more females (61.5%), while the Externalizing (53.5%), Comorbid (60.0%), and Control (57.7%) groups had more males.

Information gathered from the interviews on the participants’ living arrangements revealed that 40.6% ($n = 26$) lived with both biological parents, 12.5% ($n = 8$) lived with their biological mothers only, 25.0% ($n = 16$) lived with their biological mothers and step-fathers, 3.1% ($n = 2$) lived with their biological fathers only, 4.7% ($n = 3$) lived with their biological fathers and step-mothers, 1.6% ($n = 1$) lived with their grandparents, 4.5% ($n = 3$) were adopted, and 7.8% ($n = 5$) were “Other” or unknown. A majority of the Externalizing group (46.7%) and Control group (57.7%) lived with both biological parents. While none of the adolescents in the Externalizing group lived with their biological mothers only, 30.8% of the Depressed group ($n = 4$), 10.0% of the Comorbid group ($n = 1$), and 11.5% of the Control group ($n = 3$) did.

The participants' grade levels ranged from sixth to twelfth. The majority of participants were in the eighth (18.8%, $n = 12$), ninth (28.1%, $n = 18$) and tenth (31.3%, $n = 21$) grades. The average grade for each diagnostic group ranged from 8.70 to 9.42. While 54.7% ($n = 35$) of the participants were in general education, 26 of those participants were from the control group. Hence, 23.7% of the non-control group participants were in general education, while the majority of non-control group participants were classified as "Emotionally Disturbed" (47.4%). Thirty-eight and a half percent of the Depressed group ($n = 5$) and 46.7% of the Externalizing group ($n = 7$) were classified as "Emotionally Disturbed." Sixty percent of the Comorbid group were classified as "Emotionally Disturbed" ($n = 6$), 10% as both "Learning Disabled and Emotionally Disturbed" ($n = 1$), and 30% were "Unknown" ($n = 3$). All participants in the Control group were in general education ($n = 26$). See Table 2 for educational characteristics of the sample.

Tables 3, 4, and 5 present the number and percentages of diagnoses for the clinical groups ($n = 38$), including diagnoses not impacting group selection and other reported information, organized by diagnostic group. Fifty-eight percent ($n = 22$) of participants were diagnosed with Major Depressive Disorder and 24% ($n = 9$) with Dysthymia. Twenty-nine percent ($n = 11$) were diagnosed with Conduct Disorder and 39% ($n = 15$) with Oppositional Defiant Disorder. Other diagnoses and reported information include Substance abuse, Sexual Abuse, Eating Disorder NOS, and

Generalized Anxiety Disorder. When available, information concerning duration and severity is also presented.

Table 1

Description of Demographic Characteristics of Sample

Demographic	Depressed ^a	Externalizing ^b	Comorbid ^c	Control ^d
Age (in years)				
Mean	15.00	14.60	14.50	14.85
Standard Deviation	1.22	1.64	1.51	1.32
Gender				
Male	38.5%	53.3%	60.0%	57.7%
Female	61.5%	46.7%	40.0%	42.3%
Race				
Caucasian	84.6%	80.0%	80.0%	65.4%
Hispanic		6.7%		11.5%
African American		6.7%		3.8%
Asian		6.7%		
Mixed/Other	15.4%		20.0%	19.2%
Living Arrangements				
Both Biological Parents	15.4%	46.7%	20.0%	57.7%
Biological Mother	30.8%		10.0%	11.5%
Biological Mother and Step-Father	38.5%	20.0%	30.0%	19.2%
Biological Father		6.7%		3.8%
Biological Father and Step-Mother	7.7%	6.7%		3.8%
Grandparents			10.0%	
Adopted		6.7%	20.0%	
Other/Missing	7.7%	13.3%	10.0%	3.8%

^a*n* = 13; ^b*n* = 15; ^c*n* = 10; ^d*n* = 26

Table 2

Description of Educational Characteristics of Sample

Demographic	Depressed ^a	Externalizing ^b	Comorbid ^c	Control ^d
Grade Level				
Mean	9.08	9.20	8.70	9.42
Standard Deviation	1.12	1.74	1.34	1.24
Grade in School				
6 th		13.3%	10.0%	
7 th	7.7%	20.0%		7.7%
8 th	23.1%	13.3%	30.0%	11.5%
9 th	30.8%	33.3%	40.0%	30.8%
10 th	30.8%	13.3%	10.0%	38.5%
11 th	7.7%	6.7%	10.0%	3.8%
12 th				7.7%
Educational Classification				
General Education	38.5%	26.7%		100%
Learning Disabled (LD)	7.7%	6.7%		
Emotionally Disturbed (ED)	38.5%	46.7%	60.0%	
Both LD and ED	7.7%	13.3%	10.0%	
Unclear	7.7%	6.7%	30.0%	

^a*n* = 13; ^b*n* = 15; ^c*n* = 10; ^d*n* = 26

Table 3

Consensus Diagnoses for Depressive Group

<u>#ID^a</u>	<u>Diagnoses (Primary diagnosis listed first)</u>
1	MDD ^b (recurrent), ADHD ^c -Combined, Dysthymia
2	MDD (first episode, 7 years old), Sexual Abuse
3	MDD, ADHD, Sexual Abuse (Perpetrator and Victim)
4	MDD (current episode within past year) Dysthymia (duration: past 3 years), ADHD-Inattentive
5	MDD (past 2 months), ADHD-Hyperactive
6	MDD (recent, severe), Dysthymia, GAD ^d Sexual Abuse (Victim) (all Dx's since 8 years old)
7	MDD (single, severe, past 4 months) PTSD ^e , Sexual Abuse (Victim)
8	MDD (recurrent, severe, current episode 6 months, 1 st episode 3 years ago)
9	MDD (recurrent, 1 st episode 2 years ago), GAD, Dysthymia
10	MDD, Eating Disorder NOS, Alcohol Abuse, Sexual Abuse
11	MDD (first episode 8 years old), PTSD, Dysthymia (first episode 8 years old), ADHD, Thyroid Disorder, Sexual Abuse
12	MDD (Current episode, past year), Dysthymia
13	MDD (current episode, past year), ADHD-Inattentive

Note: When available, information on severity and onset has been presented. Some of this information was reported by the parent/caregiver and/or the participant in the interviews.

^a#ID = Participant identification number, ^bMDD = Major Depressive Disorder, ^cADHD = Attention-Deficit/Hyperactivity Disorder, ^dGAD = Generalized Anxiety Disorder, ^ePTSD = Post Traumatic Stress Disorder.

Table 4

Consensus Diagnoses for Externalizing Group

#ID	Diagnoses (Primary diagnosis listed first)
14	CD ^a , ADHD-Combined
15	ODD ^b , Depressive Disorder NOS
16	CD, Poly-Substance Abuse, ADHD-Combined
17	Depressive Disorder NOS, ADHD-Combined, ODD
18	CD, Poly-Substance Abuse
19	CD, ADHD-Inattentive
20	ODD, ADHD-combined, Substance Abuse
21	CD
22	ODD, Alcohol Abuse
23	Depressive Disorder NOS, ODD
24	ODD, ADHD
25	ODD, Depressive Disorder NOS, Poly-Substance Abuse
26	ODD, Depressive Disorder NOS
27	ODD, ADHD (by history)
36	Depressive Disorder NOS, ODD

Note: ^aCD = Conduct Disorder, ^bODD = Oppositional Defiant Disorder.

Table 5
Consensus Diagnoses for Comorbid Group

#ID	Diagnoses (Primary diagnosis listed first)
28	MD, ODD
29	MDD, CD
30	MDD, ODD
31	MDD, CD, ADHD – Inattentive
32	MDD, CD – Childhood onset, ADHD-Combined
33	MDD, ADHD, Dysthymia, ODD
34	MDD, ODD, Dysthymia
35	MDD, ODD (Adolescent onset)
37	MDD (Single episode), CD (Adolescent onset)
38	Dysthymia – ongoing, CD (Mild, Adolescent onset), PTSD, Poly-Substance Abuse

Instruments

Measurement of Depressive and Externalizing Disorders

The presence and severity of depressive symptoms was assessed using the depression section of the Schedule for Affective Disorders and Schizophrenia for School-Age Children (K-SADS; Puig-Antich & Ryan, 1986; see Appendix C). The K-SADS is a semi-structured interview based on the current DSM-IV-TR criteria for children aged 6 to 17 years and their primary caregiver (APA, 2000). The number and severity of symptoms can be recorded for each participant, even for a child not meeting all of the diagnostic criteria for a disorder.

A combined version of the K-SADS-P (present version) and K-SADS-E (episodic version) was used to determine the presence of (but not limited to) depressive disorders, conduct disorder, and oppositional defiant disorder. The K-SADS-P/E contains both structured and unstructured sections. The structured portion of the interview includes questions on approximately 200 specific symptoms or behaviors relevant to most Axis I, DSM-IV-TR diagnoses. The K-SADS-P/E diagnostic scores and the residential treatment center's psychiatrist diagnosis will be combined to arrive upon a consensus diagnosis. The Depression section of the K-SADS-E/P is included in Appendix C.

The use of the K-SADS-E/P interview in research studies on comorbidity has been suggested (Burke, Wittchen, Regier, & Sartorius, 1990; Frances et al., 1990) as it provides acceptable reliability for diagnoses. The K-SADS has been shown to have high

reliability (93% to 100% agreement for assigning present and lifetime mood and externalizing disorders, Kaufman et al., 1997; kappa = .83 for major depression, Last & Strauss, 1990). Additionally, sufficient diagnostic reliability (Ambrosini, Metz, Prabucki, & Lee, 1989; Mitchell, McCauley, Burke, Calderon, Scholoredt, 1989), internal consistency (Cronbach alpha > .68, Ambrosini, 2000; Ambrosini et al., 1989) and test-retest reliability (rtt \geq .67, Apter, Orvaschel, Laseg, Moses, & Tyano, 1989) have been demonstrated for the K-SADS.

Cognitive Triad Inventory for Children

The Cognitive Triad Inventory for Children (CTIC; Kaslow et al., 1992) is an adaptation of the Cognitive Triad Inventory (Beckham, Leber, Watkins, Boyer, & Cook, 1986) that is designed to assess the cognitive triad in children (see Appendix D). Wording of items from the original questionnaire were simplified, double negatives were removed, and content was changed to be more relevant to children. The CTIC consists of 36 items that state a specific thought about the self (12), the world (12), or the future (12). The respondents choose “Yes,” “Maybe,” or “No” for each statement concerning how they are thinking “Right Now.” Each response is rated on a three-point Likert-type scale. Half of the items are worded positively, half are worded negatively. The CTIC yields three subscales: View of Self, View of World, and View of Future. Each scale consists of 12 items. Summing the three subscales yields a total score. The CTIC has demonstrated adequate internal consistency reliability (coefficient alphas of .92 Total, .83 Self, .69 World, and .85 Future) as

discriminate validity (Kaslow et al., 1992). This study utilized the total score and the three subscale scores.

Children's Attributional Style Questionnaire

The Children's Attributional Style Questionnaire (CASQ; Kaslow et al., 1978; Seligman et al., 1984; see Appendix E) is the most commonly used measurement tool of attributional style for children and adolescents aged 8 to 18 years. Each of the 48 forced-choice items on the scale presents a situation and two possible explanations. The adolescent chooses the "the most likely explanation" for the event and therefore chooses the negative or positive explanation. Half of the situations represent positive or good outcomes; half negative or bad outcomes. The CASQ assesses a negative composite score (CN), a positive composite score (CP), and three dimensions of attributions (internal-external, stable-unstable, global-specific). Hence, a more positive composite score represents more positive items rated as internal, stable, and global. A more negative composite score represents more negative items rated as external, unstable, and specific. Each CASQ yields an overall composite score (CPCN) by subtracting the negative composite score from the positive composite score. A more depressive attributional style equates to higher negative score composites and lower positive score composites, or a lower overall composite score.

Internal consistency reliability scores have ranged from .43 to .74 for positive events, from .42 to .67 for negative events, and at .62/.63 for the overall composite (Kaslow et al., 1988; Nolen-Hoeksema, Girgus, & Seligman, 1986, 1992; Schwartz,

Kaslow, Seeley, & Lewinsohn, 2000; Seligman, Peterson, Kaslow, Tanenbaum, Allow, & Abramson, 1984). Test-retest reliabilities have been found to be .71 for positive events and .66 for negative events across six months and .56 for the overall composite score over thirteen months (Schwartz, Kaslow, Seeley, & Lewinsohn, 2000; Thompson, Kaslow, & Weiss, 1998). This study utilized the positive, negative, and overall composite scores, but not the dimensional subscale scores, as these scores have been shown to have unacceptable psychometrics properties (Gladstone, Kaslow, Seeley, & Lewinsohn, 1997).

The Life Events Checklist

The Life Events Checklist (LEC; Johnson & McCutcheon, 1980; see Appendix F)) is a self-report inventory consisting of 46 life event items, including space for individuals to list and rate additional life events. The LEC assesses the number and impact of positive and negative life events over the past 12 months. There are 10 categories of life events: family health, family member changes, family moves, money, crises, unexpected news, parents' marital relationship, parent-child relationship, general, and family resources. Participants are instructed to mark "yes" or "no" as to whether any of the events "happened to them." If the participants mark "yes," they then mark whether the event was "good" or "bad." And also how much effect the events had on their lives. Effect is measured by a four point Likert-type scale: No Effect, Some Effect, Moderate Effect, and Great Effect. The LEC therefore yields information on the number and effect of positive and negative events. The LEC contains oppositely

worded items and items specifically worded for males and females to detect response set. A weighted LEC score was used in this study for both “bad” and “good” events, derived from multiplying the number of events by the ratings of the events.

Studies have found support for the validity of the LEC as a measure of the amount of negative life events experienced by children (Greene, Walker, Hickson, & Thompson, 1985). The LEC has predicted the variability in anxiety, depression, and locus of control (Johnson & McCutcheon, 1980). Test-retest reliability over a 2-week period was reported to be .72 (Brand & Johnson, 1982). The LEC has been found to differentiate between psychiatric and nonreferred children (Tems et al., 1983) as well as clinic and nonclinic children (Johnson & McCutcheon, 1980). LEC scores have correlated significantly with depressive symptoms and cognition (Nolen-Hoeksema et al., 1986, 1992).

Procedure

Exclusionary factors for this study included the presence of organically-based psychological disorders and/or psychotic symptoms (i.e., Mental Retardation, Psychotic Disorder), episodic and stress-related disorders (i.e., Adjustment Disorder), physical illness, and an IQ less than 75.

Ethical Considerations

This study was conducted with the consideration to the privacy and well-being of its participants. Written, informed consent was obtained from caregivers and adolescents, who could withdraw their participation at any time without consequence.

Caregivers and adolescents were encouraged to ask questions about the study and measures administered. Additionally, after signing the informed assent, participants were given the choice of withholding or sharing the information derived from the study with the staff and therapists at the treatment center or school.

Consent and Assent

For the participants at the residential treatment center, during the initial admissions interview, the primary caregiver was presented with a written description of the study and was invited to participate. If the caregiver expressed interest, he or she was asked to read and sign a consent form (Appendix A). The adolescent was presented with the opportunity to participate and given the assent form to read and sign (Appendix B). The caregiver and child had to provide written informed consent/assent in order to participate in this study. Those adolescents and their caregivers who agreed to participate in the study were asked to read and complete the consent and assent forms. Additionally, all guardians and participants were informed that they may withdraw their voluntary study participation at any time.

Administration of Diagnostic Interview

The admitting psychiatrist conducted a clinical interview as part of the intake procedure at the residential treatment center. The project coordinator was then contacted and assigned administration to an interviewer, if the diagnosis fit within exclusionary criteria. The K-SADS-E/P was administered within one week of admittance to Meridell. The K-SADS-E/P interview was given to participants at

Meridell to evaluate the presence of symptoms for depression and externalizing disorders. The participant was interviewed at Meridell and a parent or guardian, if available, was interviewed by phone or in person. At the residential treatment center, The K-SADS-E/P diagnostic scores and the residential treatment center's psychiatrist's diagnosis were compared to arrive at a consensus diagnosis. The participants of the school sample were only interviewed by the doctoral research assistants at the school. None of the participants from the school sample met any diagnostic criteria.

Interviewers were doctoral research assistants who were blind to the participants' admitting diagnoses and trained in the administration of the K-SADS-E/P. Interviewers completed coursework in developmental psychopathology (including DSM-IV-TR criteria) and psychological testing. Interviews were audio-taped in order to assess interrater reliability. One-fourth of the research interviews were randomly selected, reviewed, and scored by graduate research assistants who were blind to the diagnoses. A reliability of at least .80 (kappa; Cohen, 1968) was maintained throughout the study. In the past as with the current study, interrater reliability has been .86, using the kappa statistic.

Administration of Measures

Within approximately one week of admission to the treatment center and after being interviewed, each participant completed, in counterbalanced order, a battery of self-report measures, including the CTIC, the CASQ, and the LEC. A graduate student research assistant, who was blind to a participant's diagnosis, administered the measures

individually to each participant to ensure the measures were understood and completed correctly. The measures were read to a participant if he or she required such assistance. Participants from the school population also completed the measures after the interview.

CHAPTER IV. ANALYSES and RESULTS

The sample of this study included 64 total participants. Analyses of power were performed with each planned analysis and are reported with each corresponding result. Data for this study were reviewed to confirm the accuracy of the data files from the original data. All recode, subscores, and total score calculations were recalculated to confirm the accuracy of the database. All data and calculations were accurate and no data were missing. All participants' data used in this study had complete measures. Data were analyzed using SPSS version 11.5.0 (2002). Univariate descriptive statistics (means and standard deviations) were then calculated for each of the variables used in the planned comparisons (see Table 6) as well as the intercorrelations among the subscales and total scores (see Table 7).

Table 6

Descriptive Statistics for Subscales by Diagnostic Groups

	Depressed ^a		Externalizing ^b		Comorbid ^c		Controls ^d	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
CTIC.Self	14.69	7.62	19.27	3.83	16.60	5.68	20.96	2.46
CTIC.World	13.69	6.10	16.60	2.87	12.60	4.95	18.54	2.93
CTIC.Future	18.31	6.49	18.93	3.67	16.60	8.30	21.96	2.29
CTIC.Total	46.69	18.32	54.80	7.29	45.80	18.65	61.46	6.66
CASQ.Comp Positive	11.23	3.52	12.60	3.18	11.30	3.50	12.38	2.94
CASQ.Comp Negative	11.15	4.43	8.67	3.39	8.70	3.13	9.15	2.71
CASQ.CP – CN	.077	7.26	3.93	5.08	2.60	4.99	3.23	4.25
LEC – Good	10.92	11.08	15.13	9.29	13.10	8.72	12.15	8.88
LEC – Bad	21.02	18.10	30.07	14.69	31.77	13.72	14.78	9.94

Note: CASQ = Children's Attributional Style Questionnaire, CTIC = Cognitive Triad Scale for Children,
LEC = Life Events Checklist.

^a*n* = 13; ^b*n* = 15; ^c*n* = 10; ^d*n* = 26

Table 7a

Intercorrelations of Measures for Control Group

Pearson Correlation	All Significances are 1-tailed, N = 26, Control Group								
	CQ.CP	CQ.CN	CQ.CPCN	CTIC.S	CTIC.W	CTIC.F	CTIC.T	LECG	LECB
CQ.CP	1.000	-.128	.774**	.312	.402*	.335*	.407*	-.276	-.433*
CQ.CN		1.000	-.727**	-.149	-.127	-.012	-.115	-.265	.320
CQ.CPCN			1.000	.311	.360*	.240	.355*	-.022	-.504**
CTIC.S				1.000	.748**	.576**	.896**	-.097	-.360*
CTIC.W					1.000	.540**	.901**	.012	-.245
CTIC.F						1.000	.794**	-.116	-.102
CTIC.T							1.000	-.070	-.275
LECG								1.000	.422*
LECB									1.000

** . Correlation is significant at the 0.01 level (1-tailed).

* . Correlation is significant at the 0.05 level (1-tailed).

Note: CQ.CP, .CN, .CPCN = CASQ, Composite Positive, Composite Negative, CP minus CN; CTIC.S, .W, .F, .T = CTIC Self, World, Future, Total; LECG, LECB = LEC Good Weighted Score, LEC Bad Weighted Score.

Table 7b

Intercorrelations of Measures for Diagnostic Groups

Pearson Correlation	All Significances are 1-tailed, N = 38, Diagnostic Groups								
	CQ.CP	CQ.CN	CQ.CPCN	CTIC.S	CTIC.W	CTIC.F	CTIC.T	LECG	LECB
CQ.CP	1.000	-.391**	.810**	.414**	.384**	.245	.385**	.265	.308*
CQ.CN		1.000	-.856**	-.682**	-.459**	-.370*	-.565**	-.326*	-.161
CQ.CPCN			1.000	.667**	.508**	.374*	.576**	.357*	.276*
CTIC.S				1.000	.722**	.732**	.919**	.331*	.054
CTIC.W					1.000	.653**	.868**	.191	-.219
CTIC.F						1.000	.897**	.170	-.078
CTIC.T							1.000	.260	-.080
LECG								1.00	.614**
LECB									1.000

** . Correlation is significant at the 0.01 level (1-tailed).

* . Correlation is significant at the 0.05 level (1-tailed).

Note: CQ.CP, .CN, .CPCN = CASQ, Composite Positive, Composite Negative, CP minus CN; CTIC.S, .W, .F, .T = CTIC Self, World, Future, Total; LECG, LECB = LEC Good Weighted Score, LEC Bad Weighted Score.

In analyzing univariate outliers, or outliers per cases on individual variables, the data were screened for extreme scores by transforming the variable scores into standard scores or z-scores. Tabachnick and Fidell (1996) recommend that univariate outliers are those with z-scores over 3.3 and that are disconnected from the distribution, such that other variable scores are considerably different from the rest of the sample. For this analysis, any case with a z-score greater than ± 3.30 was more closely evaluated. Four cases out of 576 scores emerged from two participants. The four cases, while having z-scores above the cut-off, did not have variable scores that were disconnected from the distribution or appeared to cause disruption within the dataset as a whole. The four instances were examined to determine whether the high z-scores were due to artifacts of the test-taking process. All cases were for CTIC scores. (One case was for the CTIC-Total score, which is a summation of the three subscale scores.) No response sets were noticed. The probability of getting z-scores beyond ± 3.30 is .0004 or less than one case for the 576 cases run.

For analyzing multivariate outliers, Tabachnick and Fidell (1996) recommend utilizing the Mahalanobis distance statistic, which analyzes a distribution of scores and takes into account the intercorrelation among measures. Cases inconsistent with the sample are identified. Standard scores are generated. A case with more scores that have greater distance from the distribution will result in a statistically significant score for that case. Mahalanobis distance statistics were created using linear regression. No

z-scores were greater than ± 3.30 . Hence, on the basis of these analyses, the database appears to be free of significant univariate and multivariate outliers.

The skewness, kurtosis, and intercorrelations of the measures were also analyzed. Standard (z) scores were created for skewness and kurtosis by dividing the skewness or kurtosis score by its respective standard error score for each diagnostic group (Tabachnick & Fidell, 1996). Scores beyond ± 3.0 were further inspected. Z-scores were beyond the 3.0 range for the Depression Only group on the CTIC-Future score for both kurtosis and skewness and for the Control group on the weighted LEC-Good score for skewness. For the Depressed group on the CTIC-Future scale, the small number of participants (13) in this group may impact the negative skew. For the Control group on the LEC-Good score, that the LEC-Good is a weighted score, calculated from multiplying the number of good events participants endorsed by the rating of those events, may impact the skewness. The LEC-Good weighted score distribution would, therefore, be extended in terms of range of scores. These two extreme examples of skewness and kurtosis may actually represent a lack of significance.

For the intercorrelation of the measures of Table 8, the correlation matrices of the three diagnostic groups and of the Control group are presented. For the Children's Attributional Style Questionnaire (CASQ)-Composite Positive – Composite Negative (CPCN) score and the Cognitive Triad Inventory for Children (CTIC)-Total score, they are, of course, highly correlated with their respective subscale scores. For the Control

group, the CTIC-World and CTIC-Total scores are positively correlated with the CASQ-Composite Positive subscale and CASQ-CPCN. The Weighted Life Events Checklist (LEC)-Bad score is also negatively correlated with the CASQ-Composite Positive subscale, the CASQ-CPCN, and the CTIC-Self subscale and positively correlated with the Weighted LEC-Good score. For all groups, the CTIC subscale scores are highly, positively correlated with each other. For the Diagnostic groups, the CASQ- Composite Positive subscale is positively correlated with the CTIC-Self, World, Total scores, and the LEC-Bad score. Similarly, the CASQ-Composite Negative subscale is negatively correlated with the CTIC-Self, World, Total scores and LEC-Good score. The Weighted LEC-Good score is positively correlated with the CASQ-CPCN subscale and the CTIC-Self score. The Weighted LEC-Bad score is positively correlated with the Weighted LEC-Good score.

Hypotheses and Results

The hypotheses in this study resulted in major comparisons among the four groups (Depressed, Externalizing Disorders, Depressed/Externalizing Disorders (Comorbid), and Control), implying two part comparisons. Each of these two comparisons can be tested. The analyses, therefore, result in two contrasts. Because there are nine variables, each contrast is repeated for each variable. Estimates of power will be used, using a subroutine of SPSS version 11.5. The hypotheses are presented below, immediately followed by their corresponding results.

Hypotheses 1a, 1b, 1c, 1d

It was predicted that, as measured by the CTIC Total (1d) score and the subscale scores, the Depressed group and Comorbid group, relative to the Externalizing and Control groups, would endorse a more negative (or less positive) view of the Self (1a), World (1b), and Future (1c), and the Total (1d) score (Contrast 1 for the ANOVA). Additionally, the Externalizing Disorder group would endorse a more negative (or less positive) view of the Self, World, and Future than the Control group (Contrast 2 for the ANOVA).

Results

Four separate ANOVAs were calculated for hypotheses 1a, 1b, 1c, and 1d each with two contrasts (see Table 8 and Table 9). Each was statistically significant ($p < .05$), indicating that the three CTIC subscales and the Total score all had differences among the groups. Utilizing η^2 , the CTIC-Self, World, and Total analyses accounted for 23%, 26%, and 24% of the variance among the diagnostic groups and had Observed Power of .94, .98, and .96, respectively. The CTIC-Future analyses fell slightly below the other subscales, with η^2 at 15% and Observed Power at 77%.

For the contrast tests run within each ANOVA, statistical significances were found for many of the analyses. For the CTIC-Self subscale, the Depressed and Comorbid diagnostic groups had more negative scores than the Externalizing and Control groups, but the Externalizing group was not found to be more negative than the Control group. For the CTIC-World subscale and the CTIC Total score, the Depression

and Comorbid diagnostic groups had more negative scores than the Externalizing and Control groups. The Externalizing group also had more negative scores than the Control group on the CTIC-World subscale and the CTIC Total score. Finally, on the CTIC-Future subscale, the Externalizing group had more negative scores than the Control group.

Table 8

ANOVA Table for CTIC

ANOVA		Mean Square	F (3, 60)	Sign.	η^2 /Obs. Power*	
1a	CTIC-Self	Between Groups	160.057	5.810	.001*	.225/.939
		Within Groups	22.384			
1b	CTIC-World	Between Groups	118.626	7.137	.000*	.263/.975
		Within Groups	16.621			
1c	CTIC-Future	Between Groups	87.682	3.641	.018*	.154/.772
		Within Groups	24.084			
1d	CTIC-Total	Between Groups	936.876	6.239	.001*	.238/.954
		Within Groups	150.154			

*Computed using alpha = .05

Table 9

Contrast Tests for CTIC*

	Contrast	Value of Contrast	Std. Error	t	df	Sig. (2-tailed)
CTIC.Self	1	4.47	1.49	2.995**	27.421	.006
	2	1.69	1.10	1.542	20.797	.138
CTIC.World	1	4.42	1.24	3.555**	24.878	.001
	2	1.94	.94	2.066**	29.814	.048
CTIC.Future	1	2.99	1.68	1.787	20.303	.089
	2	3.03	1.05	2.886**	20.400	.009
CTIC.Total	1	11.88	4.06	2.929**	22.706	.008
	2	6.66	2.29	2.907**	27.187	.007

*Equal Variances Not Assumed; ** $p < .05$

Note: Contrast 1 = Depressed and Comorbid Groups compared to Externalizing and Control Groups.

Contrast 2 = Externalizing compared to Control Group.

Hypothesis 2a, 2b, 2c

The Depressed group and Comorbid group were predicted to endorse more negative items on the CASQ-Composite Negative (CN, 2a) and fewer positive items on the CASQ-Composite Positive (CP, 2b) than the Externalizing Disorder and Control groups (Contrast 1 for the ANOVA). Participants in the Externalizing Disorder group were predicted to endorse more negative and fewer positive items on the CASQ than the Control group (Contrast 2 for the ANOVA). Using the same contrasts, the CASQ-CPCN (CP – CN) total score was also analyzed.

Results

Three separate ANOVAs were calculated for hypotheses 2a, 2b, and 2c, each with two contrasts (see Table 10 and Table 11). None of the analyses was statistically significant for the CASQ. Eta (η^2) for the CASQ scores ranged from .034 to .075, indicating the CASQ accounted for 3.4% to 7.7% of the variance among the diagnostic groups. Observed Power ranged from .19 to .42.

Table 10

ANOVA Table for CASQ

ANOVA			Mean Square	F (3, 60)	Sign.	η^2 /Obs. Power*
2a	CASQ-CN	Between Groups	18.163	1.630	.192	.075/.407
		Within Groups	11.142			
2b	CASQ-CP	Between Groups	7.259	.707	.552	.034/.191
		Within Groups	10.269			
2c	CASQ-CPCN	Between Groups	46.016	1.673	.182	.077/.417
		Within Groups	27.506			

*Computed using alpha = .05

Table 11

Contrast Tests for CASQ*

	Contrast	Value of Contrast	Std. Error	t	df	Sig. (2-tailed)
CASQ-CN	1	-1.02	.94	-1.081	36.641	.287
	2	.49	1.02	.475	24.33	.639
CASQ-CP	1	1.23	.89	1.379	36.330	.177
	2	-.22	1.00	-.215	27.472	.832
CASQ-CPCN	1	2.66	1.48	1.802	35.972	.080
	2	-.70	1.55	-.452	25.269	.655

*Equal variances not assumed.

Note: Contrast 1 = Depressed and Comorbid Groups compared to Externalizing and Control Groups.
 Contrast 2 = Externalizing compared to Control Group.

Hypotheses 3a, 3b

The Depression group and Comorbid group responses to the LEC were predicted to result in a more negative (higher) weighted LEC-Bad score (3a, Contrast 1) and a less positive (lower) weighted LEC-Good score (3b, Contrast 1) than the Externalizing Disorder and Control groups. The Externalizing Disorder group scores would also be more negative on the weighted LEC-Bad (3a, Contrast 2) and less positive on the weighted LEC-Good (3b, Contrast 2) than the Control group.

Results

Two separate ANOVAs were calculated for hypotheses 3a and 3b, each with two contrasts (see Table 12 and Table 13). For the main analyses, there were no significant differences among the groups for the LEC-Good score. For the LEC-Good score, η^2 equaled .025 and Observed Power equaled .150. The LEC-Bad score was significant ($p < .05$), indicating a difference among the groups. Observed Power equaled .98 and η^2 indicated that the LEC-Bad score accounted for 26% of the variance among the four diagnostic groups.

Only contrast tests for the LEC-Bad scores resulted in significance. For the LEC-Bad score, both contrasts produced statistically significant results indicating that the Depression group and Comorbid group had more negative scores than the Externalizing group and the Control group; moreover, the Externalizing group had more negative scores than the Control group.

Table 12

ANOVA Table for the LEC

ANOVA		Mean Square	F (3, 60)	Sign.	η^2 /Obs. Power*	
3a	LEC-Good	Between Groups	46.183	.519	.671	.025/.150
		Within Groups	88.954			
3b	LEC-Bad	Between Groups	1333.080	7.193	.000*	.263/.976
		Within Groups	185.329			

*Computed using alpha = .05

Table 13

Contrast Tests for LEC*

	Contrast	Value of Contrast	Std. Error	t	df	Sig. (2-tailed)
LEC-Good	1	1.628	2.542	.640	40.222	.526
	2	-2.972	2.963	-1.009	28.257	.324
LEC-Bad	1	-8.9690	3.94423	-2.274**	35.947	.029
	2	-15.286	4.265	-3.584**	21.531	.002

*Equal Variances Not Assumed; ** $p < .05$

Note: Contrast 1 = Depressed and Comorbid Groups compared to Externalizing and Control Groups.

Contrast 2 = Externalizing compared to Control Group.

Secondary Analyses

To test the proposed hypotheses, Analyses of Variance with contrasts were performed to explore differences among the diagnostic groups in terms of the CTIC, CASQ, and LEC. Significant results were found for all subtests of the CTIC and for the LEC-Bad score. Secondary analyses were performed to further investigate these relationships as well as any impact of the participants' gender upon their responses to the measures. Hence, all analyses were performed a second time with gender included as another variable. Tables 14 through 19 show the analyses including gender and the descriptive statistics for the CTIC, CASQ, and LEC.

Table 14

ANOVA Table for CTIC and Gender

CTIC-SELF

Source	Sum of Squares	df	Mean Square	F	Sig.	η^2 /Obs. Power*
Corrected Model	754.691**	7	107.813	6.170	.000	.435/.999
Intercept	17577.535	1	17577.535	1005.925	.000	.947/1.000
DX	311.398	3	103.799	5.940	.001	.241/.943
SEX	204.624	1	204.624	11.710	.001	.173/.920
DX * SEX	214.047	3	71.349	4.083	.011	.179/.820
Error	978.544	56	17.474			
Total	23897.000	64				
Corrected Total	1733.234	63				

* Computed using alpha = .05

**R Squared = .435 (Adjusted R Squared = .365)

CTIC-WORLD

Source	Sum of Squares	df	Mean Square	F	Sig.	η^2 /Obs. Power*
Corrected Model	475.726**	7	67.961	4.338	.001	.352/.983
Intercept	12707.318	1	12707.318	811.060	.000	.935/1.000
DX	370.955	3	123.652	7.892	.000	.297/.985
SEX	92.412	1	92.412	5.898	.018	.095/.665
DX * SEX	57.827	3	19.276	1.230	.307	.062/.312
Error	877.383	56	15.668			
Total	18091.000	64				
Corrected Total	1353.109	63				

* Computed using alpha = .05

**R Squared = .352 (Adjusted R Squared = .271)

Table 14 (continued)

CTIC-FUTURE

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	η^2 /Obs. Power*
Corrected Model	569.252	7	81.322	3.999	.001	.333/.973
Intercept	19290.024	1	19290.024	948.531	.000	.944/1.000
DX	306.128	3	102.043	5.018	.004	.212/.897
SEX	79.604	1	79.604	3.914	.053	.065/.494
DX * SEX	269.267	3	89.756	4.413	.007	.191/.851
Error	1138.857	56	20.337			
Total	26475.000	64				
Corrected Total	1708.109	63				

* Computed using alpha = .05

**R Squared = .333 (Adjusted R Squared = .250)

CTIC - TOTAL

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	η^2 /Obs. Power*
Corrected Model	4738.999	7	677.000	5.354	.000	.401/.996
Intercept	147606.236	1	147606.236	1167.365	.000	.954/1.000
DX	2821.310	3	940.437	7.438	.000	.285/.980
SEX	1078.458	1	1078.458	8.529	.005	.132/.819
DX * SEX	1240.889	3	413.630	3.271	.028	.149/.719
Error	7080.860	56	126.444			
Total	201589.000	64				
Corrected Total	11819.859	63				

* Computed using alpha = .05

**R Squared = .401 (Adjusted R Squared = .326)

Table 15

Descriptive Statistics for ANOVA analyses including Gender – CTIC

CTIC	Gender	SELF			WORLD			FUTURE			TOTAL		
		Mean	Std. Deviation	n	Mean	Std. Deviation	n	Mean	Std. Deviation	N	Mean	Std. Deviation	n
Depression	Male	19.60	1.95	5	14.80	5.07	5	19.40	2.07	5	53.80	6.72	5
	Female	11.63	8.33	8	13.00	6.91	8	17.63	8.26	8	42.25	22.15	8
	Total	14.69	7.62	13	13.69	6.10	13	18.31	6.49	13	46.69	18.32	13
Externalizing	Male	18.38	4.44	8	17.25	2.87	8	17.38	4.24	8	53.00	8.90	8
	Female	20.29	2.98	7	15.86	2.91	7	20.71	1.89	7	56.86	4.74	7
	Total	19.27	3.83	15	16.60	2.87	15	18.93	3.67	15	54.80	7.29	15
Depression and Externalizing	Male	19.50	2.43	6	15.17	2.40	6	20.67	4.18	6	55.33	8.12	6
	Female	12.25	6.70	4	8.75	5.56	4	10.50	9.75	4	31.50	21.89	4
	Total	16.60	5.68	10	12.60	4.95	10	16.60	8.30	10	45.80	18.65	10
Control	Male	21.87	2.07	15	18.87	2.90	15	22.40	1.99	15	63.13	6.13	15
	Female	19.73	2.49	11	18.09	3.05	11	21.36	2.62	11	59.18	6.95	11
	Total	20.96	2.46	26	18.54	2.93	26	21.96	2.29	26	61.46	6.66	26

Table 16

ANOVA Table for CASQ and GenderCASQ - CP

Source	Sum of Squares	df	Mean Square	F	Sig.	η^2 /Obs. Power*
Corrected Model	54.969**	7	7.853	.754	.627	.086/.294
Intercept	7880.074	1	7880.074	756.960	.000	.9311.000
DX	14.818	3	4.939	.474	.701	.025/.140
SEX	.915	1	.915	.088	.768	.002/.060
DX * SEX	32.416	3	10.805	1.038	.383	.053/.267
Error	582.969	56	10.410			
Total	9902.000	64				
Corrected Total	637.938	63				

*Computed using alpha = .05

**R Squared = .086 (Adjusted R Squared = -.028)

CASQ - CN

Source	Sum of Squares	df	Mean Square	F	Sig.	η^2 /Obs. Power*
Corrected Model	75.059**	7	10.723	.927	.493	.104/.362
Intercept	4838.854	1	4838.854	418.211	.000	.882/1.000
DX	47.826	3	15.942	1.378	.259	.069/.347
SEX	.019	1	.019	.002	.968	.000/.050
DX * SEX	18.702	3	6.234	.539	.658	.028/.154
Error	647.941	56	11.570			
Total	6348.000	64				
Corrected Total	723.000	63				

*Computed using alpha = .05

**R Squared = .104 (Adjusted R Squared = -.008)

Table 16 (continued)

CASQ – CP - CN

Source	Sum of Squares	df	Mean Square	F	Sig.	η^2 /Obs. Power*
Corrected Model	187.937**	7	26.848	.939	.484	.105/.367
Intercept	368.944	1	368.944	12.909	.001	.187/.942
DX	93.438	3	31.146	1.090	.361	.055/.279
SEX	1.198	1	1.198	.042	.839	.001/.055
DX * SEX	68.136	3	22.712	.795	.502	.041/.210
Error	1600.501	56	28.580			
Total	2240.000	64				
Corrected Total	1788.437	63				

*Computed using alpha = .05

**R Squared = .105 (Adjusted R Squared = -.007)

Table 17

Descriptive Statistics for ANOVA analyses including Gender – CASQ

Diagnoses	Gender	CP			CN			CP - CN		
		Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N
Depression	Male	13.00	3.16	5	10.60	2.88	5	2.40	4.83	5
	Female	10.13	3.44	8	11.50	5.35	8	-1.37	8.42	8
	Total	11.23	3.52	13	11.15	4.43	13	.077	7.26	13
Externalizing	Male	12.00	2.73	8	9.00	3.46	8	3.00	4.81	8
	Female	13.29	3.73	7	8.29	3.55	7	5.00	5.54	7
	Total	12.60	3.18	15	8.67	3.39	15	3.93	5.08	15
Depression and Externalizing	Male	11.00	2.76	6	8.17	1.94	6	2.83	2.32	6
	Female	11.75	4.86	4	9.50	4.65	4	2.25	8.10	4
	Total	11.30	3.50	10	8.70	3.13	10	2.60	4.99	10
Control	Male	12.47	3.23	15	9.73	2.69	15	2.73	4.13	15
	Female	12.27	2.65	11	8.36	2.66	11	3.91	4.50	11
	Total	12.38	2.94	26	9.15	2.71	26	3.23	4.25	26

Table 18

ANOVA Table for LEC and Gender

LEC-GOOD

Source	Sum of Squares	df	Mean Square	F	Sig.	η^2 /Obs. Power*
Corrected Model	412.398	7	58.914	.652	.711	.075/.255
Intercept	9578.526	1	9578.526	105.937	.000	.654/1.000
DX	104.370	3	34.790	.385	.764	.020/.121
SEX	3.857	1	3.857	.043	.837	.001/.055
DX * SEX	262.082	3	87.361	.966	.415	.049/.250
Error	5063.378	56	90.417			
Total	15877.762	64				
Corrected Total	5475.777	63				

*Computed using alpha = .05

**R Squared = .075 (Adjusted R Squared = -.040)

LEC-BAD

Source	Sum of Squares	df	Mean Square	F	Sig.	η^2 /Obs. Power*
Corrected Model	4467.424	7	638.203	3.355	.005	.295/.938
Intercept	40807.103	1	40807.103	214.541	.000	.793/1.000
DX	3889.998	3	1296.666	6.817	.001	.268/.968
SEX	20.350	1	20.350	.107	.745	.002/.062
DX * SEX	466.796	3	155.599	.818	.489	.042/.216
Error	10651.572	56	190.207			
Total	52968.664	64				
Corrected Total	15118.996	63				

*Computed using alpha = .05

**R Squared = .295 (Adjusted R Squared = .207)

Table 19

Descriptive Statistics for ANOVA analyses including Gender – LEC

CASQ		GOOD			BAD		
Diagnoses	Gender	Mean	Std. Deviation	N	Mean	Std. Deviation	N
Depression	Male	15.41	15.68	5	36.00	24.33	5
	Female	8.12	6.83	8	27.91	13.96	8
	Total	10.92	11.08	13	31.02	18.12	13
Externalizing	Male	14.00	9.32	8	32.38	17.767	8
	Female	16.42	9.82	7	27.43	10.96	7
	Total	15.13	9.29	15	30.07	14.69	15
Depression And Externalizing	Male	11.34	4.28	6	30.44	17.13	6
	Female	15.75	13.50	4	33.76	8.18	4
	Total	13.10	8.72	10	31.77	13.72	10
Control	Male	11.07	8.39	15	12.73	10.74	15
	Female	13.64	9.72	11	17.58	8.40	11
	Total	12.15	8.88	26	14.78	9.94	26

Results including Gender as a Variable

The CASQ and LEC had no significant results when gender was added as a variable. For the CTIC, all scores for the CTIC were significant for Gender alone, while the View of Self, Future, and Total score were significant for the Diagnostic Group by Gender interaction. Hence, the original analyses with the same contrasts were performed again for the CTIC; using separate groups for males and females (see Tables 20 through 23).

Table 20

ANOVA Table for CTIC – Females only

CTIC		Mean Square	F (3, 26)	Sig.	η^2 /Obs. Power*
SELF	Between Groups	158.688	5.604	.004*	.393/.906
	Within Groups	28.317			
WORLD	Between Groups	99.483	4.534	.011*	.343/.830
	Within Groups	21.943			
FUTURE	Between Groups	128.173	3.907	.020*	.311/.765
	Within Groups	32.802			
TOTAL	Between Groups	1033.458	4.893	.008*	.361/.860
	Within Groups	211.192			

*Computed using alpha = .05

Table 21

Contrast Tests for CTIC, Females only*

CTIC	Contrast	Value of Contrast	Std. Error	t	df	Sig. (2-tailed)
SELF	1	8.07	2.33	3.461**	8.905	.007
	2	-.56	1.36	-.412	11.191	.688
WORLD	1	6.10	1.98	3.074**	9.799	.012
	2	2.23	1.43	1.558	13.383	.143
FUTURE	1	6.98	2.89	2.414	5.625	.055
	2	.65	1.06	.610	15.623	.551
TOTAL	1	21.14	6.87	3.078**	6.692	.019
	2	2.32	2.76	.843	15.850	.412

*Equal Variances Not Assumed; ** $p < .05$

Note: Contrast 1 = Depressed and Comorbid Groups compared to Externalizing and Control Groups.

Contrast 2 = Externalizing compared to Control Group.

Table 22

ANOVA Table for CTIC – Males only

CTIC		Mean Square	F (3, 60)	Sig.	η^2 /Obs. Power*
SELF	Between Groups	24.250	3.002	.046*	.231/.649
	Within Groups	8.077			
WORLD	Between Groups	31.750	3.104	.041*	.237/.665
	Within Groups	10.229			
FUTURE	Between Groups	46.154	4.841	.007*	.326/.863
	Within Groups	9.534			
TOTAL	Between Groups	242.044	4.567	.009*	314/.841
	Within Groups	52.996			

*Computed using alpha = .05

Table 23

Contrast Tests for CTIC, Males only*

CTIC	Contrast	Value of Contrast	Std. Error	t	df	Sig. (2-tailed)
SELF	1	.57	1.06	.539	16.667	.597
	2	3.49	1.66	2.107	8.653	.066
WORLD	1	3.08	1.39	2.218	8.490	.055
	2	1.62	1.26	1.283	14.561	.219
FUTURE	1	-.15	1.25	-.116	15.148	.909
	2	5.02	1.59	3.170**	8.686	.012
TOTAL	1	3.50	2.85	1.230	17.820	.235
	2	10.13	3.52	2.878**	10.650	.015

*Equal Variances Not Assumed; ** $p < .05$

Note: Contrast 1 = Depressed and Comorbid Groups compared to Externalizing and Control Groups.

Contrast 2 = Externalizing compared to Control Group.

Results of CTIC utilizing separate Gender groups. For the Females group, each ANOVA analysis was statistically significant ($p < .05$), indicating that the three CTIC subscales and the Total score all had differences among the diagnostic groups. Utilizing η^2 , the CTIC-Self, World, Future, and Total analyses accounted for 39%, 34%, 31%, and 36% of the variance among the diagnostic groups and had Observed Power of .91, .83, .77, and .86, respectively.

For the contrast tests, significant results ($p < .05$) were found for the first contrast for CTIC-Self, World, and Total, indicating that the Depression and Comorbid diagnostic groups had more negative scores than the Externalizing and Control groups. No significant differences were found in the contrast tests between the Externalizing group and the Control group.

For the Males group, each ANOVA analysis was statistically significant ($p < .05$), indicating that the three CTIC subscales and the Total score all had differences among the diagnostic groups. Utilizing η^2 , the CTIC-Self, World, Future, and Total analyses accounted for 23%, 24%, 33%, and 31% of the variance among the diagnostic groups and had Observed Power of .65, .67, .86, and .84, respectively.

For the contrast tests, statistical significances ($p < .05$) were found for the second contrast for CTIC-Future and Total, indicating significant differences between the Externalizing group and the Control group. No significant differences were found in the contrast tests between the Depression and Comorbid groups and the Externalizing and Control groups.

Pairwise Comparisons

Finally, pairwise comparisons, utilizing the Bonferroni adjustment for multiple comparisons, were examined to determine any further differences among the four groups (see Table 24 and Table 25). Statistically significant differences were found among all CTIC scores and the LEC-Bad score.

The Depression and the Comorbid groups were significantly different from the Control group on the CTIC-Self, World, and Total score. For the CTIC-World score, the Comorbid group was statistically different from the Externalizing group. All three diagnostic groups were significantly different from the Control group on the LEC-Bad score.

Table 24

Pairwise Comparisons – CTIC

(I) Diagnoses	(J) Diagnoses	SELF			WORLD		
		Mean Diff. (I-J)	Std. Error	Sig. ^a	Mean Diff. (I-J)	Std. Error	Sig. ^a
Depression	Externalizing	-3.718	1.609	.148	-2.654	1.524	.526
	Depression & Externalizing	-.263	1.800	1.000	1.942	1.704	1.000
	Control	-5.184*	1.452	.004	-4.579*	1.375	.009
Externalizing	Depression	3.718	1.609	1.48	2.654	1.524	.523
	Depression & Externalizing	3.455	1.729	.303	4.595*	1.637	.041
	Control	-1.467	1.363	1.000	-1.925	1.291	.849
Depression & Externalizing	Depression	.263	1.800	1.000	-1.942	1.704	1.000
	Externalizing	-3.455	1.729	.303	-4.595*	1.637	.041
	Control	-4.922*	1.584	.018	-6.520*	1.500	.000
Control	Depression	5.184*	1.452	.004	4.579*	1.375	.009
	Externalizing	1.467	1.363	1.000	1.925	1.291	.849
	Depression & Externalizing	1.922	1.584	.018	6.520*	1.500	.000

Based on estimated marginal means

* The mean difference is significant at the .05 level.

^a Adjustment for multiple comparisons: Bonferroni.

Table 24 (Continued)

Pairwise Comparisons – CTIC

(I) Diagnoses	(J) Diagnoses	FUTURE			TOTAL		
		Mean Diff. (I-J)	Std. Error	Sig. ^a	Mean Diff. (I-J)	Std. Error	Sig. ^a
Depression	Externalizing	-.532	1.736	1.000	-6.904	4.329	.698
	Depression & Externalizing	2.929	1.942	.822	4.608	4.842	1.000
	Control	-3.369	1.566	.215	-13.133*	3.906	.008
Externalizing	Depression	.532	1.736	1.000	6.904	4.329	.698
	Depression & Externalizing	3.461	1.866	.413	11.512	4.652	.098
	Control	-2.837	1.471	.353	-6.229	3.667	.570
Depression & Externalizing	Depression	-2.929	1.942	.822	-4.608	4.842	1.000
	Externalizing	-3.461	1.866	.413	-11.512	4.542	.098
	Control	-6.298*	1.709	.003	-17.741*	4.261	.001
Control	Depression	3.369	1.566	.215	13.133*	3.906	.008
	Externalizing	2.837	1.471	.353	6.229	3.667	.570
	Depression & Externalizing	6.298*	1.709	.003	17.741*	4.261	.001

Based on estimated marginal means

* The mean difference is significant at the .05 level.

^a Adjustment for multiple comparisons: Bonferroni.

Table 25

Pairwise Comparisons – LEC-BAD

(I) Diagnoses	(J) Diagnoses	BAD		
		Mean Diff. (I-J)	Std. Error	Sig. ^a
Depression	Externalizing	2.053	5.310	1.000
	Depression & Externalizing	-.142	5.939	1.000
	Control	16.801 [*]	4.790	.005
Externalizing	Depression	-2.053	5.310	1.000
	Depression & Externalizing	-2.194	5.705	1.000
	Control	14.748 [*]	4.498	.011
Depression & Externalizing	Depression	.142	5.939	1.000
	Externalizing	2.194	5.705	1.000
	Control	16.943 [*]	5.226	.012
Control	Depression	-16.801 [*]	4.790	.005
	Externalizing	-14.748 [*]	4.498	.011
	Depression & Externalizing	-16.943 [*]	5.226	.012

Based on estimated marginal means

^{*} Adjustment for multiple comparisons: Bonferroni.

^a The mean difference is significant at the .05 level.

CHAPTER V. SUMMARY and DISCUSSION

This study sought to explore the constructs of two diathesis-stress models of depression: Beck's (1967, 1972) cognitive theory of depression and Abramson, Seligman, and Teasdale's (1978) learned helplessness/hopelessness model. In a diatheses-stress model, a stressor is an important factor in the onset of depression, but also requires a vulnerability, or diathesis. The stressor impacts the diathesis to trigger the onset of depressive symptoms. Two possible diatheses or vulnerabilities are the cognitive triad (Beck, 1967, 1972; Clark, Beck, Alford, 1999) and a negative explanatory style (Abramson et al., 1989). The cognitive triad is the core element of Beck's cognitive model of depression (Kaslow et al., 1992), while Abramson and colleagues hypothesized that a depressogenic attributional style mediates the impact of negative life events and depressive symptoms (Abramson et al., 1978; Seligman et al., 1984). In the updated hopelessness theory (Abramson, Metalsky, Alloy, 1989), individuals with a cognitive style, characterized by a tendency to attribute negative events to global and stable causes, to infer negative consequences to an event, and to infer negative characteristics about one's self surrounding a given event, exhibit a cognitive vulnerability to depression (Hankin & Abramson, 2002). Both theories involve negative cognitive patterns, which serve as vulnerabilities to depression. When individuals experience negative events, which fit within the realm of their negative cognitive patterns, depressive symptoms will follow. This study evaluated whether measures of these constructs of diathesis-stress models of depression would differentiate

groups of adolescents with depressive disorders, externalizing disorder, both depressive and externalizing disorders, and no diagnoses.

The cognitive triad was evaluated using the Cognitive Triad Inventory for Children (CTIC; Kaslow et al., 1992) and attributional style was evaluated using the Children's Attributional Scale Questionnaire (CASQ; Kaslow et al., 1978; Seligman et al., 1984). Life events and their rated severity were also measured using a composite score of the Life Events Checklist (LEC; Johnson & McCutcheon, 1980). The CTIC, CASQ, and LEC were each examined separately in relation to the four groups. Each of the main analyses included two comparisons to assess whether each measure would differentiate depressed and comorbid groups from the externalizing and control groups, as well as the three diagnostic groups from the control group. Finally, secondary analyses were performed in order to investigate for effects of gender and any further group differences. Each of the hypotheses, the main and secondary analyses, and a discussion of the results are presented below.

Discussion of Hypotheses and Results

Hypothesis 1: The Cognitive Triad, Depression, and Externalizing Disorders

The main analyses of the CTIC total and subscales scores each supported previous research that the negative cognitive triad is characteristic of depressed individuals. Adolescents with depressive disorders, whether alone or in combination with an externalizing disorder, reported more negative views of themselves as compared

to adolescents with externalizing disorders only or no diagnoses. Adolescents with externalizing disorders were not significantly different in their views of themselves as compared to adolescents with no diagnoses; thus suggesting that a negative view of the self may be specific to depressive disorders in adolescents. Adolescents with depressive disorders, whether alone or in combination with an externalizing disorder, reported more negative views of the world as compared to adolescents with externalizing disorders alone and no diagnoses; moreover, adolescents with externalizing disorders reported more negative views of the world as compared to adolescents with no diagnoses. This suggests that a negative view of the world (things in general) may be nonspecific to psychopathology in general or at least to depressive and externalizing disorders, but perhaps more severe in depressive disorders. While there were no significant differences among what adolescents with depressive disorders, whether alone or in combination with an externalizing disorder, reported as compared to adolescents with externalizing disorders alone and no diagnoses, adolescents with externalizing disorders alone reported more negative views of the future as compared to adolescents with no diagnoses. This suggests that a negative view of the future may not be specific to depressive disorders.

Pairwise comparisons for group differences were performed in order to discover any further group differences missed by the original contrast tests. Adolescents with depressive disorders, whether alone or in combination with an externalizing disorder, were more negative in their views of themselves and the world as compared to the

adolescents with externalizing disorders alone and with no diagnoses, thus confirming the main hypotheses. The adolescents with both externalizing and depressive disorders were more negative as compared to the adolescents with externalizing diagnoses alone on their views of the world, possibly indicating that the occurrence of both externalizing and depressive disorders creates a more negative view of the world for an adolescent. Adolescents with both depressive and externalizing disorders were also more negative as compared to the adolescents without disorders on their views of the future. This suggests that (combined with the main analyses finding) that a negative view of the future may not be specific to one disorder, but may apply to externalizing disorders, whether alone or in combination with a depressive disorder.

Finally, gender was then added as a factor to determine whether male and female adolescents differed across any of the previous analyses. Although significant results were found, they should be interpreted with caution, as dividing the sample by gender further decreased group sizes. After dividing the comorbid group, for example, six males and four females comprised the comorbid groups. When comparing the males to the females of the sample, female adolescents were more negative in their views of themselves and their worlds than the male adolescents. The diagnostic groups were also compared separately for males and females. Adolescent females with depressive disorders, whether alone or in combination with an externalizing disorder, were more negative in their views of themselves, the world, and overall views than adolescents with externalizing disorders and no diagnoses. There were no differences between

females with externalizing disorders alone and no diagnoses. Adolescent males with depressive disorders, whether alone or in combination with an externalizing disorder, did not differ from the adolescent males with externalizing disorders alone and no diagnoses; however, males with externalizing disorders alone were more negative in their views of the future and overall views than the adolescent males with no diagnoses. Hence, the males and females of the sample were quite different in their responses to the CTIC in terms of diagnostic groups.

Adolescents in this study were assessed within one week of admission. Adolescents with externalizing disorders alone had a negative view of their world and their future as compared to the adolescents with no diagnoses. Their world is not a positive place and their future is not hopeful. They were less negative in their views, however, as compared to the adolescents with depressive disorders. Adolescents in this study with depressive disorders, whether alone or combined with an externalizing disorder, were more negative in their views of themselves and the world as compared to adolescents with externalizing disorders and no diagnoses. Adolescents with depressive and externalizing disorders were also more negative in their views of the future compared to adolescents with no diagnoses. Hence, adolescents with depression saw themselves and things in general as quite negative. In addition, adolescents with comorbid depressive and externalizing disorders saw their futures as negative and possibly hopeless.

Hypothesis 2: Attributional Style, Depression, and Comorbid Disorders

Analyses with the CASQ found no significant differences among the four groups. Adolescents with depressive disorders, externalizing disorders, and no diagnoses did not differ on their reported attributional style. Similarly, there were no differences when gender was added as a variable. These findings could suggest that there are no differences in attributional style for depressive disorders, externalizing disorders, and no diagnoses. The sample from the residential treatment center may be too homogenous in a positive or negative attributional style, yet this does not explain the lack of difference from the control sample. Another explanation may have to do with the CASQ measure and its psychometric properties (Hankin, Abramson, & Siler, 2001; Martin & D'Augelli, 2003; Nolen-Hoeksema, Girgus, & Selgiman, 1992).

Hypothesis 3: Diatheses-Stress, Depression, and Comorbid Disorders

Adolescents with depressive disorders, externalizing disorders, and no diagnoses reported no differences in the occurrence and severity of positive events. Adolescents with depressive disorders, whether alone or in combination with an externalizing disorder, however, endorsed more negative events rated to have a more negative effect relative to the adolescents with an externalizing disorder alone or no diagnoses. Also, the adolescents with externalizing disorders alone endorsed more negative events rated to have a more negative effect relative to the adolescents with no diagnoses. These findings suggest that, first, adolescents diagnosed with a depressive and/or externalizing disorder experience more negative events rated to have a more negative effect than

adolescents with no diagnoses. [The same findings, however, could be interpreted as adolescents at a residential treatment facility experience more negative events rated to have a more negative effect than adolescents not at a residential treatment facility.]

Secondly, the findings suggest that depressive disorders, whether alone or in combination with an externalizing disorder, appear to be associated with greater number and severity of negative events as compared to externalizing disorders alone.

No differences were found between male and female adolescents in terms of their endorsements of negative events, suggesting that there are no gender differences in the amount of stressful events experienced by adolescents with depressive and externalizing disorders. When pairwise comparisons to assess for any further group differences were performed, adolescents with depressive and/or externalizing disorders endorsed more negative events rated to have a more negative impact than adolescents with no diagnoses, supporting the main analyses.

The adolescents in this study with externalizing disorders alone reported experiencing more negative events rated to have a more negative effect as compared to adolescents with no diagnoses. The adolescents with depressive disorders, whether alone or combined with an externalizing disorder, reported the most negative events rated to have a more negative effect. Hence, the adolescents with depressive disorders appear to experience the negative life or stressful events, followed by adolescents with externalizing disorders.

Summary of Results

Significant results were found for the cognitive triad and negative life events, but not attributional style. Adolescents in the three clinical groups, depressed, comorbid, and externalizing, reported a more negative cognitive style and experienced more negative events as compared to adolescents in the control group. Adolescents with a depressive disorder, whether alone or combined with an externalizing disorder, were more negative as compared to adolescents with an externalizing disorder alone in their views of themselves and the world. Comorbid adolescents were also more negative in their views of the world as compared to externalizing adolescents. Adolescents with an externalizing disorder were also more negative as compared to adolescents in the control group in their views of the world and the future. The presence of a depressive disorder, therefore, appeared to be related to the more negative cognitive profile. This lends support to the concept that an individual who is depressed will engage in negative thinking about the self, world, and future (Beck, 1967; Clark, Beck, Alford, 1999).

Adolescents in this study with externalizing disorders alone had a negative view of their world and their future as compared to the adolescents with no diagnoses. Their world is not a positive place, their future is not hopeful and they report many negative life events. Adolescents with depression, however, saw themselves and the world around them as even more negative and experienced the most negative stressful events of the groups of the study. In addition, adolescents with comorbid depressive and externalizing disorders saw their futures as negative and possibly hopeless. While less

negative, adolescents diagnosed with externalizing disorders also experienced a negative view of things in general and views of their futures as compared to adolescents without diagnoses.

The current investigation supports the presence of the diathesis component (cognitive triad) of Beck's theory and the presence of the stress component (negative events) for Beck and hopelessness theory. This study also adds to the literature that adolescents with externalizing disorders, at least for this sample in the extreme setting of a residential treatment facility, can be described as having more negative views of the world and future as compared to adolescents with no diagnoses.

Integration of Findings with the Literature

This study addressed Beck's cognitive theory and hopelessness theory and their components to determine whether assessment of the cognitive triad, attributional style, and negative events would differentiate three diagnostic groups (depressed, externalizing disorders, and comorbid) and a control group of adolescents. For Beck's cognitive theory, negative life events activate maladaptive schemas that then act as filters and aid in processing information in a negative, distorted fashion, leading to negative cognitions (Beck, 1967, 1976; Beck et al., 1979; Clark, Beck, Alford, 1999). According to the Hopelessness Theory, a depressogenic attributional style mediates the impact of negative life events and depressive symptoms (Abramson, Metalsky, Alloy, 1989).

Beck's Cognitive Theory of Depression

Beck's (1967, 1972) cognitive theory of depression hypothesizes that an individual's negative and distorted thinking is responsible for both the development and maintenance of depression. Hence, individuals with depression have negative attitudes and beliefs and they engage in errors and biases in thinking. Individuals who are depressed selectively perceive and process information pertaining to the triad in a negative and distorted manner, even when a positive interpretation is just as valid. Individuals with depression soon learn to expect the worst of the world and their futures and consider themselves to be failures (Alford & Beck, 1997; Beck, 1967, 1972). Beck's theory is also a diathesis-stress model and allows assessing the components of stressful events and self-schemas as well as depression (Beck, 1987, Clark, Beck, & Alford, 1999). Research has shown an association between the components of the CTIC (Kaslow et al., 1992) and depression in children. Scores from the CTIC also differentiated children with depressive disorders and no diagnoses (Kaslow et al., 1992). Negative cognitive attributions have been related to depression in children (Cole, 1991; Cole & Jordan, 1996; Hammen & Zupan, 1984; Jaenicke et al., 1987; Prieto et al., 1992; Zupan et al., 1987) and to disruptive behavior disorders (Peterson et al., 1993; Weiss, 1994). This investigation adds to this literature, using the CTIC to differentiate groups of depressed only and comorbid depressed/externalizing disorder adolescents from a group of externalizing disorders adolescents and a control group of adolescents. The current investigation primarily supports the diathesis component of Beck's theory,

although it does not test the interaction of the diathesis (cognitive triad) with negative events, just their presence. Presence of a depressive disorder was related to a more negative view of the self and world as compared to externalizing disorders and no diagnoses, and for comorbid depression and externalizing disorders was related to a more negative view of the future as compared to no diagnoses. This study also adds to the literature that adolescents with externalizing disorders, at least for this sample in the extreme setting of a residential treatment facility, can be described as having more negative views of the world and future and no different views of themselves as compared to adolescents with no diagnoses.

Studies with participants in nonclinical settings continue to support Beck's theory. In nonreferred high school students, increased depressive symptoms were related to increased feelings of hopelessness (attitudes towards the future) and increased dysfunctional attitudes (Moilanen, 1995). Students with higher depressive symptoms also recalled more negative self-referent adjectives and less positive self-referent adjectives on an incidental recall task (Moilanen, 1995). Vulnerabilities to stress have been associated with depressed mood and self-schemas in nonreferred college students (McClain & Abramson, 1995). When stress levels were high, positive self-schema was inversely related to depressive symptoms. Stressful events interacted with self-schemas for a significant association with depression only when the self-schemas occurred in domains relevant to depression, such as competence, self-worth, and motivation, but not non-relevant domains, such as politeness and predictability (McClain & Abramson,

1995). Less positive, but not negative self-schemas were associated with increased depressive symptoms. Hence, sufficiently positive self-schemas may serve as a protection or invulnerability against depression (McClain & Abramson, 1995).

Beck (1967, 1976) also proposed a cognitive content-specificity hypothesis, whereby each emotional disorder is characterized by a specific cognitive disturbance. According to this theory, different diagnoses may therefore be characterized by their self-schema patterns and cognitive distortions (Alford & Beck, 1997). The predominant theme for depression is one of loss, deprivation, failure, and hopelessness as well as the negative view of self, world, and future (Clark, Beck, & Alford, 1999; Schniering & Rapee, 2004). Beliefs of hostility and revenge have been associated with externalizing symptoms (Schniering & Rapee, 2004). This study can only support the negative cognitive triad for adolescents diagnosed with depressive disorders, whether alone or with comorbid externalizing disorders. This study can add to the literature the description of the parts of the negative triad that were true for the adolescents with externalizing disorders. Most studies supporting Beck's cognitive content-specificity hypothesis pertain to depression and anxiety (e.g., Clark & Steer, 1996; Alloy, Kelly, Mineka, & Clements, 1990).

The current investigation primarily supports the diathesis component of Beck's theory, although it does not test the interaction of the diathesis (cognitive triad) with negative events. Presence of a depressive disorder was related to a more negative view

of the self and world as compared to externalizing disorders and no diagnoses, and for comorbid depression and externalizing disorders was related to a more negative view of the future as compared to no diagnoses. This study also adds to the literature that adolescents with externalizing disorders, at least for this sample in the extreme setting of a residential treatment facility, can be described as having more negative views of the world and future and no different views of themselves as compared to adolescents with no diagnoses.

Hopelessness Theory

In hopelessness theory (Abramson, Metalsky, Alloy, 1989), individuals with a cognitive style characterized by a tendency to attribute negative events to global and stable causes, to infer negative consequences to an event, and to infer negative characteristics about one's self surrounding a given event, exhibit a cognitive vulnerability to depression (Hankin & Abramson, 2002). When individuals experience negative events, depressive symptoms will follow. Implications from this investigation, where participants are known to be depressed, could be a lack of support for hopelessness theory or a lack of support for the CASQ. Some past research has shown support for the reformulated learned helplessness model of depression in that children and adolescents who display depressive symptoms are more likely to attribute their failures to causes which are internal, stable, and global (Gladstone & Kaslow, 1995; Gladstone et al., 1997; Seligman et al., 1984), while other studies researchers have used the CASQ to differentiate groups of adolescents with depressive symptoms from

normative samples (Asarnow & Bates, 1988, Gladstone et al., 1997; Jaenicke et al., 1987). Nonclinical adolescents with higher levels of depressive symptoms also had a significantly more negative attributional style (Gladstone et al., 1997). Other researchers have found results using the CASQ to differentiate groups of adolescents with depressive symptoms from normative samples (Asarnow & Bates, 1988, Gladstone et al., 1997; Jaenicke et al., 1987). Other studies (e.g., Cole & Turner, 1993; Lewinsohn, Joiner, & Rohde, 2001) have not found significant results with the CASQ.

Hammen and colleagues (1988) followed children and adolescents who were high-risk for depression over a six-month period. While stressful life events predicted depressive symptoms, attributional style as measured by the CASQ Negative Composite score did not. Similarly using the CASQ Negative Composite score but in a cross-sectional design, Turner and Cole (1993) found no interaction between cognitive attributions and self-reported depression for fourth, fifth, and sixth graders. While following 371 students from sixth through seventh grade, Robinson, Garber, and Hilsman (1995) did find significant results using the CASQ Negative Composite score. Although the authors stated the effect size was small, attributional style alone and in interaction with stressors predicted depression. Curry and Criaghead (1990) conducted a similar study of 63 12 to 18 years olds who were diagnosed as depressed, anxious, or conduct disordered in an inpatient setting. Correlational analyses supported the relationship between adolescent depression and attributions measured for positive events (the CASQ's Positive Composite), but not negative events (the Negative

Composite). The authors hypothesized that the severity of depression among their participants may have impacted their lack of significant findings.

This study utilized a cross-sectional design with pre-established diagnostic groups that were relatively small. Some researchers criticize group designs (Coyne & Whiffen, 1995; Zuroff, Mongrain, & Santor, 2004) and others now utilize behavioral high-risk studies, in which individuals who currently are not depressed but are hypothesized to be at high or low risk for developing depression based on certain assessments, are grouped into high and low-risk categories (Abramson et al., 2001; Clark, Beck Alford, 1999). Such high-risk studies are considered more powerful and test cognitive vulnerabilities to depression over time.

Another possibility for the lack of significant findings for attributional style may be the lack of assessing domain-specific attributions as some researchers speculate that attributional style is not a singular factor (Clark, Beck, Alford, 1999; Robinson, Garber, & Hilsman, 1995). For example, with college students, Metalsky and colleagues (1987) found attributions to academic achievement interacted with getting a low score on an exam to predict subsequent depressed mood.

Beck's Theory and Hopelessness Theory: Diatheses Stress Models Coming Together

Both Beck's and the hopelessness theories focus on cognition in the role of initiating and maintaining depression. Both theories also describe the role of cognitive vulnerability, whereby negative cognitive patterns increase an individual's susceptibility to depression should they experience a negative event (Abramson, Alloy, Hankin,

Haefel, MacCoon, & Gibb, 2002; Beck 1987; Clark, Beck, & Alford, 1999). How these events are interpreted also impact whether depressive symptoms will result from the event. The cognitive vulnerability and stress interact; such that the negative life event is moderated by the cognitive vulnerability. The greater cognitive vulnerability an individual has, the greater the risk he or she has for developing depression. The diathesis (cognitive triad, attributional style) mediates the impact of the negative event or stressor. Higher levels of stress should be associated with higher levels of depression (Abramson, Metalsky, & Alloy, 1989). Moreover, according to Beck's vulnerability component, schema content would impact high levels of stress (Beck, 1987; Clark, Beck, Alford, 1999). Both theories also posit that there are domains of cognitive vulnerability. The closer the stressor matches the domain of the cognitive vulnerability, the greater the likelihood of depressive symptoms will result. Finally, a difference remains between the two theories in that Beck (1967, Clark, Beck, Alford, 1999) hypothesizes that depressive cognitions are distorted thinking. Hopelessness theory (Abramson et al., 1989) does not address distorted cognitions, but simply describes the cognitive style in terms such as stable and global.

Diathesis-Stress: The Impact of Stressors and Negative Life Events

In diathesis-stress models, stressful events are examined within the context of vulnerabilities to depression. Negative events activate the diathesis or vulnerability resulting in depressive symptoms. Increasingly, many studies show an indication of a relationship between cognitive distortions, negative events, and depression in childhood

as well as some underlying process to the development of these cognitions or schemas in support of a diatheses-stress model of depression (Asarnow & Bates, 1988; Garber, 1992; Gladstone et al., 1997; Hammen et al., 1988; Quiggle, Garber, Panak, & Dodge, 1992; Robinson & Garber, 1995; Tems et al., 1993). This investigation adds to this literature in finding stress (negative events) and a possible diathesis (cognitive triad) as variables in studying depression in adolescents.

According to Hopelessness Theory, a depressogenic attributional style mediates the impact of negative life events and depressive symptoms (Abramson, Metalsky, Alloy, 1989). For Beck's cognitive theory, when maladaptive schemata are activated, they act as a filter and aid in processing information in a negative, distorted fashion, leading to intrusive and believable (to the individual with depression), negative cognitions (Beck, 1967, 1976; Beck et al., 1979; Clark, Beck, Alford, 1999). Other researchers have found negative life events to be related to depressive symptoms (Becker, 2000; Goodman, 1995; Silber, Rutter, Neale, & Eaves, 2001). Stress has been shown to have a greater impact on depressive symptoms for those children with negative attributional styles (Abramson, Alloy, Metalsky, 1995; Beck, 1967; Clark, Beck, Alford, 1999; Metalsky, Abramson, Seligman, Semmel, & Peterson, 1982). Hankin, Abramson, and Siler (2001) found that adolescents with a depressogenic attributional style, whether specific and global (hopelessness) or internal, specific, and global, who then experienced negative events also experienced an increase in depressive symptoms.

Hankin, Abramson, and Siler (2001) operationalized cognitive vulnerability such that an attributional style characterized by stable and global attributions will interact with negative life events to produce hopelessness. Internal, global, and specific attributional style interacting with negative life events will result in hopelessness plus interpersonal dependency and low self-esteem (Hankin, Abramson, & Siler, 2001). In high school students who had either type of attributional style, those that reported experiencing many stressful life events had the greatest increase in depressive symptoms (Hankin, Abramson, & Siler, 2001). Other researchers have found negative life events to be related to depressive symptoms (Becker, 2000; Goodman, 1995; Silber, Rutter, Neale, & Eaves, 2001). Stress has been shown to have a greater impact on depressive symptoms for those children with negative attributional styles (Abramson, Alloy, Metalsky, 1995; Beck, 1967; Clark, Beck, & Alford, 1999; Metalsky et al., 1982). In adult studies, a history of negative events, such as child abuse and negative parent-child interactions, have been strongly associated with negative cognitive styles (Rose, Abramson, Hodulik, Halik, & Leff, 1994). Depressed inpatients who reported a history of negative family discipline/control and/or sexual abuse had more negative cognitive styles than depressed inpatients without such a history (Rose, Abramson, Hodulik, Halik, & Leff, 1994).

Stress has been associated with depressed mood in college students (McClain & Abramson, 1995). When stress levels were high, positive self-schema was inversely related to depressive symptoms. A Stress x Self-Schema interaction was significant for

an association with depression only when the self-schemas occurred in domains relevant to depression (i.e., competence, self-worth, motivation). Self-schemas in domains not relevant to depression (i.e., politeness and predictability) were not associated with depressed mood. As students' schemas became less positive, depressive symptoms increased. Hence, sufficiently positive self-schemas may serve as a protection or invulnerability against depression (McClain & Abramson, 1995). Higher stress levels may be required for activation of more negative schema (Cross & Markus, 1994).

Comorbidity with Externalizing Disorders

A negative cognitive style was present for adolescents in this study with depressive disorders and externalizing disorders; however, adolescents with depression alone and combined with externalizing disorders were more negative in some areas than adolescents with externalizing disorders alone. Curry and Craighead (1990) had found that children with depression had more negative attributional styles than children with externalizing disorders. Aggressive children and adolescents tend to misinterpret or selectively attend to information leading to hostile attributions, while depressed children and adolescents attend to negatively self-referenced information such as loss and failure (Clark, Beck, Alford, 1999; Dodge, 1993; Hammen & Zupan, 1984). Burks, Laird, and Dodge (1999) describe knowledge structure and information processing that is much like cognitive schemas. In following 585 school children from kindergarten through eighth grade, Burks and colleagues (1999) found that more hostile knowledge structures were associated with more hostile information processing, which led to an increase in

externalizing behaviors. Children with knowledge based on hostile interactions, whether actual or observed, will process information in a hostilely based manner. These children will interpret ambiguous information as hostile and view hostile reactions as acceptable (Burks, Laird, & Dodge, 1999). At the beginning of an eight year period, children who exhibited externalizing problems were significantly higher in biased social information processing at the end of the eight year period. Moreover, social cognitions partially mediated the stability of aggressive behaviors while the knowledge structures accounted for the most stability in aggressive behaviors over that time (Burks, Laird, & Dodge, 1999). This information processing is a result of activation (perhaps repeated activation) of the knowledge structures or schemas. Children and adolescents with externalizing disorders appear to have negative cognitive styles, although with different content to the structures of their schemas or attributions, than children and adolescents with depressive disorders. Whether a negative event needs to occur to activate negative schema for externalizing disorders remains unclear.

State vs. Trait and the “Scar Hypothesis”

Research has supported the hypothesis that during a depressive episode, children and adolescents exhibit negative views of themselves and their worlds. How long these changes in cognitions persist and whether the effects of depressive episodes are lasting is still debated. In the following sections, the “state vs. trait” arguments will be discussed as well as the “scar hypothesis.” Whether interpersonal changes of depressed individuals are persistent or temporal is still unclear (Gladstone & Kaslow, 1995;

Gotlib, Lewinsohn, Seeley, Rohde, & Redner, 1993; Nolen-Hoeksema et al., 1992; Petty, Sachs-Ericsson, & Joiner, 2004; Rose, Abramson, Hodulik, Halik, & Leff, 1994). Neurobiological factors will also be discussed. Early, negative life events have been associated in sensitization of stress-responsive neurobiological systems and implicated in the pathophysiology of mood disorders (Heim et al., 2000; Heim, Newport, Wagner, Wilcox, Miller, & Nemeroff, 2002; Gutman & Nemeroff, 2003; Newport, Neim, Bonsall, Miller, & Nemeroff, 2004). It is important to note that many researchers consider neurobiological and neuroendocrine implications in depression to be related to the “scar hypothesis” as such changes are considered to be possibly lifelong (e.g., Heim et al., 2000).

State vs. Trait

In one study, after retesting the participants after depressive episodes remitted and following treatment, participants demonstrated a significant drop in negative cognitive patterns, supporting Beck’s theory that depressive schema are state dependent (Asarnow & Bates, 1988; Tems et al., 1993). Yet, the schema could become more entrenched over time if activated often. Beck’s model also asserts that individuals with an underlying cognitive vulnerability (as dysfunctional schemas) may be susceptible to the recurrence of depressive symptoms, especially when negative life events occur (Clark, Beck, Alford, 1999). Some studies have found that a pessimistic explanatory style persists, even after remission of the child or adolescent’s depressive symptoms (Gladstone & Kaslow, 1995; Gotlib, Lewinsohn, Seeley, Rohde, & Redner, 1993;

Nolen-Hoeksema et al., 1992). Some researchers have found that in adults with a benign developmental history (i.e., no history of abuse), their increased levels of negative cognitive style decreased as depressive symptoms decreased (Rose, Abramson, Hodulik, Halik, & Leff, 1994). Others hypothesized that individuals with a history of trauma or abuse would therefore have more persistent negative cognitive styles, even after depressive symptoms remit (Rose, Abramson, Hodulik, Halik, & Leff, 1994). Additionally, the authors found that a negative cognitive style not only predicted depression, but also found a strong interaction between developmental variables (e.g., abuse, trauma, and negative cognitive styles). Moreover, individuals who have experienced a depressive episode in the past may be more cognitively vulnerable, than individuals who have not been depressed, and may develop a *sensitivity* to an area or domain of stressful events that could trigger depressive episodes, thus creating a vicious cycle (Clark, Beck, Alford, 1999). Clark and colleagues (1999) describe Teasdale's (1988) *differential activation hypothesis*, which hypothesizes that negative schemas and depressive cognitions are more accessible in individuals who have experienced depressive episodes. Once an individual has experienced a depressive episode, he or she now has an association between the negative cognition and past episode of depression, which is also associated with the stressor (Clark, Beck, Alford, 1999).

Working with fifth and sixth grade students instead of college students, Hilsman and Garber (1995) repeated Metalsky, Halberstadt, and Abramson's (1987) study testing attributional style, a stressful event in the form as a poor grade on an exam, and

depressive affect. Hilsman and Garber found support for the diathesis-stress model of depression in that five days after the initial stressor, the interaction of a negative attributional style with the stressor of a poor grade predicted a negative affect and depressive symptoms. Hence, students who expressed a negative cognitive style also expressed more depressive symptoms after receiving an unacceptable grade, as compared to those students without negative cognitions (Hilsman & Garber, 1995). In fact, positive cognitions appeared to serve as a buffer against negative affect in the presence of a less than desirable grade. Finally, Hilsman and Garber found that, before the presence of a stressor, negative cognitions alone appeared to increase vulnerability to depression, possibly indicating anticipation of a stressor (1995). The severity of the stressor may also impact negative cognitions and depressive symptoms.

After a year, a stressful event can still be associated with a depressive attributional style (Garber & Flynn, 2001). Feelings of hopelessness were also related to negative events (Garber & Flynn, 2001). Garber and Flynn (2001) found that, for adolescents with a negative attributional style, negative events predicted increased levels of hopelessness. As Hilsman and Garber (1995) also found that the presence of negative cognitions alone predicted negative affect and depressive symptoms, negative cognitions appear to be a natural target for assessment and treatment for the school and clinical setting.

Scar Hypothesis and Neurobiological Factors

Scar Hypothesis. Lewinsohn, Steinmetz, Larson, and Franklin (1981) first introduced a scar hypothesis whereby after or during their first depressive episode, individuals acquire a “scar” similar to way a physical wound would leave a physical scar. This scar then acts as a predisposition for future depressive episodes. While studying participants over the age of 50, who were never depressed or experiencing their first depressive episode, Rohde, Lewinsohn, and Seeley (1990) found that participants who had recovered from a depressive episode described themselves as less socially skilled than controls. While most of the psychosocial variables, including cognitive style, associated with depression in this study appeared to be state dependent, perhaps the “scar” was still present as a vulnerability and would manifest at the occurrence of a negative event (Rohde et al., 1990). Depression may “scar” interpersonal functioning if the depressive episode occurs early in life (Petty, Sachs-Ericsson, & Joiner, 2003; Rohde et al., 1994). A deficit in interpersonal skills may function as a premorbid vulnerability factor that affects the onset, recurrence, and length of episodes of depression (Petty, Sachs-Ericsson, & Joiner, 2003).

As part of a five-year longitudinal study of childhood depression, in two years of following depressed and matched nondepressed children, the presence of depression increased pessimistic explanatory style (Nolen-Hoeksema, Girgus, & Seligman, 1992). When depressive symptoms remitted, there was no significant change in negative explanatory style. For children who experienced higher levels of depressive symptoms,

over time their explanatory styles became more negative than peers with lesser or no depressive symptoms. Moreover, the onset of depression increased negative explanatory style, but stayed negative when depressive symptoms decreased, independent of negative life events (Nolen-Hoeksema, Girgus, & Seligman, 1992). Nolen-Hoeksema (1992) posit that the effects of depression on cognitive style may be stronger in children than adults, as children are still forming their cognitive styles and adults' may be more established.

Neurobiological Factors and Depression. The impact of depression and stressful events has been shown to have a neurobiological link (Heim et al., 2000; Heim et al., 2004; Newport et al., 2004; Vythilingam et al., 2002). The depth and extent of this effect or interaction is unclear. A prominent neurobiological finding exists linking depression with dysregulation of the hypothalamic-pituitary-adrenal (HPA) axis (Heim et al., 2000; Heim et al., 2002; Ising, Lauer, Holsboer, & Model, 2004; Gutman & Nemeroff, 2003; Newport et al., 2004). Cortisol, adrenocorticotrophic hormone (ACTH), and corticotrophin-releasing hormone (CRH) secretion is elevated and cortisol secretion after dexamethasone is presented is insufficiently suppressed (Ising et al., 2004). Hence, the dexamethasone suppression test (DST) and CRH challenge test are now used to assess differences among depressed and non-depressed individuals.

Researchers have found that after ten years of observation, a high risk group (measured by family history of depression) had no differences in cortisol levels in response to a DST/CRH test as compared to controls with no family history of

depression (Ising, Lauer, Holsboer, & Modell, 2004). Hence, a dysregulated HPA-system cannot be considered a neuroendocrine vulnerability marker for depression, but rather a neurobiological scar (Ising, Lauer, Holsboer, & Modell., 2004). This “scar” represents a vulnerability in depressed participants whereby, due to the reduced flexibility of the endocrine system, the HPA does not respond adequately to a stressful event, resulting in an increased and uncompensated level of cortisol, which then results in a depressive episode (Ising, Lauer, Holsboer, & Modell., 2004).

Early, stressful life events during developing childhood years appear to cause disruptions in the HPA axis, rendering individuals more vulnerable to depressive episodes at the onset of future stressful events (Gutman & Nemeroff, 2003). After undergoing a social stress test, women who had experienced a trauma in childhood and adults who had lost a parent demonstrated an increased HPA axis response (Gutman & Nemeroff, 2003). Gutman and Nemeroff (2003) believe that stressful early life events sensitize an individual such that exposure to later stressful events results in a hyperactive or maladaptive response, thus leading to a major depressive episode.

Heim and colleagues (2000) found that women with major depressive disorder and no history of abuse had a cortisol response within normal limits to a psychological stress test. Later researchers found women with a history of childhood abuse and no current depressive episode to have normal HPA axis response to a DST (Newport et al., 2004). Women with a history of childhood abuse and a current depressive episode also

have been found to have a blunted response to the DST for both ACTH and cortisol (Newport et al., 2004).

The HPA axis or neuroendocrine stress reactivity has been shown to be a consequence of childhood abuse and may contribute to a diathesis for adult psychopathology (Heim et al., 2000; Heim et al., 2002). Persistent, early stress in early life is related to sensitization of the HPA axis. Heim and colleagues (2000) found women with a history of early stress but no psychiatric disorders had an increase in pituitary reaction to stress (displaying increased ACTH but normal cortisol responses), possibly representing a neurobiological vulnerability to depression. Heim and colleagues (2002) later compared women with a history of physical and/or sexual abuse with and without a current depressive episode to women with no history of abuse and a current depressive episode as well as control participants with no history of abuse or any depressive disorder. Women, both with and without a depressive disorder, who experienced childhood abuse, reported a greater number of traumas (adult and childhood) than controls. A history of childhood abuse was positively related to ACTH levels, even when controlling for adult stressors. Those women with a history of childhood abuse, who also experienced stress or trauma as an adult, had the highest ACTH responses to stress. Severity of depression symptoms were also related to ACTH concentrations. A history of abuse in childhood, the number of different types of abuse, and depression were predictive of significant cortisol responses. Adult stressors alone were not related to cortisol responses. Childhood abuse is therefore related to

neuroendocrine stress reactivity, which is exacerbated by further stressors in adulthood and may serve as a diathesis for adult depression (Heim et al., 2000; Heim et al., 2002). These findings have implications for CRF receptor antagonists in the treatment of depression. Thus, each time these individuals are stressed, and CRF is released, depression or depressive symptoms may ultimately result (Heim et al., 2000).

The combination of early stressful events or abuse and a major depressive disorder in adults has shown to be potent in endocrine reactivity, but other areas of neurobiological findings have found significant results as well. For example, Vythilingam and colleagues (2002) found smaller left hippocampal volume in women with major depressive disorder with a history of severe and repeated physical and/or sexual childhood abuse, as compared to women with a major depressive disorder and no history of abuse and control participants. One possible explanation includes prolonged exposure to CRH in early development could lead to hippocampal neuronal loss (Vythilingam et al., 2002). Such research underscores the importance of studying not only current but also the history of negative life events in studying diathesis-stress models of depression.

Gender Differences

By adolescence and beyond, females tend to react to stress more inwardly, with rumination, rather than with action (Nolen-Hoeksema, 2001). Perhaps the gender difference in rumination also in part accounts for the gender difference in depression. In the current investigation, the male depressive groups did not differ from the

externalizing disorder group and the control group. Only the male externalizing group was more negative than the male control group on their views of the future (which could also be a factor of being placed in a residential treatment facility). The difference in coping style may have led to a difference in diagnoses, of depression versus externalizing disorders, for males and females (Nolen-Hoeksema, 2001). Others have found that in adolescent girls, but not boys, depressive symptoms were related to increased self-criticism (Shahar, Blatt, Zuroff, Kpuermine, & Leadbeater, 2004). Shahar and colleagues found a reciprocal interaction between depressive symptoms and self-criticism, in that at time one, depressive symptoms were related to time two increases in self-criticism, and vice versa. Hence, harsh attitudes towards the self led girls to exhibit an increase in depressive symptoms, and depressive symptoms led girls to exhibit harsh attitudes towards themselves (Shahar, Blatt, Zuroff, Kpuermine, & Leadbeater, 2004). No such relationship was found for boys. In the adult literature, an increased risk for depression has been associated with an increased concern for disapproval of others (Mazure & Maciejewski, 2003; Maciejewski, Prigerson, & Mazure, 2001). This risk was three times as strong for women, although there was no difference in exposure to stressful events (Maciejewski, Prigerson, & Mazure, 2001).

Biological factors have been studied when examining gender differences. Biological factors, with respect to women's increased prevalence of depression during adolescence and adulthood, were once discussed in terms of direct effects of ovarian hormones, which did not prove to be valid (Nolen-Hoeksema, 2001). More recent

research has focused on the moderating effects of ovarian hormones such as progesterone and estrogen on the HPA axis and the stress response (Nolen-Hoeksema, 2001). Men and women with major depressive disorders have been shown to have elevated cortisol levels, indicating a dysregulated HPA response, as previously discussed (Gutman & Nemeroff, 2003; Nolen-Hoeksema, 2001). As ovarian hormones are involved in the regulation of the HPA axis, women who experience rapid changes in ovarian hormones are therefore more vulnerable to dysregulation of the stress response and depression (Nolen-Hoeksema, 2001; Young & Korszun, 2001).

Implications for Assessment and Treatment

This investigation successfully assessed cognitive style or the cognitive triad using the CTIC and negative life events using the LEC. As use of the CASQ resulted in no significant results in this study and others (e.g., Lewinsohn, Joiner, Rohde, 2001) future studies of cognitive variables in depression should consider newer more comprehensive measures. Due to the low internal consistency of the measure and low reliability of the subscales, refinement of the CASQ may be in order (Hankin, Abramson, & Siler, 2001; Nolen-Hoeksema et al., 1992). The Children's Cognitive Style Questionnaire (CCSQ; Mezulis, Hyde, Abramson, Stark, & Simpson, in press) and the Adolescent Cognitive Style Questionnaire (ACSQ; Hankin & Abramson, 2002) assess negative inferences for consequences and self as well as negative inferences for the cause of a negative event (attributional style), thus measuring the negative cognitive style as encompassed by the Hopelessness Theory (Hankin & Abramson, 2002).

Most of the studies of the diathesis-stress theory of depression have utilized self-report measures. Many of these studies, particularly those that have implications for externalizing behaviors, call for further research employing alternate modalities such as interviewing and multiple informants (e.g., teachers, parents, other students) (Robinson, Garber, & Hilsman, 1995). Gathering multiple means of information, be it for study or treatment, on cognitive vulnerabilities and negative events in adolescents' lives can aid in shaping prediction of behavioral, academic, and emotional difficulties. Such knowledge aids not only teachers and therapists, but the adolescents themselves in targeting negative cognitions.

Further understanding how adolescents experience and cope with stressful events can help in preventing and treating depressive disorders. Experiencing and reacting to events in a stressful manner can create a loop of negative reactions. The more an individual suffers from and is not able to cope with an event, the more he or she experiences a negative reaction (Nolen-Hoeksema, 2001). Early identification of negative cognitive styles that would lead to depressive reactions in the presence of negative events can assist in preemptive treatment to build coping skills and prevent depressive episodes. Strong interactions have been found between negative cognitive styles of adults and traumatic events in childhood (Rose, Abramson, Hodulik, Halik, & Leff, 1994). As a negative cognitive style appears to be particularly related to depression, even in the presence of an externalizing disorder, targeting the cognitive style and coping strategies would be key in the assessment and treatment of children and

adolescent depression (Hankin & Abramson, 2002). Yet cognitive style can be just one aspect of the focus of treatment for adolescent depression, especially when associated with social maladjustment or conduct disorder (Curry & Craighead, 1990). Problem-solving skills and family interventions can also prove to be valuable.

Beck viewed cognitive styles as stable, but able to be changed (Clark, Beck, & Alford, 1999). Targeting decreasing specific events that are salient to the individual may be more effective in order to target those areas of cognitive vulnerability for treatment to prevent recurrence of depressive episodes (Clark, Beck, & Alford, 1999; Metalsky et al., 1987; Robinson, Garber, & Hilsman, 1995). As depression rates begin to rise in early adolescents, particularly for girls, these years marks an important time for prevention and identification efforts for treatment. Rates continue to rise towards adult prevalence during adolescence until, by the age of 18, up to one out of five adolescents have experienced a depressive episode; moreover, an episode of childhood depression significantly increases the risk of a subsequent depressive episode (Lewinsohn et al., 1993; Lewinsohn, Rohde, Klein, & Seeley, 1999).

Also, although this sample was an extreme in that it was a group of adolescents at a residential treatment center, identifying at-risk groups for subclinical depression and negative cognitive styles would be useful in preventing depressive episodes and fostering more positive cognitive styles in any setting. As targeting negative events may be a more effective way in preventing depressive episodes and negative events also appear to be linked to externalizing disorders, identifying negative events in children

and adolescents' lives marks an important and simple means of prevention, treatment, and possible recurrence prevention for depressive disorders as well as externalizing disorders (Clark, Beck, & Alford, 1999; Metalsky et al., 1987; Robinson, Garber, & Hilsman, 1995). All negative events certainly are not preventable in adolescents' lives; however, awareness of these events can aid parents, teachers, and psychologists in assisting the adolescents in increasing coping skills both to manage these events and to build more positive cognitive styles. Such strategies can be employed in any setting. Not only simple awareness of the events in an adolescents' life and but also how she or he perceives them (negative or positive) and the impact of those events can also help parents, teachers, and school staff to interact more effectively and in a more sensitive manner with adolescents in order to tailor treatment, curriculum, or simply day-to-day interactions. Should adolescents be reluctant or have difficulty in discussing their current stressors or events in their lives, measures such as the LEC, CTIC, and ACSQ are another modality that can assist school psychologists in assessment and treatment.

Limitations and Future Directions

This study was limited by such factors as the uniqueness of the sample (i.e., multiple diagnoses of the participants from the residential treatment center), which may create competing explanations for the results. More in depth studies along the same vein of this investigation can delve into the effects and relationships of, for example, diagnoses of sexual abuse and Poly-Substance Abuse, with diagnoses of depression. Although using somewhat younger populations, some studies have reported both scores

for depressive and normative populations using the CTIC (Kaslow et al., 1992; Laurent & Stark, 1993; Zauszniewski, Chung, Chang, & Krafcik, 2002). Kaslow and colleagues (1992) study involved children (aged $M = 11.67$) with CTIC of $M = 39.50$, $SD = 11.31$ for the Depressed group and $M = 63.27$, $SD = 1.99$ for the Control group, while Laurent and Stark (1993) had $M = 40.33$, $SD = 11.36$ for the Depressed group (age $M = 11.67$ years) and $M = 60.56$, $SD = 8.28$ for the Control group (age $M = 11.83$ years). Zauszniewski and colleagues (2002) assessed 5th and 6th graders who were 10 to 12 years old who CTIC had scores that were $M = 61.2$, $SD = 6.73$. The means of the CTIC scores from the normative groups and depressive groups from these three studies presented above are comparable to the present study's Control group ($M = 61.46$, $SD = 6.66$) as well as the Depression ($M = 46.69$, $SD = 18.32$) and Comorbid ($M = 45.80$, $SD = 18.65$) groups.

The small group sizes may also have affected the outcomes, as they may have affected the representativeness of the sample to adolescents with depressive, externalizing, and comorbid disorders in general. Moreover, when further dividing groups in order to analyze by gender, the groups became even smaller, further limiting the interpretation of the significant results. Larger group size would enable more stable and reliable gender analyses. Additionally, the externalizing group contained both Conduct Disorder (CD) and Oppositional Defiant Disorder (ODD). A diagnosis of ODD is sometimes considered a less severe form of CD (although perhaps not in a residential treatment center setting). With a larger sample size, separate Externalizing groups for CD and ODD participants would be possible. Larger sample sizes would

make analyses more stable in general and make the inclusion of important factors/groups such as comorbidity possible (Curry & Craighead, 1990). Having a group that is externalizing disorders only, however, within this study remains a strength of this study, enabling an analysis of cognitive styles of externalizing disorders and a comparison to depressed only and comorbidly depressed groups.

While this investigation utilized the comprehensive, semi-structured interview the K-SADS, it did not utilize the details of the symptom ratings in the analysis. Other studies could examine symptom patterns in addition to diagnoses (Angold & Costello, 1993; Rose, Abramson, Hodulik, Halberstadt, & Leff, 1994). For example, Rose and colleagues (1994) found that the severity of depression predicted cognitive style scores. Moreover, due to the nature of the clinical setting where the research was carried out, not all parents were available for K-SADS interviews. Future and long-term studies could strive not only to assess parents for interviews as well as cognitive factors and life events, but also to assess at multiple times across an adolescent's life (Angold & Costello, 1993; Tems et al., 1992). In addition, self-report measures completed by the adolescents were used. These three measures do not have subscales built in to detect malingering, response sets, or social desirability. Future work could add more objective assessments, such as multiple means of gathering information from parents, teachers, and participants. It may be important to note that all measures were given within the first week of admission to the residential treatment center and may have had an impact on the adolescents' views and therefore the results of the study; for example, the lack of

differences among the depressed only, the comorbid, and the other two groups for the adolescents' view of their future.

Future studies of cognitive variables in depression should utilize measures that assess the negative cognitive style as encompassed by the updated hopelessness theory (Abramson et al., 1989; Hankin & Abramson, 2002), including negative inferences for consequences and self as well as negative inferences for the cause of a negative event (attributional style) (e.g., ACSQ; Hankin & Abramson, 2002; CCSQ; Mezulis et al., in press).

Finally, other studies should consider assessing stressful events and abuse, both history and present. Several studies have found history of abuse or stressful events to be a significant factor in measuring dysregulation of the HPA axis (Heim et al., 2000; Heim et al., 2002; Newport et al., 2004). Also investigating cognitive styles in relation to stressors and abuse can provide valuable information (e.g., Rose, Abramson, Hodulik, Halik, & Leff, 1994).

In terms of addressing gender differences in depressive disorders, a comprehensive investigation of depression in adolescence should consider the complicated spectrum of biological and hormonal differences between males and females (Nolen-Hoeksema, 2001). For example, the moderating effects of adrenal hormones add to an individual's reaction to stress, specifically the HPA axis. Women and girls are more vulnerable to depression during rapid changes of ovarian hormones, as hormonal changes trigger dysregulation of the stress response (Nolen-Hoeksema,

2001). Such vulnerabilities certainly play a part in individuals' development and maintenance of their cognitive views.

Conclusions

This study investigated whether measures of life events and constructs from two diathesis-stress models of depression, Beck's (1967, 1972) cognitive theory of depression and Abramson, Metalsky, and Alloy's (1989) hopelessness theory, would differentiate groups of adolescents with depressive disorders, externalizing disorder, both depressive and externalizing disorders, and no diagnoses. Adolescents' views of self, world, and future described and differentiated depressive and comorbid disorders groups from an externalizing disorder group and a control group. No differences in adolescents' attributional style were found among the groups. Finally, adolescents in the depressed and comorbid groups reported the most negative events rated the most severe, followed by the externalizing group, with the control group reporting the fewest negative events rated the most severe. This investigation adds to the literature of child and adolescent depression and diathesis-stress theories important considerations of negative life events and cognitive styles or vulnerabilities. Although this study has limitations, for example in respect to the amount of comorbidity of the adolescents from the residential treatment center, future studies of cognitive diatheses-stress theories can build on the investigation of the impact of stressful events and cognitive style on depression disorders.

The importance of continuing to study depression in children and adolescents cannot be overstated. Although results continue to be similar to adult studies of cognitive distortions in depression, there still are variables unique to the development of male and female adolescents that will not directly and simple translate from the adult literature (Nolen-Hoeksema, 2001). We also strive toward an adequate test of the causal role cognitions play in the onset of depression in children and adolescents (Hilsman & Garber, 1995). Moreover, studies with adults have shown the link to early stressors and trauma of childhood to depression in adulthood (Heim et al., 2000; Heim at al., 2002; Ising, Lauer, Holsboer, & Model, 2004), underscoring the importance of assessing and treating depression as early as possible and therefore promoting prevention and strong coping strategies.

Appendix A
Parental Consent Form

Parental Consent Form

As part of our commitment to maintaining an effective treatment facility, we have begun an ongoing evaluation of the treatment program and additional studies of the relationship between internalizing (such as anxiety and depression) and externalizing (such as conduct disorder and ADHD) disorders in children and adolescents. These studies are a collaborative effort between Meridell Achievement Center and researchers from The University of Texas.

You and your child are invited to participate in a study of the relationship between internalizing and externalizing disorders in children and adolescents. Researchers at The University of Texas at Austin, Department of Educational Psychology, hope to learn about the relationships among children and adolescents' thoughts, feelings, and behaviors as they relate to internalizing and externalizing disorders. You were selected as a possible participant in this study because you and your child have sought child psychological treatment services from Meridell Achievement Center. You and your child or adolescent will be one of over 100 people chosen to participate in this study.

Should you decide to participate, a researcher from The University of Texas will ask you and your child to participate in a semi-structured diagnostic interview regarding your child's feelings and behaviors in order to gain a clearer understanding of the difficulties your child has been experiencing. For each of you, the interview should take, at most, an hour to complete. You and your child will also be asked to complete a number of questionnaires regarding your child, your family, and yourselves. You and your child may complete the interviews and questionnaires in more than one session. In sum, it would take you approximately 1.5 hours to complete the interview and the measures and a total of 2 to 2.5 hours for your child to complete the interviews and measures. These questionnaires were chosen because they have been used in a number of previous studies and because they enable us to gain a better understanding of the relationships between children's and adolescents' thoughts, feelings, and behaviors and the emotional difficulties that led them into treatment.

The interview and questionnaires you and your child will be asked to complete have been filled out by many people in the past and pose minimal risk to psychological health. This study will be beneficial in that it will identify psychosocial factors relevant to internalizing and externalizing disorders in children and adolescents, an area largely unexplored to date. Any information in connection with this study that can be identified with you will remain confidential and will be disclosed only with your permission. With your permission, the research staff will share treatment-relevant

information with the professional staff who are directly responsible for your child's treatment.

For research purposes, we would like your permission to audiotape the interview. The tapes will be kept in a locked file cabinet and erased once the study has been completed.

Your decision whether or not to participate will not prejudice your future relations with The University of Texas or Meridell Achievement Center. If you decide to participate, you are free to discontinue participation at any time without prejudice.

Should you decide to allow your child or adolescent to participate, he or she will also have a chance to decide whether or not to participate.

If you have any questions, feel free to ask us now. Should you have any additional questions about your or your child's participation or the research study, feel free to contact the faculty sponsor, Dr. Kevin Stark to ask any questions you might have. Dr. Stark can be reached by telephone at 512-471-4407, or in writing: Department of Educational Psychology, The University of Texas at Austin, SZB 504, Austin, Texas 78712-1296.

You will be offered a copy of this form to keep.

You are making a decision whether or not your child may participate. Your signature indicates that you have read the information provided and have decided to participate and to allow your child to participate should he or she choose to. By signing this form you are agreeing to participate both by completing the questionnaires and the clinical interview; you are also giving permission for your child's interview to be audiotaped. You may withdraw at any time without prejudice after signing this form, should you choose to discontinue participation in this study.

_____ Yes, I agree to participate and give my permission for my child to participate in the study.

_____ No, I do not want to participate nor do I want my child to participate.

_____ I would like information gained through the research project which is relevant to my child's treatment to be shared with the professional staff who are directly responsible for my child's treatment.

_____ Although I am consenting to participate in the research study and giving permission for my child to participate in the research study, I DO NOT want information gained through the research project to be shared with anyone, including the professional staff directly responsible for my child's treatment.

Signature of Parent or Legal Guardian

Date

Signature of Staff/Researcher

Date

Child's Name

Appendix B
Youth Assent Form

Assent Form

I agree to participate in a study that is interested in evaluating the relationship between thoughts, feelings, and behaviors in children adolescents. I understand that this study has been explained to my parent or guardian and that he or she has given permission for me to participate. I understand that I may decide at any time that I do not wish to continue this study and that it will be stopped if I say so. Information about what I say and do will not be given to anyone else unless I say so. However, I do understand that if I say so, some of the information I provide will be given to the people directly involved with my treatment here at Meridell, such as my case supervisor, individual therapist, and/or family therapist.

I understand that I will be asked to complete an interview about my current feelings, behaviors, and thoughts as well as a number of questionnaires about my self and my family. I understand that by signing this form I am giving permission for the interview to be audiotaped for research purposes and that these tapes will be erased as soon as the study is completed.

I understand that nothing bad or wrong will happen to me if I decide to stop my participation in this study at any time. When I sign my name to this page I am indicating that this page was read to me and that I am agreeing to participate in this study. I am indicating that I understand what will be required of me and that I may stop my participation at any time.

Child/Adolescent Signature

Date

Staff/Researcher Signature

Date

Check One:

Yes, I want information I give to be shared with the people responsible for my treatment at Meridell.

No, I DO NOT want information I give to be shared with the people responsible for my treatment at Meridell.

Appendix C

The Schedule for Affective Disorders and Schizophrenia for School-Age Children
(Mood Disorders Section) (K-SADS)

DEPRESSED MOOD

Refers to subjective feelings of depression based on verbal complaints of feeling depressed, sad, blue, gloomy, very unhappy, down, empty, bad feelings, feels like crying. Do not include ideational items (like discouragement, pessimism, worthlessness), suicide attempts or depressed appearance. Some children will deny feeling "sad" and report feeling only "bad" so it is important to inquire specifically about each dysphoric affect. Do not count feelings of anxiety, tension. Irritability without any other persistent dysphoric affect should not be rated here. In the interview with parent, mother's "gut feeling" (empathic sensing) that child frequently feels depressed can be taken as positive evidence of child's depressive mood if parent is not concurrently depressed.

How have you been feelings?

Would you say you are a happy child or a sad child?

Mostly happy or mostly sad?

Have you felt sad, blue, moody, down, very unhappy, empty, like crying? (ASK EACH ONE)

Is this a good feeling or a bad feeling?

Have you had any other bad feelings

Do you have a bad feeling all the time that you can't get rid of?

Have you cried or been tearful?

Do you feel (___)all the time, some of the time?

(Per cent of awake time: summation of % of all labels if they do not occurs simultaneously.)

(Assessment of diurnal variation can secondarily clarify daily duration of depressive mood).

Does it come and go?

How often? Every day?

How long does it last?All Day?

How bad is the feeling?

Can you stand it?

What do you do when you can't stand it?

What do you think brings it on?

Do you feel sad when mother is away? If separation from mother is given as a cause:

Do you feel (____) when mother is with you?

Do you feel a little better or is the feeling totally gone?

Can other people tell when you are sad? How can they tell? Do you look different?

0. No information.

1. Not at all or less than once a week.

2. Slight: Occasionally has dysphoric mood at least once a week for more than one hour.

3. Mild: Often experiences dysphoric mood at least 3 times a week for more than 3 hours each.

4. Moderate: Most days feels "depressed" (including weekends) or over 50% of awake time.

5. Severe: Most of the time feels depressed and it is almost painful. Feels wretched.

6. Extreme: Most of the time feels extreme depression which "I can't stand.?"

7. Very extreme: Constant unrelieved, extremely painful feelings of depression

WHAT ABOUT DURING THE LAST WEEK

LAST WEEK: 0 1 2 3 4 5 6 7

NOTE - Sometimes the child will initially give a negative answer at the start of the interview but will become obviously sad as the interview goes on. Then these questions should be repeated eliciting the present mood and using it as an example to determine its frequency. Similarly, if the mother's report is that the child is sad most of the time and the child denies it, the child should be confronted with the mother's opinion and then asked why does he think his mother believes he feels sad so often.

NOTE - When a child or parent reports frequent short periods of sadness throughout the day, it is likely that this child is always sad and only reports the exacerbation's, in which case the rating of depressive mood will be 4 or higher. Thus, it is always essential to ask about the rest of the time: "*Besides these times when you feel (____), during the rest of the time, do you feel happy or are you more sad than your friends?*" If the answer is negative, the mood rating is 2.

DEPRESSED APPEARANCE

Nonverbal manifestations of depressed mood such as tearfulness, sad face, neglected personal appearance, crying.

- 0 No information.
- 1 Not at all.
2. Slight: Of doubtful clinical significance.
3. Mild: Definitely looks somewhat sad.
4. Moderate: Generally sad appearance, occasionally tearful.
5. Severe: Persistent sad face, disheveled, frequent crying.
6. Extreme: Continually weeping, meaning conversation is almost impossible, or practically unresponsive (depressive stupor).

IRRITABILITY AND ANGER

Subjective feeling of irritability, anger, crankiness, bad temper, short tempered, resentment or annoyance, externally directed, whether expressed overtly or not. Rate the intensity or duration of such feelings. If patient has had clear episodes of mania or hypomania during which he was irritable, do not rate such irritability here.

Do you get annoyed and irritated or cranky at little things?

What kinds of things?

Have you been feeling mad or angry also (even if you don't show it)?

How angry?

More than before?

What kinds of things make you feel angry?

Do you sometimes feel angry and/or irritable and/or cranky and don't know why?

Does this happen often?

Do you lose your temper?

With your family?

your friends?

Who else?

At school?

What do you do?

Has anybody said anything about it?

How much of the time do you feel angry, irritable, and/or cranky:

All of the time?

Lots of the time?

Just now and then?

None of the time?

When you get made, what do you think about?

Do you think about killing others? Or about hurting them or torturing them? Whom:

Do you have a plan? How?

If irritability occurs in discrete episodes within a depressive state, especially if unprovoked, rater should keep this in mind when asking about mania/hypomania.

WHAT ABOUT DURING THE LAST WEEK?

- 0 No information.
2. Not at all, clearly of no clinical significance.
3. Mild: Often (at least 3 times/3 hours each week) feels definitely more angry, irritable than called for by the situation, relatively frequent but never very intense. Or often argumentative, quick to express annoyance. No homicidal thoughts.
4. Moderate: Most days feels irritable/angry or over 50% of awake time. Or often shouts, loses temper.
5. Severe: At least most of the time child is aware of feeling very irritable or quite angry or has frequent homicidal thoughts (no plan) or thoughts of hurting others. Or throws and breaks things around the house.
6. Extreme: Most of the time feels extremely irritable or angry, to the point he "can't stand it." Or frequent uncontrollable tantrums.
7. No. 6 Plus homicidal plan.

LAST WEEK: 0 1 2 3 4 5 6 7

SEPARATION-DEPENDENT-DYSPHORIA

Depressed Mood/Relieved by Presence of Parent.

The child's depressed or irritable mood always is completely and totally relieved by the presence of the parent(s) (main attachment figure).

- 0 No information.
- 1. No.
- 2. Occasionally fully relieved.
- 3. Usually not fully relieved.
- 4. Always fully relieved.

WHAT ABOUT DURING LAST WEEK?

LAST WEEK: 0 1 2 3 4

Irritable/Angry Mood/Relieved by Presence of Parent

- 0 No information.
- 1. No.
- 2. Occasionally fully relieved.
- 3. Usually not fully relieved.
- 4. Always fully relieved.

WHAT ABOUT DURING LAST WEEK?

LAST WEEK: 0 1 2 3 4

If there is no evidence of depressed mood, irritability or anger, skip to excessive or inappropriate guilt, page 17.

QUALITY OF DYSPHORIC MOOD

Extent to which the subjective feelings of depression are felt by the subject to be qualitatively different from the kind of feeling he would have or has had following the death of a loved one, a pet, or from loneliness or from feelings of missing someone during separation differences. experience (more common in child's life). If possible, get baseline for comparison of missing, mildly grief, or loneliness feelings during a period when child was not depressed. NOTE: Parent can only report this item if the child has actually stated this spontaneously before.

- 0. No information or unable to understand question.
1. No difference or just more severe.
2. Questionable or minimal
3. Definitely different, but only so (describe).
4. Very different (describe).

Is this feeling different than the one you get when a friend or your parent moved away? Is this like a "missing" or "lonely" feeling? How is it different? Has anybody close to you died? a pet? How did you feel after his/her death? Were you depressed before he died or got sick? Is this feeling of () now different from the feeling you had after he died?

WHAT ABOUT DURING THE LAST WEEK?

LAST WEEK: 0 1 2 3 4

DEGREE OF ASSOCIATION OF DEPRESSED OR IRRITABLE MOOD WITH SPECIFIC EVENTS OR PREOCCUPATIONS.

When you feel (), do you always know why you feel that way? What is it? Do you sometimes feel () when this didn't happen? Do you sometimes feel () do you know difference. why? What happens more often: that you know why or mildly that you don't

- 0. No information or unable to understand question.
1. No difference or just more severe.
2. Questionable or minimal
3. Definitely different, but only so (describe).
4. Very different (describe)

WHAT ABOUT DURING THE LAST WEEK?

LAST WEEK: 0 1 2 3 4

REACTIVITY OF DEPRESSED OR IRRITABLE MOOD

Extent to which temporary improvement in mood was associated with positive environmental events. Differentiate between improvements of separation anxiety (especially in inpatients during visiting) and improvement of depression feelings. Only the latter is to be recorded. The ratings take into account both extent and duration of mood improvement.

If someone tried to cheer you up, could they have anything good happened to you since you started feeling (____)?
If yes, what was it
If no, are you sure?
Anything a little bit good?
Did this good thing make you feel any better?
If yes, how good did you feel?
Did you feel happy?
Did you laugh at anything?
When you were at your worst, did this feeling ever go away?
When you got your mind on other things or when something good happened, did the feeling ever go away.
Did all of it go away?
What made it go away? (e.g. like when you were playing with other children?)
How long did the good feeling last
Minutes?
Hours?
All Day?
Did you feel bad no matter what was happening?

- 0. No information.
- 1. Very responsive to environmental events, in both extent and duration of improvement.
- 2. Usually mood responds fully but improvement does not last more than one hour.
- 3. Somewhat responsive, but still feels depressed: Mood improves partially and stays like that for more than a few minutes.
- 4. "Brief peak." Mood clears up almost completely for a few minutes and goes back down again.
- 5. Rarely feels any better: Mood improves partially for only a few minutes (subnormal brief peak).
- 6. Unresponsive (doesn't make any difference).

WHAT ABOUT DURING THE LAST WEEK?

LAST WEEK: 0 1 2 3 4 5 6

DIURNAL MOOD VARIATION

Extent to which, for at least one week there is a persistent fluctuation of mood (depressed or irritable) with the first or second half of the day. Rate regardless of regular environmental changes. Do not rate positive if it gets worse only at bedtime, school time or other separation times. The worst period should last at least 2 hours. Ask about weekends. Make sure the worsening refers to dysphoric mood and not to anxiety or environmental effects.

Do you feel more (____) in the morning when you wake up, or in the afternoon, or in the evening? How long does it last? Does this happen every day, after you get home from school, after dinner? When do you start feeling better? How much worse? When you feel worse, is it a different feeling or just more of the same?

(Use regular events as time milestones: lunch, second AM class, TV program, etc.)

WHAT ABOUT DURING THE LAST WEEK?

Worse in Morning

- 0. No information.
- 1. Not worse in the morning or variable.
- 2. Minimally or questionably worse or for less than 2 hours.
- 3. Mildly worse for at least 2 hours.
- 4. Considerably worse for at least 2 hours.

LAST WEEK: (AM) 0 1 2 3 4

Worse in Afternoon and/or Evening

- 0. No information.
- 1. Not worse in the morning or variable.
- 2. Minimally or questionably worse or for less than 2 hours.
- 3. Mildly worse for at least 2 hours.
- 4. Considerably worse for at least 2 hours.

WHAT ABOUT DURING THE LAST WEEK?

LAST WEEK: (PM) 0 1 2 3 4

EXCESSIVE OR INAPPROPRIATE GUILT

...and self reproach, for things done or not done, including delusions of guilt. Rate according to proportion between intensity of guilt feeling or severity of punishment child thinks he deserves and the actual misdeeds.

When people say or do things that are good, they usually feel good, and when they say or do something bad they feel bad about it. Do you feel bad about anything you have done? What is it? How often do you think about it? When did you do that? What does it mean if I said I feel guilty about something? How much of the time do you feel like this?

- Most of the time?*
- A lot of the time?*
- A little of the time?*
- Not at all?*

What kind of things do you feel guilty about? Do you feel guilty about things you have not done? or are actually not your fault? Do you feel guilty about things your parents or others do? Do you feel you cause bad things to happen? Do you feel you should be punished for this? What kind of punishment do you feel you deserve? Do you want to be punished? How do your parents usually punish you? Do you think it's enough been.?

For many young children it is preferable to give a concrete example such as: *"I am going to tell you about three children and you tell me which one is most like you. The first is a child who does something wrong, then feels bad about it, goes and apologizes to the person, the apologies are accepted and he just forgets about it from then on. The second child is like the first but after his apologies are accepted, he just cannot forget about what he had done and continues to feel bad about it for one or two weeks. The third is a child who has not done much wrong, but who feels guilty for all kinds of things which are really not his fault like... Which one of these three children is like you?"*

It is also useful to double check the child's understanding of the questions by asking him to give an example, like the last time he felt guilty "like the child in the story."

- 0. No information.
- 1. Not at all.
- 2. Slight: Occasional feeling of mild self-blame, but no persistent ruminations beyond reasonable time.
- 3. Mild: Often feels guilty about past actions, the significance of which he exaggerates, and which most children would have forgotten about.
- 4. Moderate: Feeling about guilt which he cannot explain or about things which objectively are not his fault. (Except feeling guilty about parental separation and/or divorce which is normative and should not lead by and of itself to a positive guilt rating in this score, except if it persists after repeated appropriate discussions with the parents)/
- 5. Severe: Pervasive feelings of intense guilt, or generalized feelings of self blame for most situations. Feels he should be punished more than he has
- 6. Extreme: Delusions of guilt, hallucinations in which he is accused of having done something terrible, or agonizing constant feelings of guilt.

(This rating might be changed from 4 or 5 to 6 at the time of assessing hallucinations and delusions.)

WHAT ABOUT DURING THE LAST WEEK?

LAST WEEK: 0 1 2 3 4 5 6

NEGATIVE SELF IMAGE

Includes feelings of inadequacy, inferiority, failure and worthlessness, self depreciation, self belittling. Rate with disregard of how "realistic" the negative self evaluation is.

How do you feel about yourself?

Are you down on yourself?

Do you like yourself as a person? Why?

Describe yourself.

Do you ever think of yourself as ugly? When?

How often?

Do you think you are bright or stupid? Why

Do you often think like that?

Do you think you are better or worse than your friends?

Is any one of your friends worse than you are?

What things are you good at? Any others?

What things are you bad at?

How often do you feel this way about yourself?

What would you like to change about you?

0. No information.
1. Not at all.
2. Slight: Occasional feelings of inadequacy.
3. Mild: Often feels somewhat inadequate, or would like to change his looks or his brains or his personality.
4. Moderate: Often feels like a failure, or would like to change 2 of the above.
5. Severe: Frequent feelings of worthlessness, or would like to change all 3. Occasionally says he hates himself.
6. Extreme: Pervasive feelings of being worthless or a failure. Says he hates himself.

WHAT ABOUT DURING THE LAST WEEK?

LAST WEEK: 0 1 2 3 4 5 6

FEELING UNLOVED/FORLORN

Extent to which subject feels uncared for, unloved, alone in the world.

*Who is the person who cares most about you?
Does he/she care a lot or a little?
Does he/she really love you?
How do ;you know he/she does/doesn't?
When he/she tells you he/she really cares, do you believe her/him?
Is there any one else who cares a lot about you? A little? Who?
When you have problems, is there any one you can tell?
Does he/she listen?
Does he/she try to help? How?*

*IF NO TO THE ABOVE: Do you feel all alone?
How bad does it make you feel?
Do you think about it often?
How much of the time?
Can you get your mind off it?*

WHAT ABOUT DURING THE LAST WEEK?

0. No information.
1. No present.
2. Slight: Occasional feelings of not being loved (i.e. in response to reprimands or punishment).
3. Mild: Often feels neglected or less loved than other children.
4. Moderate: Very often concerned about not being loved, but can be reassured.
5. Severe: Frequent, marked feelings of being unloved; broods about it; difficult to reassure.
6. Extreme: Convinced he/she is unloved; preoccupied with the feeling and cannot be reassured.

LAST WEEK: 0 1 2 3 4 5 6

HOPELESSNESS AND HELPLESSNESS
DISCOURAGEMENT, PESSIMISM

Negative outlook toward the future, regarding his life and his current problems. This item refers to ideational content and not to feelings.

*What do you think is going to happen to you?
Do you think you are going to get better?
Any better?
Do you think we can help you? How?
Do you think anyone can help you? Who? How?
What do you want to do (to be) when you grow up?
Do you think you'll make it? Why not?
Have you given up on life?
Do you ever feel that your death is near?
Do you feel that the world is coming to an end now?
Do you feel that you are going to continue suffering forever?
How often do you feel this way?
Are you sure that there is no hope for you?
How do you know? Could it be that there might be little hope for you?*

0. No information.
1. Not at all discouraged about the future.
2. Slight: Occasional feelings of mild discouragement about future.
3. Mild: Often discouraged. Doubts he will get better.
4. Moderate: Often feels quite pessimistic about the future. Doubts he will make it to being a grown up.
5. Severe: Pervasive feelings of intense pessimism. Has given up. Helpless.
6. Extreme: Delusions or hallucinations that he is doomed, or that the world is coming to an end.

(This rating may be changed to 6 at the time of assessing hallucinations and delusions)

WHAT ABOUT DURING THE LAST WEEK?

LAST WEEK: 0 1 2 3 4 5 6

SELF-PITY

Overly negative evaluation of the patient's past life and current problems. Does not include the future. This item refers only to ideational content and not to feelings.

*Do you feel that life has been harder for you than for your friends?
Are you more unfortunate than others?
Has life been unfair to you?
Do you deserve more than you have
A better deal than you got?
Have things ever turned out right for you?
Sometimes? Never?
Do you feel (think) sorry for yourself?*

0. No information.
1. Does not feel (think) sorry for himself.
2. Occasionally thinks that he is less fortunate than others and things often do not go right for him.
3. Often thinks that life has been unfair to him and he deserves a better fate?
4. Almost constant thoughts that he is a victim of fate or that nothing ever goes right for him.

WHAT ABOUT DURING THE LAST WEEK?

LAST WEEK: 0 1 2 3 4 5 6

ACHES AND PAINS

Somatic complaints of headaches, stomachaches, chest pains, not feeling well, backaches, other aches and pains.

Do not include fatigue, or complaints secondary to a diagnosable medical illness.

Have you been having any pains?

What about headaches, etc.? (see above).

Any other pains?

How often?

How bad do they get?

How often?

Do you get them only when you have to go to school?

What about weekends?

1. Not at all.
2. Slight: Occasionally, at least once every two weeks.
3. Mild: One or more physical symptoms to mild degree, at least once a week.
4. Moderate: One or several symptoms to a considerable degree, at least every other day.
5. Severe: Frequently bothered, almost daily.
6. Extreme: Constantly bothered, almost daily.

WHAT ABOUT DURING THE LAST WEEK?

LAST WEEK: 0 1 2 3 4 5 6

HYPOCHONDRIA'S

Unrealistic concerns with the possibility that he is suffering from a physical. Rate the degree of preoccupation taking into account intensity, unreasonableness, and amount of time spent worrying.

Do you worry much about your health?

...about your bowels?

...about your urine?

...about your eating?

...about your heart?

...about other things? What?

What do you think makes you suffer from (____)?

Are you sure? Could it be something else?

Are you sure you are really sick? in your (____)?

0. No information.
1. Not at all or concern is appropriate to real physical illness.
2. Slight: Occasional excessive concern about body, symptoms, or physical illness.
3. Mild: At times is preoccupied with thinking about illness, without actually feeling sick in any way.
4. Moderate: Frequent preoccupation. > 225% of awake time.
5. Severe: often absorbed. > 50% of awake time.
6. Extreme: Delusional hypochondriasis (somatic delusions).

(This rating might be changed to 6 at the time of assessing hallucinations and delusions.)

WHAT ABOUT DURING THE LAST WEEK?

LAST WEEK: 0 1 2 3 4 5 6

ANHEDONIA, LACK OF INTEREST, APATHY, LOW MOTIVATION, OR BOREDOM

Boredom is a term all children understand and which frequently refers to loss of ability to enjoy (anhedonia) or to loss of interest or both. Loss of pleasure and loss of interest are not mutually exclusive and may coexist.

What are things you used to do for fun? enjoy? (Get examples: sports, friends, favorite games, school subjects, outings, family activities, favorite TV programs, computer or video games, music, dancing, playing alone, reading, hanging out, etc.)

Do you feel bored a lot of the time? Are you bored because you don't enjoy things or because you are not interested in even starting them. Do you feel bored when you think about doing these things you used to do before you began feeling (sad, etc.)? (Give examples mentioned above). Does this stop you from doing those things? Do you (also) feel bored while you are doing things you used to enjoy

Anhedonia refers to partial or complete (pervasive) loss of ability to get pleasure, enjoy, have fun during participation in activities which have been attractive to the child like the ones listed above. it also refers to basic pleasures like those resulting from eating favorite foods and, in adolescents, sexual activities.

*Do you still do the things you used to do for fun before you began to feel (____)?
Do you do less than you used to?
How much less?
Do you have as much fun doing them as you used to before you began feeling (sad, etc.)?
If less fun, do you enjoy them a little less?
Much less?
Not at all?
Do you have as much fun as your friends?
How many things are less fun now than they used to be?
How many are as much fun?
More fun?
What are your favorite foods?
Do you enjoy them as much as you used to?
Are there any foods you really enjoy eating?
Do they taste as good?*

0. No information.
1. All activities are pleasurable and interesting, or more so.
2. Slight: 1 or 2 activities less pleasurable or interesting than before or than his/her friends.
3. Mild: Several activities less pleasurable or interesting. Bored or apathetic over 50% of the time during activities.
4. Moderate: Most activities much less pleasurable or interesting. Bored or apathetic over 75% of the time during activities.
5. Severe: Almost all activities much less pleasurable or interesting. Bored or apathetic 90% of the time during activities.
6. Extreme: Total inability to experience or interest pleasure ("I don't enjoy anything")>?

For adolescents:

Do you enjoy sex as much as you used to?

Do you start to do things that interest you but then find out you are not enjoying them as much?

Loss of interest, apathy, and low motivation refer to partial or complete (pervasive) loss of ability to anticipate enjoyment and to be interested and/or to have the motivation to pursue activities which have been attractive to the child. The child does not desire to engage in activities and does not initiate them. There is a lack of enthusiasm and anticipatory excitement, not caring about, apathy, lack of motivation in the contemplation of doing things he/she would normally look forward to.

Do you look forward to doing the things you used to enjoy? (Give examples.)

Do you try to get into them?

Do you have to push yourself to do your favorite activities?

Do they interest you?

Do you get excited or enthusiastic about doing them?

Why not?

Have you stopped even trying to do things that you used to because they just don't excite you anymore?

How many things are less interesting now than they were before you started feeling (sad, etc.)?

How many things are as interesting? More interesting?

In adolescents: *Are you less sexually active than you used to be?*

This item does not refer to inability to engage in activities (loss of ability to concentrate on reading, games, TV or school subjects).

Two comparisons should be made in each assessment.

Enjoyment as compared to that of peers and/or enjoyment as compared to that of child when not depressed. The second is not possible in episodes of long duration because normally children's preferences change with age. Severity is determined by the number of activities which are less enjoyable to the child, and by the degree of loss of ability to enjoy.

Do not confuse with lack of opportunity to do things which may be due to excessive parental restriction.

FATIGUE, LACK OF ENERGY AND TIREDNESS

This is a subjective feeling. (Do not confuse with lack of interest). (Rate presence even if subject feels it is secondary to insomnia). Differentiate from drowsiness, sleepiness, etc. which should not be rated here.

Have you been feeling tired?

Do you feel tired -

All of the time

Most of the time?

Some of the time?

Now and then?

When did you start feeling so tired?

Was it after you started feeling (____)?

Tell me more about this feeling, is it sleepiness or that you just do not have energy?

Do you spend time resting?

How much?

Do you have to rest?

Do your limbs feel heavy?

Is it very hard to get going? ...to move your legs?

Do you feel like this all the time?

0. No information.
1. Not at all or more energy than usual.
2. Slight: Possible less energy than usual.
3. Mild: At times definitely more tired? or less energy than usual.
4. Moderate: Often feels tired without energy. Has to rest (not sleep) during the day.
5. Severe: Almost all the time feels very tired or without energy or spends a great deal of time resting, (not sleeping). Limbs may feel heavy and hard to move.
6. Extreme: Constant feeling of extreme fatigue or lack of energy or spends most of the time resting. Limbs feel heavy and hard to move.

WHAT ABOUT DURING LAST WEEK?

LAST WEEK: 0 1 2 3 4 5 6

DIFFICULTY CONCENTRATING, INATTENTION,
OR SLOWED THINKING

(School information may be crucial to proper assessment at this time.)

Complaints (or evidence from teacher) of diminished ability to think or concentrate which was not present to the same degree before onset of present episode. (Do not include if associated with formal thought disorder). (Distinguish from lack of interest or motivation.)

*Do you know what it means to concentrate?
Sometimes children have a lot of trouble concentrating.
For instance, they have to read a page from a book,
and can't keep their mind on it so it takes much longer
to do it or they just can't do it, can't pay attention.
Have you been having this kind of trouble?
When did it begin?
Is your thinking slowed down?
If you push yourself very hard can you concentrate?*

*Does it take longer to do your homework?
When you try to concentrate on something, does
your mind drift off to other thoughts?
Can you pay attention in school?
Can you pay attention when you want to do
something you like or do you find it hard even then?
Do you forget about things a lot more?
What things can you pay attention to?
Is it that you cannot concentrate?
or is it that you are not interested.
or don't care?
Did you have this kind of trouble before?
When did it start?*

0. Not enough information.
1. Not at all.
2. Slight: Slight and of doubtful clinical significance
3. Mild: Definitely aware of limited attention span but causes no difficulties other than substantially increased effort in schoolwork
4. Moderate: Interferes with school marks. Forgetful.
5. Severe: Interferes with school work and most other activities. Can't concentrate even when he want to. Very forgetful.
6. Extreme: Unable to do the simplest task, e.g., watch T.V., or engage in a conversation.

PSYCHOMOTOR AGITATION

Includes inability to sit still, pacing, fidgeting, repetitive lip or finger movement, wringing hands, pulling at clothes, and non-stop talking. To be rate positive, such activities should occur while the subject feels depressed, not associated with the manic syndrome, and not limited to isolated periods when discussing something upsetting. Do not include subjective feelings of tension or restlessness which are often incorrectly called agitation. To arrive at your rating, take into account your observations during the interview.

When you feel so (sad), are there times when you can't sit still, or you have to keep moving and can't stop?

Do you walk up and down?

Do you wring your hands? (demonstrate)

Do you pull or rub on your clothes, hair, skin or other things?

Do people tell you not to talk so much?

Did you do this before you began to feel (sad)?

Did you do this before you began to feel (sad)?

When you do these things, is it that you are feeling (sad) or do you feel high or great?

If someone was taking movies of you while you were eating breakfast and talking to your (mother), and they took these movies before you got (depressed) and again while you were (depressed) would I be able to see a difference?

What would it be?

What would I see?

What would I hear?

Probe: Would it talk longer before or while you were (depressed)?

A little longer?

Much longer?

If I saw a videotape or heard an audio tape of your child at home while he/she was depressed and another when he/she wasn't depressed, could I tell the difference? If yes, what would I see (hear) different?

Make sure it does not refer to content of speech or acts or to facial expression. Refer only to speed and tempo.

0. No information.
1. Not at all, retarded, or associated with manic syndrome.
2. Slight: Increase which is of doubtful significance.
3. Mild: Unable to sit quietly in a chair fidgeting or pulling and/or rubbing.
4. Moderate: Frequent temper tantrums or marked inability to sit in class, always disruptive.
5. Marked: Pacing, hand wringing, or very frequent temper tantrums. Increased activity both at home and school.
6. Extreme: Almost constantly moving or pacing about or nonstop talking. Hyperactive in all settings.

CURRENT EPISODE: 0 1 2 3 4 5 6

LAST WEEK: 0 1 2 3 4 5 6

Manifestations included:

Specific behavior ratings

Rate only current episode.

- 0. No information.
- 1. Not present.
- 2. Doubtful.
- 3. Present (mild or moderate).
- 4. Severe.

Unable to sit still.

CURRENT EPISODE: 0 1 2 3 4 5 6 7

Pacing.

CURRENT EPISODE 0 1 2 3 4 5 6 7

Hand wringing.

CURRENT EPISODE 0 1 2 3 4 5 6 7

Pulling or rubbing on hair, clothing, skin.

CURRENT EPISODE 0 1 2 3 4 5 6 7

Can't stop talking; talks on and on.

CURRENT EPISODE 0 1 2 3 4 5 6 7

PSYCHOMOTOR RETARDATION

Visible, generalized slowing down of physical movements, reactions, and speech. It includes long speech latencies. Make certain that slowing down actually occurred and is not merely a subjective feeling. To arrive at your rating take into account your observations during the interview.

*Since you started feeling (sad) have you noticed that you can't move as fast as before?
Have you found it hard to start talking?
has your speech slowed down?
Do you talk a lot less than before?
have you felt like you moving in slow motion?
Have other people noticed it?*

If someone was taking movies of you while you were eating breakfast and talking to your (mother), and they took these movies before you got (depressed) and again while you were (depressed) would I be able to see a difference?

What would it be?

What would I see?

What would I hear?

Probe: *Would it take longer before or while you were (depressed)?*

A little longer?

Much longer?

If I saw a videotape or heard an audio tape of your child at home while he/she was depressed and another when he/she wasn't depressed, could I tell the difference? If yes, what would I see (hear) different?

Make sure it does not refer to content of speech or acts or to facial expression. Refer only to speed and tempo.

0. No information.
1. Not at all.
2. Slight, and of doubtful clinical significance.
3. Mild: Conversation is noticeably retarded but not strained, and/or slowed body movement.
4. Moderate: Conversation is difficult to maintain, and/or hardly moves at all.
5. Marked: Conversation is difficult to maintain, and/or move very slowly.
6. Extreme: Conversation is almost impossible, mute and immobile most of the time (depressive stupor).

CURRENT EPISODE: 0 1 2 3 4 5 6

LAST WEEK: 0 1 2 3 4 5 6

Manifestations include:

Specific behavior ratings

Rate only current episode.

- 0. No information.
- 1. Not present.
- 2. Doubtful.
- 3. Present (mild or moderate).
- 4. Severe.

Slowed Speech	CURRENT EPISODE:	0	1	2	3	4	5	6
Increased pauses before answering	CURRENT EPISODE:	0	1	2	3	4	5	6
Low or monotonous speech	CURRENT EPISODE:	0	1	2	3	4	5	6
Mute or markedly decreased amount of speech	CURRENT EPISODE:	0	1	2	3	4	5	6
Slowed body movements	CURRENT EPISODE:	0	1	2	3	4	5	6
Depressive stupor	CURRENT EPISODE:	0	1	2	3	4	5	6

SOCIAL WITHDRAWAL

Frequency of contact and depth of involvement with family members, friends, or other social situations compared to usual before onset of illness (or to peers' social involvement if episode of disorder was long >1 or 2 years). The key issue is child's degree of initiative to be with and interact with others. Differentiate from social isolation. A withdrawn child is not happy with his withdrawal, and withdrawal is limited to the duration of the overall disorder.

Since you started to feel so (sad), do you prefer to play by yourself or with other children?

Do you like to be with your friends or do you prefer to be alone?

Was it different before you started to feel so sad?

What kinds of things have you been doing by yourself?

Do your friends have more friends than you do?

Have you lost friends since you started feeling sad?

Who?

Why, what happened?

Who is your best friend now?

When did you see him/her last?

What did you do together before you started feeling so sad?

Are you a member of any clubs like the Boy Scouts, etc.?

Have you been going to their activities as much as before? How come?

Have you avoided seeing them? Why?

Have you stopped calling your friends?

If your friend comes for you, do you play or do you tell him to go away?

0. No information.

1. Not at all, no change from usual or increased contact.

2. Less contact or slight avoidance, but of doubtful clinical significance.

3. Mild: Somewhat less involved or sometimes avoids social contact that he ordinarily participates in.

4. Moderate: Definitely less involved when with people or often avoids social contact that he ordinarily participates in. Has lost friends.

5. Severe: Goes out of his way to avoid many social situations that he ordinarily participates in.

6. Extreme: Actively avoids all social contact that he ordinarily participates in.

WHAT ABOUT DURING LAST WEEK?

LAST WEEK: 0 1 2 3 4 5 6

SOCIAL ISOLATION

Refers to a lifelong pattern of lack of friends and relationships with humans, which results from persistent preference for being alone. Differentiate from Social Withdrawal, which may be lifelong in children, but it is not secondary to a preference, and the child feels badly about it.

Did you ever have any close friends?

When was the last time?

Did you ever enjoy being with friends?

or did you always prefer to be by yourself?

Did you mother or anyone else ever try to get you to make friends?

What did you do?

If always remained isolated by preference, ask:

Did you feel this way even when you were not sad (depressed, blue, etc.?)

WHAT ABOUT DURING THE LAST WEEK?

0. No information.

1. Not present.

2. Slight: Not very sociable but can enjoy activities with peers and sometimes initiates them.

3. Mild: Prefers to be alone but could engage in some social activities if actively encouraged.

4. Moderate: Indifferent to social contact; very difficult to encourage him/her to participate.

5. Severe: Has always been a "loner" by preference; cannot be encouraged to associate with peers.

6. Extreme: Totally non-social; truly enjoys isolation and actively avoids peer contact.

LAST WEEK: 0 1 2 3 4 5 6

INSOMNIA

Sleep disorder, including initial middle and terminal difficulty in getting to sleep or staying asleep. Do not rate if he feels no need for sleep. Take into account the estimated number of hours slept and the subjective sense of lost sleep. Normally a 6-8 year old child should sleep about 10 hours + 1 hour. 9-12 - 9 hours + 1 hour. 12-16 years - 8 hours + 1 hour.

Have you had trouble sleeping?

What kind of trouble?

How long does it take you to fall asleep?

Do you wake up in the middle of the night?

How many times?

Any reason for it (urinating, nightmares)?

At what time do you wake up in the morning?

Is that later or earlier than usual?

Do you wake up before you want or have to get up?

Or before your mother calls you?

Do you feel you would sleep more if you could?

For how long have you been having trouble sleeping?

Are you having this trouble-

Every night?

Almost every night?

Sometimes?

Only now and then?

Do you feel rested when you wake up?

Do you feel not rested through 3 hours after being up?

Have you at some point slept during the day and been awake during the night just could not sleep?

WHAT ABOUT DURING THE LAST WEEK?

0. No information.

1. Not at all, or feels no need for any sleep.

2. Slight: Occasional difficulty.

3. Mild: Often (at least 2 times a week) has some significant difficulty. (At least 1 hour to fall asleep, or bedtime delayed for one hour. No middle or terminal insomnia.)

4. Moderate: Usually has considerable difficulty. (Either at least 2 hours initial insomnia, or any middle or terminal insomnia unrelated to urination, lasting up to half an hour). Feeling of unrestorative sleep.

5. Severe: Almost always has great difficulty. Either at least 3 hours initial insomnia or any middle or terminal insomnia lasting over one hour total. Considerable circadian reversal.

6. Extreme: Claims he almost never sleeps and feels exhausted the next day or complete circadian inversion.

LAST WEEK: 0 1 2 3 4 5 6

TYPES OF INSOMNIA (if you rated 3-6)

Specific Sleeping Behavior Ratings

Rate only current episode.

0. No information.
- 1 Not present.
2. Doubtful (or < 30 Minutes)
3. Definitely present, mild to moderate (or 30 minute-1 ½ Hour.)
4. Definitely present, severe (or over 1 ½ Hours).

Initial Insomnia: difficulty falling asleep.

CURRENT EPISODE:0 1 2 3 4

Middle insomnia: difficulty staying asleep, preceded and followed by sleep.

CURRENT EPISODE:0 1 2 3 4

Terminal insomnia: difficulty staying asleep the usual amount of time or final awakening after 5 hours of sleep.

CURRENT EPISODE:0 1 2 3 4

Circadian reversal. Regularly falls asleep no earlier than 4AM and wakes Up no earlier than noon. Not under voluntary control.

CURRENT EPISODE:0 1 2 3 4

Non-restorative sleep: Does not feel rested upon awakening.

CURRENT EPISODE:0 1 2 3 4

Daytime sleepiness - Feels drowsy or sleepy during the day.

CURRENT EPISODE:0 1 2 3 4

HYPERMOMNIA

Do not rate positive if daytime sleep time plus nighttime true sleep time = norm (compensatory naps)

Increased need for sleep, sleeping more than usual. Inquire about hypersomnia even if insomnia was rated 3-6.

Sleeping more than norms in 24 hour period.

Are you sleeping longer than usual?

Do you go back to sleep after you wake up in the morning?

When did you start sleeping longer than usual?

What about taking long naps during the day?

Did you used to take naps before?

When did you start to take naps?

How many hours did you use to sleep before you started to feel so (sad)?

Parents may say that if child was not awakened he/she would regularly sleep >11 - 12 hours and he/she actually does so, every time he/she is left on his own. This should be rated 3.

WHAT ABOUT DURING LAST WEEK?

0. No information.
1. Not at all, or needs less sleep than usual.
2. Occasionally sleeps more than usual.
3. Frequently sleeps at least 1 hours more than usual, or regularly sleeps much longer if not forced out of bed by parent or other authority.
4. Frequently sleeps at least 2 hours more than usual.
5. Frequently sleeps at least 3 hours more than usual.
6. Frequently sleeps at least 4 hours more than usual.

LAST WEEK: 0 1 2 3 4 5 6

ANOREXIA

Appetite compared to usual or to peers if episode is of long duration. Make sure to differentiate between decrease of food intake because of dieting and because of loss of appetite. Rate here loss of appetite only.

How if your appetite?

Are you eating more or less than before?

Do you leave food on plate?

When did you begin to lose your appetite?

Do you have to force yourself to eat?

When was the last time you felt hungry?

Are you on a diet?

What kind of diet?

WHAT ABOUT DURING THE LAST WEEK?

0. No information.
1. Not at all - normal or increased.
2. Slight decrease of questionable clinical significance.
3. Mild decrease.
4. Moderate decrease.
5. Rarely feels hungry.
6. Never feels hungry.

LAST WEEK: 0 1 2 3 4 5 6

WEIGHT LOSS

Total weight loss from usual weight since onset of the present episode (or maximum of 12 months). Make sure he has not been dieting. In the assessment of weight loss it is preferable to obtain recorded weights from old hospital charts or the child's pediatrician. Failure to gain 1.5 kg. over a 6 month period for children between 5 and 11 years old qualifies as weight loss, as does loss of percentile grouping over a 6 month period (Iowa tables). Groupings are: Under 3rd %tile; between 3-10; 10-25; 50-75; 75-90; 90-97; and over 97th %tile. Rate this item even if later he regained weight or became overweight. If possible, rater should have verified weights available at time of interview.

*Have you lost any weight since you started feeling sad?
How do you know?
Do you find your clothes are looser now? your belt?
When was the last time you were weighed?
How much did you weigh then?
What about now? (measure it).*

- 0. No information.
- 1. No weight loss (stays in same percentile grouping).
- 2. Weight loss or failure to gain 1.5 kg. (3.3 lb.) or doubtful.
- 3. Weight loss plus failure to gain between 1.5 kg. - 3 kg.(3.3 - 6.6 lb.).
- 4. Weight loss plus failure to gain 3 kg. - 4.5 kg. (6.6 - 9.9 lb.).
- 5. Weight loss plus failure to gain between 10-24% of ideal body weight.
- 6. Weight loss of 25% or more of ideal body weight.

WHAT ABOUT DURING THE LAST WEEK?

LAST WEEK: 0 1 2 3 4 5 6

INCREASED APPETITE

As compared to usual. Inquire about this item even if anorexia and/or weight loss were rated 3-6.

*Have you been eating more than before?
Since when?
Is it like you feel hungry all the time?
Do you feel this way every day?
Do you eat less than you would like to eat?
Why?
Do you eat especially sweets?
What do you eat too much of?*

- 0. No information.
- 1. Not at all - normal or decreased.
- 2. Slight increase of questionable clinical significance.
- 3. Mild increase.
- 4. Moderate increase.
- 5. Hungry most of the time, but restrains self.
- 6. Hungry most of the time and eats without restraint.

WHAT ABOUT DURING THE LAST WEEK?

LAST WEEK: 0 1 2 3 4 5 6

STRONG CRAVING FOR SWEETS

- 0. No information.
- 1. Absent.
- 2. Doubtful.
- 3. Present (mild to moderate)
- 4. Severe.

WHAT ABOUT DURING THE LAST WEEK?

LAST WEEK: 0 1 2 3 4

WEIGHT GAIN

Total weight gain from usual weight during present episode (or a maximum of the last 12 months) not including gaining back weight previously lost or not gained according to the child's usual percentile for weight.

Have you gained any weight since you started feeling sad?

How do you know?

Have you had to buy new clothes because the old ones did not fit any longer?

What was your last weight?

Where were you last weighed?

- 0. No information.
- 1. No weight gain (stays in same percentile).
- 2. Weight gain under 1.5 kg. 3.3 lb.) or doubtful.
- 3. Weight gain over his/her percentile between 1.5 kg. - 3 kg.
- 4. Weight gain over his/her percentile between 3.1 kg. - 4.5 kg. (6.7 - 9.9 lb.).
- 5. Weight gain over his percentile between 4.6 kg. - 6 kg. (10 - 13.2 lb.).
- 6. Weight gain over his percentile over 6 kg. (13.2 lb.).

WHAT ABOUT DURING THE LAST WEEK?

LAST WEEK: 0 1 2 3 4 5 6

SUICIDAL IDEATION

This includes preoccupation with thoughts of death or suicide and auditory command hallucinations where the child hears a voice telling him to kill himself or even suggesting the method. Do not include mere fears of dying.

Sometimes children who get upset or feel bad think about dying or even killing themselves.

Have you had such thoughts?

Do you have a plan?

Have you told anybody (about suicidal thoughts)?

When did you start to think about suicide?

Have you actually tried to kill yourself?

When?

What did you do?

Any other thing?

Did you really want to die?

How close did you actually come to doing it?

- 0. No information.
- 1. Not at all.
- 2. Slight: Thoughts of his death (without suicidal thoughts), "I would be better off dead" or "I wish I were dead: or only in the context of anger.
- 3. Mild: Occasional thoughts of suicide but has not thought of a specific method.
- 4. Moderate: Often thinks of suicide and has thought of a specific method.
- 5. Severe: Often thinks of suicide and has thought of, or mentally rehearsed a specific plan, or has made a suicidal gesture of a communicative rather than a potentially medically harmful type, or has heard a voice telling him to kill himself.
- 6. Extreme: has made preparations for a potentially serious suicidal attempt.
- 7. Very extreme: Suicidal attempt with definite intent to die or potentially medically harmful.

WHAT ABOUT DURING THE LAST WEEK?

LAST WEEK: 0 1 2 3 4 5 6 7

SUICIDAL ACTS - NUMBER

Number of discrete suicidal acts (gestures or attempts) since onset of the present episode (or up to the last 12 months).

Note "0" indicates none or no information

WHAT ABOUT DURING THE LAST WEEK?

SUICIDAL ACTS - SERIOUSNESS

Judge the seriousness of suicidal intent as expressed in his suicidal acts like: Likelihood of being rescued; precautions against discovery; actions to gain help during or after attempt; degree of planning; apparent purpose of the attempt (manipulative or truly suicidal intent).

How id you try to kill yourself?

Was anybody in the room?

In the apartment?

Did you tell them in advance?

How were you found?

Did you really want to die?

Did you ask for any help after you did it?

WHAT ABOUT DURING THE LAST WEEK?

SUICIDAL ACTS - MEDICAL LETHALITY

Actual medical threat to life or physical condition following the most serious suicidal act. Take into account the method, impaired consciousness at time of being rescued, seriousness of physical injury, toxicity of ingested material, reversibility, amount of time needed for complete recovery and how much medical treatment is needed.

How close were you to dying after your (most serious suicidal act)?

- 0. No information or no attempt.
- 1. Obviously no intent, purely manipulative gestures.
- 2. Not sure or only minimal intent.
- 3. Definite but very ambivalent.
- 4. Serious.
- 5. Very serious.
- 6. Extreme (every expectation of death).

LAST WEEK? 0 1 2 3 4 5 6

- 0. No information.
- 1. No danger, e.g., no effects, held pills in hand.
- 2. Minimal, e.g., scratch on wrist.
- 3. Mild, e.g., took 10 aspirins, mild gastritis.
- 4. Moderate, e.g., took 10 seconds, had brief unconsciousness.
- 5. Severe, e.g., cut throat, hanging.
- 6. Extreme, e.g., respiratory arrest, prolonged coma.

Appendix D

The Cognitive Triad Inventory for Children

CTI - Children

Instructions: Circle the answer which best describes your opinion. Choose only one answer for each idea. Answer the items for what you are thinking RIGHT NOW. Remember fill this out for how you feel today.

- | | | | |
|---|-----|-------|----|
| 1. I do well at many different things. | Yes | Maybe | No |
| 2. Schoolwork is no fun. | Yes | Maybe | No |
| 3. Most people are friendly and helpful. | Yes | Maybe | No |
| 4. Nothing is likely to work out for me. | Yes | Maybe | No |
| 5. I am a failure. | Yes | Maybe | No |
| 6. I like to think about the good things that will happen for me in the future. | Yes | Maybe | No |
| 7. I do my schoolwork okay. | Yes | Maybe | No |
| 8. The people I know help me when I need it. | Yes | Maybe | No |
| 9. I think that things will be going very well for me a few years from now. | Yes | Maybe | No |
| 10. I have messed up almost all the best friendships I have ever had. | Yes | Maybe | No |
| 11. Lots of fun things will happen for me in the future. | Yes | Maybe | No |
| 12. The things I do every day are fun. | Yes | Maybe | No |
| 13. I can't do anything right. | Yes | Maybe | No |
| 14. People like me. | Yes | Maybe | No |
| 15. There is nothing left in my life to look forward to. | Yes | Maybe | No |

- | | | | | |
|-----|---|-----|-------|----|
| 16. | My problems and worries will never go away. | Yes | Maybe | No |
| 17. | I am as good as other people I know. | Yes | Maybe | No |
| 18. | The world is a very mean place. | Yes | Maybe | No |
| 19. | There is no reason for me to think that things will get better for me. | Yes | Maybe | No |
| 20. | The important people in my life are helpful and nice to me. | Yes | Maybe | No |
| 21. | I hate myself. | Yes | Maybe | No |
| 22. | I will solve my problems. | Yes | Maybe | No |
| 23. | Bad things happen to me a lot. | Yes | Maybe | No |
| 24. | I have a friend who is nice and helpful to me. | Yes | Maybe | No |
| 25. | I can do a lot of things well. | Yes | Maybe | No |
| 26. | My future is too bad to think about. | Yes | Maybe | No |
| 27. | My family doesn't care what happens to me. | Yes | Maybe | No |
| 28. | Things will work out okay for me in the future. | Yes | Maybe | No |
| 29. | I feel guilty for a lot of things. | Yes | Maybe | No |
| 30. | No matter what I do, other people make it hard for me to get what I need. | Yes | Maybe | No |
| 31. | I am a good person. | Yes | Maybe | No |
| 32. | There is nothing to look forward to as I get older. | Yes | Maybe | No |
| 33. | I like myself. | Yes | Maybe | No |

- | | | | | |
|-----|--|-----|-------|----|
| 34. | I am faced with many difficulties. | Yes | Maybe | No |
| 35. | I have problems with my personality. | Yes | Maybe | No |
| 36. | I think that I will be happy as I get older. | Yes | Maybe | No |

Appendix E

Children's Attributional Style Questionnaire

Name _____

Date _____

KASTAN-R CASQ

Directions

Here are some situations. I want you to try really hard to imagine that these situations just happened to you. After each situation is presented, two possible reasons for why the situation might have happened are given. I want you to choose the most likely reason to explain why the situation happened to you.

Sometimes both of the reasons may sound true, and sometimes both may sound false, and, you may never have been in some of these situations. But even so, I want you to pick the reason that seems to explain why the situation happened to you.

There are no right answers and no wrong answers, so always pick the reason that seems the most likely to you.

Circle either "A" or "B" for each question. I can read along with you, if that helps.

1. You get an "A" on a test.
 - A. I am smart.
 - B. I am good in the subject that the test was in.
2. You play a game with some friends and you win.
 - A. No one I know plays that game well.
 - B. I play that game well.
3. You spend a night at a friend's house and you have a good time.
 - A. My friend was in a friendly mood that night.
 - B. Everyone in my friend's family was in a friendly mood that night.
4. You go on a vacation with a group of people and you have fun.
 - A. I was in a good mood.
 - B. The people I was with were in good moods.
5. All of your friends catch a cold except you.
 - A. I have been healthy lately.
 - B. I am a healthy person.
6. Your pet gets run over by a car.
 - A. I don't take good care of my pets.
 - B. Drivers are not cautious enough.
7. Some kids that you know say that they do not like you.
 - A. Once in a while people are mean to me.
 - B. Once in a while I am mean to other people.

8. You get very good grades.
 - A. School work is simple.
 - B. I am a hard worker.
9. Your friend tells you that you look nice.
 - A. My friend liked the way I looked that day.
 - B. My friend likes the way I look.
10. A good friend tells you that he hates you.
 - A. My friend was in a bad mood that day.
 - B. I wasn't nice to my friend that day.
11. You tell a joke and no one laughs.
 - A. I do not tell jokes well.
 - B. The joke is so well known that it is no longer funny.
12. Your teacher gives a lesson and you do not understand it.
 - A. I didn't pay attention to anything that day.
 - B. I didn't pay attention when my teacher was talking.
13. You fail a test.
 - A. Teachers make hard tests.
 - B. Sometimes teachers make hard tests.
14. You gain a lot of weight and start to look fat.
 - A. The food that I have to eat is fattening.
 - B. I like fattening foods.
15. A person steals money from you.
 - A. That person is dishonest.
 - B. People are dishonest.
16. Your parents praise something that you make.
 - A. I am good at making some things.
 - B. My parents like some things I make.
17. You play a game and you win money.
 - A. I am a lucky person.
 - B. I am lucky when I play games.
18. You break a glass.
 - A. I am not careful enough.
 - B. Sometimes I am not careful enough.
19. You are invited to a lot of parties.
 - A. A lot of people have been acting friendly toward me lately.
 - B. I have been acting friendly toward a lot of people lately.
20. A grown-up yells at you.
 - A. That person yelled at the first person he saw.
 - B. That person yelled at a lot of people he saw that day.

21. You do a project with a group of kids and it turns out badly.
A. I don't work well with the people in the group.
B. I never work well with a group.
22. You make a new friend.
A. I am a nice person.
B. The people that I meet are nice.
23. You have been getting along well with your family.
A. I am easy to get along with when I am with my family.
B. Once in a while I am easy to get along with when I am with my family.
24. You try to sell candy, but no one will buy any.
A. Lately a lot of children are selling things, so people don't want to buy anything else from children.
B. People don't like to buy things from children.
25. You put a hard puzzle together.
A. Sometimes I am good at putting puzzles together.
B. Sometimes I am good at putting things together.
26. You get a bad grade in school.
A. I am stupid.
B. Teachers are unfair graders.
27. You walk into a door and you get a bloody nose.
A. I wasn't looking where I was going.
B. I have been careless lately.
28. You have a messy room.
A. I did not clean my room that day.
B. I usually do not clean my room.
29. You twist your ankle in gym class.
A. The past few weeks the sports we played in gym class have been dangerous.
B. The few past weeks I have been clumsy in gym class.
30. Your parents take you to the beach and you have a good time.
A. Everything at the beach was nice that day.
B. The weather at the beach was nice that day.
31. You take a train which arrives so late that you miss a movie.
A. The past few days there have been problems with the train being on time.
B. The trains are almost never on time.
32. Your mother makes you your favorite dinner.
A. There are a few things that my mother will do to please me.
B. My mother likes to please me.

33. A team that you are on loses a game.
A. The team members don't play well together.
B. That day the team members didn't play well together.
34. You finish your homework quickly.
A. Lately I have been doing everything quickly.
B. Lately I have been doing schoolwork quickly.
35. Your teacher asks you a question and you give the wrong answer.
A. I get nervous when I have to answer questions.
B. That day I got nervous when I had to answer questions.
36. You do not get your chores done at home.
A. I was lazy that day.
B. Many days I am lazy.
37. You go to an amusement park and you have a good time.
A. I usually enjoy myself at amusement parks.
B. I usually enjoy myself.
38. You have a fight with a friend.
A. I was in a bad mood that day.
B. My friend was in a bad mood that day.
39. You get all the toys you want on your birthday.
A. People always guess what toys to buy me for my birthday.
B. This birthday people guessed right as to what toys I wanted.
40. You go to a friend's party and you have fun.
A. Your friend gives good parties.
B. Your friend gave a good party that day.
41. Your neighbors ask you over for dinner.
A. Sometimes people are in kind moods.
B. People are kind.
42. You have a substitute teacher and she likes you.
A. I was well behaved during class that day.
B. I am almost always well behaved during class.
43. You make your friends happy.
A. I am a fun person to be with.
B. Sometimes I am a fun person to be with.
44. You get a free ice cream cone.
A. I was friendly to the ice cream man that day.
B. The ice cream man was feeling friendly that day.
45. At your friend's party the magician asks you to help him out.
A. It was just luck that I got picked.
B. I looked really interested in what was going on.

46. You try to convince a kid to go to the movies with you, but he won't go.
A. That day he did not feel like doing anything.
B. That day he did not feel like going to the movies.
47. Your parents have a big fight.
A. It is hard for people to get along well.
B. It is hard for people who are married to get along well.
48. You have been trying to get into a club and you do not get in.
A. There are a lot of things that I am not good at.
B. I am not good at the things that people in the club do.

Appendix F

Life Events Checklist

Life Events Checklist

Below is a list of things that sometimes happen to people. Put an "X" in the space by each of the events you have experienced during the past year (12 months). For each of the events you check also mark whether the event was a good event or a bad event. Finally, choose how much you feel the event has changed or has had an impact or effect on your life by placing a circle around the statement that best fits you (no effect - some effect - moderate effect - great effect). Remember, for each event you have experienced during the past year, (1) mark an "X" in the space to show that you have experienced the event, (2) mark whether you think the event was good or bad, and (3) mark how much effect the event has had on your life.

(Put and "X" only if it happened in past year)

Event	Has it happened to you?	Type of event		Effect on you			
		Good	Bad	No effect	Some effect	Moderate effect	Great effect
1. Moving to a new home	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
2. New brother or sister	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
3. Changing to new school	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
4. Serious illness or injury to a family member	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
5. Parents divorced	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
6. Major arguments between you and mom or dad	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
7. Mother or father lost job	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
8. Death of a family member	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
9. Parents separated	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect

Event	Has it happened to you?	Type of event		Effect on you			
10. Death of a close friend	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
11. Increased absence of parents at home	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
12. Brother or sister leaving home	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
13. Serious illness or injury to a close friend	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
14. Parent getting into trouble with the law	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
15. Parent getting a new job	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
16. New step-parent	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
17. Parent going to jail	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
18. Change in parent's financial status (less money at home)	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
19. Trouble with brother or sister	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
20. Special recognition for good grades	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
21. Joining a new club	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
22. Loosing a close friend	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect

Event	Has it happened to you?	Type of event		Effect on you			
		Good	Bad	No effect	Some effect	Moderate effect	Great effect
23. Decrease in number of arguments with parents	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
24. (boys only) Girlfriend or friend getting pregnant	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
25. (girls only) Getting pregnant or friend getting pregnant	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
26. Losing a job	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
27. Making the honor roll	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
28. Getting your own car	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
29. New boyfriend or girlfriend	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
30. Failing a grade	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
31. Increase in number of arguments with parents	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
32. Getting into trouble with police	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
33. Major personal illness or injury	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
34. Breaking up with boyfriend or girlfriend	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
35. Making up with boyfriend or girlfriend	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
36. Trouble with teacher	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect

Event	Has it happened to you?	Type of event		Effect on you			
37. (boys only) Girlfriend or friend having abortion	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
38. (girls only) Having abortion or friend having abortion	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
39. Failing to make an athletic team	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
40. Making failing grades on report card	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
41. Making an athletic team	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
42. Trouble with classmates	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
43. Getting put in jail	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect
Other events, in the past year, that have had an impact on your life		Type of event		Effect on you			
44.	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect

45.	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect

46.	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect

47.	_____	Good	Bad	No effect	Some effect	Moderate effect	Great effect

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Vita

Meredith Ann Doxey was born in Virginia Beach, Virginia in 1969 to Sugar and Alvin Doxey, the fifth child after Jeff, Clay, Brad, and Randie. Meredith graduated from The Norfolk Academy in 1987. Meredith attended Randolph-Macon Woman's College for one year. She received her Bachelor's of Arts Degree from Loyola College in Maryland in 1992. Meredith began a Master's program in Clinical Psychology at Loyola, where she served as a teaching assistant for graduate courses in cognitive and personality assessment. At that time, she also worked in a school that served children ages three to twelve years old who were classified as "severely emotionally disturbed." Meredith left Baltimore to pursue her doctorate in School Psychology at The University of Texas in 1994. She was awarded the Christine Anderson Scholarship. While at UT, Meredith has served as a tutor and academic coach for student athletes, a teaching assistant for undergraduate courses in Human Sexuality and in Statistics, and as a graduate research assistant for the Health Promotions Department of University Health Services. She also conducted research and published in the areas of depression in children and adolescents and cognitive theories of depression. Meredith completed her pre-doctoral internship with Dallas Public Schools in the summer of 2000, after which she performed psychological assessments for the Austin Independent School District for two years. For the past

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