The Dissertation Committee for Melanie Elizabeth Ballatore certifies that this is the approved version of the following dissertation:

Interpersonal Schemas of Adolescents with Depressive and Disruptive Disorders

Committee:

Kevin Stark, Supervisor

Edmund Emmer

Alexandra Loukas

Cindy Carlson

Janay Sander

Interpersonal Schemas of Adolescents with Depressive and Disruptive Disorders

by

Melanie Elizabeth Ballatore, B.A.; M.A.

Dissertation

Presented to the Faculty of the Graduate School of

the University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

Doctor of Philosophy

The University of Texas at Austin

December 2006

Acknowledgements

I would like to thank my advisor, Kevin Stark for his guidance and support throughout my graduate career. He has shaped my development as a practitioner, researcher, and educator in a manner that has earned my gratitude and admiration.

I would like to thank Cindy Carlson, Alex Loukas, Janay Sander, and Edmund Emmer. When deciding on committee members, I selected the professors I admired most. Their insights have made this a better dissertation and have reinforced my admiration. Their patience and encouragement have earned my sincere gratitude.

Finally, I would like to thank my family--my parents, Gil and Lexi Ballatore, for showing me that any dream can be reached with persistence and hard work, and my husband, Michael Weinfeld, for providing me with unconditional support and encouragement. I could not have completed this dissertation without you.

Interpersonal Schemas of Adolescents with Depressive and Disruptive Disorders

Publication No._____

Melanie Elizabeth Ballatore, Ph.D.
The University of Texas at Austin, 2006

Supervisor: Kevin Stark

While the interpersonal and cognitive characteristics of youth Depressive Disorders have been widely researched, the majority of research into Disruptive Disorders has focused on the examination and treatment of its behavioral correlates. This study sought to shed light onto the ways in which adolescents with Disruptive Disorders perceive interpersonal relationships. More specifically it sought to identify how those cognitive patterns are similar to or different from those identified in youth with Depressive Disorders. Participants were 66 youth (ages 12 to 17) from a residential treatment facility, with Depressive, Disruptive, or Co-morbid Depressive and Disruptive Disorders and a control group of 29 youth (ages 11 to 18) from a middle and high school. One difficulty in examining the cognitions and emotions of individuals with Disruptive Disorders is that the population is by definition guarded and dishonest. Past research has suggested that projective tests such as the Thematic Apperception Test (TAT; Murray, 1943) may be more likely to circumvent the defense mechanisms of these individuals. In this study the TAT was used to identify the interpersonal schema of individuals with Disruptive Disorders using a coding system (The Interpersonal Schema Analysis) developed for the current study. Fisher's LSD procedure indicated significant differences

between groups on Aggression and Entitlement, but did not indicate significant differences on domains more traditionally associated with Depressive Disorders.

Table of Contents

List of Tables

1. Introduction

1.1 Overview of Psychopathology in Youth

Depressive and Disruptive Disorders are some of the most common and harmful psychological diagnoses among children and adolescents (Hammen & Rudolph, 1996; Hinshaw & Anderson, 1996). Due to their significant impact, these disorders have been widely studied in an attempt to understand their development and inform treatment and prevention. While this understanding is still evolving, it is clear that these disorders are the result of a complex interaction of multiple factors (Burke, Loeber, & Brimaher, 2002; Cicchetti & Toth, 1998; Dodge & Petit, 2003; Krol, Morton, & DeBruyn, 2004; Lewinsohn, Joiner, & Rohde, 2001). For example, research suggests that interpersonal and cognitive factors are not only integrally linked to the development of both Disruptive and Depressive Disorders, but are also influenced by these disorders (Conduct Problems Research Group, 2002; Crick & Dodge, 1994; Dodge & Petit, 2003; Gotlib & Hammen, 1992).

The surprising frequency of the co-occurrence of such discrepant disorders highlights the complexity of their development (Costello, Mustillo, Erkanli, Keeler, & Angold, 2003). There has been a recent recognition of the frequency of comorbidity and a move toward further study (Angold, Costello, & Erkanli, 1999; Stahl & Clarizio, 1999). Research in the area is largely preliminary and few have specifically investigated the comorbidity of Disruptive and Depressive Disorders. Thus, while the influence of cognitive and interpersonal factors are well documented among “pure” Depressive and Disruptive Disorders (Dodge, 1993), their influence on their co-occurrence is largely

theoretical. Given the frequency with which these disorders co-occur, it seems important to increase our understanding of the interpersonal cognitions of this group.

1.2 Evolution of Theory

1.2.1 Cognitive Theory

The development of the cognitive approach to psychology was largely a reaction to the external focus of behavioral theory. This movement did not reject the importance of behavior, but sought to understand the mental processes that underlie it (Kendall, 1985). According to Beck's (1967) cognitive theory, environmental factors do not influence behavior directly. Instead, the way an individual experiences and interprets events is more critical to behavioral outcome than are the events themselves (Beck, Rush, Shaw, & Emery, 1979). Thus, two individuals witnessing the same event may understand and interpret it differently. For example, two children in a classroom where the teacher frequently raises her voice may have different understandings of her behavior. One may greet her raised voice with alarm and assume that the teacher is very upset, reacting with strong emotions such as anger or sadness. Another may interpret her behavior as an attempt to gain the class's attention and act accordingly.

According to cognitive theory, different attributions are largely due to different experiences (Beck et al., 1979; Crick & Dodge, 1994). In the previous example, the first child may live in a household where yelling occurs infrequently and is a signal of great distress. The second may live in a household where raising one's voice is commonly used for emphasis. In this way previous experience forms expectations and frameworks of

understanding, often called schemas, which guide an individual’s decisions and behavior (Beck et al., 1979; Crick & Dodge, 1994).

Schemas being unconscious (Beck, 1991) make interpretations feel like fact. They are part and parcel of the experience. The thoughts and experiences of the children in the example have a functional basis. They were formed in a particular environment and probably increased the child's functioning in that environment. A healthy cognitive schema is flexible (Crick & Dodge, 1994; Lohr, Teglasi, & French, 2004; Shirk, 1998; Stein, 1994). Ideally, the first child would probably come to understand that the teacher is not terribly angry and gradually would stop feeling alarmed every time the teacher's voice was raised.

According to cognitive theory, psychopathology occurs when an individual adapts to a difficult or dysfunctional environment and generalizes this experience maladaptively to new situations (Beck, 1991; Stein, 1994). For example, a child who's home is quite turbulent may use past experience to discern an inaccurate attribution for their teachers behavior and interpret the behavior as threatening. Experience may have taught them that the appropriate response to raised voices is to argue. Thus, the child might behave in a confrontational manner toward a teacher who was merely trying to get the class's attention. His behavior, which may have been adaptive at home, will cause problems in the school setting. Experience has provided him with a powerful set of expectations and it is likely that this child will be less able to understand that the school environment differs from that of his home and so he will persist in his maladaptive behavior.

In addition, an individual's maladaptive behavior often leads to situations that serve to strengthen their cognitive biases. In this example, the teacher is likely to react negatively to the confrontational child. Her negative reaction is likely to reinforce the child's original interpretation: now she is indeed upset with him. In this way, an individual's inaccurate or biased cognitions are self-reinforcing and become more and more resistant to change.

Despite evidence that cognitive intervention is among the most effective treatments for Depressive and Disruptive Disorders, some have criticized cognitive theory for neglecting the developmental origins of cognitions. While Beck (1991) disputes this charge, acknowledging that multiple factors contribute to the development of psychopathology and asserts that interpersonal cognitions are a primary target of cognitive intervention, there remains a call toward further integration of interpersonal factors with cognitive theory.

1.2.2 Interpersonal Theory

The interpersonal view of depression arose in response to the cognitive model of depression. Joiner, Coyne, and Blalock (1999) elegantly summarize the difference in perspective; “The strongest implication of the interpersonal approach is that depression not only has interpersonal features and consequences but also is fundamentally interpersonal in nature” (pp. 7). Thus, interpersonal theory does not reject cognitive theory; rather it differs in emphasis. The central tenet is that the roots of depression lie in interpersonal events (Coyne, 1976; Markowitz, 2003). The approach has been greatly influenced by attachment theory (Hammen et al., 1995) wherein the early interactions

between primary caregiver (usually the mother) and infant set the stage for a developing understanding of self in relation to others (Bretherton, 1992). It appears that a healthy early relationship can serve as a protective factor. There is substantial evidence that mothers who are not responsive and warm toward their infants contribute to an insecure attachment style, which has been associated with a host of negative outcomes (Burge, Hammen, Davila, Daley, Paley, Lindberg, et al., 1997; Cowan, Cohn, Cowan, & Pearson, 1996; Rosenstein & Horowitz, 1996; Verschueren & Marcoen, 1999). Interpersonal theories of depression point to the significant impairment in social functioning (Rudolph, Hammen, & Burge, 1997) and faulty interpersonal cognition (Hammen et al., 1995) associated with child and adolescent depression as evidence of the importance of interpersonal variables in the understanding and treatment of depressive disorders.

It is thought that the basis for psychopathology arises through early interactions in which the individual develops an understanding of self in relationship to others that is persistent and negative (Rudolph et al., 1997). For example, a child who experiences early rejection might develop an expectation that all people will reject them in some way. Due to early experiences the individual is unable to reconcile any reassurance or support they may receive with their negative beliefs about themselves in relation to others. As a result they are likely to seek reassurance continually, with a frequency that becomes annoying to others (Joiner, Metalsky, Katz, & Beach, 1999). As others become annoyed, their reactions to the individual naturally become more negative or at least less positive. Naturally, the individual sees this as confirmation of the schema of interpersonal rejection reinforcing their negative expectations of interpersonal interactions. While not

yet researched, it seems likely that Interpersonal theory can generalize to other disorders, including DIs, which are highly influenced by interpersonal events (Fergusson, Lynskey, & Horwood, 1996; Moffitt, 1993a).

1.2.3 Integration of Cognitive and Interpersonal Theory

There is strong empirical support for and many similarities between the components of both the cognitive and interpersonal models of psychopathology (Westen, Lohr, Silk, Gold, & Kerber, 1990). Increasingly there is a move toward the integration of the two models (Rudolph et al., 1997; Safran, 1990). As cognitive theory has evolved it has moved toward a more interactional model focusing on interpersonal experiences and cognitions. This evolution has not discarded old theory but instead builds upon the fundamental theory that cognition is central to psychopathology.

The increased consideration of interpersonal influences and experiences seems especially apropos when considering the psychology of children and adolescents. While relationships are important across all stages of development, children's' and adolescents' relationships with adults are influential in the development of psychopathology (Jewell & Stark, 2003; Shirk, 1998). It is important to note, however, that the quality of adult-child interpersonal relationships is not deterministic. Rather, it is the individual's way of understanding and making meaning of such events that determines the onset of psychological difficulties (Dodge, 1993).

1.3 Schemas

Schemas are cognitive structures which, by organizing past experiences and attributions, serve to inform future responses. They represent a host of assumptions, expectations, rules, and attributions that allow individuals to efficiently process new or unfamiliar experiences (Baldwin, 1992). This process is unconscious and instantaneous, especially within emotionally laden situations, and prevents the necessity of sorting through a large amount of information. Individuals "construct" these structures from information gleaned through life experience. These schemas form a "lens" through which an individual perceives their experience. Healthy schemas are flexible and provide individuals with accurate, constructive information (Lohr et al., 2004; Shirk, 1998) allowing individuals to assimilate or accommodate new experiences for future reference.

There is substantial evidence that children and adolescents with various disorders show striking and inflexible patterns of cognition, albeit different patterns with different disorders. While a "healthy" schema is "stable but flexible" (Stein, 1994), providing an ability to accommodate new experiences without distorting them, individuals with Depressive and Disruptive Disorders show a tendency to distort incongruent information to fit their schemas (Beck et al., 1979; Dodge & Petit, 2003; Shirk, Boergers, Eason, & Van Horn, 1998).

1.3.1 Interpersonal Schemas

Primarily, cognitive therapists focus on schemas while interpersonal therapists emphasize interpersonal cognitions. These two models, however, find common ground in the construct of Interpersonal or Relational Schema (Shirk, 1998). Baldwin (1992)

defines interpersonal schemas as “cognitive structures representing regularities in patterns of interpersonal relatedness” (pp. 461). The construct allows for overlap between the concept of self and the concept of other (Baldwin, 1997). Indeed, both interpersonal and cognitive theorists propose that the two are fundamentally linked and mutually influential. The individual’s self-concept is, at least in part, determined by their understanding of how others see him or her and vice versa.

According to Blatt (1991), “cognitive structures emerge initially in the intensity of the caring interpersonal relationship and are subsequently extended as a generalized schema” (pp. 450). This description raises a question probed by many researchers. What happens when the relational context in which the schema emerges is not caring? Many have hypothesized that flawed early primary relationships lead to a distorted and negative view of interpersonal interactions and a negative view of the self in such a context (Shirk, 1998). Additionally, many researchers have found links between difficulties in early, primary relationships and later interpersonal difficulties and psychopathology (Fergusson et al., 1996; Messer & Gross, 1995; Sanders, Dadds, Johnston, & Cash, 1992; Stark, Humphrey, Laurent, Livingston, & Christopher, 1993).

An explanation of this link is that early relationships, positive and negative, influence expectations about later interpersonal events (Dodge & Petit, 2003; Lohr et al., 2004; Shirk, 1998). Like prophecies, these expectations generate behaviors that elicit interpersonal experiences that confirm and reinforce the expectations and schemas. A cycle develops. Negative early relationships produce negative self-views and interpersonal expectations, which garner more negative interpersonal experiences

resulting in more, engrained negative interpersonal schemas. With ongoing reinforcement, these schemas become increasingly rigid and generalized (Crick & Dodge, 1994; Shirk, 1998).

Whether or how these cognitive structures lead to psychopathology is still open to debate. Though inaccurate and negative cognitions are strongly linked to depressive disorders (Rudolph et al., 1997; Shirk et al., 1998; Stark et al., 1993) and Soygut and Savasir (2001) found a link between depression and interpersonal schemas in adults. The attachment literature and investigations into social cognition and behavior linked to DIs suggest that these individuals also hold characteristic and dysfunctional interpersonal beliefs and expectations (Dodge, 2003).

1.3.2 Relationship of Interpersonal Schemas to Psychopathology

Shirk (1998) proposes Interpersonal Schemas as the mechanism that links past and future interpersonal experiences. Interpersonal theorists propose that when interpersonal experiences are consistently inadequate to meet an individual's needs, maladaptive expectations and understandings of human interaction are formed. Because he or she has always seen themselves and others from this perspective, the individual is unaware of the distortion and accepts it as reality. Thus, an individual who experienced early relationships characterized by negativity will tend to view neutral interactions as negative (Cicchetti, & Sroufe, 2000; Dodge & Petit, 2003). While maladaptive cognition is clearly linked to negative early relationships (Dodge, 1993), the nature of cognitive distortion appears to vary according to the quality of negative interactions. These differing experiences lead to differing expectations and understanding which in turn is

associated with differing psychological symptomatology (Dodge, 1993; Goldstein, Gould, Alkire, Rodnick, & Judd, 1970; Westen et al., 1990). Individuals with depressive symptomatology or diagnoses tend to place great importance on interpersonal relationships (Martin et al., 2003; Prinstein & Aikins, 2004) hold overly negative views of others and expect others to view them and interact with them in a negative manner (Stark, Schmidt, & Joiner, 1996). In contrast, individuals with Disruptive Disorders tend to exhibit hostile attribution biases and expect positive outcomes to result from aggressive and antisocial behavior (Dodge & Petit, 2003; Dodge, Price, Bachorowski, & Newman, 1990; McKeough, Yates, & Marini, 1994; Perry, Perry, & Rasmussen, 1986).

1.4 Rationale for Current Study

1.4.1 Disruptive Disorders

While research into neuropsychological, interpersonal, and environmental factors associated with Disruptive Disorders has proven fruitful, research into associated cognitive factors has been largely neglected. This is surprising since the majority of promising treatments for Disruptive Disorders are cognitive-behavioral in orientation (Brestan & Eyeberg, 1998; Reid, 1993). Considering that the nature of an individual's interpersonal relationships and cognitions is integral to diagnosis, it would seem likely that such an understanding would facilitate prevention and intervention.

Baker (1998) has proposed that youth "with conduct problems have fundamentally different early social experiences" (p. 32). Research supports this proposition. Since cognitive and interpersonal theory assert that schemata are formed through early experience, it is likely that the early experiences associated with Disruptive

Disorders would lead to distinct interpersonal schemata. Although the research into the cognitions of youth with Disruptive diagnoses is relatively limited, it is informative. It provides evidence that the cognitions of aggressive children are biased toward the perpetuation of aggressive behavior, and are often erroneous in their evaluation of social situations (Barrett, Rapee, Dadds, & Ryan, 1996; Dodge & Schwartz, 1997; Perry et al., 1986; Sanders et al., 1992).

1.4.2 Depressive Disorders

Depressive Disorders are among the most common during adolescence (American Academy of Child and Adolescent Psychiatry, 1998). Their development amongst youth is a complex process that varies by individual and developmental stage. The contributions of cognitive and interpersonal factors appear to be particularly important to the development and maintenance of Depressive Disorders in youth (Rudoph, Hammen, & Burge, 1997). Furthermore, treatment modalities that are interpersonal and/or cognitive in focus are among the most efficacious (Michael & Crowley, 2002; Weisz, Weiss, Han, Granger, & Morton, 1995). A substantial body of research has yielded a picture of the cognitions and interpersonal relationships of depressed youth (Cole, Jacquez, & Maschman, 2001; Gladstone, Kaslow, Seeley, & Lewinsohn, 1997; Joiner, 2000; Kaslow, Stark, Printz, Livingston, & Tsai, 1992; Laurent & Stark, 1993; McCauley, Mitchell, Burke, & Moss, 1988; McGrath & Repetti, 2002; Sheeber, Hops, & Davis, 2001). More specifically, negative expectations, a negative sense of self, and a sense of helplessness characterize the interpersonal cognitions of depressed youth. That these specific cognitions can serve to differentiate depressive from anxiety disorders is

clear (Stark et al., 1993). What is less clear is the extent to which interpersonal cognitions differentiate depressed youth from those with Disruptive Disorders (Garber & Kaminski, 2000).

1.4.3 Comorbid Depressive and Disruptive Disorders

While research into comorbid psychopathology among youth is currently gaining in prominence, research is limited and many results are contradictory (Marmorstein & Iacono, 2004; Stahl & Clarizio, 1999). Conceptualizations of these seemingly contradictory disorders make specific hypotheses about the cognitions of youth with comorbid Disruptive and Depressive Disorders difficult. It is well established that comorbidity is associated with increased dysfunction as compared to individuals with a single diagnosis. There is some evidence that youth with these comorbid diagnoses exhibit a more maladaptive conceptualization of interpersonal motivations and relationships. But it is unclear whether they display cognitions more like their Disruptive or Depressed only peers or if their cognitive patterns are unique.

1.5 Purpose of Current Study

One difficulty in examining the cognitions and emotions of individuals with Disruptive Disorders is that the population is by definition guarded and dishonest. Past research has suggested that projective tests such as the Thematic Apperception Test (Murray, 1943) may be more likely to circumvent the defense mechanisms of these individuals. Furthermore, schemata are unconscious and projective measures are intended to allow access to thoughts and emotions that are not easily accessed through direct questioning. In this study the TAT will be used to identify the interpersonal schema of

individuals with Disruptive Disorders, Depressive Disorders, and youth with both Depressive and Disruptive Disorders using a coding system for interpersonal schema.

Although different interpersonal experiences and cognitions have been associated with Depressive and Disruptive diagnoses (Dodge, 1993) the extent to which these cognitions are unique has not been adequately explored. The purpose of this study is to explore the interpersonal schemas associated with these diagnostic groups. This study will aim to shed light onto the ways in which adolescents with Disruptive Disorders, Depressive Disorders, or Comorbid Disruptive and Depressive Diagnoses perceive interpersonal relationships. More specifically it will seek to identify those cognitive patterns which are indicative of these disorders.

2. Review of the Literature

2.1 Overview

This chapter will provide an overview of the research literature pertaining to factors that influence the interpersonal schemas of youth with Depressive, Disruptive, and Comorbid Disruptive and Depressive Disorders . It will begin with a discussion of factors relevant to DIs, followed by similar discussions of Depressive and Comorbid Disruptive/Depressive Disorders. This discussion concludes with a rationale for the hypothesis that youth with Depressive, Disruptive, or Comorbid Disruptive/Depressive Disorders exhibit significantly different interpersonal schemas.

2.2. Disruptive Disorders in Youth

Within the DSM-IV-TR (2000) taxonomy there are two disorders of childhood and adolescence which may be considered “Disruptive Disorders”: Disruptive Defiant Disorder (ODD) and Conduct Disorder (CD) (Angold et al., 1999; Burke et al., 2002; Romano, Tremblay, Vitaro, Zoccolillo, & Pagani, 2001). Broadly, these disorders are characterized primarily by behavior that lies outside of social rules and norms and causes significant impairment in adaptive functioning (American Academy of Child and Adolescent Psychiatry, 1997).

It has been well established that there is a developmental sequence in which an individual progresses from Oppositional Defiant Disorder in early and middle childhood to Conduct Disorder (CD) in adolescence and from CD to Antisocial Personality Disorder (APD) in adulthood (Angold et al., 1999; Lahey et al., 1994; Lyons-Ruth,

1996). Progression through these disorders reflects a gradual increase in the severity of antisocial behavior. It is important to clarify, however, that at no point is this trajectory deterministic (Burke et al., 2002; Fergusson et al., 1996). Levels of antisocial behavior have been shown to fluctuate within individuals over time and in some cases such behavior will cease completely (Lahey, Loeber, Burke, & Rathouz, 2002; Loeber & Stouthamer-Loeber, 1998). There are also individuals who begin to manifest such behavior during later stages of life, especially adolescence (Fergusson et al., 1996; Moffitt, 1993a), although research indicates that later onset antisocial behavior is typically less severe (Broidy, Nagin, Tremblay, Bates, et al., 2003; Lahey et al., 2000). Generally, it appears that the longer aggression persists, the more severe it becomes (Kupersmidt & Coie, 1990). There is evidence that this pattern applies to individuals who meet diagnostic criteria for Disruptive Disorders as well (Lahey, et al, 1998; Lynam, 1998).

2.2.1 Oppositional Defiant Disorder

a. DSM-IV-TR Diagnostic Criteria

The DSM-IV-TR (2000) defines Oppositional Defiant Disorder (ODD) as "a recurrent pattern of negativistic, defiant, disobedient, and hostile behavior toward authority figures" (pp. 100) which persists at least 6 months and includes at least four of the following: (1) frequent loss of temper, (2) frequent arguments with adults, (3) frequent noncompliance with adult requests or rules, (4) intentionally annoying others, (5) blaming others for one's own mistakes or misbehavior, (6) easily annoyed by others, (7) frequently angry or resentful, (8) frequently spiteful or vindictive (DSM-IV-TR,

2000, pp. 100). Such behavior must represent harmful dysfunction and be developmentally inappropriate. If the symptoms occur exclusively during psychotic episodes or as a result of a mood disorder, a diagnosis of ODD is not appropriate. Finally, the individual must be less than 18 years old and the presence of Conduct Disorder (CD) or Antisocial Personality Disorder (APD) supercedes that of ODD.

Youth with ODD are likely to experience co-morbid diagnoses, including Depressive disorders (Ford, Goodman, & Meltzer, 2003; Rowe, Maughan, Pickles, Costello, & Angold, 2002), and especially Attention-Deficit/Hyperactivity Disorder (ADHD) (Biederman, Munir, & Knee, 1987; Costello et al., 2003; Maughan, Rowe, Messer, Goodman, & Meltzer, 2004). Given the high levels of co-morbidity of ADHD and ODD, some have called into question the independence of the two disorders. Recent research has supported the hypothesis that while these two disorders may be strongly linked, possibly causally, they are in fact independent disorders (Burns, Boe, Walsh, Sommers-Flanagan, & Teegarden, 2001; Loeber, Burke, Lahey, Winters, & Zera, 2000). Antisocial behavior is not a component of ADHD. Rather it is a feature that is sometimes associated with the diagnosis. In other words individuals with ADHD are at risk for antisocial behavior and related diagnoses as an outcome (American Academy of Child and Adolescent Psychiatry, 1997; Moffitt, 1993b).

b. Prevalence of ODD

Research into ODD is surprisingly limited and as a result most information regarding prevalence is preliminary and inconsistent, depending on sample and methodology, with estimates using population studies ranging from 2% to 16% (Costello

et al., 2003; DSM-IV-TR, 2000). While many studies indicate an increased prevalence of ODD in male youth (Loeber et al., 2000; Maugham, Rowe, Messer, Goodman, & Meltzer, 2004), the magnitude of this discrepancy appears to vary across development (Lahey et al., 2000) and females with ODD have been rarely studied. Research also indicates that a diagnosis of ODD is somewhat more likely amongst youth from a low socio-economic background and amongst minority youth (Loeber et al., 2000).

2.2.2 Conduct Disorder

a. DSM-IV-TR Diagnostic Criteria

According to the DSM-IV-TR (2000) diagnostic criteria, the defining feature of Conduct Disorder (CD) is "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. 98-99). In order to receive a diagnosis of Conduct Disorder, three of the four following criterial categories must be present: (1) aggression to people and animals, (2) destruction of property, (3) deceitfulness or theft, (4) serious violation of rules. These symptoms must cause impairment in social, academic, or occupational functioning. In those over age 18, a diagnosis of Antisocial Personality Disorder (APD) supersedes CD. When Oppositional Defiant Disorder (ODD) and CD co-occur, the latter will take precedence. As a component of diagnosis, a subtype of childhood, adolescent, or unspecified onset must be specified. Symptoms beginning prior to age ten meet criteria for childhood onset type Conduct Disorder, while onset after age ten designates the adolescent onset subtype. If the age of onset is unknown, the diagnosis is coded as unspecified onset. In addition, a

determination of severity is required (e.g. mild, moderate, or severe) (DSM-IV-TR, 2000).

More often than not, Conduct Disorder co-occurs with other diagnoses (Krueger, Caspi, Morritt, & Silva, 1998; Stahl & Clarizio, 1999). The most common co-occurring disorder is ADHD (American Academy of Child and Adolescent Psychiatry, 1997; Angold et al., 1999; Ford et al., 2003; Maugham et al., 2004), and the relationship between the two disorders is similar to that between ODD and ADHD (Fergusson et al., 1996; Moffitt, 1993b). Comorbid diagnoses of depression (Ford et al., 2003) and anxiety (Costello et al., 2003) also occur more often than would be expected by chance (American Academy of Child and Adolescent Psychiatry, 1997; Angold et al., 1999).

b. Prevalence of CD

Prevalence rates for Conduct Disorder (CD) generally range from 1% to 9% of children and adolescents (American Academy of Child and Adolescent Psychiatry, 1997; Costello et al., 2003; Lahey, et al., 1998). CD is substantially more common in males than it is in females (American Academy of Child and Adolescent Psychiatry, 1997; Lahey, et al., 2000; Maugham et al., 2004; Romano et al., 2001) however this gap appears to be lessening. There is some indication that presentation, etiology, and prognosis may differ with gender (American Academy of Child and Adolescent Psychiatry, 1997; Crick & Dodge, 1996; DSM-IV-TR, 2000; Lyons-Ruth, 1996) although the true extent and nature of these differences is as yet unclear (Lahey et al., 2000). Research suggests some variation in the rates of CD across ethnic and socioeconomic groups, with a tendency for some ethnic minorities, especially African-

Americans, to be over-represented amongst those diagnosed (American Academy of Child and Adolescent Psychiatry, 1997; Bird, Canino, Davies, Zhang, Ramirez, & Lahey, 2001). The extent and nature of these differences varies significantly across studies and Ethnicity and SES are frequently confounded (Shaw, Bell, & Gilliom, 2000).

It is more difficult to estimate the prevalence of the subtypes of CD because the designation is fairly new. Only one study has directly examined the prevalence of the subtypes. Lahey et al. (1998) investigated their occurrence in both a community and clinical/inpatient sample. In the community sample, 5.8% of the participants met criteria for CD; of those who met criteria, the ratio of childhood to adolescent onset cases was 53:21. In the clinical sample, 28.6% of the participants met criteria for CD, of those who met criteria; the ratio of childhood to adolescent onset cases was 97:22. Thus, in both samples childhood onset CD was more than twice as frequent as was adolescent onset CD.

2.3 Development of Disruptive Disorders

Behavioral problems are the most common reason for referral of children and adolescents to psychological clinics (American Academy of Child and Adolescent Psychiatry, 1997). Diagnostic criteria for Disruptive Disorders are meant to identify those with the most problematic behavior. A large body of research seeks to understand the development of individuals with Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD) in order to facilitate prevention and treatment. The development of Disruptive Disorders in children and adolescents appears to be a complex process marked by both multifinality and equifinality of causal factors. While the greatest predictor of

future oppositional behavior is past oppositional behavior (Broidy et al., 2003; Kupersmidt & Coie, 1990), it appears that a diversity of factors including intrachild (Dodge & Petit, 2003; Dodge et al., 1990; Fergusson et al., 1996; Lahey et al., 2002; McKeough et al., 1994; Moffitt, 1993a; Speltz, DeKlyen, Calderon, Greenberg, & Fisher, 1999; Toupin, Dery, Pauze, Mercier, & Fortin, 2000), environmental (Conduct Problems Prevention Group, 2002; Tiet et al., 2001), and interpersonal (Burke et al., 2002; Dodge & Petit, 2003; Fergusson et al., 1996; Moffitt, 1993a; Mrung, Hoza, & Bukowski, 2004) influences contribute to the initiation and maintenance of oppositional behavior. The causation of Disruptive Disorders is further complicated by apparent differences in causal and maintaining influences by gender (American Academy of Child and Adolescent Psychiatry, 1997; Broidy et al., 2003; Crick, 1996; Perry et al., 1986), age (Dodge & Petit, 2003; Moffitt, 1993a), and socio-economic status (American Academy of Child and Adolescent Psychiatry, 1997; Beyers, Loeber, Wikstrom, & Stouthamer-Loeber, 2001; Dodge & Petit, 2003; Fergusson et al., 1996; Lahey et al., 2002). What follows is a review of factors that appear to be the most salient to the causation and maintenance of ODD and CD.

2.3.1 Intrachild Factors

There has been significant debate over the extent to which genetic and neurological factors influence the development of Disruptive Disorders (DIs) (see Teichner & Golden, 2000 for review). While such intrachild factors appear to impact the onset and maintenance of oppositional behavior, direct causality is still unproven. Most likely, intrachild factors act in concert with environmental and interpersonal variables to

produce levels of problem behavior sufficient to meet the threshold for disorder (Blair & Frith, 2000; Burke et al., 2002; Dodge & Petit, 2003; Moffitt, 1993a).

a. Genetic

There is substantial evidence that genetic factors play a role in the development of ODD, CD, and APD (American Academy of Child and Adolescent Psychiatry, 1997; O'Connor, McGuire, Reiss, Hetherington, & Plomin, 1998). Research indicates that the risk for externalizing behavior in a pair of monzygotic twins is significantly greater than for dizygotic twins (Gjone & Stevenson, 1997). Also, Huesman, Eron, Lefkowitz, and Walder's (1984) longitudinal study found aggressive behavior to be more stable across generations than it was within individuals. While these results do not establish genetic causality, and do not address Disruptive Disorders directly, they raise the possibility that some individuals are born predisposed to these disorders. Dodge and Petit (2003) point out that the likelihood of a single gene responsible for such a predisposition is unlikely. Rather, they propose that multiple genetic factors combine to constitute a predisposition.

b. Neuropsychological

Some have proposed that genetic factors manifest in neuropsychological irregularities that are related to antisocial behavior in youth (Teichner & Golden, 2000). Research in this area is plagued by methodological confounds and has yet to establish whether such relationships are causal, how they operate amongst subgroup populations, or how they interact with other factors (Burke et al., 2002; Cicchetti & Sroufe, 2000). Information into the origin and nature of biological substrates that underlie such deficits is limited and it is likely that many youth with Disruptive Diagnoses are

neuropsychologically intact (Hill, 2002). Thus, at this time, biological correlates of Disruptive Diagnoses are best conceptualized simply as risk factors. Broadly, it appears that various structures and processes related to activation and inhibition of aggressive behavior malfunction in a subset of youth with elevated levels of antisocial behavior (Krol et al., 2004). These irregularities most likely constitute predispositions that interact with environmental factors to produce increased levels of antisocial behavior (Blair & Frith, 2000; Dodge & Petit, 2003). While an exhaustive review of the neuropsychological literature is beyond the scope of this paper, what follows is a brief review of the most well researched and strongly correlated neuropsychological factors.

Perhaps the strongest empirical link exists between verbal deficits and antisocial behavior (Moffitt, 1993b; Speltz, DeKlyen, Calderon, et al., 1999; Teichner & Golden, 2000). Most studies find that many children and adolescents who exhibit elevated levels of antisocial or aggressive behavior also score below their nonaggressive counterparts on measures of verbal knowledge and functioning (Dery, Toupin, Pauze, Mercier, & Fortin, 1999). Dodge and Petit (2003) suggest that early verbal deficits prevent youth from using verbal solutions to problems and promote an over-reliance on physical solutions. This, in turn, contributes to problematic interpersonal relationships and impairs verbally mediated learning, which might otherwise serve to teach more adaptive problem solving.

An inconsistent but widely reported relationship has been found between executive functioning and the development and severity of Disruptive Disorders (American Academy of Child and Adolescent Psychiatry, 1997; Bauer & Hesselbrock, 2001; Blair & Frith, 2000; Keenan, Loeber, Zhang, Stouthamer-Loeber, & Van Kammen,

1995; Moffitt, 1993b). Impaired executive functioning, characterized by deficits in planning ability, attention, cognitive flexibility, concept formation, and inhibition, has been linked to significant impairment in social functioning (Blair & Frith, 2000). Unfortunately the origin, magnitude and frequency of a link between executive functioning and Disruptive Disorders varies across studies (Teichner & Golden, 2000). In sum, it appears that biological factors render some youth especially vulnerable to the influence of environmental and interpersonal difficulties resulting in increased likelihood of developing ODD or CD.

c. Temperament

Temperament can be defined as regular patterns of behavior present from very early in development and stable over time. Broadly, it refers to an individual's reactivity to their environment and the ability to effectively manage the impact of external stimuli (effortful control). While there is ongoing debate, beyond the scope of this review, over the extent to which temperament is an expression of underlying neurobiology, it appears likely that an individual's temperament is at least in part biologically based (Gjone & Stevenson, 1997; Nigg, 2006; Whittle, Allen, Lubman, & Yucel, 2005). There is evidence that specific types of psychopathology are linked to specific qualities of temperament, although the nature of the causal relationship (e.g. moderation, mediation) between temperamental qualities and psychopathology is not yet clear.

Early research has identified a particular temperamental style characterized by high levels of activity and reactivity, negative emotionality, low adaptability, and poor effortful control which has been linked to the development of disruptive disorders (Frick

& Morris, 2003; Giancola, Mezzich, & Tarter, 1998; Keenan, Shaw, Delliquadri, Giovanelli, & Walsh, 1998; Muris & Ollendick, 2005; Olson, Sameroff, Kerr, Lopez, and Wellman, 2005). The nature of the relationship of this temperamental style to other risk factors is still unclear, but it is theorized that it acts upon and is acted upon by biological, interpersonal, environmental, and cognitive factors (Leve, Kim, & Pears, 2005; Nigg, 2006) to result in disruptive disorders.

2.3.2 Environmental Factors

While biological factors make a contribution to the development of Disruptive Disorders, it appears that their effect is influenced by external factors. Indeed, social and economic setting appear to impact many factors that are correlated with the development of Disruptive Diagnoses in youth. Specifically, it appears that the influence of an environment characterized by violence and social disadvantage is often important to the development of Disruptive Disorders, particularly during adolescence (American Academy of Child and Adolescent Psychiatry, 1997; Beyers et al., 2001; Fergusson et al., 1996). It is hypothesized that these environments foster antisocial behavior and offer few influences that serve to protect youth from the development of DIs (Campbell, Shaw, & Gilliom, 2000; Shaw et al., 2000).

a. Socio-Economic Status

Socio-Economic Status (SES) is probably the most widely studied environmental correlate of Disruptive Disorders and there is strong evidence that it acts as both a risk and a protective factor. For example, youth with early CD behaviors are more likely to improve in high-income families (Lahey et al., 2002) and research suggests that

biological factors are more likely to contribute to the development of Disruptive Disorders amongst high SES youth (Beyers et al., 2001). In contrast, youth in low SES environments are clearly at higher risk for the development of Disruptive Disorders. Neighborhoods characterized by low socio-economic status increase the likelihood and frequency of exposure to significant stressors such as poverty, mobility, parental unemployment, and crime. All of these act as risk factors for conduct problems (Campbell et al., 2000; Dodge & Petit, 2003; Ford, Goodman, & Meltzer, 2004; Shaw et al., 2000; Tiet et al., 2001). Association with antisocial peers is more likely to occur in high crime neighborhoods (Shaw et al., 2000) and has been strongly indicated in the development of adolescent antisocial behavior (McCabe, Hough, Wood, & Yeh, 2001). Not only does such association occur more frequently in low SES settings, but also the effect of deviant peer influence appears to be magnified in low-income neighborhoods (Campbell et al., 2000). When taken together, this research suggests that SES acts as a risk factor for youth in low SES areas and a protective factor for youth in high SES areas. Thus SES is an important factor to consider in the prevention and treatment of youth Disruptive Diagnoses.

b. School Environment

The impact of school environment is less well studied, but likely influential in the development or prevention of Disruptive Disorders. As children enter an elementary school environment, which requires increased social interaction and compliant behavior, they become more likely to meet diagnostic criteria for Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD) (Coie & Jacobs, 1993; Huesmann et al, 1984; Lahey

et al., 1994; Lyons-Ruth, 1996). The verbal and executive functioning difficulties associated with DIs often contribute to poor academic performance (Fergusson et al., 1996). As a result, many children with behavioral problems end up in special education or are retained, both of which have been shown to increase the likelihood of problematic behavior (Conduct Problems Prevention Group, 2002; Dodge & Petit, 2003). The research of Nagin, Pagani, Tremblay, and Vitaro (2003) indicates that school retention may have an especially negative impact upon youth exhibiting above average physical aggression. Thus, it appears that school's typical responses to childhood behavior problems may serve to increase the likelihood that such behavior will worsen and reach the diagnostic threshold for ODD or CD.

2.3.3 Interpersonal Factors

It appears that the development of Diruptive Disorders is a complex process that involves the reciprocal relationships between variables, and varies across individuals. Factors that are most consistently related to Disruptive Diagnoses involve a complex, transactional process that evolves and changes over time. Interpersonal factors appear to be consistently implicated in the process. They have been shown to influence and be influenced by multiple environmental (Gorman-Smith, Tolan, & Henry, 2000), cognitive (Dodge & Petit, 1993), and biological variables (Moffitt, 1993b; Tolan & Thomas, 1995). Compared to non-disordered peers, youth with Disruptive Disorders exhibit broadly impaired social functioning across the course of development regardless of age of onset, and youth with the most severe impairment exhibiting the most disturbed interpersonal relationships (Fergusson et al., 1996). Parent-child relationships appear to be key to

early-onset Disruptive Disorders while peer relationships largely determine the development of adolescent onset Disruptive Disorders (Moffitt, 1993a). Finally, targeting of interpersonal factors have proven to be necessary to effective treatment of Disruptive youth (Brestan & Eyeberg, 1998). There are several mechanisms by which problematic interpersonal functioning has been shown to increase the likelihood that an individual will develop a Disruptive Disorder.

a. Family Interaction

Parent-child relationships are important to the development of oppositional behavior problems, especially early-onset and highly persistent antisocial behavior (Patterson, Forgatch, Yoerger, & Stoolmiller, 1998). Family factors seem to operate primarily through the reciprocity of the relationship between parent and child (Patterson, 1986). Ideally, the parent-child relationship sets the stage for the development of adaptive social skills and mutually beneficial relationships. In the case of youth who develop Disruptive Disorders , these family processes frequently fail to provide these critical factors (Tremblay, 2004).

There is significant evidence that the parent-child relationship during infancy influences the development of Disruptive Disorders. Research into the interaction between parent and infant (sometimes referred to as attachment) has found that highly dysfunctional (insecure) infant-caregiver interactions predict later antisocial behavior (Greenberg, Speltz & DeKlyen, 1993; Renken, Egeland, Marvinney, Mangelsdorf, & Sroufe, 1989; Waters, Posada, Crowell & Lay, 1993). More specifically, a relationship characterized by unpredictable and non-responsive caretaker behavior, resulting in a

haphazard and ineffective interpersonal interaction style in the child (disorganized attachment style), has been shown to be predictive of later aggression (Lyons-Ruth, 1996; Moss, Cyr, & Dubois-Comtois, 2004; Shaw, Owens, Vondra, Keenan, & Winslow, 1996; Wakschlag & Hans, 1999). This, in turn, increases the likelihood that an individual will go on to develop ODD or CD (Campbell, Pierce, Moore, Marakovitz, & Newby, 1996; Caspi, Moffitt, Morgan, Rutter, Taylor, Arseneault et al., 2004).

Researchers have also investigated the impact of infant and child characteristics or temperament upon early parent-child relationships. There is some evidence that difficult child temperament (e.g. lack of persistence, noncompliance) plays a role in these maladaptive early relationships (Shaw, Keenan, & Vondra, 1994), however, it appears that difficult temperament is a nonspecific predictor of psychopathology (Keenan et al., 1998; Speltz, DeKlyen, & Greenberg, 1999). Shaw et al.'s (1996) longitudinal study investigated which child and parent factors present at twelve months of age best predicted aggression at five years of age. Early predictors included difficult child temperament, lack of parental support, parent antisocial behavior, and psychopathology.

As development progresses, the interaction between parent and child begins to reciprocally encourage maladaptive behavior. In their review of relevant literature, Dodge and Petit (2003) identified a pattern of parenting characterized by "inconsistent and harsh discipline, physical harshness of discipline practices (abuse), lack of warmth between parent and child and (lack of) teaching behaviors by the parent" as strongly linked to the maintenance and consolidation of antisocial behavior during childhood. Patterson (1986) provided evidence that such parenting practices foster an aggressive and

manipulative interpersonal style in children, and other researchers have found similar relationships (Jaffee, Caspi, Moffitt, & Taylor, 2004; Stormshak, Bierman, McMahon, Lengua, & Conduct Problems Prevention Group, 2000; Stouthamer-Loeber, Loeber, Homish, & Wei, 2001).

It is believed that over time these youth develop an increasingly solidified, distorted understanding of interpersonal relationships and their role in them which then generalizes to relationships outside of the family. The research of Pierce, Ewing, and Campbell (1999) and Shaw et al. (1996) indicate that parental perception of their child as difficult or hard to manage is a key factor associated with negative behavioral outcome. Parenting behavior becomes further entrenched over time, reinforcing the child's distorted interpersonal perceptions. Research also indicates that supportive parenting serves to prevent and decrease levels of aggression in children over time (Conduct Problems Prevention Research Group, 2002; Webster-Stratton, 1998). Other research has identified the family as key in the development of "concern for others" (Hastings, Zahn-Waxler, Robinson, Usher, & Bridges, 2000).

In sum, it appears that family factors in and of themselves constitute early and ongoing risk factors for the development of Disruptive Disorders. Furthermore, these factors serve to influence other contributing factors such as interpersonal cognition and behavior. Both parent and child factors interact to produce an understanding of interpersonal relationships that is maladaptive and this understanding is reinforced through repeated experience. Thus, interaction between parent and child sets the stage for children's broader understanding of and strategies for interacting with others.

b. Peer Influence

As children reach school age, relationships with peers offer new interpersonal experiences. The family background of most youth with early antisocial behavior prevents them from developing the interpersonal skills vital to the formation of positive peer relationships and increases the likelihood that they will utilize strategies (i.e. aggression) which alienate peers (Patterson, 1986). Research has made it clear that aggression and antisocial behavior during the childhood years are associated with peer rejection (Bierman & Wargo, 1995; Hill, 2002) and that aggressive children are more likely to associate with aggressive peers (Burke et al., 2002; Keenan et al., 1995; Mrung et al., 2004). Poor peer relationships reduce important opportunities for social learning (Crick & Dodge, 1994; Moffitt, 1993a; Tolan & Thomas, 1995) resulting in increasingly atypical social relationships (Patterson, 1986). Despite the relationship between poor peer relations and aggressive behavior, research indicates that most delinquent behavior during childhood occurs independent of peer reinforcement (Tremblay et al., 1995). This is different from delinquent and antisocial behavior that begins in adolescence. As youth enter adolescence, the relationship between antisocial behavior and peer relationships begins to change.

Although, family variables continue to exert influence (Henry, Tolan, & Gorman-Smith, 2001) as children grow older, peers become increasingly influential, and the relative influence of parents lessens (Dodge & Petit, 2003). The effect of peers appears to be a key difference in the development of adolescent onset conduct disorder (McCabe et al., 2001). In some cases, antisocial behavior, which previously elicited rejection is seen

as desirable and is reinforced by peers (Rodkin, Farmer, Pearl, & Van Acker, 2000). In fact, the results of Fergusson et al.'s (1996) examination of antisocial behavior in adolescents suggest that association with antisocial peers is the variable that causes teens with "intermediate" levels of risk factors to progress to pathological levels of misbehavior. They also found evidence that children who experienced elevated levels of antisocial behavior early on but who did not associate with deviant peers were less likely to continue to engage in misbehavior (see also Conduct Problems Prevention Group, 2002; Lacourse, Nagin, Tremblay, Vitaro, and Claes, 2003). The combination of early onset antisocial behavior and deviant peer association predicts especially severe antisocial behavior (Moffitt, 1993a).

Thus, the trajectory of increasingly atypical interpersonal behavior continues to worsen through the influence of continuing deviant interpersonal relationships. It seems that these youth acquire a flawed understanding of interpersonal relationships, which are reinforced and further distorted through deviant peers' association. There is evidence that these youth display atypical interpersonal cognitions which discriminate them from their peers and which may help to explain their maladaptive behavior**.**

2.3.4 Cognitive Factors

The link between Disruptive Disorders in youth and atypical social experience is supported by research into child, parent, and social factors. Many researchers have attempted to research the mechanism by which these factors impact behavior. In accordance with cognitive and interpersonal theory, it appears that early social experiences, especially those that occur within the family context, do indeed shape the

way in which individuals interpret social information (Baker, 1998; Beck et al., 1979; Dodge & Petit, 2003; Dodge & Schwartz, 1997; Young & Lindemann, 1992). This understanding of interpersonal information in turn impacts an individual's interpersonal behavior. Thus, cognition appears to be important to the relationship between interpersonal influences and behavioral outcome.

Research provides evidence that the cognitions of aggressive children are biased toward the perpetuation of aggressive behavior (Dodge & Schwartz, 1997) and that such cognition constitutes a risk factor for worsening behavior independent of previous levels of aggression (Burke et al., 2002; Conduct Problems Prevention Research Group, 2002; Dodge & Petit, 2003). Many researchers (Blair & Frith, 2000; Dodge, 1993; Moffitt, 1993a; Patterson et al., 1998) propose that problematic social information processing is a result of an early family environment that fosters biased perception of social feedback. These biased perceptions are believed to be self-perpetuating in that they prevent individuals from understanding the response of peers and adults to their antisocial behavior. This pattern of inaccurate positive cognitions about the self has been linked to the most severe cases of aggressive behavior, (Hughes, Cavell, & Grossman, 1997) so it seems likely that these cognitions are characteristic of individuals who meet diagnostic thresholds for DIs.

a. Views of Antisocial Behavior

If an individual's behavior is indeed guided or determined by their understanding of that behavior, we would expect that youth who engage in atypical aggressive behavior would hold atypical cognitions regarding antisocial behavior. There is research indicating

that children who engage in antisocial behavior hold an unrealistic understanding of the nature of antisocial behavior (Dodge & Schwartz, 1997) and there is ample evidence that children with Conduct Disorder have poor peer relations (MacKinnon-Lewis & Lofquist, 1996; Patterson et al, 1998; Renouf, Kovacs, & Mukerji, 1997). Evidence suggests that this is related to an inaccurate understanding of social events and difficulty generating effective responses in social contexts (Coy, Speltz, DeKlyen, & Jones, 2001). Across multiple studies, aggressive children were found to be more likely to interpret social behavior in ambiguous vignettes as aggressive and more likely to generate maladaptive, aggressive solutions to social challenges (Barrett et al., 1996; Dodge & Schwartz, 1997; McKeough et al., 1994; Quiggle, Garber, Panak, & Dodge, 1992; Wyatt & Haskett, 2001). Others have found such tendencies amongst youth who meet criteria for DIs (Coy et al., 2001; Sanders et al., 1992). Smithmyer, Hubbard, and Simons (2000) found that aggressive children believe in the ease and efficacy of aggression as compared to nonaggressive peers. More specifically, they believed such behavior would allow them material gain and would end aversive experiences. Perry et al., found similar results in their 1986 study of aggressive children. McKeough et al., (1994) found that stories told by aggressive children were more likely to include situations characterized by aggression that went unpunished. Thus, it appears that youth that exhibit atypical levels of aggressive behavior have developed an unusually positive view of such behavior. It seems likely that this is related to a tendency to engage in aggressive behavior as compared to youth that see such behavior as detrimental.

b. View of Self

In addition to this biased view of aggressive behavior, some studies have indicated that some aggressive children have a positively biased self-image (Brendgen, Vitaro, Turgeon, Poulin, & Wanner, 2004; Perez, Petit, David, Kistner, & Joiner, 2001; Zariski & Coie, 1996). Both Perry et al., (1986) and Zakriski and Coie (1996) found that aggressive children saw themselves as unrealistically verbally persuasive and pro-social but were able to accurately assess the social status of others, suggesting a “blind spot” regarding social feedback directed at them. Similarly, Hughes et al's (1997) study of aggressive children found that compared to their nonaggressive peers, aggressive children rated their social competence in a "perfect or idealized manner" (p. 75). Despite their high rate of violent crime convictions, Moffitt, Caspi, Disckson, Silva, and Stanton's (1996) life-course-persistent aggressive sample described themselves as "about average." In her 1998 study, Swearer found that an overall positive sense of self differentiated CD from depressed and co-morbid CD/Depressed peers. She also identified more specific qualities of self-schema specific to CD (Swearer, 1998). This schema, based on Young and Lindemann's (1992) proposed framework of self-schemata associated with various personality disorders, was defined by an emphasis on gratification of one’s own desires and a disregard of the needs/desires of others coupled with a lack of self-control and frustration tolerance. In sum, there is substantial evidence that youth with Disruptive Diagnoses exhibit a self-schema that is distinct and maladaptive. One’s view of self influences and is influenced by the way in which an individual interacts with others.

c. View of Others

In addition to faulty cognition regarding the efficacy of aggression and their own social behavior, it appears that Disruptive youth exhibit an inaccurate understanding of others. Broadly, it appears that this group is lacking in empathy and concern for others and expects others to be motivated by malice and hostility. This pattern of interpersonal cognition has been identified among youth exhibiting high levels of externalizing (Hastings et al., 2000), delinquent (Frick, Cornell, Barry, Bodin, & Dane, 2003), and antisocial behavior (Moffit et al., 1996) and among youth diagnosed with CD (Krueger, Caspi, Moffitt, Silva, & McGee, 1996). More specifically, these youth were found to be unusually callous, manipulative, and unemotional in their attitudes toward others. Krueger et al. (1996) found that a lack of investment in interpersonal relationships combined with “unrestrained” behavior predicted CD diagnostic status as well as Adult Antisocial Personality Disorder symptomatology at three year follow up.

Furthermore, researchers have examined the interpersonal expectations of oppositional youth and found evidence for a “hostile attribution bias” among aggressive and conduct disordered youth (Crick, Grotpeter, & Bigbee, 2002; Dodge et al., 1990). This bias is characterized by a tendency to believe that others intend to harm them or are motivated by malicious intentions. Moffit’s 1996 study found that boys who exhibited early onset antisocial behavior "endorsed an extremely aggressive, hostile, alienated, suspicious, and cynical stance toward the social world" (p. 420). As well, Burke et al., (2002), found that this pattern of social cognition biases were linked to Oppositional behavior disorders independent of all other factors. Thus, it seems that youth that lack

empathy toward others and see others as holding a similar attitude are more likely to exhibit and are at risk for developing antisocial behavior.

d. Interpersonal Schema

Schemas are a cognitive construct that allows for a more holistic description of an individual's perceptions, beliefs, attributions, and expectations. Crick and Dodge (1994) have proposed that cognitions that are repeated over time become persistent and influence the way in which a child interprets social experience. The concept of interpersonal schema integrates an individual's sense of self and expectations of others, consisting of an individual's understanding of themselves in an interpersonal context. It seems likely that individuals that are raised in problematic interpersonal environments and have negative cognitions related to relationships are likely to have negative interpersonal schemas.

Taken together, research into the interpersonal cognitions among Disruptive youth suggest a specific and biased pattern of social information processing and a distorted understanding of social relationships. These include an unrealistically positive understanding of how others perceive them, a "cold" attitude toward others, and a tendency to view the motivations of others as negative. While most research looks at specific aspects of interpersonal cognition, it seems likely that these aspects are part of a broader inter-related pattern of cognitions, known within cognitive theory as interpersonal schema. This more holistic perspective on interpersonal cognitions has yet to be examined among youth with Depressive Disorders.

2.3.5 Summary of the Development of Disruptive Disorders

Research has yielded a complex model of the development of Disruptive Disorders, which includes genetic and neuropsychological factors which predispose some youth to faulty perception of social information and to aggressive and maladaptive social behavior. For many youth with Disruptive Diagnoses, low socio-economic status and difficulties in school serve to further increase the risk of DI development. The most widely researched and highly critical contributors to the development and maintenance of Disruptive Disorders in youth are interpersonal and cognitive factors. Youth with Depresive Diagnoses tend to have early family relationships that perpetuate erroneous and biased perceptions of themselves in relation to others and peer relationships further reinforce these perceptions. These youth develop a perspective on the self in relation to others (Interpersonal Schema) that further perpetuates the reliance on ineffective and aggressive modes of interaction. The evidence for a complex inter-relationship between cognitive and interpersonal factors is compelling and provides insight into how these youth experience the world.

Some questions remain about whether current research captures the entirety of these youths' interpersonal cognitions. Furthermore, the extent to which these interpersonal cognitions differentiate Disruptive youth from others is unclear. As this literature review progresses it will become clear that many of the experiences of these youth are common to other forms of psychopathology. Further insight into these youth's understanding of the nature of interpersonal relationships and their role in them would benefit the understanding of the development and treatment of these disorders.

2.4 Diagnosis and Prevalence of Depressive Disorders in Youth

The DSM-IV identifies two depressive disorders which are relatively common amongst youth; Major Depression (MDD) and Dysthymic Disorder (DD). Criteria are defined by extreme feelings of sadness and irritability (American Academy of Child and Adolescent Psychiatry, 1998) and are differentiated primarily by duration and intensity of symptoms (DSM-IV-TR, 2000). The pathway to adolescent depressive disorders is a complex one, the nature of which varies greatly across individuals by gender (Ge, Conger, & Elder, 2001: Romano et al., 2001) and age (Cole, Tram, Martin, Hoffman, Ruiz, Jacquez, & Maschman, 2002; Garber, Keiley, & Martin, 2002; Sheeber et al., 2001). While the relationships between multiple variables such as genetic predisposition (O'Connor, McGuire, Reiss, Hetherington, & Plomin, 1998; Silberg et al., 1999; Thapar & McGuffin, 1996), problematic interpersonal relationships (Goodyer, Herbert, Tamplin, Secher, & Pearson, 1997; Joiner, 2002), increased levels of stressful events (Cicchetti & Sroufe, 2000; Tiet et al., 2001), cognitive distortions (Garber, Weiss, & Shanley, 1993; Gotlib, Lewinsohn, Seeley, Rohde, & Redner, 1993; Stark et al., 1996) and depressive diagnoses are clear, the nature of these relationships are not fully understood. It appears that the best predictor of DE onset it past depressive symptomatology (Lewisohn, Rohde, Klein, & Seeley, 1998; Reinherz et al., 2000).

2.4.1 Dysthymic Disorder

a. DSM-IV-TR Diagnostic Criteria

Dysthymic Disorder (DD), is often described as a chronic, low-grade depression, is distinguished from Major Depression by its lesser intensity of symptomatology and

substantially increased duration. Dysthymia requires the presence of depressed mood (or irritable mood in children and adolescents), that occurs more days than not, and lasts for a minimum of two years in adults, or one year in adolescents and children. In addition to depressed mood, at least two of the five following symptoms must be present: (1) Poor appetite or overeating, (2) Insomnia or hypersomnia, (3) Low energy or fatigue, (4) Poor concentration or difficulty making decisions, (5) Feelings of hopelessness. It is important to note that if criteria for Major Depression are met during the first year of Dysthymic Disorder, then the diagnosis of Major Depression takes precedence (DSM-IV-TR, 2000, pp. 349).

When an individual exhibits many depressive features of Major Depression or Dysthymia, but does not meet diagnostic criteria for either disorder, the diagnosis of Depressive Disorder Not Otherwise Specified may be made. For example, less than five symptoms are present for a minimum of two weeks, a diagnosis of Minor Depressive Disorder may be warranted (DSM-IV-TR, 2000).

It should be noted that the criteria for DEs are relatively "understudied" as compared to other diagnoses. As a result, there remains some controversy over the independence of DD from MDD. In Goodman, Schwab-Stone, Lahey, Shaffer, and Jensen's (2000) large sample of children and adolescents with Dysthymia and MDD, they found the outcomes of these two disorders to be statistically indistinguishable. Masi et al., (2003) found evidence to suggest that the current set of diagnostic criteria (DSM-IV-TR, 2000) does not capture an accurate "clinical picture" of youth with Dysthymia, suggesting that further study of Dysthymia is warranted.

b. Prevalence of Dysthymic Disorder

Prevalence estimates of Dysthymia during childhood and adolescence ranges between less than one percent and eight percent (American Academy of Child and Adolescent Psychiatry, 1998; Cicchetti & Toth, 1998; Ford et al., 2003). Approximately 50 percent of those diagnosed will have another comorbid condition (American Academy of Child and Adolescent Psychiatry, 1998) and 10 percent of adolescents diagnosed with Dysthymia will experience the disorder alone (Lewinsohn & Essau, 2002). Accordingly, it is estimated that 70 percent of youth that meet diagnostic criteria for Dysthymia will develop subsequent or concurrent Major Depression (sometimes referred to as "double depression") (American Academy of Child and Adolescent Psychiatry, 1998). Because most youth with Dysthymia will experience a subsequent Major Depressive episode, Dysthymia is considered a major pathway to Major Depression in youth (Cicchetti & Toth, 1998). When compared to Major Depression, Dysthymia has a more prolonged course, typically lasting four years.

2.4.2 Major Depressive Disorder

a. DSM-IV-TR Diagnostic Criteria

The most common criteria used for the diagnosis of major depression in children are those of the most recent revision of the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2000). According to the DSM-IV-TR (2000), the defining features of major depression are depressed mood and/or anhedonia. In children and adolescents, the mood may be one of irritability rather than depression. This mood must persist for a minimum of two weeks and must be present more often

than not. In addition to the primary symptoms mentioned above, at least four of the following symptoms must be present: (1) Significant, unintentional weight loss or gain (in children failure to gain weight as would be expected), (2) insomnia or hypersomnia, the frequent occurrence of nightmares in children is also acceptable), (3) psychomotor agitation or retardation, (4) fatigue or loss of energy (5) feelings of worthlessness or excessive guilt, (6) diminished concentration or ability to make decisions, (7) recurrent thoughts of death, suicidality, or suicide attempt. These symptoms must cause impairment or distress in social, academic, occupational, or other areas of functioning. In order to meet criteria for major depression, these symptoms may not have been caused by the physiological effects of a substance or medical condition, and may not be due to bereavement. In addition, it is important to consider whether criteria better fit a mixed or bipolar episode or Dysthymia. There are several features commonly associated with Major Depression including high rates of mortality and suicidality (DSM-IV-TR, 2000, pp. 344-345). Those with chronic general medical conditions are at increased risk for the development of Major Depression. Evidence also suggests that their medical prognoses are less favorable if a Major Depression is present (Cicchetti & Toth, 1998).

The DSM-IV-TR (2000) definition of major depression assumes that most symptoms of this disorder remain equivalent across all stages of development (Kovacs, 1996). It specifies, however, that while the core symptoms of major depression remain the same across the life cycle, some symptoms may be more prominent in children and less common in adolescents and adults. For example children are more likely to experience symptoms of anxiety, somatic complaints, irritability, and social withdrawal

(American Academy of Child and Adolescent Psychiatry, 1998). Also symptoms such as psychomotor retardation, hypersomnia, and delusions are less common in children than in adolescents and adults. Children are more likely to suffer from co-occurring conditions such as Oppositional behavior disorders, AD/HD, and anxiety disorders (Jacques & Mash, 2004; Lewinsohn et al., 1998). Thus, it is particularly important that clinicians carefully consider differential diagnoses when dealing with children. In children, it is important to consider the possible effects of Attention-Deficit/Hyperactivity Disorder (AD/HD) such as distractibility, low frustration tolerance, and irritable mood (DSM-IV-TR, 2000).

There are several symptoms of MDD that occur with greater frequency amongst adolescents than amongst children. These include sleep and appetite disturbances, suicidality, and severe impairment of function. Relative to adults, adolescents with depressive disorders are more likely to exhibit behavior problems (American Academy of Child and Adolescent Psychiatry, 1998). Often Major Depression is associated with other co-occurring mental disorders (Kovacs & Devlin, 1998). The majority of adolescents diagnosed with MDD qualify for diagnosis of another disorder. The most frequent comorbid diagnoses among these adolescents include Dysthymia and anxiety disorders. As well, adolescents diagnosed with Major Depression commonly have a history of Dysthymic Disorder and are at an increased risk for future Dysthymia (American Academy of Child and Adolescent Psychiatry, 1998).

b. Prevalence of MDD

Major Depressive Disorder is one of the more common of childhood psychological disorders and incidence increases drastically with the onset of adolescence (American Academy of Child and Adolescent Psychiatry, 1998; Cicchetti & Toth, 1998; Hankin et al., 1998). Recent studies estimate the prevalence among adolescents ranges from less than one percent to nine percent (Hammen & Rudolph, 1996; Kovacs & Devlin, 1998; Rushton, Forcier, & Schectman, 2002). It is estimated that 15 to 20 percent of adolescents will experience a diagnosable depressive episode before the end of adolescence (American Academy of Child and Adolescent Psychiatry, 1998; Lewinsohn & Essau, 2002; Sheeber et al., 2001). Lewinsohn et al. (1998) report that the mean age of onset for Major Depression among their sample of adolescents was 14.9 years. Additional research results found that up to 50% of children and adolescents in their study recalled depressive symptomatology ranging from last week to 6 months ago (Kessler, 2002). Additionally, research has clearly shown that adolescent and adult females are diagnosed with depressive disorders twice as often as their male counterparts (e.g. American Academy of Child and Adolescent Psychiatry, 1998; Lewinsohn et al., 1998; Rushton et al., 2002).

2.5 Development of Depressive Disorders

Many would describe moodiness and irritability as “normal” to adolescents. Youth who meet criteria for Depressive Disorders, however, exhibit a unique pattern of symptoms with serious implications for prognosis (Rushton et al., 2002). As with most psychological disorders, the development of Depression is a complex and varied process

across and within individuals (Beardslee & Gladstone, 2001). There is evidence that many of these risk factors are at work prior to the development of a diagnosable disorder (Field, et al., 1988; Whiffen & Gotlib, 1989). As with most disorders, it appears that earlier onset and co-morbid diagnoses are associated with more severe impairment and a greater likelihood of recurrent psychopathology (Kovacs & Devlin, 1998; Hammen & Rudolph, 1996).

The past decade has brought about great insight into factors related to the development of Depression during childhood as well as childhood factors that predict later Depression. It is clear that family relationships, cognitive distortions, and stressful life events are important factors that contribute to this process. Preliminarily, it appears that early interpersonal relationships (Brennan, Hammen, Katz, & LeBroque, 2002; Burge & Hammen, 1991), family environment (Goodyer et al., 1997; Kashani, Burbach, & Rosenberg, 1988), and high levels of stressful events (Cicchetti & Sroufe, 2000; Tiet et al., 2001) provide an overly negative environment, which leads to cognitive errors (Garber et al., 1993; Gotlib et al., 1993; Stark et al., 1996) and futher negative interpersonal experiences (Messer & Gross, 1995; Sheeber et al., 2001). These factors likely serve to amplify the initially negative environment and interpersonal interactions (Rudolph, Kurlakowsky, & Conley, 2001). This in turn reinforces negative cognitions. This persistent system of beliefs likely accounts for the well-established chronicity of Depression as well as the development of Depression later in life (Lewinsohn et al., 1994; Lewinsohn, Rohde, Klein, & Seeley, 1999).

2.5.1 Intrachild Factors

While various biological factors have been linked to Depression, the extent to which these relationships are applicable to youth remains unclear. It is yet to be determine whether such factors are causal or simply exacerbate and maintain Depressive Disorders. It seems likely that biological factors are a component of a complex interaction of multiple factors that cause and maintain Depressive Disorders in youth.

a. Gender

Beginning about age 13, a striking shift occurs among the gender of those meeting diagnostic criteria for Depressive Disorders (Ge et al., 2001; Silberg et al., 1999; Wichstrom, 1999). During childhood the number of boys and girls meeting criteria is approximately equal but by adolescence, the majority of individuals meeting criteria are female. In fact, by the teenage years twice as many females as males are depressed (American Academy of Child and Adolescent Psychiatry, 1998; Hammen & Rudolph, 1996; Ingram, 2001). While the reasons for these differences are not yet clear, it does not appear that the genders differ in the correlates and risk factors during this developmental period. Rather, the evidence suggests that these factors occur with increased frequency and intensity in females or have a relatively greater impact on female adolescents (Hankin & Abramson, 2001). Females experience higher levels of stressful events during adolescence than do males (Rudolph & Hammen, 1999; Silberg et al., 1999), appear to be more strongly effected by the timing of puberty (Ge et al., 2001), interpersonal stressors (Crawford, Cohen, Midlarsky, & Brook, 2001; Nolen-Hoeksema & Girgus, 1994), have a more ruminative coping style (Broderick, 1998)**,** and are more likely to experience

recurrent depressive symptomatology (Lewinsohn et al., 1994) than are their male counterparts. It should be noted that there remains some debate as to whether gender is an individual or social risk factor, most likely it is best conceptualized as some combination of the two.

b. Genetic

There is strong evidence for the heritability of Depressive Disorders. Twin and family studies indicate the presence of genetic factors that contribute to their development (American Academy of Child and Adolescent Psychiatry, 1998; Hammen & Rudolph, 1996; Kovacs & Devlin, 1998; Wallace, Schneider, & McGuffin, 2002). Evidence for the relative importance of heredity to childhood Depression is mixed. Some research finds evidence that heredity plays an especially strong role in childhood- versus adolescent- or adult-onset depression (Hammen & Rudolph, 1996; Kovacs & Devlin, 1998; Wallace et al., 2002), while other studies have found that childhood Depression is less heritable than depression that begins at later developmental stages (Thapar & McGuffin, 1996). The causal nature of the relationship of biological variables to depressive disorders is unproven; none have yet been shown to occur in infants who go on to develop Depressive Disorders later in life (Cicchetti & Toth, 1998; Kaslow, Deering & Racusin, 1994; Wallace et al., 2002). Mothers' Depression during pregnancy and early childhood has been linked to the development of later psychopathology, especially depressive disorders, in their offspring (Beardslee, Versage, & Gladstone, 1998; Cicchetti & Toth, 1998; Dodge, 1990; Field, Fox, Pickens, & Nawrocki, 1995; Luoma et al., 2001; Seifer, Dickstein, Sameroff, Magee, & Hayden, 2001) which may or

may not reflect an inherited biological disposition. Some studies suggest that genetics play a significant role in the increase in female rates of Depression during adolescence (Silberg et al., 1999).

c. Neuropsychological Factors

Research into the role of biological and neurological factors in childhood and adolescent Depression (e.g. thyroid activity, abnormal brain activity) remain generally inconclusive and inconsistent (Kaufman, Martin, King, & Charney, 2001; Wagner & Ambrosini, 2001). Interestingly, although results are preliminary, there appears to be a difference between the biological correlates of childhood Depression as compared to adolescent and adult Depression. For example, it appears that children respond with less consistency to medications that are effective during adolescence and adulthood (See Hazell, 2002 and Wagner & Ambrosini, 2001 for reviews). In adolescents, biological factors such as hormonal level, differential response to stress, sleep differences, low levels of growth hormone, irregularities in thyroid hormones, and neurotransmitter influence (Emslie & Mayes, 2001; Hankin & Abramson's 2001; Kaufman et al., 2001) have been correlated with Depression, but causality is yet to be determined.

d. Temperament

There is evidence that specific temperamental pathways contribute to the development of Depressive Disorders. It appears that these youth exhibit high levels of withdrawl from negative stimuli and are hesitant to seek out reinforcing interactions, which is linked to low positive emotionality. Additionally, these youth have a particularly difficult time regulating their emotions (affective control) (Nigg, 2006). It is

proposed that these aspects of temperament increase vulnerability to other, external risk factors for depression.

Several researchers have identified specific relationships between temperament and interpersonal and cognitive risk factors for depression. For instance, research has shown that temperament acts in conjunction with problematic parenting to impact the development of depression (Brendgen, Wanner, Morin, & Vitaro, 2005; Leve et al., 2005; Oldehinkel, Veenstra, Ormel, deWinter, & Verhulst, 2005). Hayden, Klein, Durbin, and Olino (2006) found evidence that low positive emotionality at age three predicted depressive cognitions (especially interpersonal helplessness) at age 7. In sum, while research into the relationship of temperament to depression in youth is still fairly new, it does appear very likely that it acts in conjunction with other risk factors to produce depression.

2.5.2 Environmental Factors

Certain aspects of a youth's larger environment appear to impact the likelihood that they will develop or continue to experience Depressive Disorders (Petersen et al., 1993; Moos, Cronkite, & Moos, 1998; Williamson et al., 1998). Youth who experience significant or chronic stress are at increased risk to develop a Depressive Disorders. In general a more "negative" environment is related to a more "negative" cognitive style which is in turn related to the development of Depression or Dysthymia (Rudolph et al., 2001). In other words, it appears that the impact of one's environment is largely contingent on one's perception of that environment (Garnefski, 2000).

a. Stressful Events

The causal relationship of stress to the development of Depressive Disorders in children and adolescents is well-established (Williamson et al., 1998). Both daily hassles (e.g. poor school performance or peer interaction) and more serious life events (e.g. abuse, neglect, family disruption, parental death or separation) have been linked to the development of Depressive Disorders (American Academy of Child and Adolescent Psychiatry, 1998; Cole & Turner, 1993; Hammen, Rudoph, Wiesz, Rao, and Burge, 1999; Kaufman, 1991; Rudolph et al., 2001). Relevant stressful events include, but are likely not limited to, poor social relationships, loss or grief, the breakup of romantic relationships, poor health or injury, substance abuse, conflict with parents, academic difficulties, changes in family structure, and co-morbid psychiatric diagnoses (Lewinsohn, Gotlib, & Seeley, 1997; Lewinsohn et al., 1994; Monroe, Rohde, Seeley, & Lewinsohn, 1999). As a child's world expands into the increasingly independent role of adolescence, the occurrence and influence of daily stress becomes increasingly salient both to the development of Depression (Garber & Flynn, 2001; Garber et al., 2002; Silberg et al., 1999; Williamson et al., 1998) and it's recurrence (Davila, Hammen, Burge, Paley, & Daley, 1995). Research also suggests that interpersonal stressful events may be particularly salient to the development of Depression in adolescents (Cornwell, 2003; Olsson, Nordstrom, Arinell, & Von Knorring, 1999).

It appears that the effects of stressful life events on the development of Depression in adolescents are influenced by cognitions and coping skills (Abela, 2001; Chen, Mechanic, & Hansell, 1998; Lewinsohn et al., 2001; Tram & Cole, 2000). For

example, in one study the impact of negative life events was significantly buffered by an effective method of coping with stressors. Girls who viewed difficult events as "challenges" which could be overcome were found to be significantly less likely to experience Depression (Frye & Goodman, 2000). In contrast, Depressed adolescents show decreased ability to regulate negative emotion, have fewer coping techniques at their disposal, use less effective strategies, and fail to use potentially effective strategies due to low expectations of success (Sheeber et al., 2001).

2.5.3 Interpersonal Factors

There is clear support for a relationship between negative interpersonal experience and the development of depressive disorders. Depressed youths experience unusually negative relationships with peers and adults (Altman & Gotlib, 1988; Connolly, Geller, Marton, & Kutcher, 1992; Messer & Gross, 1995). It is proposed that problematic early interpersonal relationships, especially parent-child relationships, influence an individual's perspective on later relationships, perpetuating a bias toward negative perceptions of social competency and interaction (Alloy, Abramson, Tashman, Berrebbi, Hogan, Whitehouse, Crossfield, & Morocco, 2001; Hoffman, Cole, Martin, Tram, & Seroczynski, 2000; Ingram, 2001; Rudolph et al., 2001). This pattern of cognition has been strongly linked to and to some extent defines the onset, maintenance, and recurrence of Depressive Disorders (Boivin, Poulin, & Vitaro, 1994; Cole, Martin, Powers, & Truglio, 1996; Rudolph et al., 1997).

a. Family Factors

Various qualities of parent-child relationships have been linked to the development and maintenance of Depressive Disorders in youth. In particular, parental psychopathology has been shown to constitute a strong risk factor for the development of these disorders, especially parental Depression (Burge and Hammen, 1991; Reinherz et al., 2000). Multiple mechanisms of for this influence have been proposed and it appears that the nature of this relationship varies across developmental stages.

Findings suggest that as early as infancy, offspring of Depressed mothers differ in their style of relating to others and that this difference is not limited to the mother-child relationship (Field, et al., 1988; Pickens & Field, 1993; Whiffen & Gotlib, 1989). Seiner and Gelfand (1995) found that infants of non-Depressed mothers react to non-Depressed adults who mimic depressive behavior in a manner that is similar to the interactions found in children of Depressed mothers. This supports the hypothesis that an infant's "depressive" responding is a result of external factors (e.g. parental depression) and that all infants react in a similar manner to caretakers who exhibit depressive behavior. It seems likely that this repeated pattern of interaction is reinforced with repetition and becomes chronic, persisting into later developmental stages.

Parental psychopathology continues to have an impact during childhood (Beardslee & Gladstone, 2001; Beardslee et al., 1998; Dodge, 1990; Downey & Coyne, 1990; Field et al., 1996; Goodman & Gotlib, 1999; Hammen et al., 1999; Jacob & Johnson, 1997; Lee & Gotlib, 1989). The interactions between a Depressed parent and their child are more likely to be characterized by higher levels of parental rejection,

harshness, inconsistent discipline, negative affect, negative messages, and lower levels of parent responsiveness, parent-child interaction and communication (Berg-Nielsen, Vikan, & Dahl, 2002; Breznitz & Sherman, 1987; Campbell, Cohn, & Meyers, 1995; Cohn, Campbell, Matias, & Hopkins, 1990; Field, Healy, Goldstein, & Guthertz, 1990; Radziszewska, Richardson, Dent, & Flay, 1996; Stark et al., 1996). Many researchers have hypothesized that Depressed parents fail to provide children with the experiences necessary to develop adaptive emotion regulation skills and inadvertently teach their children to think, feel, and behave in a Depressed manner (Berg-Nielsen et al., 2002; Cicchetti & Toth, 1998; Garber & Horowitz, 2002; Goodman, S.H., 2002). The relationship between family factors and Depression persists into adolescence (Brennan et al., 2002; Garber et al., 2002; Shiner & Marmorstein, 1998; Thomas & Forehand, 1991). The familial relationships amongst depressed adolescents are characterized by inefficient problem-solving, less warmth and supportive behavior, poor parental boundaries, and increased conflict and stressful events as indicated by researcher observation (Sagrestano, Paikoff, Holmbeck, & Fendrich, 2003; Sheeber & Sorensen, 1998), parents (Brennan et al., 2002; Puig-Antich et al., 1993), and youth self-report (Davila et al., 1995; Greenberger & Chen's, 1996; Patton, Coffey, Posterino, Carlin, & Wolfe, 2001; Shiner & Marmorstein, 1998).

A broader mechanism of inter-generational transmission of Depression consists of differing family environment and relationships. Families with a depressed parent have been found to be characterized by problematic marital relationships, relative inattention to the critical tasks of parenting, and increased negative and decreased positive

communication (Alloy et al, 2001; Beardslee & Gladstone, 2001; Cole & Rehm, 1986; Goodyer et al., 1997; Ingram, 2001; Jacob & Johnson, 1997; Jacob & Johnson, 2001; Messer and Gross, 1995; Sheeber et al., 2001). These environments likely serve to increase stress levels and to reinforce negative interpersonal cognitions both of which increase the likelihood of Depressive Disorders.

While most research has focused on parental influence on children, it appears that to some extent, depressed youth play a role in their interpersonal difficulties. Sheeber et al. (2001) found that while the family environments of these youths are indeed more negative, Depressed teens see these environments as more negative than they are, at least to outside observers. Messer and Gross (1995) found that Depressed children engaged in less positive, more negative, and more solitary behavior than did a control group. They were also less likely to respond positively to other family members' positive behavior. In sum, it appears that during childhood, a process of "reciprocal negative influence" (Chiariello & Orvaschel, 1995) is at work. Early problematic parent-child relationships provide a poor environment for social learning, these children are less likely to acquire critical social skills and learn to have negative expectations of interpersonal relationships. These expectations have been linked to the onset and maintenance of Depressive Disorders.

b. Peer Influence

Depressive Disorders are also associated with interpersonal difficulties outside of the family (Goodyer et al., 1997; Hammen, Burge, & Stansbury, 1990). Youth with Depression are generally perceived as less socially competent than non-Depressed peers

by both adults and children (Cole et al., 2001; Cole et al., 1996; Levendosky, Okun, & Parker, 1995; Mullins, Peterson, Wonderlich, & Reaven, 1986; Seroczynski, Cole, & Maxwell, 1997). Stice, Raglan, and Randall (2004) found that the onset of Depression is associated with a decrease in peer support. As with so many variables, the impact of social competence on Depression appears to occur in conjunction with characteristic cognitions. Youth who placed greater importance on social status and those with Depressive cognitions have been found to exhibit a significant relationship between social status and Depression (Martin et al., 2003; Prinstein and Aikins, 2004). It is likely that these social difficulties serve to perpetuate an already negative estimation of social ability and performance and serve as a maintaining factor. In support of this hypothesis, Brendgen et al., (2004) found that children's overestimation (as compared to peers) of their social competence predicts a decrease in Depressive symptomatology.

During adolescence, relationships with peers become more important and influential. Correspondingly, the impact of these variables upon the likelihood or existence of Depression in adolescents increases (Aseltine, Gore, & Colten, 1994; Greeenberger & Chen, 1996). Adolescent Depression is linked to relatively poor social functioning and a sense of inadequacy in interpersonal domains (See Hammen & Brennan, 2001 for review). Depressed adolescents see themselves as less socially competent across multiple social domains (e.g. appearance, likability, athletics, scholastics) as compared to non-Depressed peers (Harter and Whitesell, 1996) and as experiencing lower levels of positive and supportive peer relationships (Lewisohn, Gotlib, & Seeley, 1997). These perceptions are backed by observational studies (Sheeber

& Sorensen, 1998), the reports of their peers (Connolly et al., 1992), and parents (Puig-Antich et al., 1993).

2.5.4 Cognitive Factors

a. Depressive Cognitions

Youth with Depressive Disorders exhibit a distinctive pattern of cognitions characterized by a less positive view of themselves, the world, and their future, an increased tendency to view positive events as due to factors which are unstable, specific, and external to themselves (Cole et al., 2001; Gladstone et al., 1997; Joiner, 2000; Kaslow, Stark, Printz, Livingston, & Tsai, 1992; Laurent & Stark, 1993; McCauley et al., 1988; McGrath & Repetti, 2002; Sheeber, Hops, & Davis, 2001; Stark et al., 1993), and a tendency to dwell or ruminate on negative thoughts and events (Andersen & Limpert, 2001; Broderick, 1998).

Current research indicates that these ways of thinking impact the likelihood that a given risk factor will lead to the development of Depression (Alloy, 2001; Hankin, Abramson, & Siler, 2001; Lewinsohn et al., 2001; Tram & Cole, 2000; Stark et al., 1996; Weisz, Southam-Gerow, & McCarty, 2001). The impact of multiple risk factors including poor peer relationships, negative family environment, and stressful life events often hinges on an individual's understanding of them. For example, significant and ongoing stress does not necessarily lead to Depression, rather it is the extent to which an individual's understanding of these events is "depressogenic" which determines their impact. Similar results have been found for the relationships between Depression and influences such as family relationships (Gibb et al., 2001), peer relationships (Panak &

Garber, 1992; Prinstein & Aikins, 2004; Prinstein, Cheah, & Guyer, 2005), and academic difficulties (Hilsman & Garber, 1995). The preponderance of research suggests that most of these cognitions remain even after Depressive symptomatology decreases and may contribute to the increased risk for Depression amongst those previously depressed (Garber et al., 2002; Gotlib et al., 1993; Lewinsohn et al., 1998; McGrath & Repetti, 2002; Sheeber, Hops, & Davis, 2001; Nolen-Hoeksema, Girgus, & Seligman, 1992).

b. View of Self

The construct of self-schema is widely researched construct and the presence of a characteristic depressive self-schema has been well established. It is characterized by a generally negative view of the self that differentiates Depressed youth from their non-depressed peers (Gencoz, Voelz, Gencoz, Pettit, & Joiner, 2001; Gladstone et al., 1997; Schniering & Rapee, 2004). More specifically, Depressed youth hold themselves responsible for negative events or experiences, and feel that they are incapable of changing things for the better (Gotlib et al., 1993; Lewinsohn et al., 1998; Weisz et al., 2001). Multiple researchers have found that Depressed children and adolescent's self-assessments were more negative than the ratings of their parents, teachers, and peers, with this difference becoming larger and more stable over time (Abela, 2001; Cole et al., 2001; Cole, Martin, Peeke, Seroczynski, & Fier, 1999; Cole, Martin, Peeke, Seroczynski, & Hoffman, 1998; Cole et al., 1996; Hoffman et al., 2000; Jordan & Cole, 1996; Reinherz et al., 2000; Rudolph et al., 1997; Seroczynski et al., 1997; Sheeber, Hops, & Davis, 2001). Depressed children tend to be seen by others as less competent across domains but generally overestimate their own levels of incompetence. Given that

depressed youngsters hold a pessimistic view of the world, and their future and view positive events as due to factors which are unstable, specific, and external to themselves (Andersen & Limpert, 2001; Cole et al., 2001; Joiner, 2000; Kaslow, Stark, Printz, Livingston, & Tsai, 1992; Laurent & Stark, 1993; McCauley et al., 1988; McGrath & Repetti, 2002; Sheeber, Hops, & Davis, 2001), these youngsters not only see themselves as less competent, they believe that this is unlikely to change and that they are incapable of making a change for the better.

Given the contribution that interpersonal factors make to the development of Depressive Disorders it is not surprising that depressive self-schemas incorporate cognitions related to others. In the case of Depression, the concept of self is inextricably linked to an individual's understanding of their relationships with others.

c. View of Others

Depressed youth's understanding of self is integrally related to their views of others. Youth with Depressive Disorders see themselves as socially inadequate and likely to be rejected by others. Thus, youth with depressive disorders would expect negative interactions with others (Garber et al., 1993; Gladstone et al., 1997; Lewinsohn et al., 1994; Soygut & Savasir, 2001), are likely to inaccurately perceive interpersonal interactions as negative (Sheeber & Sorensen, 1998), and to discount positive interaction (Gotlib et al., 1993). Prinstein et al., (2005) found a similar relationship between interpersonal attributions and depressive symptomatology.

d. Interpersonal Schema

Particular attention has been paid to the relationship between Depressive Disorders in youth and characteristic schemas. Coyne (1976) proposed that depressive symptoms develop as a result of ongoing negative interpersonal interactions. Subsequent research has found that negative interpersonal events in particular appear to be related to the development of Depression in children (Hammen & Goodman-Brown, 1990). Current research has identified characteristics of schemas in youth with Depressive Disorders. In light of the significance of the influence of interpersonal factors in the development of depressive disorders, schemas related to the self in social context have been most well researched.

It is clear that interpersonal experience is a significant contributor to the development of Depressive Disorders in many individuals (Altman & Gotlib, 1988; Alloy et al., 2001). There is also evidence that depressed individuals have distorted cognitions, many of which pertain to interpersonal relationships. Soygut and Savasir (2001) found evidence for a negative interpersonal schema among depressed adults. Furthermore, many "self" schemas examined in research contain mostly interpersonal cognitions. It seems likely that these interpersonal cognitions are characterized by relational expectations that differ from those of others with other psychological diagnoses and those who do not meet criteria for psychological diagnoses.

2.5.5 Summary of the Development of Depressive Disorders in Youth

As with Disruptive Disorders, the development of Depressive Disorders in youth reflects a complex combination of biological, environmental, interpersonal, and cognitive

factors. The link between biological factors and stressful life events and the subsequent development of Depression in youth are well established. These factors likely contribute to and interact with problematic interpersonal relationships and cognition that are important both to the development and transmission of Depression (Ingram, 2001). Specifically it appears that depressive cognitions are formed in the context of problematic interpersonal relationships a process that continues over the course of development to form interpersonal cognitions that become more inflexible and maladaptive over time. While this process appears to be similar to that of the development of interpersonal cognitions amongst individuals with Disruptive Disorders, there is evidence that the interpersonal cognitions of youth with Depressive and Disruptive Disorders differ in content. Hostility and a sense of control most likely characterize the interpersonal cognitions of individuals with Disruptive Disorders; hopelessness and pessimism characterize those of individuals with Depression.

2.6 Comorbid Disruptive and Depressive Disorders in Youth

Dual diagnoses are relatively common amongst children and adolescents (Arseneault, Moffitt, Caspi, Taylor, & Silva, 2000; Avenoli, Stolar, Li, Dierker, & Merikangas, 2001; Breton, Bergeron, Valla, Berthiaume, Gaudet, Lambert et al., 1999; Fleming and Offord, 1990; Kreuger, Caspi, Moffitt, Silva, & McGee, 1996). More often than not youth with Depressive or Disruptive Disorders meet criteria for another disorder (Biederman, Faraone, Mick, & Lelon, 1995) and most research finds a significant relationship between these two sets of disorders (Caron and Rutter, 1991). The frequency of comorbidity suggests a significant impact on conclusions about Depressive and

Disruptive Disorders, especially since few researchers specifically investigate the difference between pure and comorbid disorders. Because "pure" disorders are relatively rare among youth, many samples of youth with Depressive or Disruptive Diagnoses include those with co-occurring disorders, implicitly assuming that comorbid and "pure" disorders are the same. This assumption is contradicted by research into comorbidity, which shows that individuals with co-morbid disorders typically show more diverse and severe impairment (Angold, Costello, & Erkanli, 1999; Mamorstein & Iancono's, 2001; Newman, Moffitt, Caspi, & Silva's, 1998; Rohde, Clarke, Lewinsohn, Seeley, & Kaufman, 2001). Also, this may lead to the erroneous conclusion that factors related to the comorbid disorder are contributors to the disorder under study. The evidence that youth with Depressive Disorders have a cognitive and interpersonal style distinct from youth with Disruptive Disorders (Dodge, 1993) raises questions about the interpersonal cognitions of this population.

2.6.1 Diagnosis and Prevalence of Comorbid Disruptive and Depressive Disorders

a. Clinical Characteristics of Comorbid Disruptive and Depressive Disorders

Research into the symptom profile associated with this dual diagnosis is limited. In at least one sample (ages 15 to 24) "Syndrome atypicality" was significantly greater in amongst individuals with comorbid conditions including Comorbid Depressive and Disorders (Sullivan, Kessler, & Kendler, 1998). There is significant evidence to suggest that this dual diagnosis is associated with more severe symptomatology and impairment

especially among females (Angold, Costello, & Erkanli, 1999; Mamorstein & Iancono's, 2001; Newman, Moffitt, Caspi, & Silva's, 1998; Rohde, Clarke, Lewinsohn, Seeley, & Kaufman, 2001). Comorbid CD and depression is associated with a significantly greater risk of suicidal behavior than either disorder alone (Keenan, Loeber, & Green, 1999) and decreased long-term treatment effects (Rohde et al., 2001).

b. Order of onset

There is contradictory evidence about whether Depressive or Disruptive Disorders tend to precede the other. A specific pattern of onset would have implications for the ways in which Comorbid Disruptive and Depressive Disorders develop, manifest, and should be treated. The preponderance of research indicates that Depressive Disorders antedate Comorbid disorders (American Academy of Child and Adolescent Psychiatry, 1997; Avenevoli, Stolar, Li, Dierker, & Merikangas, 2001; Biederman et al., 1995; Kovacs, Paulauskas, Gatsonis, & Richards, 1988), but research specific to Disruptive Disorders and CDs is minimal (Avenevoli, Stolar, Li, Dierker, & Merikangas, 2001). Harrington, Rutter, and Frombonne (1996) suggest a mechanism of action where early conduct problems serve to increase stressful life events, which in turn predict the onset of Depressive Disorders.

c. Prevalence

Evidence suggests that a significant portion of youth with Depressive Disorders experience a comorbid Disruptive Disorder and vice versa (Caron & Rutter, 1991; Marmorstein & Iacono's, 2001). Although estimates of this dual diagnosis varies widely dependent on sample, age, and gender, all but one study (Breton et al., 1999) found a

significant relationship between the two disorders (Avenoli et al., 2001; Biederman et al., 1995; Harrington et al., 1996; Kovacs et al., 1988; Myers, Burket, & Otto, 1993; Zoccolillo, 1992). Angold, Costello, and Erkanli's (1999) review of studies with community samples estimated the association between Depressive and Disruptive Disorders at 6.6 percent- a significant association. In Arseneault et al.'s, (2000) clinical sample 33.3% of CD group also met criteria for Major Depression (MDD) or Dysthymic Disorder (DD) while 26.2% of the ODD sample had MDD or DD.

2.6.2 Factors which Differentiate Development of Comorbid Disruptive and Depressive Disorders

a. Similarities in Interpersonal Cognitions of Depressive and Disruptive Disorders

Although the interpersonal cognitions of youth with Depressive or Disruptive Disorders are distinct in many ways, there are also similarities in their understanding of social relationships. This is likely due to similarities in life and interpersonal experience as compared to non-disordered youth. Both diagnoses are associated with significantly more interpersonal difficulties (Conduct Problems Research Group, 2002; Crick & Dodge, 1994; Dodge & Petit, 2003; Gotlib & Hammen, 1992) and adverse life events (Tiet et al., 2001) than non-disordered youth. Sanders et al., (1992) found that both groups exhibit significant interpersonal problem solving deficits and significant "overlap in…interactional style". Thus, while youth with Depressive and Disruptive Diagnoses can be expected to differ in many specific interpersonal cognitions, they appear to share an overall negative view of interpersonal relationships. It follows that youth with both

diagnoses would likely share this interpersonal cognitive style. Given evidence that comorbid youth tend to exhibit similar but more severe dysfunction than single diagnosis peers it seems likely that comorbid youth could be expected to exhibit similar interpersonal cognitions but to a greater degree.

b. Similarities to Pure Depressive Disorder

There is some evidence that youth with Disruptive and Depressive Disorders exhibit a cognitive style more similar to those of Depressed youth. In Rudolph and Clark's (2001) examination of the relationship between social perception and depressive symptomatology in children, increased levels of social withdrawal differentiated youth with aggressive and depressive symptoms from asymptomatic peers. Youth with Depressive Disorders, however, exhibit significantly higher levels of social withdrawal as compared to Disruptive only youth (Rudolph & Clark, 2001). The authors concluded that depressed children relatively accurately perceive social information (although more negative than was warranted by social status) but lack adaptive responses (e.g. skill deficit), while aggressive children are "insensitive to social cues in their environment". They conclude that combined children most closely parallel the depressed group- they view themselves and peers more negatively.

Other studies have found a similar pattern. Anderson, Williams, McGee, and Silva (1989) found that youth Depression or Comorobid Disruptive and Depressive Diagnoses have lower self-esteem than do control or Disruptive only youth. It appears that youth with Comorbid Depressive and Disruptive Disorders exhibit significantly lower levels of aggression than do Disruptive only youth (Dadds, Sanders, Morrison, &

Rebgetz, 1992) and Sanders et al., (1992) found that children with Comorbid Conduct Disorder and Deprssion “were characterized by depressive rather than both angry and depressed affect. Youth with Comorbid Depressive and Disruptive Disorders also exhibit a negative conceptualization of peers similar which is similar to Depressed youth but significantly more negative than Disruptive only youth (Rudolph & Clark, 2001). While it appears that Comorbid youth hold some cognitions more similar to those of pure Depressed youth, it cannot be said that this is the case overall.

c. Similarities to Pure Disruptive Disorder

Youth with comorbid Depressive and Disruptive Diagnoses exhibit cognitions similar to that of depressed youth, but it appears that their social functioning is more similar to that of youth with CD or ODD. This maladaptive social functioning is in turn linked to poor social relationships. As discussed previously, Disruptive Disorders tend to precede (American Academy of Child and Adolescent Psychiatry, 1997; Avenevoli, Stolar, Li, Dierker, & Merikangas, 2001; Biederman et al., 1995) and outlast comorbid Depressive Disorders (Kovacs et al., 1988; Angold, Costello, & Erkanli, 1999). Multiple researchers have concluded that the significant social difficulties exhibited by youth with Comorobid Depressive and Disruptive Disorders are similar to those of Disruptive only youth and significantly more severe and pervasive than youth with Depression alone (Cole & Carpentieri, 1990; Harrington et al., 1996).

In Rudolph and Clark’s (2001) sample, Depressed aggressive youth exhibited the lowest level of prosocial behavior and popularity and the highest levels of aggressive/oppositional behavior and levels of peer rejection similar to the aggression

only group. Depressed only youth showed significantly less impairment in all of these realms leading Rudolph and Clark (2001) to conclude that problematic social status among comorbid youth was found to be “more a function of CD than Depression”. Thus, it appears that the social relationships of youth with Comorbid Depressive and Disruptive Diagnoses exhibit social skills and behavior more similar to Disruptive than Depressed youth.

d. Evidence for uniqueness of Comorbid Depressive/Disruptive Disorders

Thus it appears that youth with Comorbid Depressive and Disruptive Disorders can be expected to have an understanding of relationships similar to each diagnostic category and to have an understanding of social behavior more similar to the Disruptive group. Still there is research to suggest that the interpersonal schema of youth with Comorbid Depressive and Disruptive Diagnoses may differ significantly from those with either disorder alone. Comorbidity magnifies the dysfunction associated with “pure” diagnoses. Marmorstein and Iacono (2001) found an interaction of the two diagnoses produces a significantly lower incidence of positive emotion. Other research has found very low levels of self and other referent negative cognitions but displayed higher levels of depressive affect as compared to either disorder alone (Sanders et al., 1992). Milich and Landau (1984) found that the combination of aggression and withdrawal was associated with the highest level of negative peer interaction and rejection, significantly more problematic that aggression or withdrawal alone.

e. Interpersonal Schema

In McGee, Wolfe, and Olson's (2001) study of maltreated adolescents self and other blame for maltreatment often co-existed. The greatest levels of maladaption were where perception and attributions were "confused and conflicting" and not commensurate with the situation or maltreatment. The limited research into comorbid Depressive and Disruptive Diagnoses yields a somewhat conflicting picture of the interpersonal lives of these youth. What is clear is the increased severity of dysfunction associated with this pattern of comorbidity (Angold, Costello, & Erkanli, 1999; Mamorstein & Iancono's, 2001; Newman et al., 1998; Rohde et al., 2001). Perhaps the interpersonal cognitions of comorbid youth are not so much qualitatively but quantitatively different from either disorder alone.

2.7 Statement of the Problem

Research into the development and manifestation of Disruptive and Depressive Disorders highlights the importance of both cognitive and interpersonal variables to Interpersonal and Disruptive Disorders (Conduct Problems Research Group, 2002; Crick & Dodge, 1994; Dodge & Petit, 2003, Gotlib & Hammen, 1992). Factors which contribute to both types of disorders have more in common than not. Both sets of youth experience early, negative interpersonal relationships (Burge, & Hammen, 1991; Fergusson et al., 1996) and exhibit biased interpersonal cognition (Dodge & Petit, 2003; Sheeber & Sorensen, 1998). While some research has indicated that interpersonal and cognitive factors differentiate these groups (Dodge, 1993; Jewell & Stark, 2003), a

thorough understanding of the nature of these differences is lacking (Garber & Kaminski, 2000).

There is strong evidence that comorbid diagnoses in youth are the rule rather than the exception. Nevertheless, research into the development, manifestation, and treatment of co-occurring disorders is a relatively new development (Angold et al., 1999; Stahl & Clarizio, 1999). Given the current status of research into comorbid disorders, it is not surprising that there is little research into the characteristics of youth that have been diagnosed with both Disruptive and Depressive Disorders (Dadds et al., 1992). A better understanding of the similarities and differences of the interpersonal cognitions of youth with would have significant implications for the prevention and treatment.

This study is an exploratory examination of the interpersonal cognitions characteristic of youth with pure and comorbid Disruptive and Depressive Disorders.

2.8 Hypotheses

It is hypothesized that youth who have been diagnosed with (1) a Depressive Disorder, (2) a Disruptive Disorder, and (3) both a Depressive and a Disruptive Disorder will differ significantly from one another and from youth who do not meet criteria for any disorder (control group) on measures of various aspects of interpersonal schema.

Given the limited research into the interpersonal cognitions of Comorbid and Disruptive youth, not to mention the inherent contradiction of this version of comorbidity, it is difficult to hypothesize about what will be observed in this study with any confidence. Therefore, this study will be exploratory in nature rather than confirmatory. More specifically:

2.8.1 Hypothesis 1: $\mu_{CM}>\mu_{DI}=\mu_{DE}>\mu_{C}$

It is predicted that all diagnostic groups will exhibit significantly greater frequency and severity of Abandonment/Instability (AI) in their TAT stories than do youth in the control groups. Furthermore it is predicted that the stories of youth with Comorbid Depressive and Disruptive Diagnoses will exhibit significantly more frequent and severe examples of AI than youth with a Disruptive or Depressive Diagnosis alone.

Rationale: The construct of Abandonment/Instability (AI) is defined by the perceived instability or unreliability of those available for support and connection. Research indicates that youth with Depressive and Disruptive Disorders are more likely to experience problematic attachment to parent. Parents of both diagnostic groups are less likely to respond or respond more inconsistently to their children's needs than are parents of nondisordered children (Berg-Nielsen et al., 2002; Breznitz & Sherman, 1987; Campbell et al., 1995; Cohn et al., 1990; Field et al., 1990; Lyons-Ruth, 1996; Moss et al., 2004; Radziszewska et al., 1996; Shaw et al., 1996; Stark et al., 1996; Wakschlag & Hans, 1999). Furthermore it appears that problematic relationship pattern persist over the course of development (Brennan et al., 2002; Campbell et al., 1996; Caspi et al., 2004; Garber et al., 2002; Shiner & Marmorstein, 1998; Thomas & Forehand, 1991). Providing further support for this hypothesis, both diagnostic groups have been shown to experience and expect negative interactions with others (Barrett et al., 1996; Bierman & Wargo, 1995; Connolly et al., 1992; Dodge & Petit, 2003; Dodge & Schwartz, 1997; 1992; Garber et al., 1993; Gladstone et al., 1997; Hammen & Brennan, 2001; Hill, 2002; Lewisohn et al., 1997; McKeough et al., 1994; Quiggle et al., 1992; Soygut & Savasir,

2001; Wyatt & Haskett, 2001). This evidence suggests that youth with DIs and DEs are less likely to understand social interaction as entailing support from or connection to others. This hypothesis will explore the extent to which these expectations differ from those of non-disordered youth as well as the extent to which the expectations of these groups may differ from one another.

The literature on comorbid disorders does not offer specific evidence pertaining to expectations and beliefs of youth with Comorbid Depressive and Disruptive Diagnoses. There is evidence, however, to suggest that these youth exhibit more severe social impairment overall as compared to youth with a single disorder (Cole & Carpentieri, 1990; Harrington et al., 1996; Rudolph & Clark, 2001). Thus, it is likely that these youth experience an increased frequency of social rejection (Milich & Landau, 1984). For this reason, it is hypothesized that the stories of youth with Comorbid Depressive and Disruptive Diagnoses will contain significantly greater frequency and severity of examples of AI as compared to youth with either disorder alone.

2.8.2 Hypothesis 2: $\mu_{CM}>\mu_{DE}>\mu_{DI}>\mu_{C}$

It is predicted that youth with Comorbid Depressive and Disruptive Diagnoses will exhibit significantly more instances of Emotional Deprivation (ED) than youth with Depressive Disorders who in turn will exhibit significantly more instances than do youth with Disruptive Disorders. Finally, youth with Disruptive Disorders will exhibit significantly more instances of ED than non-disordered youth.

Rationale: Emotional Deprivation (ED) is defined as the presence of an emotional need that is not being met. While Depressed and Disruptive children are more

likely to come from a family environment where parents are inconsistently and unpredictably available for emotional support (Berg-Nielsen et al., 2002; Breznitz & Sherman, 1987; Campbell et al., 1995; Cohn et al., 1990; Field et al., 1990; Lyons-Ruth, 1996; Moss et al., 2004; Radziszewska et al., 1996; Shaw et al., 1996; Stark et al., 1996; Wakschlag & Hans, 1999), the emotional symptoms of depression constitute a near constant emotional need. In contrast youth with Disruptive youth tend to see themselves as confident and competent (Brendgen et al., 2004; Perez et al., 2001; Zariski & Coie, 1996) and potentially as less "needy" than Depressed children.

While the literature on Comorbid Depressive and Disruptive Diagnoses does not provide specific information about emotionality in these youth, the combination of Depressive and Disruptive Diagnoses corresponds to an especially severe pattern of symptomatology (Angold et al., 1999; Mamorstein & Iancono's, 2001; Newman et al., 1998; Rohde et al., 2001). Thus, these youth are likely to experience extremes in emotionality (Marmorstein & Iacono, 2001), which is compounded by a lack of positive social relationships (Cole & Carpentieri, 1990; Harrington et al., 1996; Milich & Landau, 1984; Rudolph & Clark, 2001). It is predicted that this combination of extreme emotional distress combined with non-responsive home environment will yield high incidences of ED in TAT stories.

2.8.3 Hypothesis 3: $\mu_{CM} > \mu_{DE} > \mu_{DI} > \mu_{C}$

It is predicted that youth meeting criteria will exhibit the greatest frequency and severity of Social Isolation (SI) with Depressed youth exhibiting more than Disruptive youth and control youth exhibiting the lowest levels of SI.

Rationale: Social Isolation (SI) is defined by the feeling that one is isolated from the rest of the world and/or not a part of any group or community. Youth with Depression tend to be socially isolated (Messer & Gross, 1995; Rudolph & Clark, 2001) which is compounded a sense that their social status will not change. In contrast, youth with Disruptive Diangoses tend to see themselves as socially competent (Brendgen et al., 2004; Perez et al., 2001; Zariski & Coie, 1996). Thus it is predicted that the stories of youth with Depressive Diagnoses will contain more frequent and severe examples of SI.

As with other variables, the literature on Comorbid Depressive and Disruptive Diagnoses does not provide research specific to SI. Rudolph and Clark (2001), however, found that youth with comorbid disorders exhibit elevated levels of social withdrawal. In addition, these youth are likely to experience higher levels of social rejection than youth with Disruptive or Depressive Diagnoses alone (Milich & Landau, 1984). For this reason, it is predicted that youth with Comorbid Depressive and Disruptive Diagnoses will exhibit the most frequent and severe instances of SI in their stories.

2.8.4 Hypothesis 4: $\mu_{DI}>\mu_{CM}>\mu_{DE}=\mu_{C}$

It is predicted that youth with Disruptive Disorders alone will exhibit instances of Aggression (AG) at a level higher than other groups. Youth with Comorbid Depressive and Disruptive Diagnoses are expected to exhibit elevated frequency and severity of instances of AG as compared to both Depressed and control groups.

Rationale: Aggression (AG) is defined as any expression or indication of verbal or physical aggression/hostility toward others. Aggression is, to some extent, a defining aspect of Disruptive Disorders. Increased levels of aggression both verbal and

physical (Dodge & Schwartz, 1997) and the perception that aggression is an effective interpersonal strategy (Perry et al., 1986; Smithmyer et al., 2000) are consistently supported by research. Also, research indicates that this group is prone to expect aggression from others (Crick et al., 2002; Dodge et al., 1990).

This is one area where research prior research into Comorbid Depressive and Disruptive Diagnoses is useful. Although preliminary it appears that comorbid youth exhibit less aggression than to Disruptive only peers (Dadds et al., 1992). These youth, however, still exhibit increased aggression as compared to Disruptive or nondisordered peers (Rudolph & Clark, 2001). Thus, it is predicted that stories of Disruptive youth will contain the most frequent and severe examples of AG followed by comorbid youth. It is predicted that the levels of AG in the stories of Depressed and Control youth will not differ significantly.

2.8.5 Hypothesis 5: $\mu_{DI}>\mu_{CM}>\mu_{DE}=\mu_{C}$

It is proposed that youth with Disruptive Disorders will exhibit the highest incidence and severity of instances of Entitlement (EN) than will CM youth who will exhibit greater levels of EN as compared to Depressed or Control groups.

Rationale: Entitlement (EN) is defined as insistence that one should be able to do or have whatever one wants, regardless of what is reasonable or the cost to others; or an exaggerated focus on superiority, in order to achieve power or control. The work of Moffitt (1993a) on early onset Conduct Disorder supports the idea that these youth are callous and self-centered in their views of interpersonal relationships. Other research suggests that Comorbid Depressive Disorders mute the antisocial aspects of Disruptive

Disorders (Dadds et al., 1992; Sanders et al., 1992) thus it is proposed that youth with Disruptive Diagnoses will exhibit the highest incidence of EN in their stories, followed by youth with Comorbid Depressive and Disruptive Diagnoses. There is no empirical evidence linking feelings of entitlement to Depressive Disorders thus it is proposed that youth with Depressive Disorders will not exhibit greater incidences of EN as compared to controls.

2.8.6 Hypothesis 6: $\mu_{CM}>\mu_{DE}>\mu_{DI}>\mu_{C}$

It is proposed that youth with Comorbid Depressive and Disruptive Diagnoses will exhibit the greatest levels of Quality of Relational Interaction (QR). Youth with Depression are expected to exhibit greater levels of QR as compared to youth with Disruptive Disorders who are in turn expected to exhibit greater levels of QR than Controls.

Rationale: Quality of Relational Interaction (QR) is defined as the overall explanatory tone of social interaction, the affective representation of relationships. Because comorbid youth likely come from the most dysfunctional of interpersonal experience (Milich & Landau, 1984), it is proposed that the stories of these youth will be especially negative in tone. As well, depressed youth have negative expectations and make negative attributions more frequently than non-depressed peers (Garber et al., 1993; Gladstone et al., 1997; Lewinsohn et al., 1994; Soygut & Savasir, 2001; Sheeber & Sorenson, 1998). Thus it is predicted that the stories of Comorbid youth will exhibit the greatest incidence of negative QR with Depressed youth exhibiting lesser but significant levels of negative QR. In contrast, some research has shown that Disruptive youth hold

an overly optimistic perception of their own social skills and status (Perry et al., 1986; Zariski & Coie, 1996; Hughes, 1997; Swearer, 1998). While they tend to have negative expectations of others, they are more confident of their own ability to "handle" these situations (Brendgen et al., 2004; Perez et al., 2001; Zariski & Coie, 1996). This group is expected to exhibit a more negative tone to their stories as compared to controls but a more positive tone as compared to Comorbid or Depressed youth.

2.8.7 Hypothesis 7: $\mu_{CM}>\mu_{DE}>\mu_{DI}>\mu_{C}$

It is proposed that youth with Comorbid Depressive and Disruptive Diagnoses will exhibit the greatest levels of Helplessness (HE). Youth with Depression are expected to exhibit greater levels of HE as compared to youth with Disruptive Diagnoses who are in turn expected to exhibit greater levels of HE than Controls.

Rationale: Helplessness is defined as the lack of control over negative, external forces. A sense of HE is highly associated with Depression (Gotlib et al., 1993; Lewinsohn, 1998; Weisz et al., 2001). Therefore it is expected that both groups of Depressed youth will exhibit elevated levels of HE. It is predicted that comorbid youth who exhibit especially poor social and coping skills (Rudolph & Clark, 2001; Cole & Carpentieri, 1990; Harrington et al., 1996) will exhibit the highest levels of HE. Youth with Disruptive Diagnoses also lack effective coping strategies (Fergusson et al., 1996; Tremblay, 2004; Patterson, 1986) but see themselves as socially competent (Brendgen et al., 2004; Hughes et al., 1997; Perez et al., 2001; Perry et al., 1986; Swearer, 1998; Zariski & Coie, 1996) are expected to exhibit elevated HE as compared to controls but less profound sense of helplessness than Depresed or Comorbid peers.

3. Method

3.1 Overview

Youth with diagnoses of Conduct or Oppositional Defiant Disorder (Disruptive Disorder), Depression (Depressive Disorder), or comorbid Depressive and Disruptive Disorder, and a nondisordered control group were administered a diagnostic interview and a Thematic Apperception Test. Apperception test stories were coded for interpersonal schema.

3.2 Participants

The total sample consisted of 95 youth. The age range for the total sample was 11-18 (M= 14.7, SD=1.39) and participants were in grades 6-12 (M=8.99 , SD= 1.41). Thirty-eight of the participants were female (40%) and 55 male (60%). Of the total sample 83% were Caucasian (n= 79), 4% were Hispanic (n=4), 3% were Bi-racial (n=3), 2% were African-American (n=2), 2% categorized themselves as "other" (n=2), and 1% were Asian-American (n=1). Family living arrangements at the time of data collection varied with the most common family structure consisting of children or adolescents who lived with their biological mother and father (35%, n = 33); 27% lived with their biological mother and stepfather (n = 26); 16% lived with their biological mother only (n = 15); 6% lived with their biological father and step mother (n = 6); 5% lived with their biological father only (n = 5); 3% lived with their adoptive parents n = 3); 2% described their family structure as "other" (n = 2); 1% lived with their grandparents (n= 1). All participants resided in a mid-sized city in Central Texas at the time of data collection.

Table 1. *Age and Grade Means and Standard Deviations within Experimental Groups*

	Diagnostic Group							
	Disruptive Disorder		Depressive Disorder		Comorbid		Control	
	M	SD	M	SD	M	SD	M	SD
Age	14.47	1.46	15.05	1.03	14.72	1.35	14.57	1.62
Grade	8.47	1.46	9.33	1.37	8.84	1.29	9.21	1.50

Table 2. *Participant Ethnicity within and across Experimental Groups*

	Diagnostic Group									
	Disruptive		Depressive		Comorbid		Control		Total	
Ethnicity	n	%	n	%	n	%	n	%	n	%
Caucasian	12	80%	17	94%	30	97%	20	69%	79	83%
Hispanic	1	7%					3	11%	4	4%
Bi-Racial							3	11%	3	3%
African-American	1	7%					1	3%	2	2%
Other			1	5%	1	3%			2	2%
Asian-American	1	7%							1	1%
Unknown			1	5%	1	3%	2	7%	4	4%

Table 3. *Participant Gender within and across Experimental Groups*

	Diagnostic Group									
	Disruptive		Depressive		Comorbid		Control		Total	
Gender	n	%	n	%	n	%	n	%	n	%
Female	3	20%	9	47%	14	44%	12	41%	38	40%
Male	12	80%	9	47%	17	53%	17	59%	55	58%
Unknown			1	5%	1	3%			2	2%

Table 4. *Participant Living Arrangement within and across Experimental Groups*

	Diagnostic Group									
	Disruptive		Depressive		Comorbid		Control		Total	
Living Arrangement	n	%	n	%	n	%	n	%	n	%
Biological Parents	3	20%	3	16%	9	28%	18	62%	33	35%
Biological Mother & Step-Father	4	27%	9	47%	8	25%	5	17%	26	27%
Biological Mother	1	7%	4	21%	7	22%	3	10%	15	16%
Biological Father & Step-Mother	1	7%	2	11%	2	6%	1	3%	6	6%
Biological Father	2	13%			2	6%	1	3%	5	5%
Adoptive Mother & Father	2	13%			1	3%			3	3%
Other	2	13%							2	2%
Grandparents					1	3%			1	1%
Unknown			1	5%	2	6%	1	3%	4	4%

3.2.1 Diagnostic Groups

Diagnostic group participants (n= 66) were children and adolescents selected from a larger, ongoing study of individuals receiving treatment at an inpatient psychiatric facility. Diagnostic subgroups were determined by diagnosis. The Disruptive Disorder group (n=15) consisted of those diagnosed with Conduct Disorder or Oppositional Defiant Disorder. Diagnoses of Major Depression, Dysthymic Disorder, or Depressive Disorder Not Otherwise Specified comprised the Depressive Disorder group (n= 19). The comorbid group (n=32) consisted of youth who were diagnosed with both DIs and DEs. Individuals who presented with organically based psychological disorders (e.g. mental retardation), psychotic symptoms, episodic and stress-related behaviors (e.g. Adjustment Disorder), unwillingness to participate, physical illness which prevented assessment, or a Full Scale IQ score below 85 were excluded. Demographic information (including IQ score) was obtained from the youth's clinical record. The age range for the diagnostic sample was 12-17 and diagnostic group participants were in grades 6-12. Twenty-six of the participants were female and 38 male. Of the diagnostic group, 89% were Caucasian (n= 59), 3% categorized themselves as "other" (n=2), 2% were African-American (n=1), 2% were Hispanic (n=1), and 2% were Asian-American (n=1). Family living arrangements prior to admission varied with the most common family structure consisting of children or adolescents who lived with their biological mother and stepfather (32%, n = 21); 23% lived with their biological mother and biological father (n = 15); 18% lived with their biological mother only (n = 12); 8% lived with their biological father and step mother (n = 5); 6% lived with their biological father only (n =

4); 5% lived with their adoptive parents (n = 3); 3% described their family structure as "other" (n = 2), and 2% lived with their grandparents (n= 1).

Table 5. *Participant Psychiatric Diagnoses within and across Diagnostic Groups*

Psychiatric Diagnosis	Diagnostic Group							
	Disruptive		Depressive		Comorbid		Total	
	n	%	n	%	n	%	n	%
Major Depression			17	89%	28	88%	45	68%
Dysthymia			3	16%	4	13%	7	11%
Depressive Disorder NOS					1	3%	1	2%
Conduct Disorder	8	53%			21	66%	29	44%
Oppositional Defiant Disorder	2	13%			8	25%	10	15%
Attention-Deficit/ Hyperactivity Disorder	7	47%	7	37%	12	38%	26	39%
Substance Abuse Disorder	2	13%	2	11%	15	47%	19	29%
Post Traumatic Stress Disorder			5	26%			5	8%
Intermittent Explosive Disorder					2	6%	2	3%

3.2.2 Control Group

Control participants (n=29) were volunteers from a nearby high school, ninth grade center, and middle school. Youth who met the diagnostic criteria for any psychiatric disorder were excluded from participation. The age range for the control sample was 11-18 and were in grades 6-12. Twelve of the participants were female and

17 male. Of the control sample 74% were Caucasian (n= 20), 11% were Hispanic (n=3), and 11% were Bi-racial (n=3), 2% Classified their ethnicity as “Other” (n=2), 1% were African-American (n=1), and 1% (n=1) were Asian-American. Sixty-four percent (n=18) of control youth were reported to live with both biological parents; 18% lived with their biological mother and step father (n = 5); 11% lived with their biological mother only (n = 3); 4% lived with their biological father only (n = 1); and 4% lived with their biological father and step mother (n = 1). IQ data were not obtained for the control sample.

An effort was made to match control group demographics to those of the larger study and the diagnostic and control groups were well matched by gender, ethnicity, age and grade level. Because the current research includes only a portion of the larger sample there is some discrepancy between the diagnostic and control groups. More specifically, participants in the three diagnostic groups were much less likely to live with both biological parents than were control participants. While the DI group includes more males than the other experimental groups, this is to be expected given that DIs occur more frequently in males.

3.3 Instruments

3.3.1 The Schedule for Affective Disorders and Schizophrenia for School-Age Children Epidemiological and Present Combined Version (K-SADS-E & P) (Orvaschel & Puig-Antich, 1986) (see Appendix A).

This semi-structured diagnostic interview was designed to assess Axis I diagnoses of the DSM-III-R. The version of this interview used in this study was updated with the author's permission (phone communication, Helen Orvaschel, March 1994) in order to

meet DSM-IV criteria of all Axis I disorders. The K-SADS-E and P is designed for use with youths ages 6-17 and their parents. The combined present state and epidemiologic version used in this study (K-SADS-E & P) inquires about lifetime history of disorders and included both current and past symptomatology. Each section of the K-SADS-E & P covers a different disorder and begins with screening questions. If the participant does not endorse the screening question, the interviewer proceeds to the next section of the interview. If the participant endorses a screening question, the entire section is then administered. Each question represents a DSM-IV diagnostic criterion and the interviewer codes each response by frequency and/or severity. Once the interview is complete, the interviewer reviews endorsed items and determines if they meet the diagnostic threshold for any DSM-IV Axis I disorder.

The original K-SADS-E has been shown to demonstrate acceptable inter-rater reliability (Ambrosini, 2000; Curry & Craighead, 1990) and has been shown to produce high levels of agreement in diagnosis ($\underline{r}$ =. 86) (Orvaschel, Puig-Antich, Chambers, Tabrizi & Johnson, 1982). In a review of recent K-SADS research, Ambrosini (2000) found that the measure has adequate validity and reliability across multiple studies. Furthermore this measure is widely used in research to establish clinical diagnoses including depressive (e.g. Goodyer et al., 1997; Sheeber & Sorensen, 1998; Stark et al., 1993) and DIs (Greene, Ablon, Goring, Raezer-Blakely, Markey, Monuteaux, Henin, Edwards, & Rabbit, 2004).

K-SADS interviewers were advanced graduate students in a School Psychology doctoral program. Training consisted of an initial training session with a Professor in the

program or a previously trained student. Subsequently, trainees reviewed taped interviews and engaged in mock interviews. Inter-rater reliability was established by having trainees score taped interviews and comparing ratings and diagnoses with those of the original interviewer. Once a trainee had obtained inter-rater reliability on three interviews they were permitted to interview participants. Interviewers were blind to admitting diagnoses.

3.3.2 The Thematic Apperception Test (TAT; Murray, 1943).

The Thematic Apperception Test is a projective measure that has been successfully used to assess cognitive-affective processes that underlie interpersonal functioning (Westen, et al., 1990) such as attributional style (Peterson & Ulrey, 1994), object relations (Westen, 1991), and social cognition (Westen et al., 1990). The test consists of black-and-white illustrations shown to the participant who is then encouraged to tell a story about the picture. Participants are asked to tell what is happening in the picture as well as what happened before and what will happen next. They are also encouraged to describe the emotions and cognitions of any characters in the story. Appendix B contains initial instructions and standard prompts.

Schultheiss and Brunstein (2001) suggest that the TAT and other projective techniques are especially suitable for getting at unconscious cognitive structures such as schemas. McGrew & Teglasi (1990) were able to use TAT stories to distinguish "emotionally disturbed" from their non-disturbed peers. The use of story and testimony has been used to measure the self-schema in depressed children and adolescents (Hammen & Goodman-Brown, 1990).

3.3.3 The Interpersonal Schema Analysis (ISA; Appendix **C**)

In order to assess stories elicited by the TAT cards for interpersonal schema, a coding system called Interpersonal Schema Analysis was developed by three predoctoral graduate students (including the author). The system was based on theoretical and empirical literature regarding interpersonal cognitions and psychopathology.

An initial review of the literature resulted in the creation of fourteen domains in which to code the TAT responses. Eventually, it was determined that this list could be appropriately reduced to eight domains without the loss of any significant information. These seven domains ultimately serve as the dependent variables in the current study (See table 7 for further description of the seven domains).

Young's (1992) theory of the relationship between personality disorders and maladaptive schemas, the developmental nature of which lends itself to be applied to a sample of children and adolescents, was the basis for five of the ISA domains. These are Abandonment/Instability (AI), Emotional Deprivation (ED), Social Isolation (SI), Aggression (AG), and Entitlement (EN). Similarly, Westen's (1991) method for assessing object relations with the TAT served as the basis for Quality of Relational Interaction (QR). The final category, Helplessness (HE), was based upon Seligman's (1984) helplessness theory of depression.

Table 6. *Inter-Rater Reliability for ISA Domains*

	Intraclass Correlation Coefficients		
ISA Domain	Single Rater ICC	F	p.
Abandonment/Instability (AI)	.584	5.170	.000
Emotional Deprivation (ED)	.504	4.227	.000
Social Isolation (SI)	.524	4.908	.000
Aggression (AG)	.628	6.194	.000
Entitlement (EN)	.367	2.734	.000
Quality of Relational Interaction (QR)	.572	5.102	.000
Helplessness (HE)	.589	5.667	.000
Other Directedness (OD)	.044	1.139	.247
Emotional Expression (EE)	.300	2.325	.000
Distorted Causality (DC)	.438	3.419	.000

Once the coding system was developed, it was necessary to establish inter-rater reliability. Transcripts (consisting of 13 TAT stories per transcript) for five randomly selected participants were reviewed and coded for 13 ISA categories by the raters (three predoctoral graduate students) as a group. Discrepancies were discussed and the coding system was adjusted to make variable descriptors more clear. Three categories (Approval Seeking, Dependency, and Locus of Control) were dropped due to lack of occurrence in the TAT stories. Subsequently, a separate sample of six transcripts was coded individually. To establish inter-rater reliability, intraclass correlation

coefficients—two-way mixed design (subjects were random factor, raters were fixed factor) with absolute agreement—were computed (See table 6). One category (Other-Directedness) yielded low inter-rater agreement. Upon review of the coding data, it was clear that this category was rarely present in the TAT transcripts leaving little room for inter-rater variability. Two categories, Distorted Causality and Emotional Expression, had adequate reliability but were determined to be non-specific to Interpersonal Schema. Thus three domains were dropped from the ISA. Seven ISA categories yielded adequate inter-rater agreement and were retained to make up the final ISA coding domains (see table 7).

Table 7. *Domains of Interpersonal Schema Assessed by ISA*

Domain	Definition
Abandonment/Instability	*Perceived instability or unreliability of those available for support and connection.*
Emotional Deprivation	*Presence of an emotional need that is not being met.*
Social Isolation	*The feeling that one is isolated from the rest of the world and/or not a part of any group or community.*
Aggression	*Any expression or indication of verbal or physical aggression/hostility toward others.*
Entitlement	*Insistence that one should be able to do or have whatever one wants, regardless of what is reasonable or the cost to others; or an exaggerated focus on superiority, in order to achieve power or control.*
Quality of Relational Interaction	*The overall explanatory tone of social interaction, the affective representation of relationships.*
Helplessness	*The lack of control over negative, external forces.*

To code the TAT responses, each story was scored on all eight of the ISA categories using a scale of 0 to 3 with "0" meaning a complete lack of the category quality and "3" representing significant frequency and intensity of the domain quality (see Appendix C for complete description of the Interpersonal Schema Analysis coding system). After all 13 stories were coded for a given participant, the 13 scores for each domain were summed to yield a single score for each domain. Thus, each participant received a score between 0 and 39 for each domain where a greater score indicated greater intensity and frequency of a domain.

3.4 Procedure

3.4.1 Diagnostic Sample

Data was gathered from the participants and their parents upon admission to the inpatient psychiatric facility. At intake, all adolescents and children were invited by a staff member to participate in the study. Participation was voluntary and the treatment received was not effected by their decision to participate or not. Once verbal consent was obtained, an assent form was reviewed and signed (Appendix D). In addition, a separate consent form was reviewed by a staff member and signed by the parent or guardian (Appendix E).

Treatment center staff reviewed intake diagnosis and determined whether a youth met the criteria for the larger ongoing study. A staff member then contacted a member of the research team and coordinated assessment dates and times within two weeks of admission. The research team member did not inform other team members of youth

diagnosis. Assessment took place at the inpatient psychiatric facility in a quiet and private office.

3.4.2 Control Group

The initial wave of volunteer recruitment consisted of in-class presentations by research team members. Presentations consisted of information regarding the purpose of the study and the activities expected of participants and their parents. Students were informed that only a portion of those who volunteered would be selected for participation and that those who were selected would receive twenty dollars in compensation. Youth who were interested in participating were asked to raise their hands. Volunteers were given a consent form including an attached demographic questionnaire to be completed by the youth and their parents. Research team members returned to the schools to collect completed consent forms and a group of volunteers was selected based upon similarities to the demographic characteristics of the diagnostic sample. Assessments took place in various locations at participant's schools.

3.4.3 Assessment Procedure

Due to the lengthiness of the assessment battery, assessment took place over two to three sessions. At the outset of each assessment session consent, confidentiality, and a broad overview of the research project were reviewed with the participant. Order of TAT and K-SADS administration was counterbalanced. Every effort was made to administer the TAT and K-SADS within two weeks of each other.

The K-SADS was individually administered to the youths, resulting in an initial diagnosis. Because research indicates that youth report validity varies according to

diagnosis (Lahey et al., 2000), the K-SADS was also administered to the consenting parent by phone. In the case of control participants, the K-SADS results were used to rule out any Axis I diagnoses (other than ADHD). For diagnostic group participants, the K-SADS diagnosis was compared to the intake diagnosis of the admitting psychiatrist. Most often the two were congruent. In cases where the two clinicians differed, they would discuss relevant data and a consensus diagnosis was agreed upon. Based upon the diagnostic categories and exclusionary criteria, a diagnostic sample was selected and divided into three diagnostic groups, youth with depressive disorders, DIs, and both depressive and DIs.

The TAT was administered to each participant by a graduate student in a School Psychology graduate program. Training consisted of an introductory presentation, which reviewed administration guidelines and a sample administration. Trainees also listened to taped administrations and engaged in mock administrations with trainer feedback. The challenge of TAT administration lies not in the technicalities of consistent administration, rather the administrator's clinical judgement about which prompts to use and when to use them. Thus, training focused on teaching the trainees how to administer the TAT in a manner that encourages youth to feel comfortable and competent in their story telling, thus fostering a setting in which unconscious motivations and cognitions can emerge.

Arrangements for and structure of the assessment session was identical to that for the K-SADS. The TAT was administered in the procedure described in the materials section and their responses were tape-recorded. The individual who administered the TAT transcribed each tape and each transcript was coded by a trained graduate student

researcher using the ISA. The researcher who administered the TAT was blind to participant diagnosis.

In this study, the following cards were used as a method for assessing self-schema: 1, 2, 3BM, 5, 6BM, 7GF, 8GF, 8BM, 9GF, 9BM, 13B, 14, and 17BM. Administration of the entire TAT is lengthy and time consuming so only thirteen cards were administered, which meets Smith's (1992) suggested minimum for assurance of reliability. These cards were chosen to pull for interpersonal and self-cognitions.

3.5 Variables

Demographic information obtained for the diagnostic sample included grade level, gender, ethnicity, age, and family living arrangement. Independent variables were determined by psychological diagnosis. The sample was divided into four subgroups: Depressed, Disruptive, Comorbid, and Control. The eight interpersonal schema domains, which serve as dependent variables, are as follows (see table 7 and appendix C for more detailed description): Abandonment/Instability (AI), Emotional Deprivation (ED), Social Isolation (SI), Aggression (AG), Entitlement (EN), Quality of Relational Interaction (QR), and Helplessness (HE).

3.6 Data Analysis

3.6.1 Demographic Variables

To examine whether an association exists between demographic variables and experimental group, a two-way chi square will be performed on experimental group together with each of the nominal demographic variables: gender, ethnicity, and family living arrangement. For the continuous variables, age and grade level, an ANOVA will

be performed to see if a main effect exists for experimental group on each of these variables.

3.6.2 Descriptives

Means and standard deviations will be reported for each experimental group's interpersonal schema scores. Also, correlations between interpersonal schema will be calculated and reported in a correlation matrix.

3.6.3 Hypotheses

Hypothesis 1: $\mu_{CM} > \mu_{DI} = \mu_{DE} > \mu_{C}$

It is predicted that all diagnostic groups will exhibit significantly greater frequency and severity of Abandonment/Instability (AI) in their TAT stories than do youth in the control group. Furthermore it is predicted that the stories of youth with Comorbid Depressive and Disruptive Diagnoses will exhibit significantly more frequent and severe examples of AI than youth with Disruptive or Depressive Diagnoses alone.

Analytic Plan: Fisher's LSD procedure will be performed, $\alpha = .05$, to determine significant differences between experimental groups on AI.

Hypothesis 2: $\mu_{CM} > \mu_{DE} > \mu_{DI} > \mu_{C}$

It is predicted that youth with Comorbid Depressive and Disruptive Diagnoses will exhibit significantly more instances of Emotional Deprivation (ED) than youth with Depression who in turn will exhibit significantly more instances than do youth with Disruptive Diagnoses. Finally, Disruptive youth will exhibit significantly more instances of ED than non-disordered youth.

Analytic Plan: Fisher's LSD procedure will be performed, $\alpha = .05$, to determine significant differences between experimental groups on ED.

Hypothesis 3: $\mu_{CM} > \mu_{DE} > \mu_{DI} > \mu_{C}$

It is predicted that youth meeting criteria will exhibit the greatest frequency and severity of Social Isolation (SI) with Depressed youth exhibiting more than Disruptive youth and control youth exhibiting the lowest levels of SI.

Analytic Plan: Fisher's LSD procedure will be performed, $\alpha = .05$, to determine significant differences between experimental groups on SI.

Hypothesis 4: $\mu_{DI} > \mu_{CM} > \mu_{DE} = \mu_{C}$

It is predicted that youth with Disruptive Disorders alone will exhibit instances of Aggression (AG) at a level higher than other groups. Youth with Comorbid Depressive and Disruptive Diagnoses are expected to exhibit elevated frequency and severity of instances of AG as compared to both Depressed and Control groups.

Analytic Plan: Fisher's LSD procedure will be performed, $\alpha = .05$, to determine significant differences between experimental groups on AG.

Hypothesis 5: $\mu_{DI} > \mu_{CM} > \mu_{DE} = \mu_{C}$

It is proposed that youth with Disruptive Diagnoses will exhibit a higher incidence and severity of Entitlement (EN) than will Comorbid youth who will exhibit greater levels of EN as compared to Depressed or Control groups.

Analytic Plan Fisher's LSD procedure will be performed, $\alpha = .05$, to determine significant differences between experimental groups on EN.

Hypothesis 6: $\mu_{CM} > \mu_{DE} > \mu_{DI} > \mu_{C}$

It is proposed that youth with Comorbid Depressive and Disruptive Diagnoses will exhibit the greatest levels of Quality of Relational Interaction (QR). Youth with Depression are expected to exhibit greater levels of QR as compared to youth with Disruptive Diagnoses who are in turn expected to exhibit greater levels of QR than controls.

Analytic Plan: Fisher's LSD procedure will be performed, $\alpha = .05$, to determine significant differences between experimental groups on QR.

Hypothesis 7: $\mu_{CM} > \mu_{DE} > \mu_{DI} > \mu_{C}$

It is proposed that youth with Comorbid Depressive and Disruptive Diagnoses will exhibit the greatest levels of Helplessness (HE). Youth with Depression are expected to exhibit greater levels of HE as compared to youth with Disruptive Diagnoses who are in turn expected to exhibit greater levels of HE than Controls.

Analytic Plan: Fisher's LSD procedure will be performed, $\alpha = .05$, to determine significant differences between experimental groups on HE.

4. Results

Basic descriptive statistics have been computed for both the demographic and research variables. A series of chi squares and ANOVA's were performed to determine whether the demographic variables exerted any influence on the interpersonal schema.

To assess the stated hypotheses, a series of Fisher's LSD procedures were performed. Additionally, supplemental analyses were performed to address the highly intercorrelated nature of the interpersonal schema. These supplemental analyses consisted of a principal components factor analysis with varimax rotation and Fisher's LSD procedures conducted on the resulting two factors.

4.1 Descriptive Statistics and Preliminary Analyses

Means and standard deviations for each group on each interpersonal schema can be found in Table 8.

Table 8. *Descriptive Statistics*

ISA Domain	Group	Mean	SD	n
Abandonment/Instability				
	Disruptive	2.47	2.80	15
	Depressive	1.26	1.37	19
	Comorbid	3.38	3.25	32
	Control	2.25	3.18	28
	Total	2.47	2.93	94
Emotional Deprivation				
	Disruptive	2.33	3.37	15
	Depressive	.95	1.08	19
	Comorbid	1.72	2.00	32
	Control	1.57	3.06	28
	Total	1.62	2.48	94
Social Isolation				
	Disruptive	1.87	1.88	15
	Depressive	1.89	2.05	19
	Comorbid	2.50	3.62	32
	Control	2.93	3.83	28
	Total	2.40	3.19	94
Aggression				
	Disruptive	5.67	5.80	15
	Depressive	4.47	3.53	19
	Comorbid	6.53	3.74	32
	Control	3.28	2.26	28
	Total	5.01	3.93	94
Entitlement				
	Disruptive	6.53	6.02	15
	Depressive	4.05	3.22	19
	Comorbid	7.13	4.57	32
	Control	3.43	2.81	28
	Total	5.31	4.14	94
Quality of Relational Int.eraction				
	Disruptive	6.60	4.12	15
	Depressive	5.00	2.62	19
	Comorbid	5.44	2.64	32
	Control	3.96	3.19	28
	Total	5.10	3.16	94
Helplessness				
	Disruptive	8.00	4.41	15
	Depressive	6.63	2.73	19
	Comorbid	7.28	4.18	32
	Control	6.36	6.15	28
	Total	6.99	4.64	94

Table 9 demonstrates the intercorrelations of the interpersonal schema domains.

Table 9. *Correlation Matrix for ISA Domains*

	Pearson Correlation						
ISA Domain	HE	QR	EN	AG	SI	ED	AN
Abandonment/Instability (AI)	.699*	.330*	.426*	.297*	.639*	.702*	-
Emotional Deprivation (ED)	.707*	.544*	.450*	.343*	.594*	.-	-
Social Isolation (SI)	.676*	.140	.123	.091	-	-	-
Aggression (AG)	.300*	.509*	.810*	-	-	-	-
Entitlement (EN)	.434*	.598*	-	-	-	-	-
Quality of Relational Interaction (QR)	.431*	-	-	-	-	-	-
Helplessness (HE)	-	-	-	-	-	-	-

* Correlation is significant at the 0.01 level (2-tailed)

Analyses yielded multiple significant correlations, suggesting a lack of independence between domains. The possibility that these correlations indicate the effect some higher order constructs is examined further in section 4.3.

To determine if there are any associations between the nominal demographic variables (gender, SES, ethnicity, and family living arrangement) and diagnostic group, a series of chi squares were performed (see Table 10 for results). Because there are relatively few non-Caucasian participants, they were collapsed into two ethnic groups, Caucasian and non-Caucasian, for the purposes of demographic analyses. Similarly, the eight Family Living Arrangement categories were collapsed into three categories, both biological parents, one biological parent and one step-parent, and all other configurations.

Table 10. *Chi Square Tests of Association between Diagnostic Group and Demographic Variables*

Demographic Variable	Chi Square	df	Sig.
Gender	3.56	3	.313
SES	12.17	6	.058
Ethnicity	8.038	3	.045*
Family Living Arrangement	19.04	6	.004*

*Chi Square is significant at the 0.05 level

Similarly, to determine whether the continuous demographic variables (age, grade in school) had any influence on diagnostic group membership, Fisher's LSD procedures were performed. The diagnostic groups did not differ significantly on age [F (3,93) = .623, p = *n.s.*] or grade in school [F (3,91) = 1.42, p = *n.s.*].

4.2 Hypotheses

4.2.1 Hypothesis 1: Abandonment/Instability $\mu_{CM}>\mu_{DI}=\mu_{DE}>\mu_{C}$

In order to determine whether differences between experimental groups were significant on Abandonment/Instability, Fisher's LSD procedure was performed (α= .05) (see Table 4 for results).

It was hypothesized that all diagnostic groups would exhibit significantly greater frequency and severity of Abandonment/Instability (AI) in their TAT stories than would youth in the Control group. Furthermore, it was predicted that the stories of youth with Comorbid Depressive and Disruptive Diagnoses would exhibit significantly more frequent and severe examples of AI than youth with Disruptive or Depressive Disorders alone.

No significant between-group differences were found for Abandonment/Instability, F (3,93) = 2.23, p = *n.s.*

Table 11. *Test of Between-Subjects Effects, Abandonment/Instability*

Source	Degrees of Freedom	Sum of Squares	Mean Square	F	p
Group	3	55.24	18.41	2.23	.090
Error	90	744.17	8.27		
Total	93	799.40			

4.2.2 Hypothesis 2: Emotional Deprivation $\mu_{CM}>\mu_{DE}>\mu_{DI}>\mu_{C}$

In order to determine whether differences between experimental groups were significant on Emotional Deprivation (ED), Fisher's LSD procedure was performed ($\propto$= .05) (see Table 12 for results).

It was hypothesized that youth with Comorbid Depressive and Disruptive Diagnoses would exhibit significantly more instances of Emotional Deprivation (ED) than youth with Depression who in turn would exhibit significantly more instances than would youth with Disruptive Disorders. Finally, youth with Disruptive Disorders were predicted to exhibit significantly more instances of ED than non-disordered youth.

No significant between-group differences were found for Emotional Deprivation (ED) F (3,93) = .893, p = *n.s.*

Table 12. *Test of Between-Subjects Effects, Emotional Deprivation*

Source	Degrees of Freedom	Sum of Squares	Mean Square	F	p
Group	3	16.61	5.54	.893	.45
Error	90	557.61	6.20		
Total	93	574.21			

4.2.3 Hypothesis 3: Social Isolation $\mu_{CM}>\mu_{DE}>\mu_{DI}>\mu_{C}$

In order to determine whether differences between experimental groups were significant on Social Isolation (SI), Fisher's LSD procedure was performed (α= .05) (see Table 13 for results).

It was hypothesized that youth meeting diagnostic criteria for Comorbid Depressive and Disruptive Diagnoses would exhibit the greatest frequency and severity of Social Isolation (SI). Depressed youth would exhibit more than Disruptive youth, and Control youth would exhibit the lowest levels of SI.

No significant between-group differences were found for Social Isolation (SI) $F(3,93) = .56$, p = *n.s.*

Table 13. *Test of Between-Subjects Effects, Social Isolation*

Source	Degrees of Freedom	Sum of Squares	Mean Square	F	p
Group	3	17.26	5.75	.56	.65
Error	90	927.38	10.30		
Total	93	944.64			

4.2.4 Hypothesis 4: Aggression $\mu_{DI}>\mu_{CM}>\mu_{DE}=\mu_{C}$

In order to determine whether differences between experimental groups were significant on Aggression (AG), Fisher's LSD procedure was performed (α= .05) (see Table 14 for results).

It was hypothesized that youth with Disruptive Diagnoses alone would exhibit instances of Aggression (AG) at a level higher than other groups. Youth with Comorbid Depressive and Disruptive Diagnoses were expected to exhibit elevated frequency and severity of instances of AG as compared to both Depressed and Control groups.

A significant F value was obtained for Aggression (AG) F (3,93) = 4.01, $p < .05$.

Table 14. *Test of Between-Subjects Effects, Aggression*

Source	Degrees of Freedom	Sum of Squares	Mean Square	F	p
Group	3	169.24	56.41	4.01	.01
Error	90	1267.75	14.09		
Total	93	1436.99			

In order to determine the nature of these significant between-group differences, post hoc analyses were performed (see Table 15 for results of post hoc analyses). Two significant pair-wise differences were found. Youth with disruptive disorders were found to exhibit significantly more elevated scores on AG than Control youth and Comorbid youth were also found to exhibit significantly more elevated scores than Control youth.

Table 15. *Post Hoc Comparisons, Aggression*

Diagnostic Grp.	Diagnostic Group								
	Disruptive			Depressive			Comorbid		
	m diff.	se	sig.	m diff.	se	sig	m diff.	se	sig.
Control	-2.38	1.20	.05*	-1.19	1.12	.29	-3.25	.97	.001*
Comorbid	.86	1.17	.46	2.06	1.09	.46	-	-	-
Depressive	-1.19	1.30	.36	-	-	-	-	-	-

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

4.2.5 Hypothesis 5: Entitlement $\mu_{DI}>\mu_{CM}>\mu_{DE}=\mu_{C}$

In order to determine whether differences between experimental groups were significant on Entitlement (EN), Fisher's LSD procedure was performed (α= .05) (see Table 16 for results).

It was hypothesized that youth with Disruptive Diagnoses would exhibit a higher incidence and severity of Entitlement (EN) than would Comorbid youth who would exhibit greater levels of EN as compared to Depressed and Control groups.

A significant F value was found for Entitlement F (3,93) = 4.96, $p < .01$.

Table 16. *Test of Between-Subjects Effects, Entitlement*

Source	Degrees of Freedom	Sum of Squares	Mean Square	F	p
Group	3	257.02	85.67	4.96	.003
Error	90	1555.04	17.28		
Total	93	1812..05			

In order to determine the nature of these significant between-group differences, post hoc analyses were performed (see table 17 for results of post hoc analyses). Three significant pair-wise differences were found. Both Disruptive and Comorbid youth were found to exhibit significantly more elevated scores as compared to Control youth. Also, Comorbid youth were found to exhibit significantly more elevated scores than were Depressed youth.

Table 17. *Post Hoc Comparisons, Entitlement*

	Diagnostic Group								
Diagnostic Grp.	Disruptive			Depressive			Comorbid		
	m. diff.	se	sig.	m diff.	se	sig	m diff.	se	sig.
Control	-3.10	1.33	.02*	-.62	1.24	.62	-3.70	1.08	.001*
Comorbid	.59	1.30	.65	-3.07	1.20	.01*	-	-	-
Depressive	-2.48	1.44	.09	-	-	-	-	-	-

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

4.2.6 Hypothesis 6: Quality of Relational Interaction $\mu_{CM}>\mu_{DE}>\mu_{DI}>\mu_{C}$

In order to determine whether differences between experimental groups were significant on Quality of Relational Interaction (QR), Fisher's LSD procedure was performed (α= .05) (see Table 18 for results).

It was hypothesized that youth with Comorbid Depressive and Disruptive Diagnoses would exhibit the greatest levels of Quality of Relational Interaction (QR). Youth with Depressive Disorders were expected to exhibit greater levels of QR as compared to youth with Disruptive Disorders who were in turn expected to exhibit greater levels of QR than Controls.

No significant between-group differences were found for Quality of Relational Interaction F (3,93) = 2.59, p = *n.s.*

Table 18. *Test of Between-Subjects Effects, Quality of Relational Interaction*

Source	Degrees of Freedom	Sum of Squares	Mean Square	F	p
Group	3	73.7	24.57	2.59	.057
Error	90	852.44	9.47		
Total	93	926.14			

Follow up t-tests showed a difference between groups although the F test was not significant. For those who prefer a less conservative alpha level, between group differences were significant for $\propto$ =.08.

4.2.7 Hypothesis 7: Helplessness $\mu_{CM}>\mu_{DE}>\mu_{DI}>\mu_{C}$

In order to determine whether differences between experimental groups were significant on Helplessness (HE), Fisher's LSD procedure was performed (α= .05) (see Table 19 for results).

It was hypothesized that youth with Comorbid Depressive and Disruptive Diagnoses would exhibit the greatest levels of Helplessness (HE). Youth with Depression were expected to exhibit greater levels of HE as compared to youth with Disruptive Disorders who were in turn expected to exhibit greater levels of HE than Controls.

No significant between-group differences were found for Helplessness F (3,93) = .48, p = *n.s.*

Table 19. *Test of Between-Subjects Effects, Helplessness*

Source	Degrees of Freedom	Sum of Squares	Mean Square	F	p
Group	3	31.67	10.56	.48	.70
Error	90	1967.32	21.86		
Total	93	6591.00			

4.3 Supplemental Analyses

Based on the highly inter-correlated nature of the ISA domains, a principal components analysis with varimax rotation was performed (see Table 20 for results). Keeping only those factors with an eigenvalue greater than one, a two-factor solution was indicated. The first factor was Lack of Social Support (LS) made up of Abandonment/Instability, Emotional Deprivation, Social Isolation, and Helplessness. The second factor was Negative Interaction (NI) made up of Aggression, Entitlement, and Quality of Relational Interaction.

Table 20. *Rotated Component Matrix for Interpersonal Schema Domains*

	Component	
ISA Domain	Lack of Social Support	Negative Interaction
Abandonment/Instability (AI)	.834	.255
Emotional Deprivation (ED)	.792	.382
Social Isolation (SI)	.892	-.082
Aggression (AG)	.073	.891
Entitlement (EN)	.196	.908
Quality of Relational Interaction (QR)	.261	.748
Helplessness (HE)	.844	.289

The scores for the ISA Domains loading onto each new factor, or super domain, were summed to come up with a score for that factor (see Table 21 for descriptive statistics). Fisher's LSD procedure ($\alpha = .05$) was then used to determine any significant between-group differences were present for the diagnostic groups on Lack of Social Support and Negative Interaction.

Table 21. *Descriptive Statistics-Super Domains*

Super Domains	Group	Mean	SD	n
Lack of Social Support				
	Disruptive	14.67	10.59	15
	Depressive	10.74	5.31	19
	Comorbid	14.88	10.93	32
	Control	13.11	15.38	28
	Total	13.47	11.54	94
Negative Interaction				
	Disruptive	18.8	14.56	15
	Depressive	13.53	7.72	19
	Comorbid	19.03	9.72	32
	Control	10.68	6.89	28
	Total	15.41	10.11	94

An ANOVA did not yield any significant group differences on Lack of Social Support, $F(3,93) = .568$, $p = n.s.$ On Negative Interaction, however, significant differences were found, $F(3.93) = 4.75$, $p < .01$.

Table 22. *Test of Between-Subjects Effects, Lack of Social Support*

Source	Degrees of Freedom	Sum of Squares	Mean Square	F	p
Group	3	230.26	76.75	.569	.638
Error	90	12163.20	135.15		
Total	93	12393.46			

Table 23. *Test of Between-Subjects Effects, Negative Interaction*

Source	Degrees of Freedom	Sum of Squares	Mean Square	F	p
Group	3	1300.86	433.62	4.75	.004
Error	90	8211.96	91.24		
Total	93	9512.82			

In order to determine the nature of these significant between-group differences for Negative Interaction, post hoc analyses were performed (see Table 24 for results of post hoc analyses).

Table 24. *Post Hoc Comparisons, Negative Interaction*

	Diagnostic Group								
Diagnostic Grp.	Disruptive			Depressive			Comorbid		
	md	se	sig.	md	se	sig	md	se	sig.
Control	-8.12	3.06	.009**	-2.85	2.84	.319	-8.42	2.47	.001**
Comorbid	.29	2.98	.922	5.57	2.77	.047*	-	-	-
Depressive	-5.27	3.30	.113	-	-	-	-	-	-

*Mean Difference is significant at 0.05 level.
**Mean Difference is significant at 0.01 level.

Three significant pairwise differences were found. Comorbid youth were found to exhibit significantly more elevated scores as compared to both Control and Depressed youth, and Disruptive youth were found to exhibit significantly more elevated scores as compared to Control youth.

4.4 Influence of Demographic Variables

Because the demographic variables Ethnicity and Family Living Arrangement were associated with Diagnostic Group, it was necessary to determine their influence on

Aggression, Entitlement, and Negative Interaction (the dependent measures where there was a main effect for Diagnostic Group). To do this, each demographic variable was entered one at a time with Diagnostic Group into an ANOVA for each significant Interpersonal Schema Domain. The results are as follows.

4.4.1 Aggression

When Family Living Arrangement was included with Diagnostic Group, there were main effects for both factors (see Table 25) There was no main effect for Ethnicity when added to the ANOVA model (see Table 26). There were no interaction effects when Family Living Arrangement or Ethnicity were included with Diagnostic group in the ANOVA model.

Table 25. *Test of Between-Subjects Effects, Aggression- Diagnosis x Family Living Arrangement*

Source	Degrees of Freedom	Sum of Squares	Mean Square	F	p
Diagnosis	3	132.22	44.07	3.44	.021*
Living Arrangement	2	157.94	78.97	6.16	.003*
Diagnosis * Living Arr.	6	84.82	14.14	1.10	.369
Error	78	1000.81	12.83		
Total	89	1371.96			

*Significant at 0.05 level

Table 26. *Test of Between-Subjects Effects, Aggression- Diagnosis x Ethnicity*

Source	Degrees of Freedom	Sum of Squares	Mean Square	F	p
Diagnosis	3	51.71	17.24	1.182	.322
Ethnicity	1	4.873	4.87	.334	.565
Diagnosis *Ethnicity	3	8.654	2.89	.198	.898
Error	82	1195.53	14.58		
Total	89	1346.46			

In order to determine the nature of significant between-group differences for Diagnostic Group and Family Living Arrangement, post hoc pairwise analyses were performed (see Table 27 for Family Living Arrangement means and standard deviation).

Table 27. *Means and Standard Deviations, Family Living Arrangement/Aggression*

Family Living Arrangement	Mean	Standard Error
Biological Parents	4.056	.817
One Biological & One Step-Parent	6.970	.688
Other	3.708	.767

Two significant pairwise differences were found for Family Living Arrangement (See Table 28) on Aggression. Youth living with one biological and one step parent were found to exhibit more elevated scores on Aggression than youth with all other living arrangements.

Table 28. *Post Hoc Comparisons, Family Living Arrangement/Aggression*

	Family Living Arrangement					
Family Living Arrangement	One Biological & One Step-Parent			Other		
	md	se	sig.	md	se	sig
Biological Parents	-2.71*	.896	.003	-.09	.939	.921
One Biological & One Step-Parent	-	-	-	2.62*	.953	.007
Other	-	- .	-	-	-	-

*mean difference significant at 0.05 level

Previously obtained pairwise differences for Diagnostic Group on Aggression were supported (see Table 29). Youth with Disruptive Disorders and youth with

Comorbid diagnoses were found to exhibit significantly more elevated scores on Aggression than Control youth.

Table 29. *Post Hoc Comparisons, Diagnostic Group/Aggression*

Diagnostic Grp.	Diagnostic Group								
	Disruptive			Depressive			Comorbid		
	md	se	sig.	md	se	sig	md	se	sig.
Control	-2.37	1.15	.043*	-1.43	1.09	.195	-3.14	.95	.001**
Comorbid	.77	1.13	.501	1.71	1.07	.113	-	-	-
Depressive	-.94	1.25	.453	-	-	-	-	-	-

*Mean Difference is significant at 0.05 level.
**Mean Difference is significant at 0.01 level.

4.4.2 Entitlement

There was no main effect for Family Living Arrangement (see Table 30) or Ethnicity (see Table 31) when added to the ANOVA model with Diagnostic Group. There were no interaction effects when Family Living Arrangement or Ethnicity were included with Diagnostic Group in the model.

Table 30. *Test of Between-Subjects Effects, Entitlement- Diagnosis x Family Living Arrangement*

Source	Degrees of Freedom	Sum of Squares	Mean Square	F	p
Diagnosis	3	171.35	57.12	3.49	.020
Living Arrangement	2	97.30	48.65	2.97	.057
Diagnosis *Living Arr.	6	142.15	23.69	1.45	.207
Error	78	1276.34	16.36		
Total	89	1732.62			

Table 31. *Test of Between-Subjects Effects, Entitlement- Diagnosis x Ethnicity*

Source	Degrees of Freedom	Sum of Squares	Mean Square	F	p
Diagnosis	3	46.94	15.65	.890	.450
Ethnicity	1	11.90	11.99	.682	.411
Diagnosis *Ethnicity	3	25.39	8.46	.481	.696
Error	82	1441.36	17.58		
Total	89	1703.79			

4.4.3 Negative Interaction

When Family Living Arrangement was added to the model with Diagnostic Group, there were main effects for both factors (see Table 32). There was no main effect for Ethnicity when added to the ANOVA model (see Table 33). There were no interaction effects when Family Living Arrangement or Ethnicity were independently included with Diagnostic Group.

Table 32. *Test of Between-Subjects Effects, Negative Interaction- Diagnosis x Family Living Arrangement*

Source	Degrees of Freedom	Sum of Squares	Mean Square	F	p
Diagnosis	3	949.38	316.46	3.71	.015
Living Arrangement	2	707.98	353.99	4.15	.019
Diagnosis *Living Arr.	6	654.71	109.12	1.28	.277
Error	78	6661.03	85.40		
Total	89	9064.46			

*Significant at 0.05 level

Table 33. *Test of Between-Subjects Effects, Negative Interaction- Diagnosis x Ethnicity*

Source	Degrees of Freedom	Sum of Squares	Mean Square	F	p
Diagnosis	3	363.23	121.08	1.345	.266
Ethnicity	1	97.47	97.47	1.082	.301
Diagnosis *Ethnicity	3	120.51	40.17	.446	.721
Error	82	7383.47	90.04		
Total	89	8851.66			

In order to determine the nature of significant between-group differences for Diagnostic Group and Family Living Arrangement, post hoc pairwise analyses were performed (see Table 34 for Family Living Arrangement means and standard deviations).

Table 34. *Means and Standard Deviations, Family Living Arrangement/Negative Interaction*

Family Living Arrangement	Mean	Standard Error
Biological Parents	14.556	2.109
One Biological & One Step-Parent	19.932	1.776
Other	12.616	1.979

Two significant pairwise differences were found for Family Living Arrangement (see Table 35) on Negative Interaction. Youth living with one biological and one step parent were found to exhibit more elevated scores on Negative Interaction than youth with all other living arrangements.

Table 35. *Post Hoc Comparisons, Family Living Arrangement/Negative Interaction*

Family Living Arrangement	Family Living Arrangement					
	One Biological & One Step-Parent			Other		
	md	se	sig.	md	se	sig
Biological Parents	-5.71*	2.311	.016	-.35	2.423	.885
One Biological & One Step-Parent	-	-	-	5.35*	2.458	.032
Other	-	-	-	-	-	-

* Significant at 0.05 level

Previously obtained pairwise differences for Diagnostic Group on Negative Interaction were supported with one exception (see Table 36). Comorbid youth and Disruptive youth were found to exhibit significantly more elevated scores as compared to Control youth.

Table 36. *Post Hoc Comparisons, Diagnostic Group./Negative Interaction*

Diagnostic Grp.	Diagnostic Group								
	Disruptive			Depressive			Comorbid		
	md	se	sig.	md	se	sig	md	se	sig.
Control	-7.91	2.98	.010**	-3.22	2.81	.255	-8.01	2.45	.002**
Comorbid	.10	2.92	.973	4.79	2.76	.086	-	-	-
Depressive	-4.69	3.23	.151	-	-	-	-	-	-

*Mean Difference is significant at 0.05 level.
**Mean Difference is significant at 0.01 level.

4.5 Exploratory Analyses

In order to further explore the relationship between Family Living Arrangement and Negative Interaction, Family Living Arrangement was collapsed once more into two

categories, Intact (both biological parents) and Other (including all other living arrangements).

Table 37. *Test of Between-Subjects Effects, Negative Interaction- Diagnosis x Family Living Arrangement*

Source	Degrees of Freedom	Sum of Squares	Mean Square	F	p
Diagnosis	3	755.79	251.93	2.65	.015
Living Arrangement	1	27.68	27.68	.29	.054
Diagnosis *Living Arr.	3	117.82	39.27	.41	.744
Error	82	7802.49	95.15		
Total	89	9064.46			

*Significant at 0.05 level

With this new configuration of Family Living Arrangement, the main effect for Family Living Arrangement seen in the previous configuration disappeared.

5. Discussion

Results from the current study indicate that the interpersonal schemas (as measured by the TAT and ISA) of youth diagnosed with Disruptive Disorders contain cognitions that differ from those of peers without Disruptive Disorders. More specifically, these youth created narratives in which Aggression and Entitlement characterized interpersonal relationships. These domains also tended to cluster together with a measure of overall negative tone of interpersonal interactions (Quality of Relational Interaction) to form a single factor, Negative Interaction. Negative Interaction also occurred at greater levels in the stories of youth with Disruptive Disorders than in the stories of their non-disordered peers. Thus, the stories of youth with Disruptive Disorder were characterized by antisocial interpersonal schema domains which differed from control, and to limited depressed youth.

In contrast, interpersonal schema domains more traditionally associated with Depressive disorder did not occur more frequently among the TAT stories of youth with Depressive Disorders. More specifically, cognitions of Helplessness, Social Isolation, Emotional Deprivation, Quality of Relational Interaction, and Abandonment/Instability did not characterize the stories of any of the diagnostic groups more than others.

This discussion will begin with a review of each original hypothesis and relevant results followed by a review of the results for supplemental analyses. Implications of the current findings to theory, research, and practice will be discussed followed by possible limitations and suggested future directions for research.

5.1 Supported Hypotheses

5.1.1 Aggression

a. Hypothesis

It was proposed that the TAT stories of youth with Disruptive disorders (pure and comorbid) would contain more Aggression than the stories of youth with Depression only or youth without a diagnosis. In addition, it was proposed that the stories of youth with Comorbid Disruptive and Depressive Disorders would contain levels of Aggression less than those of youth with Disruptive Disorders alone but greater than those of youth with a Depressive Disorder alone or youth without a diagnosis. Finally, it was proposed that the levels of Aggression in the TAT stories of Depressed and Control youth would not differ.

This hypothesis is based on a substantial body of literature, which indicates that the interpersonal relationships of youth with Disruptive Disorders are more aggressive than other youth (Patterson, 1986). Some researchers have theorized that the aggressive behavior characteristic of these youths is a manifestation of a cognitive bias (Moffitt, 1993a), a tendency to see aggressive behavior where none is present or to see aggression as an effective interpersonal strategy. Previous research has supported the notion that Disruptive youth view aggressive interpersonal behavior in a manner different from those of other peers. More specifically, they see such behavior as more efficacious (Perry et al., 1986; Smithmyer et al., 2000) and common (Dodge & Schwartz, 1997; Smithmyer et al., 2000) than other youth and they are likely to interpret ambiguous behavior as aggressive (Barrett et al., 1996; Dodge & Schwartz, 1997; McKeough et al., 1994; Quiggle et al.,

1992; Wyatt & Haskett, 2001). These youth see Aggression as a significant aspect of interpersonal interaction. Thus, the current hypothesis proposes that when faced with ambiguous visual stimuli, such as the TAT, Disruptive youth are likely to generate responses that reflect these cognitive biases wherein interpersonal relationships are characterized by Aggression

There is a small body of research that indicates that youth with Comorbid Disruptive and Depressive Disorders exhibit levels of aggression intermediate to those of youth with Disruptive or Depressive Disorders alone (Dadds et al., 1992; Rudolph & Clark, 2001). While there is not research which specifically assesses this group's cognitions about aggression, Cognitive Theory proposes that behavior is a manifestation of an individual's cognition or understanding of a given situation. Based upon this evidence, it was proposed that Comorbid youth would generate stories that contained levels of Aggression lower than youth with Disruptive Disorders alone but higher than youth without diagnoses or youth with Depressive Disorders alone.

b. Results

Results provided limited support for the hypothesis. As proposed, results for Aggression indicate that when presented with the visual stimuli provided by TAT cards, youth with Disruptive Disorders and Comorbid Disruptive and Depressive Disorders created narratives that contained greater levels of Aggression than did the stories of youth with no diagnosis. Contrary to the hypothesis, Comorbid Depression did not appear to lessen the levels of Aggression as compared to the stories of youth with Disruptive Disorders alone. The stories of youth with Depression did not contain levels of

Aggression low enough to differentiate them from youth with Disruptive Disorders or levels high enough to differentiate them from Control youth. Furthermore, when two factors, Ethnicity and Family Living Arrangement, which initially appeared to be related to Diagnoses, were accounted for, these significant relationships remained.

These results suggest that interpersonal aggression is cognitively prominent for youth with Disruptive Disorders even in the presence of comorbid Depression. When faced with an ambiguous stimuli, these youth generated narratives characterized by greater levels of interpersonal aggression than youth without a clinical diagnosis. It is assumed that the tendency to perceive and generate stories characterized by Aggression in response to stimuli that does not specifically contain evidence of Aggression indicated an expectation of interpersonal aggression.

It is somewhat surprising that the TAT stories of Disruptive and Comorbid youth did not show significantly greater levels of Aggression than those of Depressed youth. While Depressed youth have frequently been shown to have negative expectations for their interactions with others (Garber et al., 1993, Gladstone et al., 1997; Lewinsohn et al., 1994; Sheeber & Sorensen, 1998; Soygut & Savasir, 2001) they have not displayed levels of aggressive behavior similar to Disruptive youths, pure or Comorbid (Dodge & Schwartz, 1997; Rudolph & Clark, 2001). Interpersonal Schema incorporates both expectations of others and one's understanding of their own social behavior. Given Depressed youths' history of negative interpersonal relationships, the Aggression which occurred in their TAT transcripts may reflect an expectation of negative interpersonal behavior from others but not a tendency to behave in an aggressive manner themselves.

5.1.2 Entitlement

a. Hypothesis

It was proposed that the TAT stories of youth with Disruptive disorders (pure and comorbid) would contain more Entitlement than the stories of youth with Depression or youth without a diagnosis. In addition, it was proposed that the stories of youth with Comorbid Disruptive and Depressive Disorders would contain levels of Entitlement less than those of youth with Disruptive Disorders but greater than those of youth with a Depressive Disorder alone or youth without a diagnosis. Levels of Entitlement in the stories of Depressed only and Control youth were not expected to differ.

Interpersonal and Cognitive Theories propose that the antisocial behavior of youth is motivated by an antisocial view of themselves and others. Much of the theory regarding the cognition (and diagnostic criteria) of Disruptive Disorders has described a pattern of cognition characterized by a disregard for others and a sense of superiority as compared to others (Hastings et al., 2000; Moffitt et al., 1996; Krueger et al., 1996). The research of Moffitt (1993a) indicated that a sample of youth with Conduct Disorder viewed interpersonal relationships with a sense of entitlement. This previous research and theory informed the current hypothesis that youth with Disruptive Disorders would respond to TAT cards with stories of interpersonal relationships characterized by a sense of entitlement.

Youth with Comorbid Depression and Disruptive Disorders have rarely been researched. What research does exist is equivocal on whether these youth most resemble Depressed or Disruptive youth, or whether they are unique in their interpersonal

cognitions (Marmorstein & Iacono, 2001; Rudolph & Clark, 2001*).* Research into the behavior of this population (Dadds et al., 1992; Sanders et al., 1992) suggests that youth with Comorbid Disruptive and Depressive Disorders display less severe antisocial behavior than their counterparts with Disruptive Disorders only (but greater levels of such behavior than peers without disruptive diagnoses). Given that cognitive theory proposes that behavior is motivated by an individual's cognitive patterns, the current research proposed that this difference in behavior may reflect a difference in cognition. More specifically, it was proposed that youth with Comorbid Disruptive and Depressive Disorders would generate narratives characterized by greater levels of Entitlement than their non Disruptive peers but by lower levels of entitlement than youth with Disruptive Disorders alone.

b. Results

Results for Entitlement provide limited support for the hypothesis. They indicate that when presented with the visual stimuli provided by the TAT cards, youth with Disruptive Disorders (both comorbid and "pure") created narratives that contained more Entitlement than the stories of non-disordered peers. The stories of youth with Comorbid Depression and Disruptive Disorders contained more Entitlement than the stories of peers with Depression alone. The stories of youth with Disruptive Disorders alone did not contain levels of Entitlement distinguishable from their Comorbid peers. The stories of Depressed and Control youth did not differ on Entitlement. Furthermore, when two factors, Ethnicity and Family Living Arrangement, which initially appeared to be related to Diagnoses, were accounted for, these significant relationships remained.

The current research supports the idea that Entitlement is relevant to Disruptive Disorders both comorbid and pure and that this may be an important factor which distinguishes them from youth without psychopathology. Results also call into question previous findings that Comorbid Depression "mutes" the antisocial aspects of Disruptive Disorders. The current results indicate that, at least in this domain, Comorbid youth most resemble Disruptive youth. Perhaps the cognitions traditionally linked to Depression (e.g. a sense of helplessness and hopelessness) serve to decrease the likelihood that an individual will act on antisocial cognitions.

Interpretations of the current findings are complicated by the lack of difference in levels of entitlement for youth with Disruptive and Depressive diagnoses alone. While previous research indicates a significant difference in levels of antisocial behavior the current research does not support a corresponding difference in cognition.

5.2 Unsupported Hypotheses

5.2.1 Abandonment/Instability

a. Hypothesis

It was proposed that the TAT stories of youth with Comorbid Depressive and Disruptive Diagnoses would contain more Abandonment/Instability than any other group. Furthermore it was proposed that the stories of youth with Depression alone and youth with a Disruptive Disorder alone would contain similar levels of Abandonment/Instability. Finally, it was proposed that youth without psychiatric diagnoses would create stories with less Abandonment/Instability than any other group.

Predicted results for Abandonment/Instability were based primarily on research into the early social relationships of these groups. Interpersonal and Cognitive Theories emphasize the importance of early childhood relationships to later cognitive functioning. Research indicates that both Depressed and Disruptive youth experience high levels of problematic relationships with parents and other adults. More specifically, parents of both groups experience problematic attachment and are less likely to respond or respond more inconsistently to their children's needs than are parents of nondisordered children (Berg-Nielsen et al., 2002; Breznitz & Sherman, 1987; Campbell et al., 1995; Cohn et al., 1990; Field et al., 1990; Lyons-Ruth, 1996; Moss et al., 2004; Radziszewska et al., 1996; Shaw et al., 1996; Stark et al., 1996; Wakschlag & Hans, 1999), a pattern of relating that persists over time (Brennan et al., 2002; Campbell et al., 1996; Caspi et al., 2004; Garber et al., 2002; Shiner & Marmorstein, 1998; Thomas & Forehand, 1991).

Providing further support for this hypothesis, both diagnostic groups have been shown to expect negative interactions with others (Dodge & Schwartz, 1997; Garber et al., 1993; Gladstone et al., 1997; Lewinsohn et al., 1994; Smithmyer et al., 2000; Soygut & Savasir, 2001). This evidence suggests that youth with Disruptive and Depressive disorders are more likely to understand social interaction as lacking support from or connection to others as compared to youth without psychiatric diagnoses.

The literature on comorbid disorders does not offer specific evidence pertaining to expectations and beliefs of youth with comorbid Disruptive and Depressive youth. There is evidence, however, to suggest that these youth exhibit more severe social impairment overall as compared to youth with a single disorder (Cole & Carpentieri,

1990; Harrington et al., 1996; Rudolph & Clark, 2001). The current research supposes that consistent with Interpersonal and Cognitive Theory, problematic social experiences will translate into more problematic interpersonal cognition and that cognitive biases underlie problematic social relationships. For these reasons, it is hypothesized that the stories of youth with comorbid Disruptive and Depressive disorders will contain significantly greater levels of Abandonment/Instability as compared to youth with either disorder alone.

Because a sample of youth without psychiatric diagnoses can be expected to contain a wide variety of social skills and relationships, it was proposed that this group would produce TAT stories with a comparatively lower level of Abandonment/Instability.

b. Results

The Hypothesis for Abandonment/Instability was not supported. Results for Abandonment/Instability indicate that when presented with the visual stimuli provided by TAT cards, youth without clinical diagnoses created narratives that contained levels of Abandonment/Instability very similar to the levels in the narratives of youth with Depressive and Disruptive Disorders.

Mean scores for this variable were relatively low indicating that Abandonment/Instability was rarely present in the TAT stories of this sample. Interpersonal and Cognitive Theory presume that early experiences form schemas that influence an individual's perception of later relationships. Schemas by definition are broad and overgeneralized. Perhaps the ISA's definition of Abandonment/Instability was

too specific to be captured by the TAT which is theorized to capture core cognitions which are broad and overgeneralized. It makes sense that the schemas of these youth would be defined by negative interpersonal expectations which manifest in a wide variety of problematic perceptions and beliefs. If Abandonment/Neglect is only one of many manifestations of a pathological interpersonal schema it may not occur with enough frequency to distinguish diagnostic groups.

5.2.2 Emotional Deprivation

a. Hypothesis

It was proposed that the TAT stories of youth with Comorbid Disruptive and Depressive Disorders would contain more Emotional Deprivation than any other group. In addition, it was proposed that the stories of youth diagnosed with a Depressive Disorder would contain more Emotional Deprivation than those of youth with a Disruptive Disorder. Finally, it was proposed that the stories of youth without psychiatric diagnoses would contain less Emotional Deprivation than any other group.

Rationale for this hypothesis focused both on the perception of emotional need and the perception that such a need will not be met. It is clear that youth with Disruptive and Depressive Disorders are more likely to come from a family environment where parents are inconsistently and unpredictably available for emotional support (Berg-Nielsen et al., 2002; Breznitz & Sherman, 1987; Campbell et al., 1995; Cohn et al., 1990; Field et al., 1990; Lyons-Ruth, 1996; Moss et al., 2004; Radziszewska et al., 1996; Shaw et al., 1996; Stark et al., 1996; Wakschlag & Hans, 1999). Thus, these youth are not expected to differ in the perception that others are unavailable for emotional support.

They are expected, though, to differ in their perception that a need for emotional support exists. The emotional symptoms of depression constitute a near constant emotional need. In contrast youth with Disruptive Disorders tend to see themselves as confident and competent (Brendgen et al., 2004; Perez et al., 2001; Zariski & Coie, 1996) and potentially as less "needy" than depressed youth. In other words, it is proposed that while both groups perceive availability of emotional support as limited, youth with depression are expected to feel this lack of support as more salient. Since schemas are formed by and consist of beliefs that are emotionally charged and highly relevant to previous experience, it is proposed that the stories of youth with Depression will contain more Emotional Deprivation than those of youth with Disruptive Disorders.

The literature on Comorbid Disruptive Disorders and Depressive Disorders does not provide specific information about the extent to which these youth may resemble either group of single diagnosis youth in their perception of emotional need. We do know however that the social relationships of Comorbid youth are likely to be more problematic than those of youth with either diagnosis alone (Cole & Carpentieri, 1990; Harrington et al., 1996; Milich & Landau, 1984; Rudolph & Clark, 2001). The current hypothesis assumes that the awareness of emotional need characteristic of depression is worsened by the more problematic social functioning associated with comorbidity. For these reasons, it was predicted that the TAT stories of Comorbid youth would yield the greatest levels of Emotional Deprivation.

Because a sample of youth without psychiatric diagnoses can be expected to contain a wide variety of social skills and relationships, it was proposed that this group would produce TAT stories with a comparatively lower level of Emotional Deprivation.

b. Results

The Hypothesis for Emotional Deprivation was not supported. Results for Emotional Deprivation indicate that when presented with the visual stimuli provided by TAT cards, youth without clinical diagnoses created narratives that contained levels of Emotional Deprivation very similar to the levels in the narratives of youth with Depressive and/or Disruptive Disorders.

Emotional Deprivation had the lowest average scores of any of the interpersonal domains. The fact that it was so rarely scored makes it difficult to hypothesize about theoretical reasons that it did not differ across groups. Possibly, the definition, which requires the coder to identify an emotional need *and* that this need is unmet *and* the presence of individuals who would normally be required to provide support, made it difficult for a conservative coder to identify.

Similar to Abandonment/Instability, perhaps this definition also accesses interpersonal beliefs that are too specific to be a component of a schema. The expectation that others will be unavailable to provide emotional support may be a result rather than a core belief of a negative interpersonal schema. Since projective measures are believed to access generalized core beliefs, the TAT may not have elicited stories containing the specific cognitions encompassed by the definition of Emotional Deprivation.

5.2.3 Social Isolation

a. Hypothesis

It was proposed that the TAT stories of youth with Comorbid Depressive and Disruptive Disorders would contain more Social Isolation than those of youth with Depression. The stories of Depressed youth were proposed to contain more Social Isolation than those of Disruptive youth. Finally, it was proposed that youth without psychiatric diagnoses would create narratives with less Social Isolation than youth with Disruptive and/or Depressive Disorders.

There is a strong link between increased Social Isolation and Depressive Diagnoses. Youth with Depression are more likely to be socially isolated than non-depressed peers (Connolly et al.1992; Puig-Antich et al., 1993; Sheeber & Sorensen, 1998) and these youth show a cognitive bias toward an exaggerated perception of social isolation. Research suggests that these youth underestimate their social standing (Abela, 2001; Cole et al., 2001; Cole et al., 1999; Cole et al. 1998; Hoffman et al., 2000; Reinherz et al., 2000; Rudolph et al., 1997; Seroczynski et al., 1997; Sheeber, Hops, & Davis, 2001). In contrast, while youth with Disruptive Disorders also tend to be socially rejected there is evidence that they do not perceive their social status accurately and overestimate their popularity (Hughes et al., 1997; Zariski & Coie, 1996). Thus, while both Depressive and Disruptive youth are more socially isolated than peers without psychiatric diagnoses and both groups show cognitive biases, their perceptions of social status are very different. For these reasons, it was hypothesized that the stories of youth

with Depressive Disorders would include greater levels of Social Isolation than those of youth with Disruptive Disorders.

Previous evidence for the cognitions pertaining to social isolation of youth with Comorbid Disorders is limited. There is substantial research, however, indicating that youth with comorbid disorders experience more problematic social relationships (Cole & Carpentieri, 1990; Harrington et al., 1996; Rudolph & Clark, 2001), including social isolation (Connolly et al.1992; Puig-Antich et al., 1993; Sheeber & Sorensen, 1998), than peers with single or no clinical diagnoses. Since there was no research into relevant cognition, the hypothesis for the comorbid group on the Social Isolation domain was based on research into the social behavior and social status of this group. It was proposed that youth with Comorbid Depressive and Disruptive Disorders would generate stories with the greatest levels of Social Isolation.

Because a sample of youth without psychiatric diagnoses can be expected to contain a wide variety of social skills and relationships, it was proposed that this group would produce TAT stories with a comparatively lower level of Social Isolation.

b. Results

The hypothesis for Social Isolation was not supported. Results for Social Isolation indicate that when presented with the visual stimuli provided by TAT cards, youth without clinical diagnoses created narratives that contained levels of Social Isolation very similar to the levels in the narratives of youth with Depressive and/or Disruptive Disorders.

An examination of the average scores for Social Isolation suggest that it was rarely scored by any diagnostic group. Thus, one explanation for the unexpected results is that the domain was defined and coded in a manner that failed to capture a sense of social isolation that was present in depressed youth. Cognitive theory identifies helplessness and unlovability as core depressive beliefs. A perception of social isolation may be an intermediate belief that is a result of these core beliefs (e.g. I am unlovable so I will always be alone). The current methodology was intended to access schemas which consist of deeply held and highly generalized beliefs. If a sense of social isolation is an intermediate belief, perhaps it is not pervasive enough to be revealed by a projective measure.

Given the low mean scores for this domain, it is possible that the current definition captured a low-level sense of social isolation common to youth in this age group. The ISA definition includes "a sense of separateness, disconnection, or differentness". It could be argued that a mild sense of social isolation more or less defines the experience of adolescence for many youth independent of psychopathology. Perhaps the TAT and ISA captured a normal level of social isolation.

5.2.4 Quality of Relational Interaction

a. Hypothesis

It was proposed that the TAT stories of youth with Comorbid Disruptive and Depressive Disorders would contain a more negative Quality of Relational Interaction than any other group. In addition, it was proposed that the stories of youth diagnosed with a Depressive Disorder would contain a more negative Quality of Relational

Interaction than those of youth with a Disruptive Disorder. Finally, it was proposed that the stories of youth without psychiatric diagnoses would contain a less negative Quality of Relational Interaction than any other group.

Quality of Relational Interaction is defined as the overall explanatory tone of social interaction, the affective representation of relationships. Of the four diagnostic groups in this study, Comorbid youth likely experienced the most dysfunctional of interpersonal relationships (Milich & Landau, 1984). Since Cognitive and Interpersonal Theories suggest that experience underlies cognition and the current measures are aimed to elicit and measure interpersonal cognition, it was proposed that the overall tone of Comorbid youth's stories would be the most negative of the four diagnostic groups.

Depressed youth have negative expectations for interpersonal relationships and make negative attributions more frequently than non-depressed peers (Garber et al., 1993; Gladstone et al., 1997; Lewinsohn et al., 1994; Soygut & Savasir, 2001; Sheeber & Sorenson, 1998). Disruptive youth show similarly difficult social relationships (Fergusson et al., 1996; Tremblay, 2004; Patterson, 1986), but previous research suggests that Disruptive youth hold an unrealistically positive perception of their own social skills and status (Perry et al., 1986; Zariski & Coie, 1996; Hughes, 1997; Swearer, 1998). They do tend to have negative expectations of others, but are confident of their own ability to manage interpersonal relationships (Brendgen et al., 2004; Perez et al., 2001; Zariski & Coie, 1996). For these reasons, the stories of Depressed youth were predicted to have greater levels of negative Quality of Relational Interaction than Disruptive youth.

Because a sample of youth without psychiatric diagnoses can be expected to contain a wide variety of social skills and relationships, it was proposed that this group would produce TAT stories with a comparatively lower level of Quality of Relational Interaction.

b. Results

The hypothesis for Quality of Relational Interaction was not supported. Results for Quality of Relational Interaction indicate that when presented with the visual stimuli provided by TAT cards, youth without clinical diagnoses created narratives that contained levels of Quality of Relational Interaction very similar to the levels in the narratives of youth with Depressive and/or Disruptive Disorders.

Quality of Relational Interaction can be seen as a more global assessment of an interpersonal schema, which looks at the overall tone of interactions. It is somewhat surprising that the mean score was relatively high across all groups including controls. This suggests either that youth with Disruptive and Depressive Disorders do not have an abnormal view of interpersonal relationships or that youth without clinical diagnoses also have a negative view of relationships. Both of these possibilities are surprising given the previously discussed research into the differences in the early and ongoing relationships of these populations.

Another possibility is that the TAT stimuli elicit stories with a negative tone giving the impression that the cognitions of all groups are more negative than they really are. Alternatively, a lack of positive categories to contrast with Quality of Relational Interaction creates the impression that these stories are more negative than they are. In

other words, the presence of a negative tone does not mean that negative tone is a complete or accurate description of the story's overall tone. Finally, it is possible that while the stories of the four groups have a similar tone, the specifics of the interpersonal interaction in the stories is differs across groups. At a minimum, these groups differ on Entitlement and Aggression.

5.2.5 Helplessness

a. Hypothesis

It was proposed that the TAT stories of youth with Comorbid Depressive and Disruptive Disorders would contain more Helplessness than the stories of youth with a Depressive Disorder alone. Also, it was proposed that youth with Depression would generate stories that contained more Helplessness than the stories of youth with a Disruptive Disorder. Finally, it was proposed that Disruptive youth would create stories with more Helplessness than youth with out clinical diagnoses.

There is a very strong link between thoughts of Helplessness and Depressive Disorders in youth. Depressed youth have problematic interpersonal relationships (Altman & Gotlib, 1988; Connolly et al., 1992; Messer & Gross, 1995) and have a tendency to expect negative interactions with others (Garber et al., 1993; Gladstone et al., 1997; Lewinsohn et al., 1994; Soygut & Savasir, 2001). They hold themselves responsible for these negative interactions but feel powerless to change or prevent them (Gotlib et al., 1993; Lewinsohn, 1998; Weisz et al., 2001). Thus it was proposed that youth with Depressive Diagnoses would create stories with levels of Helplessness higher than those of youth without Depressive Diagnoses.

Research indicates that youth with Comorbid diagnoses have especially poor social and coping skills (Rudolph & Clark, 2001; Cole & Carpentieri, 1990; Harrington et al., 1996). It seems likely that these greater difficulties would contribute to more intense feelings of helplessness. Therefore, the current study proposed that the Comorbid group would produce stories with the greatest levels of Helplessness.

The portion of the hypothesis pertaining to youth with Disruptive Disorders alone was informed both by research indicating that these youth lack effective coping strategies (Fergusson et al., 1996; Tremblay, 2004; Patterson, 1986) but see themselves as socially competent (Brendgen et al., 2004; Hughes et al., 1997; Perez et al., 2001; Perry et al., 1986; Swearer, 1998; Zariski & Coie, 1996). The current study proposed that these youths' view of themselves as socially competent would help to offset the reality that they have poor coping strategies, thus generating stories with less Helplessness than peers with Depressive Diagnoses. It was also proposed that the interpersonal difficulties clearly associated with Disruptive Diagnoses (Fergusson et al., 1996; Tremblay, 2004; Patterson, 1986) would manifest themselves in stories containing more helplessness than those of youth without diagnoses.

b. Results

The hypothesis for Helplessness was not supported. Results for Helplessness indicate that when presented with the visual stimuli provided by TAT cards, youth without clinical diagnoses created narratives that contained levels of Helplessness very similar to the levels in the narratives of youth with Depressive and Disruptive Disorders.

These results conflict with previous research, which clearly links cognitions of Helplessness to Depression. Past research has shown that youth with Depression do have a greater sense of helplessness than other youth (Gotlib et al., 1993; Lewinsohn, 1998; Weisz et al., 2001). Whether the difference in the current study reflects a flaw of methodology or a true aspect of the cognitive and interpersonal functioning of these youth cannot be determined in the context of the current study. What follows is an examination of possible explanations of these unexpected results.

Given that the mean scores for this variable were relatively high across all diagnostic groups, it cannot be assumed that the lack of difference between groups occurred because it was rarely identified in the stories of this sample. The possibility must be considered that the current research defined helplessness in a manner that was so broad that it captured adaptive cognitions. It is possible that the current methodology has revealed an underlying sense of helplessness common to all youth in this age group. After all, the sample does consist of children and adolescents who realistically have limited control over many aspects of their lives as compared to adults. Perhaps the Helplessness domain was inadvertently defined in a manner that accessed a normative rather than pathological sense of helplessness. It is also possible that the definition does not adequately identify the context in which cognitions of helplessness occur. Perhaps what the sense of helplessness captured by the ISA was a realistic sense that everyday life includes events and forces beyond an individual's control.

5.3 Supplemental Analyses

A statistical procedure (Correlation matrix) was performed in order to ensure that each of the domains was measuring something unique. Results indicated that some of the domains were so closely associated as to possibly be redundant. In order to explore this possibility, a second statistical procedure (Factor Analysis) was conducted to determine if groups of domains might be different aspects of a larger concept. Results suggested that the seven domains could be divided into two higher order constructs, or Superfactors. One Superfactor, Lack of Social Support, consisted primarily of domains hypothesized to be linked to Depression. The second Superfactor, Negative Interaction, primarily contained domains hypothesized to be characteristic of youth with Disruptive Disorders.

5.3.1 Lack of Social Support

The domains that make up Lack of Social Support (Abandonment/Instability, Social Isolation, Helplessness, and Emotional Deprivation) include domains pertaining to the accessibility of social support (Abandonment/Instability, Social Isolation, Emotional Deprivation) and a domain measuring solving strategies (Helplessness). This factor includes the domains that align most closely with empirically supported depressive cognitions. Levels of factor did not prove to occur more frequently for any of the diagnostic groups.

At first glance, the results for Lack of Social Support suggest that youth with Depressive and Disruptive Diagnoses do not differ significantly in extent to which they expect interpersonal relationships to be supportiveness or the extent to which they feel they can exert control over interpersonal events. While this may be the case, it seems

more likely that this reflects the possible limitations that were previously discussed for the individual domains. In other words, it is likely that the similarity across diagnostic groups is an artifact of difficulty in defining or measuring the domains that make up Lack of Social Support, rather than an accurate reflection of this group's Interpersonal Schema.

5.3.2 Negative Interaction

The domains that make up Negative Interaction (Entitlement, Aggression, and Quality of Relational Interaction) incorporate interpersonal interactions that are hostile or negative in nature. Stories of youth with pure and Comorbid Disruptive Disorders had greater levels of this factor than did youth without clinical diagnoses (Control). Stories of Comorbid youth also contained more Negative Interaction than the stories of youth with Depression alone. Stories of Disruptive and Comorbid youth had similar levels of Negative Interaction, as did stories of youth with Depressive and Disruptive Disorders alone. When Ethnicity, which initially appeared to be related to Diagnoses, was accounted for, these significant relationships remained. However, when Family Living Arrangement is accounted for, the difference between levels of Aggression in the stories of Depressive and Comorbid youth disappears.

The fact that Negative Interaction yielded significant between group differences is not surprising given that it includes Entitlement and Aggression. Quality of Relational Interaction is essentially an assessment of overall interpersonal tone. Given that Entitlement and Aggression certainly indicate negative interactions, they would logically be related to higher scores on Quality of Relational Interaction.

That a measure of overall negativity of interactions with others would distinguish Disruptive and Comorbid youth from control youth is supported by current research. Both of these groups have been shown to have negative relationships with others that differentiates them from non-disordered youth (Conduct Problems Research Group, 2002; Crick & Dodge, 1994; MacKinnon-Lewis & Lofquist, 1996; Patterson et al., 1998; Renouf et al., 1997). There is also evidence that these negative expectations translate to biased cognition related to interpersonal aggression (Crick et al., 2002; Dodge et al., 1990).

Given scores on Aggression and Entitlement, it is not surprising that Comorbid youth differed significantly on this factor from youth with Depressive disorders. There is no research to suggest that youth with Depressive Disorders have an entitled view of themselves in an interpersonal context or that they expect such treatment from others. Nor is there evidence that these youth have cognitive biases regarding aggression. It appears that a Comorbid Disruptive Diagnosis adds a set of antisocial biases to the cognitions of youth with Depression.

The lack of significant difference between Disruptive and Depressive only youth is unexpected. It is possible that these groups do differ on these domains but not enough to reach statistical significance. Perhaps the increased severity of dysfunction associated with comorbidity intensifies this cognitive bias.

5.4 Influence of Family Living Arrangement

The finding that levels of Aggression and Negative Interaction differ between types of Family Living Arrangement may provide additional information about factors

that contribute to antisocial cognitions. The current results indicate that youth who reside with a biological and step-parent are more likely to generate TAT stories characterized by interpersonal aggression. This suggests that family structure is an important consideration when examining factors that contribute to interpersonal aggression in youth. This is consistent with research that suggests family structure and interaction styles have an effect on later behavioral difficulties.

5.5 Implications of Findings

5.5.1 Theoretical

a. Interpersonal Theory

Interpersonal Theory proposes that individuals are shaped by early interpersonal experience and that psychopathology is fundamentally interpersonal in nature. In the past this theory primarily addressed Depression but it has been suggested that this theory can be applied to other disorders. The current research proposed that given differing early interpersonal experiences, specific interpersonal cognitions would underlie both Depressive and Disruptive Disorders and sought to identify the extent to which these specific cognitions differ across diagnostic groups.

The current methodology seeks to identify interpersonal cognitions via responses to a projective measure. Interpersonal Theory proposes that individual develops an understanding of interpersonal relationships through early experience. This understanding colors an individual's perception of social situations and interactions. The TAT provides relatively ambiguous stimulus and essentially asks an individual to make sense of it. In theory, an individual's cognitive biases will reveal themselves in their

response. For example, an individual who expects relationships to be hostile will tell stories characterized by hostility. Because Interpersonal Theory proposes that psychological disorders are fundamentally interpersonal in nature, it may be presumed that individuals with psychological diagnoses will have a tendency to create narratives that focus on interpersonal interaction. In line with Interpersonal Theory, an assumption of the current study is that the diagnostic groups will produce narratives that contain interpersonal interactions similar to those they experienced early on.

While it is beyond the scope of the current study to prove or disprove the relevancy of Interpersonal Theory to Disruptive or Depressive Disorders, results suggest that youth with Disruptive Disorders, especially with comorbid Depression, do see interpersonal relationships differently from youth with Depression alone or without diagnoses. Results are consistent with past research into the early interpersonal experiences of Disruptive youth, which suggests that these youth lack the interpersonal experiences that typically shape empathy or concern for others. In the current sample, these youth told stories which contained greater amounts of Entitlement in an interpersonal context. Youth who research suggests experienced early relationships characterized by aggressive or violent interactions generated stories that contained greater levels of Aggression in an interpersonal context. The results for Family Living Arrangement further serve to support the relevance of family factors to the development of Disruptive Disorders, suggesting that differing family structures have an impact on interpersonal cognition. Finally, consistent with Interpersonal Theory there appears to be

continuity between the characteristics of early negative relationships and the relationships described in the TAT stories.

This theory is further supported by the findings pertaining to youth with Comorbid Disruptive and Depressive Disorders. These youth experience similar, and likely even more difficult, early interpersonal experience. According to Interpersonal Theory we would expect the similar experiences to produce similar cognitions. The current results suggest that this is the case, the TAT stories of comorbid youth did contain levels of Entitlement and Aggression similar to youth with Disruptive Disorders alone.

The implications of the results for interpersonal domains more typically associated with depression neither refute nor support interpersonal theory. It is puzzling that none of the diagnostic groups differed across these domains. A discussed previously, perhaps early interpersonal experiences lead to more global cognitive biases and the more specific domains measured here vary across and within individuals. Or more likely, the definitions for those domains that did not differ across groups were so narrowly defined that they were rarely scored or so broad as to be present in the cognitions of most youth regardless of diagnostic status.

b. Cognitive Theory

Cognitive theory proposes that specific patterns of maladaptive cognitions underlie psychological disorders. These cognitions, shaped by past experience, exist in interconnected layers of awareness. Thoughts, such as automatic thoughts, that are more readily accessible are manifestations of deeper, more unconscious and pervasive cognitions called schemas.

The current study sought to assess interpersonal schema through an instrument designed to access cognitions not typically accessible through direct means. Since Cognitive Theory proposes that Schemas are not consciously accessible. Projective measures are meant to force an individual to utilize their frameworks for understanding unfamiliar situations (schemas) to produce a story. By looking at characteristics of the interpersonal relationships within these stories, it was hoped that interpersonal schemas characteristic of the specific disorders would emerge. It was proposed that youth with different psychiatric disorders would have developed differing schemas, which would manifest in differing TAT responses.

The current research supports the notion that youth with Disruptive Disorders differ cognitively from youth with a Depressive Disorder alone and from youth without a psychiatric diagnosis. It also expands Cognitive Theory by adding to the rather limited body of research into the cognitions of youth with Disruptive Disorders. More specifically, the current research indicates that, as measured by a projective measure, youth with Disruptive Disorders (pure or comorbid) have some cognitive biases that are different from those of youth Depressive Diagnoses or those without psychiatric diagnoses.

The lack of findings for Depressed youth is quite surprising given the strong empirical support provided by past research. There is a substantial body of literature assessing the specificity of cognitions to Depressed individuals. It is also possible that the current sample, which is made up of youth in a residential treatment center, is a more severely impaired population than that assessed in most studies. Possibly Disruptive

youth in such as setting have a depressive aspect to their interpersonal cognitions. These youth live in a highly restrictive environment away from loved ones. It seems possible that this situation could increase the saliency of feelings of helplessness, social isolation, abandonment/neglect and emotional deprivation. In other words perhaps what was assessed by this study was the cognitions of youth in residential treatment. Of course, this explanation is not adequate to address the similar content of youth in the control group.

The current research calls into question the theory that Depression "masks" aggressive symptomatology. This idea is based upon a limited body of evidence that youth with Comorbid Disorders show less aggression than youth with pure Disruptive Disorders (Dodge & Schwartz, 1997; Rudolph & Clark, 2001). The current research suggests that if Comorbid youth are less aggressive than their single diagnosis peers, it is not the result of a difference in the relevance of Entitlement and Aggression to interpersonal relationships and their role in it.

5.5.2 Research

The current results have many implications for the direction of future research. First and foremost it would be beneficial to replicate the current research with a larger and more diverse sample. Current results are limited in their generalizability due to little variability in the ethnicity, socio-economic status, and family structure of the sample. In the current sample, low levels of diversity often limited the ability to assess and control for the impact of demographic variables on independent variables. A larger, more diverse sample would also allow researchers to investigate the impact these factors might have on the dependent variables.

In a related vein, the current disruptive, depressive, and comorbid samples were obtained at a residential treatment facility. Research suggests that these youth may differ significantly from youth with similar diagnoses that are not in residential treatment (Handwerk, Friman, Mott, & Stairs, 1998; Lahey et al., 1998). Youth in more restrictive settings (e.g. inpatient hospitalization) tend to exhibit relatively more severe dysfunction and youth in less restrictive settings (e.g. outpatient treatment) exhibit relatively less severe dysfunction than youth in residential treatment settings. In other words, it cannot be assumed that these results apply to all youth with Disruptive or Depressive Disorders without further study. In order to facilitate the utility of these findings for treatment outcome, it would be useful to replicate these findings with a broader sample of youth with these disorders.

Another methodological issue that has implications for future research is the utility of projective measures. The use of projective measures, specifically the TAT, to access characteristics of interpersonal schema was supported for some domains. It appears that they are especially useful for accessing cognitions which might be considered socially undesirable (e.g. Aggression and Entitlement) and might therefore be missed under more direct methods of assessment.

The significant results for Entitlement and Aggression add to previous research regarding the continuity of Disruptive Disorders across development. There is a well-established trajectory in which youth progress from Oppositional Defiant Disorder to Conduct Disorder to Antisocial Personality Disorder. The concept of Entitlement especially has been identified among adults with Antisocial Personality Disorder (Young

& Lindemann, 1992). An assumption has been made that similar cognitions occur among youth with disruptive disorders but this has been rarely studied (Moffit et al., 1996). The current research indicates that there is continuity not only in Disruptive behavior and diagnoses but also in interpersonal cognitions.

Finally, the finding that youth who reside in a home with a step-parent are more likely to include elevated levels of Aggression in their stories suggests an important avenue of research. Step-families are a diverse group with many different structures and interpersonal dynamics. Further research into what aspects of step-families is related to these cognitions would be beneficial.

5.5.3 Applied

The results for Disruptive youth provide useful information for the assessment and treatment of Disruptive Disorders. Empirically supported treatments for this population involve multisystemic intervention, while individual or group treatment alone shows little efficacy. The current research adds to the understanding of the cognitions that underlie disruptive behavior. Given the difficulty of implementing effective intervention with these youth, this understanding could provide useful direction for therapeutic intervention with disruptive youth. Research investigating effective means of targeting these cognitions through group or individual therapy may provide a valuable clinical tool. More specifically, these results highlight the importance of addressing cognitions such as regarding the rights/needs of others, the reciprocity of relationships, the efficacy (or lack thereof) of aggression as an interpersonal strategy.

Attempts to prevent the development of these cognitions might represent an important avenue for the prevention of Disruptive Disorders. For example, a focus on early effective parenting strategies and assisting youth in developing effective strategies for social interaction may serve to provide the positive social relationships which are thought to foster the development of adaptive social cognitions.

The results also highlight the importance of accounting for Comorbid Disorders when designing interventions. It adds to previous research that indicates Comorbid youth often present a more complex clinical picture than do their single diagnosis peers. These implications are especially important given that most youth with a clinical diagnosis meet criteria for more than one disorder (Angold et al., 1999; Marmorstein & Iaconos, 2001; Newman et al., 1998; Rohde et al., 2001; Sullivan et al., 1998). An intervention approach targeting a single disorder in a youth with multiple disorders will likely fail to address key cognitions, emotions, or behaviors. The current research suggests that youth with Comorbid Depressive and Disruptive Disorders require intervention that targets *both* Depressive and Disruptive symptomatology.

Finally, previous research has suggested that Comorbid Depression serves to decrease the antisocial behavior in Disruptive youth. The current research highlights the importance of targeting antisocial cognitions in Disruptive youth regardless of the amount or intensity of antisocial behavior they exhibit.

5.6 Limitations

5.6.1 Design of Study and Internal Validity

A major limitation of the current research is its small sample size and homogeneity on most demographic factors. The current results should only be generalized to Caucasian youth in residential treatment. Additionally, there were some notable differences between the various diagnostic groups. Ethnicity was not evenly distributed across the sample with Caucasians dominating each diagnostic group. Also, family living situation was not consistent across diagnostic groups. Control youth tended to live in a home with both biological parents while Disruptive youth (both pure and Comorbid) disproportionately came from homes without any biological parents. Since the focus of this research is interpersonal schema, the potential impact of family living arrangement on interpersonal cognition should not be overlooked. Based on the current results, one cannot discount the possible influence of family living arrangement and ethnicity on interpersonal cognitions.

It should also be noted that the current design cannot imply causation. The current analyses indicate associations only. Thus, the possibility must be considered that interpersonal schema to causes youth to develop the disorders examined here.

5.6.2 External Validity and Generalizability

Clearly the limited sample size and diversity limit the generalizibility of the current results. The current sample was largely homogeneous and findings should not be generalized to a non-hospitalized population without further research.

Another possible explanation for the lack of significant results for “depressive” interpersonal cognitions is that the ISA did not adequately define these cognitions. Thus, such cognitive patterns might have been present but not detected. It would be beneficial to compare the results of these measures to other more well-established measures of these cognitions.

5.6.3 Analysis and Statistical Power

The low levels of observed power for non-significant domains and Lack of Support suggest the possibility that a significant relationship exists but was not captured by the current methodology. Also lack of diversity made it difficult to assess and control for the effect of demographic variables.

5.6.4 Measurement

There are several aspects of the current assessment system that serve to limit the interpretability of the current results and which may explain the lack of significant results for several hypotheses. More specifically, the use of a projective measure and of a new and untested coding system may have failed to capture important characteristics of the interpersonal schemas of youth with Depressive disorders.

The TAT, a projective measure, may be limited in its ability to elicit some of the cognitive domains being assessed. It is even possible that the nature of the stimuli served to limit the expression of a particular domain, failing to elicit existing cognitions. This is especially likely for domains such as Abandonment/Instability, Emotional Deprivation, and Social Isolation where the mean scores were low across diagnostic groups. Perhaps the TAT is not an ideal instrument for eliciting cognitions such as

Abandonment/Instability, Emotional Deprivation, or Social Isolation. In other words, the TAT may not be an adequate stimulus to elicit some of the interpersonal domains characteristic of youth with Depressive disorders.

TAT cards do not feature everyday social occurrences. Perhaps the fact that the stimuli contain unusual situations prevents them from eliciting cognitions that occur in more mundane social situations. Another possible problematic feature of the stimuli is that many of the pictures feature individuals in isolation. Perhaps pictures containing interpersonal interactions would be more effective in eliciting interpersonal cognitions characteristic of depressed youth.

Another potential limitation of the TAT is the possibility that the cards utilized in the current study elicited cognitions typical of those with depressive disorders in all individuals, regardless of their interpersonal schema. Both Quality of Relational Interaction (QR) and Helplessness (HE) yielded high mean scores across all diagnostic groups. The fact that the mean score for the Control group was relatively high supports the idea that the lack of between group differences is an error of measurement. It seems unlikely that Control youth have interpersonal schemas that include high levels of helplessness. This is especially true given a substantial body of research that links cognitions of helplessness to individuals with Depressive disorders (Gotlib et al., 1993; Lewinsohn et al., 1998; Weisz et al., 2001).

A second possible source of methodological difficulty is the use of the Interpersonal Schema Analysis (ISA). This measure was designed specifically for the current research and external validity has not been tested. It is possible that this system

did not accurately define domains that are in fact characteristic of Depressive disorders. Where mean scores were high across diagnostic groups (HE and QR), perhaps coding definitions were too broad and captured instances not truly indicative of schema. Where mean scores were uniformly low (AI, ED, and SI) domains may have been so narrowly defined that coders did not code examples present in TAT stories.

In all cases, the definitions for the domains made some compromises in order to make the domains more "codable". For example, it is unlikely that a character in a story would say "I feel superior to that individual and I am going to disregard considerations of their well-being for my personal gain". The definition of Entitlement was broadened in order to allow for a certain amount of interpretation and assumptions by coders. This necessity is also likely reflected in the low-interrater reliability for some domains particularly Entitlement. These compromises make it possible that the coding system is capturing domains that differ from the more widely accepted definitions, providing a possible explanation for results that differ from previously well-established findings.

Another potential explanation for the lack of results for "Depressive" domains is the interpersonal nature of the coding system. Although both interpersonal and cognitive theory acknowledge the importance of interpersonal experience upon a youth's understanding of relationships and one's role in it, both theories focus primarily on self-schema. Perhaps the current coding system's inclusion of broader interpersonal domains obfuscated more narrow, self-related cognitions.

It is also possible that the decision to utilize a scoring system with a range of scores limited the utility of the TAT. The TAT is traditionally scored thematically (0/1 or

present/not present). Perhaps by looking for specific examples of domains, a more global sense of say, Social Isolation, was missed.

5.7 Future Directions

The current results offer multiple avenues for further investigation. First and foremost, it would be beneficial to replicate the current assessments with a larger and more diverse sample including non-hospitalized youth with clinical diagnoses. It is also important that such a sample include a diversity of ethnicity, family structure, and SES in order to examine the influence that these demographic factors might have on interpersonal schema.

It would also be interesting to see if interpersonal schema could be adequately assessed in a more expeditious manner. While the current methodology is likely impractical in for therapeutic settings, the information gained would be quite useful to clinical assessment and intervention. Research comparing the current method with other assessment tools such as questionnaires or structured interviewing would be informative. Such research would also help to establish external validity for the use of the TAT and the ISA to target the interpersonal schemas of youth.

The current results suggest that the ISA is not an effective tool for assessing the cognitions of depressed youth. Several approaches to revision might yield a more effective instrument. First, a series of qualitative interviews with depressed youth might provide more insight into the themes characteristic of this group. The resulting information could then be used to create new ISA domains or to refine the current categories. A second approach would be to revisit whether the current “depressive”

domains truly represent aspects of schemas. Many of the domains were based upon research that used questionnaires to assess cognitions. The fact that these cognitions can be so directly assessed suggests that they may too close to consciousness to be part of an individual's schema. It would be useful to revisit cognitive theories of depression to better identify core the core beliefs characteristic of depression. These core beliefs might help to identify and define new ISA categories.

It would be beneficial to examine the issue of childhood versus adolescent onset Conduct Disorder using the current methodology. There is very little research into the differences between these two groups. What research exists suggests that these two group have different interpersonal histories, which suggests a possible difference in the way they see interpersonal relationships. An analysis of possible differences could have important implications for both prevention and treatment of Disruptive Disorders.

The level of significance for entitlement among Disruptive and Comorbid youth also suggests important directions for future research. It raises many questions. When does this sense of entitlement begin to develop? What sorts of interpersonal experiences are linked to its development? To what extent is this sense of entitlement causally linked to aggressive or antisocial behavior?

Finally, the current results highlight the complexity and relative severity of comorbid diagnoses. Considering the lack of research into and the frequency of comorbidity in youth, it is important to gain further insight into how comorbid disorders may alter or intensify the symptoms typically associated with a given disorder.

5.8 Conclusion

The current findings have several broad applications. First, it provides support for theories that propose that cognitive patterns associated with Antisocial Personality Disorder are present in youth with Conduct or Oppositional Defiant Disorder. Secondly, youth with Comorbid Disruptive and Depressive disorders most resemble youth with Disruptive disorders in aspects of interpersonal schema traditionally associated with Disruptive disorders. Also, youth with Comorbid Depressive and Disruptive disorders seem to have the most atypical interpersonal cognitions of the groups measured in this study. Finally, while the current assessment system appears to have captured "antisocial" domains of Interpersonal Schema, it does not seem to have effectively captured more "depressive" cognitions.

The fact that the Disruptive and Comorbid groups exhibited elevated levels of Entitlement and Aggression are consistent with research into the cognitive patterns of adults with Antisocial Personality Disorder provides support for previous theories. It also allows insight into the cognitions of a group who is widely examined for their behavior but whose cognitions are rarely examined. This information has implications that reach beyond theory, potentially informing efforts to prevent and treat CD and ODD in youth.

The current results clarify several lines of previous research. It provides some argument against previous research that proposes Depressive Disorders "mute" the antisocial aspects of Disruptive Disorders. In fact, youth with comorbid disorders exhibited the highest mean scores on the "antisocial" variables Entitlement and Aggression. This is congruent with research that suggests that youth with any type of

comorbidity exhibit higher levels of dysfunction and cognitive distortion than do youth with a single disorder.

The pattern of significant and nonsignificant results also provides information about the utility of the current method. The use of a projective measure, specifically the TAT, to elicit certain "antisocial" patterns of cognition is supported by the current research. The combination of TAT and the ISA does not appear to be effective for assessing the cognitions more traditionally associated with Depressive Disorders. In some cases this combination of assessment instruments appeared to miss cognitions that could reasonably be expected to be present and in others the instruments failed to identify domains that have been previously shown to differentiate clinical groups.

In sum, while the current study appears to have significant methodological limitations, it does provide useful information about the cognitions of youth with Disruptive and Comorbid Disruptive/Depressive Disorders. This information can potentially provide a starting point for future research and offers possible direction for intervention with Disruptive youth, a notoriously difficult to treat population.

Appendix A

Thematic Apperception Test Administration Guidelines

THEMATIC APPERCEPTION TEST ADMINISTRATION GUIDELINES

INSTRUCTIONS TO SUBJECTS (modified from Peterson & Ulrey, 1994):

"You will be shown some pictures, one at a time, as a test of imagination. Your task will be to make up a story for each picture and tell it to me. Your story will be taperecorded and used for research purposes only. No one at (the treatment center) will hear these stories. In fact, no one will know that these stories are yours. When you begin your story, tell what has led up to the event in the picture, describe what is happening at the moment, what the characters are feeling and thinking, and then tell what happens next. There are no right or wrong stories. Tell your thoughts as they come to mind. There is no time limit."

ACCEPTABLE PROBES:

Probing is acceptable when the participant's story is very short or lacking in detail.

"What led up to the event in the picture?"

"What is happening in the picture?"

"What are the characters thinking and feeling?"

"What happens next?"

"What a great imagination- tell me more."

"This is like creative writing. You can make up anything."

"Tell me more."

"Anything else?"

Appendix B

Interpersonal Schema Analysis

INTERPERSONAL SCHEMA ANALYSIS SCORING SYSTEM

Guide to Coding

1) When a story is coded on Distorted Causality as a 0 or 1, assign other codes based upon the story as a whole. However, if a story receives the Distorted Causality code of 2 or 3, code any instance of a particular category.

2) References to animals as characters in the story should be coded as humans are coded. It is thought that the animals are metaphors for individuals.

3) Coders should take into consideration developmental norms, such as those of adolescents and code accordingly.

4) If stories contain two stories within a story, always code accordingly to the most severe elements provided.

5) Do not let magically resolved endings of stories nullify other codes.

Abandonment/Instability (AI)

Definition: Perceived instability or unreliability of those available for support and connection. Involves the sense that significant others (those who would reasonably be expected to provide support) will not be able to continue providing emotional support, connection, strength, or practical protection because they are emotionally unstable and unpredictable, unreliable, or erratically present; because they will die imminently; or because they will abandon the individual in favor of someone better.

Coding Notes:

a. AI includes abandonment such as the death of any emotionally significant other. The death of a parent/caregiver is typically coded as Level 3

b. When a character references "the world" or makes global references in this light, it may be coded as AI.

c. AI must occur within the context of a relationship to be coded, such as romantic relationships, parent/child or other caregiver/dependent relationships, relatives, or friendships. AI can occur parent to child or child to parent, as with Emotional Deprivation (e.g., a child running away from adaptive home environment).

0	1	2	3
No Abandonment or instability	Mild abandonment/ instability with regret	Moderate abandonment/ instability or perception thereof, more pervasive	Complete abandonment/instability which causes great harm

Coding Examples:

Level 0 – The mom's thinking, you know, "Why don't you face them and come back? Let's face them; together we can face them." (118, 9GF)

Level 1 – She looks like she had a little trouble with her boyfriend, I guess. And she's ah, she's crying, she's sad about what happened. She didn't want to break up, or she didn't want to have troubles. But then, she didn't want to have trouble with her relationship. So, either she gathers her thoughts here while she's crying or maybe she'll go back and talk with him. (053, 3BM)

This one was, um, this girl in the picture is looking at her daughter in her room. Her daughter is trying to commit suicide, and um, her mom opens the door and see her daughter trying to do this. And the mom is feeling like, you know – is feeling like, she's kinda confused. She's like, "Why are you doing this?" And she feels really confused, and depressed. And like she wants to help her daughter. And she things, like, "What should I do?" She's really confused because she don't know what to do. And the daughter is just feeling depressed and doesn't know what to do either. (118, 5)

Level 2 – There was this boy, and he had this violin. And his dad, he like – this boy tried to play his violin for his dad, and his dad, like, never listened to him, you know? He's never there, and the boy is thinking, "Why doesn't my dad ever listen to me? Why doesn't he understand?" And he felt really down and depressed and confused. And hurt. Because his dad didn't listen. And, um, the ending of this is he just quit plating the violin and stayed depressed because his dad never listened. So he just quite playing. (118, 1)

This is a girl, a little girl, who kind of pushes everybody away. Just the fact that a lot of things have happened to her. Bad things have happened to her, where she just don't trust anybody anymore. Not even her mother. She feels just like…like she can never love people again. Like she never could trust anybody again. So she pushes everybody away. In this picture, her mom is trying to talk to her, and it's just the fact that, she just doesn't want to listen. Because she feels like pushing everybody away. And um, the mom is thinking, you know, "Why? What can I do? What can I do to make her talk to me?" And she feels like there's no hope, but she feels like she has to get her child better. And um, it

all ends with, her daughter ends up in rehab, and trying to get better. (118, 7GF)

Level 3 – This is a little boy, and he is hiding from his dad. Because his dad beats him, all the time…This little boy feels like, "Why does my daddy have to do this to me?" He feels like…he feels like, "Why do they take it out on me?" And um, he thinks that- he feels like, that he wants to be out of there. And he thinks that, maybe if he does something good, his dad wouldn't beat him, but every time he does something good, it happens anyway. The end of it, I guess, is that he just ends up hiding from his dad. (118, 13B)

This is a kid…his parents just abandoned him because they couldn't afford him and they didn't want him anyway…they're putting him there and they're going to let other parents come up and bid for him. (012, 13B)

He wakes up, goes outside and sits down and waits for his dad to come home. But his dad never comes home. [He's feeling] scared and worried. (037, 13BM)

Emotional Deprivation (ED):

Definition: There must be an emotional need present that is not being met. Involves the expectation that one's desire for a normal degree of emotional support will not be adequately met by others who would reasonably be expected to provide emotional support. May be deprivation of nurturance, empathy, or protection.

Coding Notes:

2 The death of a character is not coded ED.

b. ED is always coded in the context of a relationship as defined in Abandonment/Instability (romantic relationships, parent/child or other caregiver/ dependent relationships, relatives, or friendships). ED may be coded parent to child or child to parent (e.g., parent's sense that child is letting him or her down or not meeting his or her needs).

a. ED must indicate that the need is not being met.

d. ED may be coded globally, implying a larger "they" as somehow unsupportive or malevolent.

0	1	2	3
No deprivation	Mild situational inattention	Moderate deprivation or instability, which results in unmet needs	Complete emotional deprivation or instability. Character responds negatively or not at all.

Coding Examples:

Level 0 – That little girl's older sis had a baby and that's her mother looking over her shoulder at it. And her sister let her hold the baby. They're looking at the baby…[They're feeling] happy. [They're going to] take it out to buy it clothes, I don't know. (002, 7GF)

Level 1 – It's a girl and her Mom, and she's sad and her mom is reading her a book and she doesn't care she's thinking about being somewhere else. Her Mom is done reading to her.
E: And what is the Mom thinking or feeling?
S: She doesn't know, she's just reading her book she doesn't know what is going on.
E: So the little girl is?
S: She feels alone. (NS3, 5)

This lady has just come from a hard day at work. Rough. Her boss chewed her out thousands of times for the smallest mistakes. She's come home and she's feeling extremely suicidal. That's what the knife is for. She's just cut her wrists because she wants to die so bad…" (024, 3 BM)

Level 2 – The guy's trying to tell his mom something about…he's gay and his mom doesn't understand that, so she's disappointed and he's sad 'cause he has to tell her now. (050, 6BM)

This guy had just come back from like, a business trip and went to visit his mother. He's like, talking to his mom and his mom's just staring out the window. She's like gloomy or something. He's upset that she won't talk to him and he'll try to talk to her again…She's crazy. She don't feel nothing. (026, 6BM)

Level 3 – She finally got away from her alcoholic parents. They didn't abuse her or anything but they were just so mean, the bad situations she was in, you know the fact that everyone wouldn't except the fact that she had quit drugs and wasn't a slut anymore you know it was just horrible and no other family members would help her out. No one would really help her out. (NS4, 7)

There was this boy, and he had this violin. And his dad, he like – this boy tried to play his violin for his dad, and his dad, like, never listened to him, you know? He's never there, and the boy is thinking, "Why doesn't my dad ever listen to me? Why doesn't he understand?" And he felt really down and depressed and confused. And hurt. Because his dad didn't listen. And, um, the ending of this is he just quit plating the violin and stayed depressed because his dad never listened. So he just quite playing. (118, 1)

Social Isolation (SI)

Definition: The feeling that one is isolated from the rest of the world and/or not a part of any group or community. Can also include a sense of separateness, disconnection, or "differentness."

Coding Notes:

a. SI must convey the experience of isolation or differentness, not simply the state of being alone.

3 Physical or emotional isolation (e.g., child being sent to room, prisoner in cell, loss of a loved one), without loneliness implied, is not coded SI.

4 Teasing could be coded as SI 1 or 2 depending on the circumstances and severity.

0	1	2	3
No social isolation	Isolated or situationally-based incidence of rejection or loneliness, or subtle sense of separateness or disconnectedness	Loneliness, social separateness indicated, but not focus of narrative	Overt, pronounced isolation or loneliness, a more permanent state

Coding Examples:

Level 0 – This boy just received some good news. His birthday is tomorrow but he didn't really know it 'cause he's a retarded young man. He gets a harmonica, above all the most glorious gift 'cause it came from his father. So he discards the other gifts….sits and starts to play in pure bliss, thinking "my father must really love me to give me what I always wanted." (024, 13B)

Level 1 – These two girls decided they would play hide-and –seek. The girl in the tree is hiding and she moves around the tree as the other girl goes by. They're having fun. And after this she'll run back to base and the girl will be it again. The one girl is thinking she's gonna find the other girl and the other girl is thinking she ain't gonna find her and they're both having fun and happy. (032, 9GF)

Level 2 – This boy starts this clubhouse in a shack on his land. Everybody joins, but he's bossy. He won't let them do anything unless it's his idea. One day everybody wants to collect frogs from the creek, and he decided they weren't allowed to collect frogs on his land. They all quit the club that day. He took his bucket of frogs back to the clubhouse. It was real still, there wasn't anybody around. He sat on the doorstep and wished and wished that his friends were back. Of course, he'd just run them off. So, he's sitting there and realizes that even if you have everything that you want it's nothing without someone to share it with. He feels real lonely. (064, 13B)

Level 3 –This story is about an adopted child. You know what jerks they are. Matthew has been through, been in foster homes ever since he can remember. People kept sending him back once they figured out he wasn't the cute, charming , sweet boy they thought he was….This is the last night in her (foster mother's) house. He really doesn't care, he didn't like her anyway.
or…He wakes up, goes outside and sits down, waits for his dad to come home. But his dad never comes home. He's scared and worried. (064, 5)

This girl really stayed to herself, too. She's in her room, and that's usually where she goes to get away from people. And there's something beside her, which is a knife. And, um, she's thinking about committing suicide with the knife. But she doesn't know what to do. She feels like – she feels like the world's coming down on her, and everybody's, like, treating her wrong. She feels like the world just don't want her there. And she thinks…she thinks that, too. Um, but, the whole thing, how is ends – she doesn't commit suicide. She just lives in this world of anger and depression, and she just doesn't know what to do. (118, 3BM)

Aggression (AG)

Definition: Any expression or indication of verbal or physical aggression/hostility towards others. Violence in general may be coded such as accidental aggression.

Coding Notes:

a. Murder (not natural death) is always coded Level 3.
b. Teasing may be coded as verbal aggression.

0	1	2	3
No aggression	Mild aggression, often with regret. May include verbal aggression.	Moderate, reactive aggression or rejection	Complete proactive, aggression, motivated by a desire to inflict serious harm

Coding Examples:

Level 0 – He doesn't know if he should have it (violin) out or not. And he, his dad catches him and asks him why he has it out and says he was in a (?) with his violin and he wishes he could play and his father says, um, the next time you want to look at it for him to ask permission to get it out and that it's OK as long as he asks permission to look at it. (054, 1)

Level 1 – He feels that, I don't know he's just upset,. He wanted his family…he wants to tell his parents that he doesn't like it but he can't like do anything about it. He can't like tell em because he's afraid, cause you don't, he knows what they'll do cause their you know like proper people that get all upset and defense and say 'how dare you say that' and probably wash his mouth out with soap just because his family is a bunch of psychopaths. (NS4,1)

E: What's happening in this picture?

S: They…that looks…it looks like a mother and son and they're in a fight.
E: What are the characters thinking?
S: She's mad at him for doing something, and he…maybe the son is thinking that she is totally overreacting and being foolish.
E: What are the characters fooling?
S: They're both mad at each other.
E: What happened before this?
S: He did something…I don't know…maybe he got in a fight with his stepfather, and she's mad at each other.
E: What's going to happen next?
S: She's going to pout and make him feel guilty, and he'll probably apologize even though he doesn't want to. (81, 6BM)

It looks like a boy and his grandmother, and they're talking about um…some kind of business or something that he had to go to…that he's supposed to be taking care of. His grandmother's just not really listening to him, and he's kind of mad because he thinks that all this stuff is very important, and so after they get into sort of a disagreement and what led up to it was um…he walked in and tried to tell her about his great deal he had and then she started talkin' about "what about this?" "what about that?" and "you should do this…" and he started arguing with her, and so they're both feeling…well, one's feeling, well…real sad and things and they're both feeling angry. (71, 6BM)

Level 2 – They're living on the island 'cause they couldn't handle the city anymore because the town thinks they are witches. The truth is that they are not. 'Cause they always wear black, they keep to themselves, they're shy, and they never come out of their house. That's why they think they're witches. The town barely knows them but still hates them. So they went to this island so they could get away from this town and now the town has found them. (003, 9GF)

S: Somebody is sliding down a rope, and I guess they're just trying to leave somewhere and uh…
E: What is the character thinking?
S: He's thinking he's happy to leave wherever he was.
E: What is he feeling?
S: He's feeling determined but afraid of getting caught.
E: What happened before this? What led up to this?
S: Ummm…I don't know.
E: What is going to happen next?
S: A person will see the rope, and they'll cut the rope , and he'll fall. Just short of killin' someone… (071, 17BM)

Level 3 – He asked if he could go live with his mother and his…and his guardian people wouldn't let him….he's gonna go back and live with his guardian, and then one day he's gonna call his friend and they're gonna go somewhere far away and they're gonna hire a hitman to kill his guardian. (097, 14)

S: There is a girl, and she's running away and from her evil stepmom and that's all.
E: What happened before?
S: The stepmom tried to kill her.
E: What is going to happen next?
S: The stepmom is going to get her and kill her.
E: What is the stepmom thinking and feeling?
S: The devil, she is just evil.
E: And the girl?
S: She is trying to get away, she's scared. (NS3. 8)

She might be sleeping. She might have gotten beaten up or something….She got robbed. I guess when she was coming in the house a man beat her up. She's coming in and that

man was hiding in the house and he beat her up…And he took her purse. [She's feeling] scared. (002, 3BM)

Entitlement (EN)

Definition: The belief that one should be able to do or have whatever one wants, regardless of what others or society consider reasonable or the cost to others; or an exaggerated focus on superiority, in order to achieve power or control. Disregard to what is reasonable and the cost to others. Often involves domination of others combined with a lack of concern for their needs or feelings.

Coding Notes:

a. EN may be coded in global light, not merely within a relationship.
b. A code of EN is determined by the intent of the perpetrator rather than whether or not he or she is successful in harming.
c. Overly harsh or inappropriate parent discipline may be coded as EN.
d. Any mention of killing or rape is coded Level 3 with the exception of self-defense or combat situations.

0	1	2	3
No entitlement	Mild disregard for another's condition or emotional state. Might not cause significant distress or victimization of other.	Intentional verbal cruelty or crimes that do not involve direct physical harm (i.e., stealing).	Clear intent to hurt others which creates serious physical or mental harm/death (excludes self-defense).

Coding Examples:

Level 0 – Well this person is thinking that he wishes that he could sleep, but he has so much on his conscience that he would not be able to so he can't…He's feeling very guilty and depressed because him and his wife are getting a divorce because he had an affair….Well, his wife and him… they have children so they're still gonna be civil to each other, and…but they're getting a divorce, and he sees his kids like every weekend and they come to see him…go to his house. (089, 14)

Level 1 – And he mom was pregnant with this child, and the little, this girl was always like, didn't really want this baby to come, because she knew the baby would like take over her mom. And she didn't what her - she wanted her mom all to herself. (118, 2)

Ok, the girl in the picture wanted to buy a baby doll. Her mom sent out to go buy her one. She came back with the wrong baby doll. So the girl started pouting, angry. And then the mom came and tried to calm her down but every single time she tried to cheer her up, she just, the girl would get even madder. So the lady was feeling kind of, like, worried 'cause like she didn't know what's gonna happen next if there was a problem. So what happened after that, the girl grabbed the baby and threw it into the trashcan and then she saved her own money and bought the doll she wanted. (062, 7GF)

This lady has just come from a hard day at work. Rough. Her boss chewed her out thousands of times for the smallest mistakes. She's come home and she's feeling extremely suicidal. That's what the knife is for. She's just cut her wrists because she wants to die so bad…" (024, 3 BM)

Ok, this is a long time ago. Ok, these people are out working the farm and the girl just now got back from school and the lady's taking a rest and she's about to have to go start working again and she thinks she ought to be doing something else instead of just working over here. And later on she just ditches the work and starts doing all that other stuff she wants to… (004, 2)

Level 2 – There's a picture of some men and they're going to their hideout cause they're bank robbers. And they're taking their loot and their horses into this hideout which is a cave under a waterfall, which before they just robbed a bank and they're trying to hide from the police. They're thinking pretty scared, they're thinking once they get out, they'll

make it. They're thinking once they get out with the money they'll be rich. They don't want to be caught. (NS1,11)

It's water. Maybe somebody's out there drowning or having trouble with the water and maybe she's up to it or something in the deep end and just decided to hide because she couldn't figure out what to do about it. And this lady here runs around the corner and she's just looking at her and she's feeling kind of, looks like she's feeling a little guilty about it, about what she did and I imagine she'll come through it and she'll ah, confess to what she did. Later on after maybe afterwards they'll talk after awhile. (053, 9GF)

Level 3 – Ok, there's two girls. One of the girls don't like the other girl. But the girls tries to be her friend. And this girl keeps on stalking her and now she's hiding behind a tree watching the girl run, which the girl thought she was being chased after, but really, the girl's just behind the tree watching her, studying her every moves so she can tackle her or something like that. And like the girl that's stalking her is like, feeling, I hate this girl, I want to kill her or something like that. And like, the other girl's like, oh my gosh, she wants to kill me, ah, I'd better run. And what happens is ah, she ah, she turns out to be like a nice person, she didn't really want to kill her after all and they became friends. (062, 9GF)

That he's some sort of horrible lead gang guy and they like catch him. Their rivals, so this rival guy you know their just really pissed off at the other gang cause like a guy took some other guys' girlfriend and the guy that took the other guys girlfriend from him, so they have him in there and their like really pissed off and their gonna like kill him, but first they want him to talk this is how creepy they are. Ok the guy that's like getting cut he's like not have a good day, he's really scared and upset and I guess everything else that's goes through a persons mind when they're about to die (NS4, 8)

This guy is a killer and a cannibal and now he’s in a mental facility wishing he never was who he was and he’s about to hang himself. (012, 3BM)

Helplessness (HE)

Definition: The lack of control over negative, external forces. Sense of control as environmental or outside of self. Helplessness (HE) describes situations in which characters are primarily acted upon rather than being proactive or influential.

Coding Notes:

a. Helplessness does not have to occur in interpersonal context. Random acts of violence, powerful outside forces, etc. are considered as metaphors for general expectations of powerlessness.
b. If the narrative contains elements of both powerful external and internal influences demonstrated, with external forces outweighing the internal, the highest HE code that may be given is level 1.

0	1	2	3
No helplessness	Minor helplessness that does not reflect cognitive distortion (e.g., authoritative parenting).	Moderate helplessness, such as in an unfair situation or powerful, external forces.	Total character helplessness within situation. Complete lack of strategy or efficacy.

Coding Examples:

Level 0 - This boy is in gym, they're having a contest on who can get up the rope the highest and he's over half way. One person is just a head taller than him and is almost about to win, but he sets his mind to going way up and back down real fast even though he's afraid of heights. And he makes it. (032, 17BM)

Level 1 – A farm setting, everyone just woke up. The girl's going to school, a man's working the farm, the wife is looking at the sunrise getting ready to get started. The girl is off to school just like she does every day, I guess. The lady leaning on the tree, she's looking at how nice, gonna be a nice, hot day, and the guy is like "Oh, here comes another day of hard work." (032, 2)

E: What's happening in this picture?
S: They…that looks…it looks like a mother and son and they're in a fight.
E: What are the characters thinking?
S: She's mad at him for doing something, and he…maybe the son is thinking that she is totally overreacting and being foolish.
E: What are the characters fooling?
S: They're both mad at each other.
E: What happened before this?
S: He did something…I don't know…maybe he got in a fight with his stepfather, and she's mad at each other.
E: What's going to happen next?
S: She's going to pout and make him feel guilty, and he'll probably apologize even though he doesn't want to. (81, 6BM)

S: This girl, is ah, a modern 30's girl. She's walking home from school one day. She's thinking about what life in the Midwest must be, away from the city and away from all the mundane noise and everything. So he pictures a farmer plowing his fields and a wife who is pregnant with his baby and wondering, "Will I ever wind up like that?"
E: Ok, so what happens?
S: Turns out that her imagination ends when she goes home her parents tell her, "Pack your things. You father's just been fired so we're going to move to another state."
E: Ok, and what is she thinking and feeling?
S: She's thinking it would be wonderful if I could get out of this city. (024, 2)

Level 2 – A guy climbing down a rope trying to escape a building on fire. Looks like he's scared and confused thinking about what he left behind in the building. He's escaped the fire and everything. He's going to have to start all over, everything has been burned. (094, 17BM)

This is a man, who has been in war, and he was a medic but he's been injured or shot. This nurse is trying to help him, but then she falls in love with him, and she doesn't want him to die when he goes out to help others cause he's a medic. At the end, he dies, and she becomes very sad. Before this he was in the battlefield. He's sad because he doesn't want to go back out. He's thinking of why he joined to be a medic. That'd be cool to be a medic. You wouldn't have to fight. That's what I'd do. She's very sad. She doesn't want him to go. (NS1, 4)

S: Um, it's a little boy that he looks like he's been practicing the violin, kinda frustrated with it, 'cause he's kind of going like that (imitated boy's body expression), he don't want to practice anymore.
E: What is he thinking?
S: That he's tried of practicing.
E: What is he feeling?
S: He's feeling that he'd rather go outside and play rather than sit inside and have to practice violin.
E: What happened before this?
S: He was practicing a lot.
E: What is going to happen next?
S: His mother's going to come into the room and tell him to start practicing again before he can go outside and play. (82, 1)

This looks kind of like a scene from Alice in Wonderland. Ok, the maid is reading the book to the girl, an the girl and the other girl is not really paying attention to it…she's just dreaming of other stuff besides this loony tune…what the maid has…what the story's about because the maid's always supposed to read her at least one story a day. The girl doesn't really like listening to the stories but her mother says she has to.
E: What are the characters thinking?

S: The maid's thinking that…that the girl is being kind of rude because the maid's trying to do her best to help her mother, and the girl…she's just daydreaming so I'm not really sure what she's thinking…she's just dreaming about stuff.
E: What are the characters feeling?
S: The girl's feeling dazed, and she really doesn't care, and the maid's feeling that she hates the girl.
E: What happened before this? What led up to this?
S: Ummm, the maid was calling…looking for her, and the little girl told her that she didn't like listening to the stories and hated having to do it but the maid told her that she had to because she does.
E: What is going to happen next?
S: The girl will get up and run off someplace. (71, 7GF)

S: It looks like a guy is looking out a window.
E: What is the character thinking?
S: Maybe he's trying to device to jump or not.
E: What is the character feeling?
S: I don't know…pretty bad.
E: What happened before this picture?
S: Maybe he lost his job or something.
E: What's going to happen next?
S: He umm…he almost jumps but then chickens out…I don't know. (079, 14)

Level 3 – Mmmm…she's sad. She's been crying. She's scared…Because of her family and stuff…Um…her parents probably beat her. (013, 3BM)

S: A little boy's sitting in the doorway. Waiting for someone, probably…He looks like a young one, and, I guess he doesn't have any brothers or sisters…
E: What will happen?

S: Mmmm…he won't have any fun playing by himself. (013, 5)

A person's been closed up in a dark room for a long time. He finally gets to open his window and sees light ahead. He's feeling really anxious to get out, but his window is too high for him to jump out. So he's trying to figure out another way to get out of the room. And he never can find his way out. (032, 14)

The person in the picture I guess the chick is all upset cause she just like killed somebody and she didn't like wanna kill him cause she's like a good natured person but then again she's like crazy so she did it anyway. She's got like multiple personalities and like she's got like this sweet personality so she's all upset when she realizes what she's done, and the other personality is like very violent so she's like two people in one… Right now she is thinking how the hell could I have done this, I really need to get help for my problem but you know whenever that happens the other personality takes over it's like you know I wanna kill somebody. (NS4, 3)

This girl really stayed to herself, too. She's in her room, and that's usually where she goes to get away from people. And there's something beside her, which is a knife. And, um, she's thinking about committing suicide with the knife. But she doesn't know what to do. She; feels like – she feels like the world's coming down on her, and everybody's, like, treating her wrong. She feels like the world just don't want her there. And she thinks…she thinks that, too. Um, but, the whole thing, how is ends – she doesn't commit suicide. She just lives in this world of anger and depression, and she just doesn't know what to do. (118, 3BM)

Quality of Relational Interaction (QR)

Definition: Westen (1991) calls it affect-tone of relationship paradigms, "the affective coloring of the object world", captures relational attributions. The overall explanatory tone of social interaction, the affective representation of relationships.

Coding Notes:

a. Relationships are defined as any social interaction or occurrence between two entities (e.g., a random or accidental shooting in which characters are strangers). Closeness of the relationship is not a factor. Thus, QR may be coded between animals, enemies, or the larger world.

b. If a global relational interaction exists, it must be strongly implied (e.g., "they" are all out to get him, or "everybody's" just so mean…).

c. References made to negative interpersonal expectations are coded as QR.

0	1	2	3
No relational interaction OR positive, supportive indications of caring/ responsiveness	Empty disconnect-edness between characters or mild situational rejection	Relationships are somewhat hurtful or antagonistic	Malevolent, highly violent/ aggressive interactions

Coding Examples:

Level 0 – She's checking in on someone who should be in the room. Just making sure everything's alright. She will probably run into the room and help whoever it is. She looks like she would provide a lot of comfort. (092, 5)

Level 1 – The boy was being bad, so the mom said, you can't come out of the house. So the boy's looking at some of his friends having fun and thinking, "Boy I wish I wouldn't have gotten into trouble because if I wouldn't have gotten into trouble, I would have been out there playing with my friends." So after that, he goes and tells his mom that he's

sorry and that he'll never do it again. And he's feeling like mad, I can't stand my mom, why is she always getting me into trouble? Even though it was him that was doing it, she could have at least been a little bit easier on him, that's what he's thinking. After that, he's says sorry to his mom he says he'll never do it again and his mom says, "OK, you can go out and play now." (062, 13B)

This looks like a girl, and it's very sad. About maybe some family problems of her friends don't like her anymore. She's feeling very sad, and thinking what to do, but in the end it all works out. She was all fine, walking in the halls, and her friends made fun of her for something that she did and she was already having a bad day because she got in a fight with her parents in the morning before she got to school. (NS 1, 3BM)

Level 2 – Somebody just woke up and they're, she comes into the room and it's a mess. She's thinking that her kid's got a hold of a lot of things. She's ready to kill him for it! And afterwards she finds out it was the cat. (032, 5)

The little boy is looking at his instrument and he hates violin, or whatever instrument. He hates violin, his parents makes him violin but he didn't want to play violin he wanted to play guitar, but since he comes from like one of those families that...what's the word well since he comes from a family that's very cultured they want him to be cultured in the arts and they believe that guitar music for the most part is not very cultured just it's not a good kind of music. So he's looking at it and just thinking god this just really sucks, how do I get out of this, why does my family have to force me to play this stupid instrument…He feels that, I don't know he's just upset he wanted his family…he wants to tell his parents that he doesn't like it but he can't like do anything about it. He can't like tell 'em because he's afraid, cause you don't, he knows what they'll do cause their you know like proper people that get all upset and defense and say 'how dare you say that' and probably wash his mouth out with soap just because his family is a bunch of psychopaths. (NS4, 1)

Level 3 – She's in a place like (the residential treatment center). She finally got away from her alcoholic parents. They didn't abuse her but they were just so mean….It was just so terrible and no other family members would help her out. (117, 8GF)

Once upon a time there was a happy family. One day the daddy come and he was doing bad…he never smoke and drugs but when he came to the house he was smoking and having drugs. And then he was having a gun in his pocket. He killed himself and the mom and the kids were crying…and they never stopped crying…so she didn't have nothing to eat or to give to the kids…the only thing to do was kill herself and her kids. And she started to cry, "Oh my kids, oh my kids!" by the river…they were all sad. (NS2, 3BM)

Appendix C

Participant Assent Form-Residential Treatment Facility

Participant Assent Form

I agree to participate in a study that is interested in evaluating the relationship between the thoughts, feelings and behaviors in children and 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 at the clinic, such as my therapist.

I understand that I will be asked to complete an interview about my feelings, behaviors and thoughts as well as a story telling task. I understand that by signing this form I am giving permission for the interview to be audio-taped for research purposes and that all my responses in the interview and storytelling task will be confidential.

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

Appendix D

Parental Consent Form- Residential Treatment Facility

Parental Consent Form

Your child is invited to participate in study of the impact of emotional and behavioral disturbances on thoughts, social behavior, and family functioning of children and adolescents. The purpose of this study is to learn more about the contribution of life events, disturbances in thinking, social behavior, and family interactions to the development of depressive disorders and disruptive behavior disorders during childhood. Your child has been selected as a possible participant for this study because he or she is experiencing a depressive disorder, a behavioral disorder, or both which have led to his or her admission. It is believed that your participation in this project may lead to a better understanding of the issues that led to your child's hospitalization. This study will be conducted under the supervision of Kevin D. Stark, Ph.D., Director of School Psychology Program at The University of Texas at Austin and will be coordinated by staff at (the Residential Treatment Center).

If you decide to allow your child to participate, he or she will be invited to complete an interview about his or her emotional functioning. The interview is designed to broadly assess how the child has been feeling lately and about his or her behavior. Typically, the interview is complete in about one hour. In addition to the interview, your child will be asked to complete a storytelling exercise, the Thematic Apperception Test. This exercise typically lasts 30-45 minutes.

For research purposes, we would like your permission to audiotape the interview and storytelling exercise. Each interview and all questionnaires will be coded numerically so that identifying information about your child is removed. At the completion of the study, all audiotapes are erased. All information gained through the completion of the study will remain strictly confidential. However, you do have the option to request that this information be shared with your child's treatment team. The interview and storytelling exercise have been completed by thousands of youngsters and pose no known risk to psychological well-being.

Your decision regarding the participation of your child will not affect your family's relationship with (the residential treatment center) or The University of Texas at Austin. If you allow your child to participate, you may discontinue his or her participation at any point with no consequences. If you grant your permission, your child will also be given the opportunity to decide whether or not to participate.

If you have any questions, please feel free to contact Dr. Kevin Stark at 512.471.4407, or in writing: SZB 504, The University of Texas at Austin, TX, 78712. You may keep a copy of this form for your records.

You are making a decision whether or not to participate. Your signature indicates that you have read the information provided or that it has been explained to you. You may withdraw at any time after signing this form should you choose to discontinue participation in the study.

_____ Yes, I am giving my permission for the research staff to share information gained through the research project which is relevant to my child's treatment with the professional staff who are directly responsible for my child's treatment.

_____ No, 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 Researcher Date

Appendix E

Parental Consent Form- Public School

Parental Consent Form

Your child is invited to participate in study of the impact of emotional and behavioral disturbances on thoughts, social behavior, and family functioning of children and adolescents. The purpose of this study is to learn more about the contribution of life events, disturbances in thinking, social behavior, and family interactions to the development of depressive disorders and disruptive behavior disorders during childhood. Your child has been selected as a possible participant for this study as part of the group of well functioning children. To qualify for this group, your child cannot be diagnosed with a psychological disorder (e.g. depression, anxiety, etc.). This study will be conducted under the supervision of Kevin D. Stark, Ph.D., Director of School Psychology Program at The University of Texas at Austin and will be coordinated by staff at (the Residential Treatment Center).

If you decide to allow your child to participate, he or she will be invited to complete an interview about his or her emotional functioning. The interview is designed to broadly assess how the child has been feeling lately and about his or her behavior. Typically, the interview is complete in about one hour. In addition to the interview, your child will be asked to complete a storytelling exercise, the Thematic Apperception Test. This exercise typically lasts 30-45 minutes.

For research purposes, we would like your permission to audiotape the interview and storytelling exercise. Each interview and all questionnaires will be coded numerically so that identifying information about your child is removed. At the completion of the study, all audiotapes are erased. All information gained through the completion of the study will remain strictly confidential. The interview and storytelling exercise have been completed by thousands of youngsters and pose no known risk to psychological well-being.

Your decision regarding the participation of your child will not affect your family's relationship with your child's school or The University of Texas at Austin. If you allow your child to participate, you may discontinue his or her participation at any point with no consequences. If you grant your permission, your child will also be given the opportunity to decide whether or not to participate. At the conclusion of your child's participation, your child will be paid $20 for their time.

If you have any questions, please feel free to contact Dr. Kevin Stark at 512.471.4407, or in writing: SZB 504, The University of Texas at Austin, TX, 78712. You may keep a copy of this form for your records.

You are making a decision whether or not to participate. Your signature indicates that you have read the information provided or that it has been explained to you. You may withdraw at any time after signing this form should you choose to discontinue participation in the study.

_____ Yes, I am giving my permission for the research staff to share information gained through the research project which is relevant to my child's treatment with the professional staff who are directly responsible for my child's treatment.

_____ No, 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 Researcher Date

Appendix F

Participant Assent Form- Public School

Participant Assent Form

I agree to participate in a study that is interested in evaluating the relationship between the thoughts, feelings and behaviors in children and adolescents. I am being invited to participate as a normal control participant. 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. I understand that when my participation is complete, I will be paid $20 for my time.

I understand that I will be asked to complete an interview about my current feelings, behaviors and thoughts as well as a story telling task. I understand that by signing this form I am giving permission for the interview to be audio-taped for research purposes and that all my responses in the interview and storytelling task will be confidential.

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

References

Abela, J. R. (2001). The hopelessness theory of depression: A test of the diathesis-stress and causal mediation components in third and seventh grade children. *Journal of Abnormal Child Psychology, 29*(3), 241-254.

Alloy, L. B., Abramson, L. Y., Tashman, N. A., Berrebbi, D. S., Hogan, M. E., Whitehouse, W. G., et al. (2001). Developmental origins of cognitive vulnerability to depression: Parenting, cognitive, and inferential feedback styles of the parents of individuals at high and low cognitive risk for depression. *Cognitive Therapy and Research, 25*(4), 397-423.

Altman, E. O., & Gotlib, I. H. (1988). The social behavior of depressed children: An observational study. *Journal of Abnormal Child Psychology, 16*(1), 29-44.

Ambrosini, P. J. (2000, January). Historical development and present status of the Schedule for Affective Disorders and Schizophrenia for School-Age Children (K-SADS). *Journal of the American Academy of Child & Adolescent Psychiatry, 39*(1), 49-58.

American Academy of Child and Adolescent Psychiatry (1997, October). Practice parameters for the assessment and treatment of children and adolescents with conduct disorder. *Journal of the American Academy of Child and Adolescent Psychiatry, 36*(Suppl. 10), 122S-139S.

American Academy of Child and Adolescent Psychiatry (1998). Practice parameters for the assessment and treatment of child and adolescents with depressive disorders. *Journal of the American Academy of Child and Adolescent Psychiatry, 37*(10 Supplement), 63S-83S.

American Psychiatric Association (2000). *Diagnostic and Statistical Manual of Mental Disorders* (4th, text revision ed.). Washington, D.C.: American Psychiatric Association.

Andersen, S. M., & Limpert, C. (2001). Future-event schemas: Automaticity and rumination in major depression. *Cognitive Therapy and Research, 25*(3), 311-333.

Anderson, J., Williams, S., McGee, R., & Silva, P. (1989, November). Cognitive and social correlates of DSM-III disorders in preadolescent children. *Jouranl of the American Academy of Child and Adolescent Psychiatry, 28*(6), 842-846.

Angold, A., Costello, E. J., & Erkanli, A. (1999). Comorbidity. *Journal of Child Psychology and Psychiatry, 40*(1), 57-87.

Arseneault, L., Moffitt, T. E., Caspi, A., Taylor, P. J., & Silva, P. A. (2000). Mental disorders and violence in a total birth cohort. *Archives of General Psychiatry, 57*, 979-986.

Aseltine, R. H., Jr., Gore, S., & Colten, M. E. (1994). Depression and the social developmental context of adolescence. *Journal of Personality and Social Psychology, 67*(2), 252-263.

Avenevoli, S., Stolar, M., Li, J., Dierker, L., & Merikangas, K. R. (2001). Comorbidity of depression in children and adolescents: Models and evidence from a prospective high-risk family study. *Biological Psychiatry, 49*, 1071-1081.

Baker, J. A. (1998). Are we missing the forest for the trees? Considering the context of school violence. *Journal of School Psychology, 36*(1), 29-44.

Baldwin, M. W. (1992, November). Relational schemas and the processing of social information. *Psychological Bulletin, 112*(3), 461-484.

Baldwin, M. W. (1997). Relational schemas as a source of if-then self-inference procedures. *Review of General Psychology, 1*(4), 326-335.

Barrett, P. M., Rapee, R. M., Dadds, M. M., & Ryan, S. M. (1996). Family enhancement of cognitive style in anxious and aggressive children. *Journal of Abnormal Child Psychology, 24*(2), 187-203.

Bauer, L. O., & Hesselbrock, V. M. (2001). CDS/BEM localization of P300 sources in adolescents "at-risk": Evidence of frontal cortex dysfunction in conduct disorder. *Biological Psychiatry, 50*, 600-608.

Beardslee, W. R., & Gladstone, T. R. (2001). Prevention of childhood depression: Recent findings and future prospects. *Biological Psychology*, 1101-1110.

Beardslee, W. R., Verage, E. M., & Gladstone, T. R. (1998). Children of affectively ill parents: A review of the past 10 years. *American Academy of Child and Adolescent Psychiatry, 37*(11), 1134-1141.

Beck, A. T. (1967). *Depression: Clinical, experimental, and theoretical aspects*. New York, NY: Harper & Row.

Beck, A. T. (1991, April). Cognitive therapy: A 30-year retrospective. *American Psychologist*, *46*(4), 368-375.

Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy of depression*. New York, NY: Guilford Press.

Berg-Nielsen, T. S., Vikan, A., & Dahl, A. A. (2002). Parenting related to child and parental psychopathology: A descriptive review of the literature. *Clinical Child Psycholgoy and Psychiatry, 7*(4), 529-552.

Beyers, J. M., Loeber, R., Wikstrom, P.-O. H., & Stouthamer-Loeber, M. (2001). What predicts adolescent violence in better-off neighborhoods? *Journal of Abnormal Child Psychology, 29*(5), 369-81.

Biederman, J., Faraone, S., Mick, E., & Lelon, E. (1995). Psychiatric comorbidity among referred juveniles with major depression: Fact or artifact. *Journal of the American Academy of Child and Adolescent Psychiatry, 34*(5), 579-590.

Biederman, J., Munir, K., & Knee, D. (1987). Conduct and oppositional disorder in clinically referred children with attention deficit disorder: A controlled family study. *Journal of the American Academy of Child and Adolescent Psychiatry, 26*(5), 724-727.

Bierman, K. L., & Wargo, J. B. (1995). Predicting the longitudinal course associated with aggressive-rejected, aggressive (nonrejected), and rejected (nonaggressive) status. *Development and Psychopathology, 7*, 669-682.

Bird, H. R., Canino, G. J., Davies, M., Zhang, H., Ramirez, R., & Lahey, B. B. (2001, December). Prevalence and correlates of antisocial behaviors among three ethnic groups. *Journal of Abnormal Child Psychology, 29*(6), 465-478.

Blair, J., & Frith, U. (2000). Neurocognitive explanations of the antisocial personality disorders. *Criminal Behavior and Mental Health , 10*, S66-S81.

Blatt, S. J. (1991, August). A cognitive morphoology of psychopathology. *Journal of Nervous and Mental Disease, 179*(8), 449-458.

Boivin, M., Poulin, F., & Vitaro, F. (1994). Depression mood and peer rejection in childhood. *Development and Psychopathology, 6*, 483-498.

Brendgen, M., Vitaro, F., Turgeon, L., Poulin, F., & Wanner, B. (2004). Is there a dark side of positive illusions? Overestimation of social competence and subsequent adjustment in aggressive and nonaggressive children. *Journal of Abnormal Child Psychology, 32*(3), 305-320.

Brendgen, M., Wanner, B., Morin, A.J.S., & Vitaro, F. (2005, October). Relations with parents and with peers, temperament, and trajectories of depressed mood during early adolescence. *Journal of Abnormal Child Psychology, 33*(5), 579-594.

Brennan, P. A., Hammen, C., Katz, A. R., & Le Brocque, R. M. (2002). Maternal depression, paternal psychopathology, and adolescent diagnostic outcomes. *Journal of Consulting and Clinical Psychology, 70*(5), 1075-1085.

Brestan, E. V., & Eyberg, S. M. (1998). Effective psychosocial treatments of conduct-disordered children and adolescents: 9 years, 82 studies, and 5,72 kids. *Journal of Clinical Child Psychology, 27*(2), 180-189.

Bretherton, I. (1992, September). The origins of attachment theory: John Bowlby and Mary Ainsworth. *Developmental Psychology, 28*(5), 759-775.

Breton, J.-J., Bergeron, L., Valla, J.-P., Berthiaume, C., Gaudet, N., Lambert, J., et al. (1999). Quebec child mental health survey: Prevalence of DSM-III mental health disorders. *Journal of Child Psychology and Psychiatry, 40*(3), 375-384.

Breznitz, Z., & Sherman, T. (1987). Speech patterning of natural discourse of well and depressed mothers and their young children. *Child Development, 58*, 395-400.

Broderick, P. C. (1998, May). Early adolescent gender differences in the use of ruminative and distracting coping strategies. *Journal of Early Adolescence, 18*(2), 173-191.

Broidy, L. M., Nagin, D. S., Tremblay, R. E., Bates, J. E., Brame, B., & Dodge, K. A. (2003, March). Developmental trajectories of childhood disruptive behaviors and adolescent delinquency: A six-site, cross-national study. *Developmental Psychology, 39*(2), 222-245.

Burge, D., & Hammen, C. (1991). Maternal communication: Predictors of outcome at follow-up in a sample of children at high and low risk for depression. *Journal of Abnormal Psychology, 100*(2), 174-180.

Burge, D., Hammen, C., Davila, J., Daley, S. E., Paley, B., Lindberg, N., et al. (1997, Winter). The relationship between attachment cognitions and psychological adjustment in late adolescent women. *Development and Psychopathology, 9*(1), 151-167.

Burke, J. D., Loeber, R., & Birmaher, B. (2002, November). Oppositional defiant disorder and conduct disorder: A review of the past 10 years, part II. *Journal of the American Academy of Child & Adolescent Psychiatry, 41*(11), 1275-1293.

Burns, G. L., Boe, B., Walsh, J. A., Sommers-Flanagan, R., & Teegarden, L. A. (2001). A confirmatory factor analysis on the DSM-IV ADHD and ODD symptoms: What is the best model for the organization of these symptoms? *Journal of Abnormal Child Psychology, 29*(4), 339-349.

Campbell, S. B., Cohn, J. F., & Meyers, T. (1995, May). Depression in first-time mothers: Mother-infant interaction and depression chronicity. *Developmental Psychology, 31*(3), 349-357.

Campbell, S. B., Pierce, E. W., Moore, G., Marakovitz, S., & Newby, K. (1996). Boys' externalizing problems at elelmentary school age: Pathways from early behavior problems, maternal control, and family stress. *Development and Psychopathology, 8*, 701-719.

Campbell, S. B., Shaw, D. S., & Gilliom, M. (2000). Early externalizing behavior problems: Toddlers and preschoolers at risk for later maladjustment. *Development and Psychopathology, 12,* 467-488.

Caron, C., & Rutter, M. (1991, November). Comorbidity in child psychopathology: Concepts, issues and research strategies. *Journal of Child Psychology and Psychiatry, 32*(7), 1063-1080.

Caspi, A., Moffitt, T. E., Morgan, J., Rutter, M., Taylor, A., Arseneault, L., et al. (2004, March). Maternal expressed emotion predicts children's antisocial behavior problems: Using monozygotic-twin differences to identify environmental effects on behavioral development. *Developmental Psychology, 40*(2), 149-161.

Chen, H., Mechanic, D., & Hansell, S. (1998). A longitudinal study of self-awareness and depressed mood in adolescence. *Journal of Youth and Adolescence, 27*(6), 719-734.

Chiariello, M. A., & Orvaschel, H. (1995). Patterns of parent-child communication: Relationship to depression. *Clinical Psychology Review, 15*(5), 395-407.

Cicchetti, D., & Sroufe, L. A. (2000). Editorial: The past as a prologue to the future: The times, they've been a-changin'. *Development and Psychopathology, 12*, 255-264.

Cicchetti, D., & Toth, S. L. (1998, February). The development of depression in children and adolescents. *American Psychologist, 53*(2), 221-241.

Cohn, J. F., Campbell, S. B., Matias, R., & Hopkins, J. (1990). Face-to-face interactions of postpartum depressed and nondepressed mother-infant pairs at 2 months. *Developmental Psychology, 26*(1), 15-23.

Coie, J. D., & Jacobs, M. R. (1993, Winter). The role of social context in the prevention of conduct disorder. *Development and Psychopathology, 5*(1-2), 263-275.

Cole, D. A., & Carpentieri, S. (1990, December). Social status and the comorbidity of child depression and conduct disorder. *Journal of Consulting and Clinical Psychology, 58*(6), 748-757.

Cole, D. A., Jacquez, F. M., & Maschman, T. L. (2001). Social origins of depressive cognitions: A longitudinal study of self-perceived competence in children. *Cognitive Therapy and Research, 25*(4), 377-395.

Cole, D. A., Martin, J. M., Peeke, L. A., Seroczynski, A., & Fier, J. (1999, March/April). Children's over- and underestimation of academic competence: A longitudinal study of gender differences, depression, and anxiety. *Child Development, 70*(2), 459-473.

Cole, D. A., Martin, J. M., Peeke, L. G., Seroczynski, A., & Hoffman, K. (1998). Are cognitive errors of underestimation predictive or reflective of depressive symptoms in children: A longitudinal study. *Journal of Abnormal Psychology, 107*(3), 481-496.

Cole, D. A., Martin, J. M., Powers, B., & Truglio, R. (1996). Modeling causal relations between academic and social competence and depression: A multitrait-multimethod longitudinal study of children. *Journal of Abnormal Psychology, 105*(2), 258-270.

Cole, D. A., & Rehm, L. P. (1986). Family interaction patterns and childhood depression. *Journal of Abnormal Child Psychology, 14*(2), 297-314.

Cole, D. A., Tram, J. M., Martin, J. M., Hoffman, K. B., Ruiz, M. D., Jacquez, F. M., et al. (2002, February). Individual differences in the emergence of depressive symptoms in children and adolescents: A longitudinal investigation of parent and child reports. *Journal of Abnormal Psychology, 111*(1), 156-165.

Cole, D. A., & Turner, J. E. (1993). Models of cognitive mediation and moderation in child depression. *Journal of abnormal psychology, 102*(2), 271-281.

Conduct Problems Prevention Research Group (2002). Using the Fast-Trak randomized prevention trial to test the early-starter model of the development of serious conduct problems. *Development and Psychopathology, 14*, 925-943.

Connolly, J., Geller, S., Marton, P., & Kutcher, S. (1992). Peer responses to social interaction with depressed adolescents. *Journal of Clinical Child Psychology, 21*(4), 365-370.

Cornwell, B. (2003, March). The dynamic properties of social support: Decay, growth, and staticity, and their effects on adolescent depression. *Social Forces, 81*(3), 953-978.

Costello, E. J., Mustillo, S., Erkanli, A., Keeler, G., & Angold, A. (2003). Prevalence and development of psychiatric disorders in childhood and adolescence. *Archives of General Psychiatry, 60*, 837-844.

Cowan, P. A., Cohn, D. A., Cowan, C. P., & Pearson, J. L. (1996, February). Parents' attachment histories and children's externalizing and internalizing behaviors: Exploring family systems models of linkage. *Journal of Consulting and Clinical Psychology, 64*(1), 53-63.

Coy, K., Speltz, M. L., DeKlyen, M., & Jones, K. (2001). Social-cognitive processes in preschool boys with and without oppositional defiant disorder. *Journal of Abnormal Child Psychology, 29*(2), 107-119.

Coyne, J. C. (1976, February). Toward an interactional description of depression. *Psychiatry: Journal for the study of interpersonal processes, 39*(1), 28-40.

Crawford, T. N., Cohen, P., Midlarsky, E., & Brook, J. S. (2001). Internalizing symptoms in adolescents: Gender differences in vulnerability to parental distress and discord. *Journal of research on adolescence, 11*(1), 95-118.

Crick, N. R. (1996). The role of overt aggression, relational aggression, and prosocial behavior in the prediction of children's future social adjustment. *Child Development, 67,* 2317-2327.

Crick, N. R., & Dodge, K. A. (1994, January). A review and reformulation of social information-processing mechanisms in children's social adjustment. *Psychological Bulletin, 115*(1), 74-101.

Crick, N. R., & Dodge, K. A. (1996). Social information-processing mechanisms in reactive and proactive aggression. *Child Development, 67,* 993-1002.

Crick, N. R., Grotpeter, J. K., & Bigbee, M. A. (2002, July/August). Relationally and physically aggressive children's intent attributions and feelings of distress for relational and instrumental peer provocations. *Child Development, 73*(4), 1134-1142.

Curry, J. F., & Craighead, W. E. (1990, February). Attributional style in clinically depressed and conduct disordered adolescents. *Journal of Consulting and Clinical Psychology, 58*(1), 109-115.

Dadds, M. R., Sanders, M. R., Morrison, M., & Rebgetz, M. (1992). Childhood depression and conduct disorder: II. an analysis of family interaction patterns in the home. *Journal of Abnormal Psychology, 101*(3), 505-513.

Davila, J., Hammen, C., Burge, D., Paley, B., & Daley, S. E. (1995, November). Poor interpersoanl problem solving as a mechanism of stress generation in depression among adolescent women. *Journal of Abnormal Psychology, 104*(4), 592-600.

Dery, M., Toupin, J., Pauze, R., Mercier, H., & Fortin, L. (1999, June). Neuropsychological characteristics of adolescents with conduct disorder: Association with attention-deficit-hyperactivity and aggression. *Journal of Abnormal Child Psychology, 27*(3), 225-.

Dodge, K. A. (1990). Developmental psychopathology in children of depressed mothers. *Developmental Psychology, 26*(1), 3-6.

Dodge, K. A. (1993). Social-cognitive mechanisms in the development of conduct order and depression. *Annual Review of Psychology, 44*, 559-584.

Dodge, K. A., & Petit, G. S. (2003, March). A biopsychosocial model of the development of chronic conduct problems in adolescence. . *Developmental Psychology, 39*(2), 349-371.

Dodge, K. A., Price, J. M., Bachorowski, J. A., & Newman, J. P. (1990, November). Hostile attribution biases in severly aggressive adolescents. *Journal of Abnormal Psychology, 99*(4), 385-392.

Dodge, K. A., Price, J. M., Bachorowski, J.-A., & Newman, J. P. (1990, November). Hostile attribution biases in severely aggressive adolsecents. *Journal of Abnormal Psychology, 99*(4), 385-392. Retrieved October 16, 2004, from EBSCO database.

Dodge, K. A., & Schwartz, D. (1997). Social information processing mechanisms in aggressive behavior. In D. M. Stoff & J. Breiling (Eds.), *Handbook of Antisocial Behavior* (pp. 171-180). New York, NY: John Wiley & Sons, Inc.

Downey, G., & Coyne, J. C. (1990). Children of depressed parents: An integrative review. *Psychological Bulletin, 108*(1), 50-76.

Emslie, G. J., & Mayes, T. L. (2001). Mood disorders in children and adolescents: Psychopharmacological treatment. *Biological Psychiatry, 49*, 1082-1090.

Fergusson, D. M., Lynskey, M. T., & Horwood, L. J. (1996). Factors associated with continuity and changes in disruptive behavior patterns between childhood and adolescence. *Journal of Abnormal Child Psychology, 24*(5), 533-553.

Field, T., Fox, N. A., Pickens, J., & Nawrocki, T. (1995, May). Relative right front EEG activation in 3- to 6- month-old infants of "depressed" mothers. *Developmental Psychology, 31*(3), 358-363.

Field, T., Healy, B., Goldstein, S., & Guthertz, M. (1990). Behavior-state matching and synchrony in mother-infant interactions of nondepressed versus depressed dyads. *Developmental Psychology, 26*(1), 7-14.

Field, T., Healy, B., Goldstein, S., Perry, S., Bendell, D., Schanberg, S., et al. (1988). Infants of depressed mothers show "depressed" behavior even with nonepressed adults. *Child Development, 59*, 1569-1579.

Field, T., Lang, C., Martinez, A., Yando, R., Pickens, J., & Bendell, D. (1996, September). Preschool follow-up of infants of dysphoric mothers. *Journal of Clinical Child Psychology, 25*(3), 272-279.

Fleming, J. E., & Offord, D. R. (1990). Epidemiology of childhood depressive disorders: A critical review. *Journal of the American Academy of Child and Adolescent Psychiatry, 29*(4), 571-580.

Ford, T., Goodman, R., & Meltzer, H. (2003). The British child and adolescent mental health survey 1999: The prevalence of DSM-IV disorders. *Journal of the American Academy of Child and Adolescent Psychiatry, 42*(10), 1203-1211.

Ford, T., Goodman, R., & Meltzer, H. (2004). The relative imporance of child, family, school and neighbourhood correlates of childhood psychiatric disorder. *Social Psychiatry and Psychiatric Epidemiology, 39*, 487-496.

Frick, P. J., Cornell, A. H., Barry, C. T., Bodin, S. D., & Dane, H. E. (2003, August). Callous-unemotional traits and conduct problems in the prediction of conduct problem severity, aggression, and self-report of delinquency. *Journal of Abnormal Child Psychology, 31*(4), 457-470.

Frick, P.J. & Morris, A.S. (2004). Temperament and developmental pathways to conduct problems. *Journal of Clinical Child and Adolescent Psychology, (33)*1, 54-68.

Frye, A. A., & Goodman, S. H. (2000). Which social problem-solving components buffer depression in adolescent girls? *Cognitive Therapy and Research, 24*(6), 637-650.

Garber, J., & Flynn, C. (2001). Predictors of depressive cognitions in young adolescents. *Cognitive Therapy and Research, 25*(4), 353-376.

Garber, J., & Horowitz, J. L. (2002). Depression in children. In I. H. Gotlib & C. L. Hammen (Eds.), *Handbook of depression* (pp. 510-540). New York, NY, US: Guilford Press.

Garber, J., & Kaminski, K. M. (2000, December). Laboratory and performance-based measures of depression in children and adolescents. *Journal of Clinical Child Psychology, 29*(4), 509-525.

Garber, J., Keiley, M. K., & Martin, N. C. (2002). Developmental trajectories of adolescents' depressive symptoms: Predictors of change. *Journal of Consulting and Clinical Psychology, 70*(1), 79-95.

Garber, J., Weiss, B., & Shanley, N. (1993). Cognitions, depressive symptoms, and development in adolescents. *Journal of Abnormal Psychology, 102*(1), 47-57.

Garnefski, N. (2000). Age differences in depressive symptoms, antisocial behavior, and negartive perceptions of family, school, and peers among adolescents. *Journal of the american academy of child and adolescent psychiatry, 39*(9), 1175-1181.

Ge, X., Conger, R. D., & Elder, G. H., Jr. (2001). Pubertal transition, stressful life events, and the emergence of gender differences in adolescent depressive symptoms. *Developmental Psychology, 37*(3), 404-417.

Gencoz, T., Voelz, Z. R., Gencoz, F., Petit, J. W., & Joiner, T. E., Jr. (2001). Specificity of information processing styles to depressive symptoms in youth psychiatric inpatients. *Journal of Abnormal Child Psychology, 29*(3), 255-262.

Gibb, B. E., Alloy, L. B., Abramson, L. Y., Rose, D. T., Whitehouse, W. G., Donovan, P., et al. (2001). History of childhood maltreatment, negative cognitive styles, and episodes of depression in adulthood. *Cognitive Therapy and Research, 25*(4), 425-446.

Gladstone, T. R., Kaslow, N. J., Seeley, J. R., & Lewinsohn, P. M. (1997). Sex differences, attributional style, and depressive symptoms among adolescents. *Journal of Abnormal Child Psychology, 25*(4), 297-305.

Goldstein, M. J., Gould, E., Alkire, A. A., Rodnick, E. H., & Judd, L. L. (1970, May). Interpersonal themes in the thematic apperception test stories of families of disturbed adolescents. *Journal of Nervous and Mental Disease, 150*(5), 354-365.

Goodman, S. H. (2002). Depression and early adverse experiences. In I. H. Gotlib & C. L. Hammen (Eds.), *Handbook of depression* (pp. 245-267). New York, NY, US: Guilford Press.

Goodman, S. H., & Gotlib, I. H. (1999, July). Risk for psychopathology in the children of depressed mothers: A developmental model for understanding mechanisms of transmission. *Psychological Review, 106*(3), 458-490.

Goodman, S. H., Schwab-Stone, M., Lahey, B. B., Shaffer, D., & Jensen, P. S. (2000). Major depression and dysthymia in children and adolescents: Discriminant validity and differential consequences in a community sample. *Journal of the American Academy of Child and Adolescent Psychiatry, 39*(6), 761-770.

Goodyer, I. M., Herbert, J., Tamplin, A., Secher, S. M., & Pearson, J. (1997). Short-term outcome of major depression: II. life events, family dysfunction, and friendship difficulties as predictors of persistent disorder. *Journal of the American Academy of Child and Adolescent Psychiatry, 36*(4), 474-480.

Gorman-Smith, D., Tolan, P. H., & Henry, D. B. (2000). A developmental-ecological model of the relation of family functioning to patterns of delinquency. *Journal of Quantitative Criminology, 16*(2), 169-198.

Gotlib, I. H., & Hammen, C. L. (1992). *Psychological aspects of depression: Toward a cognitive-interpersonal integration*. Oxford, England: John Wiley & Sons.

Gotlib, I. H., Lewinsohn, P. M., Seeley, J. R., Rohde, P., & Redner, J. E. (1993). Negative cognitions and attributional style in depressed adolescents: An examination of stability and specificity. *Journal of Abnormal Psychology, 102*(4), 607-615.

Greenberg, M. T., Speltz, M. L., & DeKlyen, M. (1993). The role of attachment in the early development of disruptive behavior problems. *Development and Psychopathology, 5*, 191-213.

Greenberger, E., & Chen, C. (1996). Percieved family relationships and depressed mood in early and late adolescence: A comparison of European and Asia Americans. *Developmenatl Psychology, 4*, 707-716.

Greene, R. W., Ablon, J. S., Goring, J. C., Raezer-Blakely, L., Markey, J., Monuteaux, M., et al. (2004, December). Effectiveness of collaborative problem solving in affectively dysregulated children with Oppositional Defiant Disorder: Initial findings. *Journal of Consulting & Clinical Psychology, 72*(6), 1157-1164.

Hammen, C., & Brennan, P. A. (2001, April). Depressed adolescents of depressed and nondepressed mothers: Tests of an interpersonal impairment hypothesis. *Journal of Consulting and Clinical Psychology, 69*(2), 284-29.

Hammen, C., Burge, D., & Stansbury, K. (1990, January). Relationship of mother and child variables to child outcomes in a high-risk sample: A causal modeling analysis. *Developmental Psychology, 26*(1), 24-30.

Hammen, C., & Goodman-Brown, T. (1990, April). Self-schemas and vulnerability to specific life stress in children at risk for depression. *Cognitive Therapy & Research, 14*(2), 215-227, Special issue: Selfhood processes and emotional disorders.

Hammen, C., Rudolph, K., Weisz, J., Rao, U., & Burge, D. (1999). The context of depression in clinic-referred youth: Negected areas in treatment. *Journal of Child and Adolescent Psychiatry, 38*(1), 64-71.

Hammen, C., & Rudolph, K. D. (1996). Childhood Depression. In E. J. Mash & R. A. Barkley (Eds.), *Child psychopathology* (pp. 153-195). New York, NY: Guilford Press. (Original work published 1996)

Hammen, C. L., Burge, D., Daley, S. E., Davila, J., Paley, B., & Rudolph, K. D. (1995, August). Interpersonal attachment cognitions and prediction of symptomatic responses to interpersonal stress. *Journal of Abnormal Psychology, 104*(3), 436-443.

Handwerk, M.L., Friman, P.C., Mott, M. A., & Stairs, J. M. (1998, Fall). The relationship between program restrictiveness and youth behavior problems. *Journal of Emotional and Behavior Disorders, 6*(3), 170-179.

Hankin, B. L., & Abramson, L. Y. (2001). Development of gender differences in depression: An elaborated cognitive vulnerability-transactional stress theory. *Psychological Bulletin, 127*(6), 773-796.

Hankin, B. L., Abramson, L. Y., Moffitt, T. E., Silva, P. A., McGee, R., & Angell, K. E. (1998). Development of depression from preadolescence to young adulthood: Emerging gender differences in a 10-year longitudinal study. *Journal of Abnormal Psychology, 107*(1), 128-140.

Hankin, B. L., Abramson, L. Y., & Siler, M. (2001). A prospective test of the hopelessness theory of depression in adolescence. *Cognitive Therapy and Research, 23*(5), 607-632.

Harrington, R., Rutter, M., & Frombonne, E. (1996). Developmental pathways in depression: Multiple meanings, antecedents, and endpoints. *Development and Psychopathology, 8*, 601-616.

Harter, S., & Whitesell, N. R. (1996). Multiple pathways to self-reported depression and psychological adjustment among adolescents. *Development and Psychopathology, 8*, 761-777.

Hastings, P. D., Zahn-Waxler, C., Robinson, J., Usher, B., & Bridges, D. (2000). The development of concern for others in children with behavior problems. *Developmental Psychology, 36*(5), 531-546.

Hayden, E.P., Klein, D.N., Durbin. C.E. & Olino, T.M. (2006, April). Positive emotionality at age 3 predicts cognitive styles in 7-year-old children. *Development and Psychopathology, 18*(2), 409-423.

Hazell, P. (2002, August). Depression in children: May go unnoticed and untreated. *British Medical Journal, 325*(7358), 229-230.

Henry, D. B., Tolan, P. H., & Gorman-Smith, D. (2001). Longitudinal family and peer group effects on violence and nonviolent delinquency. *Journal of Clinical Child Psychology, 30*(1), 172-186.

Hill, J. (2002). Biological, psychological, and social processes in the conduct disorders. *Journal of Child Psychology and Psychiatry, 43*(1), 133-164.

Review article

Hilsman, R., & Garber, J. (1995, August). A test of the cognitive diathesis^stress model of depression in children: Academic stressors, attributional style, perceived competence, and control. *Journal of Personality & Social Psychology, 69*(2), 370-380.

Hoffman, K. B., Cole, D. A., Martin, J. M., Tram, J., & Seroczynski, A. D. (2000, November). Are the discrepancies between self- and others' appraisals of competence predictive or reflective of depressive symptoms in children and adolescents: A longitudinal study, part II. *Journal of Abnormal Psychology, 109*(4), 651-662.

Huesmann, L. R., Eron, L. D., Lefkowitz, M. M., & Walder, L. O. (1984). Stability of aggression over time and generations. *Developmental Psychology, 20*(6), 1120-1134.

Hughes, J. N., Cavell, T. A., & Grossman, P. B. (1997). A positive view of self: Risk or protection for aggressive children? *Development and Psychopathology, 9*, 75-94.

Ingram, R. E. (2001). Developing perspectives on the cognitive-developmental origins of depression: Back is the future. *Cognitive Therapy and Research, 25*(4), 497-504.

Jacob, T., & Johnson, S. L. (1997, December). Parent-child interaction among depressed fathers and mothers: Impact on child functioning. *Journal of Family Psychology, 11*(4).

Jacob, T., & Johnson, S. L. (2001, March). Sequential interactions in the parent-child communications of depressed fathers and depressed mothers. *Journal of Family Psychology, 15*(1), 38-52.

Jacques, H. A., & Mash, E. J. (2004, February). A test of the tripartite model of anxiety and depression in elementary and high school girls and boys. *Journal of Abnormal Child Psychology, 32*(1), 13-25.

Jaffee, S. R., Caspi, A., Moffitt, T. E., & Taylor, A. (2004, February). Physical maltreatment victim to antisocial child: Evidence of an environmentally mediated process. *Journal of Abnormal Psychology, 113*(1), 44-55.

Jewell, J. D., & Stark, K. D. (2003, March). Comparing the family environments of adolescents with conduct disorder or depression. *Journal of Child and Family Studies, 12*(1), 77-89.

Joiner, T., Coyne, J. C., & Blalock, J. (1999). On the interpersonal nature of depression. In T. Joiner & J. C. Coyne (Eds.), *Interactional nature of depression: Advances in interpersonal approaches* (pp. 3-19). Washington D.C., US: American Psychological Association.

Joiner, T. E. (2002). Depression in its interpersonal context. In I. H. Gotlib & C. L. Hammen (Eds.), *Handbook of depression* (pp. 295-313). New York, NY: Guilford Press.

Joiner, T. E., Jr. (2000). A test of the hopelessness theory of depression in youth psychiatric inpatients. *Journal of Clinical Child Psychology, 29*(2), 167-176.

Joiner, T. E., Jr., Metalsky, G. I., Katz, J., & Beach, S. R. (1999). Depression and excessive reassurance-seeking. *Psychological Inquiry, 10*(4), 269-278.

Jordan, A., & Cole, D. A. (1996). Relation of depressive symptoms to structure of self-knowledge in childhood. *Journal of Abnormal Psychology, 05*(4), 530-540.

Kashani, J. H., Burbach, D. J., & Rosenberg, T. K. (1988). Perception of family conflict resolution and depressive symptomatology in adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry, 27*(1), 42-48.

Kaslow, N. J., Deering, C. G., & Racusin, G. R. (1994). Depressed children and their families. *Clinical Psychology Review, 14*(1), 39-59.

Kaufman, J. (1991). Depressive disorders in maltreated children. *Journal of the American Academy of Child and Adolescent Psychiatry, 30*, 257-265.

Kaufman, J., Martin, A., King, R. A., & Charney, D. (2001). Are child-, adolescent-, and adult-onset depression one and the same disorder? *Biological Psychiatry, 49*, 980-1001.

Keenan, K., Loeber, R., & Green, S. (1999). Conduct disorder in girls: A review of the literature. *Clinical Child and Family Psychology Review, 2*(1), 3-19.

Keenan, K., Loeber, R., Zhang, Q., Southamer-Loeber, M., & Van Kammen, W. B. (1995). The influence of deviant peers on the development of boys' disruptive and delinquent behavior: A temporal analysis. *Development and Psychopathology, 7*, 715-726.

Keenan, K., Shaw, D., Dellaquadri, E., Giovannelli, J., & Walsh, B. (1998). Evidence for the continuity of early problem behaviors: Application of a developmental model. *Journal of Abnormal Child Psychology, 26*(6), 441-454.

Kendall, P. C. (1985, September). Toward a cognitive-behavioral model of child psychopathology and a critique of related interventions. *Journal of Abnormal Child Psychology, 13*(3), 357-372.

Kessler, R. C. (2002). Epidemiology of depression. In I. H. Gotlib & C. L. Hammen (Eds.), *Handbook of depression* (pp. 23-42). New York, NY: Guilford Press.

Kovacs, M. (1996, June). Presentation and course of major depressive disorder during childhood and later years of life span. *Journal of the American Academy of Child and Adolescent Psychiatry, 35*(6), 705-806.

Kovacs, M., & Devlin, B. (1998). Internalizing disorders in childhood. *Journal of Child Psychology and Psychiatry, 39*(1), 47-63.

Kovacs, M., Paulauskas, S., Gatsonis, C., & Richards, C. (1988, November/December). Depressive disorders in childhood: III. A longitudinal study of comorbidity with and risk for conduct disorders. *Journal of affective disorders, 15*(3), 205-217.

Krol, N., Morton, J., & De Bruyn, E. (2004). Theories of conduct disorder: A causal modelling analysis. *Journal of Child Psychology and Psychiatry, 45*(5), 727-742.

Krueger, R. F., Caspi, A., Moffitt, T. E., & Silva, P. A. (1998). The structure and stability of common mental disorders (DSM-III-R): A longitudinal-epidemiological study. *Journal of Abnormal Psychology, 107*(2), 216-227.

Krueger, R. F., Caspi, A., Moffitt, T. E., Silva, P. A., & McGee, R. (1996, August). Personality traits are differentially linked to mental disorders: A multitrait-multidiagnosis study of an adolescent birth cohort. *Journal of Abnormal Psychology, 105*(3), 299-312.

Kupersmidt, J. B., & Coie, J. D. (1990). Preadolescent peer status, aggression, and school adjustment as predictors of externalizing problems in adolescence. *Child Development, 61*, 1350-1362.

Lacourse, E., Nagin, D., Tremblay, R. E., Vitaro, F., & Claes, M. (2003). Developmental trajectories of boys' delinquent group membership and facilitation of violent behaviors during adolescence. *Development and Psychopathology, 15*, 183-197.

Lahey, B. B., Applegate, B., Barkley, R. A., Garfinkel, B., McBurnett, K., Kerdyk, L., et al. (1994, August). DSM-IV field trials for oppositional defiant disorder and conduct disorder in children and adolescents. *American Journal of Psychiatry, 151*(8), 1163-1171.

Lahey, B. B., Loeber, R., Burke, J., & Rathouz, P. J. (2002, July). Adolescent outcomes of childhood conduct disorder among clinic-referred boys: Predictors of improvement. *Journal of Abnormal Child Psychology, 0*(4), 333-348.

Lahey, B. B., Loeber, R., Quay, H. C., Applegate, B., Shaffer, D., Waldman, I., et al. (1998). Validity of the DSM-IV subtypes of conduct disorder based on age of onset. *Journal of the American Academy of Child and Adolescent Psychiatry, 37*(4), 435-442.

Lahey, B. B., Miller, T. L., Schwab-Stone, M., Goodman, S. H., Waldman, I. D., Canino, G., et al. (2000, August). Age and gender differences in oppositional behavior and conduct problems: A cross-sectional household study of middle childhood and adolescence. *Journal of Abnormal Psychology, 109*(3), 488-503.

Laurent, J., & Stark, K. D. (1993). Testing the cognitive content-specificity hypothesis with anxious and depressed youngsters. *Journal of Abnormal Psychology, 102*(2), 226-237.

Lee, C. M., & Gotlib, I. H. (1989). Maternal depression and child adjustment: A longitudinal analysis. *Journal of Abnormal Psychology, 98*(1), 78-85.

Leve, L.D., Kim, H.K., & Pears, K.C. (2005). Childhood temperament and family environment as predictors of internalizing and externalizing trajectories from ages 5 to 17. *Journal of Abnormal Pyschology, 33*(5), 505-520.

Levendosky, A. A., Okun, A., & Parker, J. G. (1995). Depression and maltreatment as predictors of social competence and social problem-solving skills in school-age children. *Child Abuse & Neglect, 19*(10), 1183-1195.

Lewinsohn, P. M., & Essau, C. A. (2002). Depression in adolescents. In I. H. Gotlib & C. L. Hammen (Eds.), *Handbook of Depression* (pp. 541-559). New York, NY: Guilford Press. (Original work published 2002)

Lewinsohn, P. M., Gotlib, I. H., & Seeley, J. R. (1997). Depression-related psychosocial variables: Are they specific to depression in adolescents? *Journal of Abnormal Psychology, 106*(3), 365-375.

Lewinsohn, P. M., Joiner, T. E., Jr., & Rohde, P. (2001). Evaluation of cognitive diathesis-stress models in predicting major depressive disorder in adolescents. *Journal of Abnormal Psychology, 110*(2), 203-215.

Lewinsohn, P. M., Roberts, R. E., Seeley, J. R., Rohde, P., Gotlib, I. H., & Hops, H. (1994). Adolescent psychopathology: II. Psychosocial risk factors for depression. *Journal of Abnormal Psychology, 13*(2), 302-315.

Lewinsohn, P. M., Rohde, P., Klein, D. N., & Seeley, J. R. (1999). Natural course of adolescent major depressive disorder: I. continuity into young adulthood. *Journal of the American Academy of Child and Adolescent Psychiatry, 38*(1), 56-63.

Lewisohn, P. M., Rohde, P., & Seeley, J. R. (1998). Major depressive disorder in older adolescents: Prevalence, risk factors, and clinical implications. *Clinical Psychology Review, 18*(7), 765-794.

Loeber, R., Burke, J. D., Lahey, B. B., Winters, A., & Zera, M. (2000). Oppositional defiant and conduct disorder: A review of the past 10 years, part I. *Journal of the American Academy of Child and Adolescent Psychiatry, 39*(12), 1468-1484.

Loeber, R., & Stouthamer-Loeber, M. (1998, February). Development of juvenile aggression and violence: Some common misconceptions and controversies. *American Psychologist, 53*(2), 242-259.

Lohr, L. B., Teglasi, H., & French, M. (2004). Schemas and temperament as risk factors for emotional disability. *Personality and Individual Differences, 36*, 1637-1654.

Luoma, I., Tamminen, T., Kaukonen, P., Laippala, P., Puura, K., Salmelin, R., et al. (2001). Longitudinal study of maternal depressive symptoms and child well-being. *Journal of the American Academy of Child and Adolescent Psychiatry, 40*, 1367-1374.

Lynam, D. R. (1998). Early identification of the fledgling psychopath: Locating the psychopathic child in the current nomenclature. *Journal of Abnormal Psychology, 107*(4), 566-575.

Lyons-Ruth, K. (1996, February). Attachment relationships among children with aggressive behavior problems: The role of disorganized early attachment patterns. *Journal of Consulting and Clinical Psychology, 64*(1), 64-73.

MacKinnon-Lewis, C., & Lofquist, A. (1996, December). Antecedents and consequences of boys' depression and aggression: Family and school linkages. *Journal of Family Psychology, 10*(4), 490-500.

Markowitz, J. C. (2003, August). Interpersonal psychotherapy for chronic depression. *Journal of Clinical Psychology, 59*(8), 847-858.

Marmorstein, N. R., & Iacono, W. G. (2001, March). An investigation of female adolescent twins with both major depression and conduct disorder. *Journal of the American Academy of Child and Adolescent Psychiatry, 40*(3), 299-?

Marmorstein, N. R., & Iacono, W. G. (2004, February). Major depression and conduct disorder in youth: Associations with parental psychopathology and parent-child conflict. *Journal of Child Psychology and Psychiatry, 45*(2), 377-386.

Martin, J. M., Cole, D. A., Clausen, A., Logan, J., & Strosher, H. L. (2003, October). Moderators of the relation between popularity and depressive symptoms in children: Processing strength and friendship value. *Journal of Abnormal Child Psychology, 31*(5), 471-483.

Masi, G., Millepiedi, S., Mucci, M., Pascale, R. R., Perugi, G., & Akiskal, H. S. (2003). Phenomenology and comorbidity of dysthymic disorder in 100 consecutively referred children and adolescents: Beyond DSM-IV. *Canadian Journal of Psychiatry, 48*, 99-105.

Maughan, B., Rowe, R., Messer, J., Goodman, R., & Meltzer, H. (2004). Conduct disorder and oppositional defiant disorder in a national sample: Developmental epidemiology. *Journal of Child Psychology and Psychiatry, 45*(3), 609-621.

McCabe, K. M., Hough, R., Wood, P. A., & Yeh, M. (2001). Childhood and adolsecent onset conduct disorder: A test of the developmental taxonomy. *Journal of Abnormal Child Psychology, 29*(4), 305-316.

McCauley, E., Mitchell, J. R., Burke, P., & Moss, S. (1988). Cognitive attributes of depression in children and adolescents. *Journal of Consulting and Clinical Psychology, 56*(6), 903-908.

McGee, R., Wolfe, D., & Olson, J. (2001, Fall). Multiple maltreatment, attribution of blame, and adjustment among adolescents. *Development and Psychopathology, 13*(4), 827-846.

McGrath, E. P., & Repetti, R. L. (2002, February). A longitudinal study of children's depressive symptoms, self-perceptions, and cognitive distortions about the self. *Journal of Abnormal Psychology, 111*(1), 77-87.

McGrew, M. W., & Teglasi, H. (1990, Summer). Formal characteristics of Thematic Apperception Test stories as indices of emotional disturbance in children. *Journal of Personality Assessment, 54*(3-4), 639-655.

McKeough, A., Yates, T., & Marini, A. (1994). Intentional reasoning: A developmental study of behaviorally aggressive and normal boys. *Development and Psychopathology, 6*, 285-304.

Messer, S. C., & Gross, A. M. (1995). Childhood depression and family interaction: A naturalistic observation study. *Journal of Clinical Child Psychology, 24*(1), 77-88.

Milich, R., & Landau, S. (1984, June). A comparison of the social status and social behavior of aggressive and aggressive withdrawn boys. *Journal of Abnormal Child Psychology, 12*(2), 277-288.

Moffitt, T. E. (1993). Adolescence-limited and life-course-persistent antisocial behavior: A developmental taxonomy. *Psychological Review, 100*(4), 674-701.

Moffitt, T. E. (1993). The neuropsychology of conduct disorder. *Development and Psychopathology, 5*, 135-151.

Moffitt, T. E., Caspi, A., Dickson, N., Silva, P., & Stanton, W. (1996). Childhood-onset versus adolescent-onset antisocial conduct problems in males: Natural history from ages 3 to 18 years. *Development and Psychopathology, 8*, 399-424.

Monroe, S. M., Rohde, P., Seeley, J. R., & Lewinsohn, P. M. (1999). Life events and depression in adolescence: Relationship loss as a prospective risk factor for first onset of major depressive disorder. *Journal of Abnormal Psychology, 108*(4), 606-614.

Moss, E., Cyr, C., & Dubois-Comtois, K. (2004, July). Attachment at early school age and developmental risk Examining family contexts and behavior problems of controlling-caregiving, controlling-punitive, and behaviorally disorganized children. *Developmental Psychology, 40*(4), 519-532.

Mrung, S., Hoza, B., & Bukowski, W. M. (2004, February). Choosing or being chosen by aggressive-disruptive peers: Do they contribute to children's externalizing or internalizing problems? *Journal of Abnormal Child Psychology, 32*(1), 53-65.

Mullins, L. L., Peterson, L., Wonderlich, S. A., & Reaven, N. M. (1986). The influence of depressive symptomatology in children on the social resposes and perceptions of adults. *Journal of Clinical Child Psychology, 15*(3), 233-240.

Muris, P. & Ollendick, T.H. (2005). The role of temperament in the etiology of child psychopathology. *Clinical Child and Family Psychology Review, 8*(4), 271-289.

Murray, H. A. (1943). *Thematic apperception test*. Cambridge, MA: Harvard University Press.

Myers, W. C., Burket, R. C., & Otto, T. A. (1993, January). Conduct disorder and personality disorders in hospitalized adolescents. *Journal of Clinical Psychiatry, 54*(1), 21-26.

Nagin, D. S., Pagani, L., Tremblay, R. E., & Vitaro, F. (2003). Life course turning points: The effect of grade retention on physical aggression. *Development and Psychopathology, 15*, 343-361.

Newman, D. L., Moffitt, T. E., Caspi, A., & Silva, P. A. (1998). Comorbid mental disorders: Implications for treatment and sample selection. *Journal of Abnormal Psychology, 107*(2), 305-311.

Nigg, J. (2006). Temperament and developmental psychopathology. *Journal of Child Psychology and Psychiatry, 47*(3/4), 395-422.

Nolen-Hoeksema, S., & Girgus, J. S. (1994). The emergence of gender differences in depression during adolescence. *Psychological Bulletin, 115*(3), 424-443.

Nolen-Hoeksema, S., Girgus, J. S., & Seligman, M. E. (1991). Sex differences in depression and explanatory style in children. *Journal of Youth and Adolescence, 20*(2), 233-245.

O'Connor, T. G., McGuire, S., Reiss, D., Hetherington, E. M., & Plomin, R. (1998, February). Co-occurrence of depressive symptoms and antisocial behavior in adolescence: A common genetic liability. *Journal of Abnormal Psychology, 107*(1), 27-37.

Oldenhinkel, A.J., Veenstra, R., Ormel, J, de Winter, A.F., & Verhulst, F.C. (2006). Temperament, parenting, and depressive symptoms in a population sample of preadolescents. *Journal of Child Psychology and Psychiatry, 47*(7), 684-695.

Olson, S.L., Sameroff, A.J., Kerr, D.C.R., Lopez, N.L., and Wellman, H.M. (2005, Winter). Developmental foundations of externalizing problems in young children: The role of effortful control. *Development and Psychopathology, 17*(1), 25-45.

Olsson, G. I., Nordstrom, M.-L., Arinell, H., & von Knorring, A.-L. (1999). Adolescent depression: Social network and family climate- a case control study. *Journal of Child Psychology and Psychiatry, 40*(2), 227-237.

Orvaschel, H., & Puig-Antich, J. (1986). *Schedule for affective disorder and schizophrenia for school-age children epidimiologic version (KSADS-E)*. Unpublished manuscript, Nova University, Ft. Lauderdale, FL.

Orvaschel, H., Puig-Antich, J., Chambers, W. J., Tabrizi, M. A., & Johnston, R. (1982). Retrospective asessment of prepubertal major depression with the Kiddie-SADS-E. *Journal of the American Academy of Child Psychiatry, 21*, 392-397.

Patterson, G. R. (1986, April). Performance models for antisocial boys. *American Psychologist, 41*(4), 432-444.

Patterson, G. R., Forgatch, M. S., Yoerger, K. L., & Stoolmiller, M. (1998). Variables that initiate and maintain an early-onset trajectory for juvenile offending. *Development and Psychopathology, 10*, 531-547.

Patton, G. C., Coffey, C., Posterino, M., Carlin, J. B., & Wolfe, R. (2001). Parental "affectionless control" in adolescent depressive disorder. *Social Psychiatry and Psychiatric Epidemiology, 36*, 475-480.

Perez, M., Pettit, J. W., David, C. F., Kistner, J. A., & Joiner, T. E. (2001). The interpersonal consequences of inflated self-esteem in an inpatient psychiatric youth sample. *Journal of Consulting and Clinical Psychology, 69*(4), 712-716.

Perry, D. G., Perry, L. C., & Rasmussen, P. (1986). Cognitive social learning mediators of aggression. *Child Development, 57*, 700-711.

Petersen, A. C., Compas, B. E., Brooks-Gunn, J., Stemmler, M., Ey, S., & Grant, K. E. (1993, February). Depression in adolescence. *American Psychologist, 48*(2), 155-168.

Peterson, C., & Ulrey, L. M. (1994, February). Can explanatory style be scored from TAT protocols? *Personality & Social Psychology Bulletin, 20*(1), 102-106.

Pickens, J., & Field, T. (1993). Facial expressivity in infants of depressed mothers. *Developmental Psychology, 29*(6), 986-988.

Pierce, E. W., Ewing, L. J., & Campbell, S. B. (1999). Diagnostic status and symptomatic behavior of hard-to-manage preschool children in middle childhood and early adolescence. *Journal of Clinical Child Psychology, 28*(1), 44-57.

Prinstein, M. J., & Aikins, J. W. (2004, April). Cognitive moderators of the longitudinal associatio between peer rejection and adolescent depressive symptoms. *Journal of Abnormal Child Psychology, 32*(2), 147-158.

Prinstein, M. J., Cheah, C. S., & Guyer, A. E. (2005). Peer victimization, cue interpretation, and internalizing symptoms: Preliminary concurrent and longitudinal findings for children and adolescents. *Journal of Clinical Child and Adolescent Psychology, 34*(1), 11-24.

Puig-Antich, J., Kaufman, J., Ryan, N. D., Williamson, D. E., Dahl, R. E., Lukens, E., et al. (1993). The psychosocial functioning and family environment of depressed adolescents. *Journal of the American Child and Adolescent Psychiatry, 32*, 244-253.

Quiggle, N. L., Garber, J., Panak, W. F., & Dodge, K. A. (1992). Social information processing in aggressive and depressed children. *Child Development, 63*, 1305-1320.

Radziszewska, B., Richardson, J. L., Dent, C. W., & Flay, B. R. (1996). Parenting style and adolescent depressive symptoms,smoking, and academic achievement: Ethnic, gender, and SES differences. *Journal of Behavioral Medicine, 19*(3), 289-305.

Reid, J. B. (1993, Winter). Prevention of conduct disorder before and after school entry: Relating interventions to developmental findings. *Development and Psychopathology, 5*(1-2), 243-262, Special issue: Toward a developmental perspective on conduct disorder.

Reihnherz, H. Z., Giaconia, R. M., Carmola Hauf, A. M., Wasserman, M. S., & Paradis, A. D. (2000). General and specific childhood risk factors for depression and drug disorders by early childhood. *Journal of the American Academy of Child and Adolescent Psychiatry, 39*(2), 223-231.

Renken, B., Egeland, B., Marvinney, D., Mangelsdorf, S., & Sroufe, L. A. (1989, June). Early childhood antecedents of aggression and passive-withdrawal in early elementary school. *Journal of Personality, 57*(2), 257-281.

Renouf, A. W., Kovacs, M., & Mukerji, P. (1997). Relationship of depressive, conduct, and comorbid disorders and social functioning in childhood. *Journal of the American Academy of Child and Adolescent Psychiatry, 36*(7), 998-1004.

Rodkin, P. C., Farmer, T. W., Pearl, R., & Von Acker, R. (2000, January). Heterogeneity of popular boys: Antisocial and prosocial configurations. *Developmental Psychology, 36*(1), 14-24.

Rohde, P., Clarke, G. N., Lewinsohn, P. M., Seeley, J. R., & Kaufman, N. K. (2001). Impact of comorbidity on a cognitive-behavioral group treatment for adolescent depression. *Journal of the American Academy of Child and Adolescent Psychiatry*, *40*(7), 795-802.

Romano, E., Tremblay, R. E., Vitaro, F., Zoccolillo, M., & Pagani, L. (2001). Prevalence of psychiatric diagnoses and the role of percieved impairment: Findings from an adolescent community sample. *Journal of Child Psychology and Psychiatry, 42*(4), 451-461.

Rosenstein, D. S., & Horowitz, H. A. (1996, April). Adolescent attachment and psychopathology. *Journal of Consulting and Clinical Psychology, 64*(2), 244-253.

Rowe, R., Maughan, B., Pickles, A., Costello, E. J., & Angold, A. (2002). The relationship between DSM-IV oppositional defiant disorder and conduct disorder: Findings from the Great Smoky Mountains Study. *Journal of Child Psychology and Psychiatry*, *43*(3), 365-373.

Rudolph, K. D., & Clark, A. G. (2001). Conceptions of relationships in children with depressive and aggressive symptoms: Social-cognitive distortion or reality? *Journal of Abnormal Child Psychology, 29*(1), 415.

Rudolph, K. D., & Hammen, C. (1999, May/June). Age and gender as determinants of stress exposure, generation, and reactions in youngsters: A transactional perspective. *Child Development, 70*(3), 660-677.

Rudolph, K. D., Hammen, C., & Burge, D. (1997). A cognitive-interpersonal approach to depressive symptoms in preadolescence in children. *Journal of Abnormal Child Psychology, 25*(1), 33-45.

Rudolph, K. D., Kurlakowsky, K. D., & Conley, C. S. (2001). Developmental and social-contextual origins of depressive control-related beliefs and behavior. *Cognitive Therapy and Research, 25*(4), 447-475.

Rushton, J. L., Forcier, M., & Schectman, R. M. (2002). Epidemiology of depressive symptoms in the national longitudinal study of adolescent health. *Journal of the American Academy of Child and Adolescent Psychiatry, 41*, 199-205.

Safran, J. D. (1990). Towards a refinement of cognitive therapy in light of interpersonal theory: I. Theory. *Clinical Psychology Review, 10*(1), 87-105.

Sanders, M. R., Dadds, M. R., Johnston, B. M., & Cash, R. (1992, August). Childhood depression and conduct disorder: I. Behavioral, affective, and cogntive aspects of family problem-solving interactions. *Journal of Abnormal Psychology, 101*(3), 495-504.

Schniering, C. A., & Rapee, R. M. (2004, August). The relationship between automatic thoughts and negative emotions in children and adolescents: A test of the cognitive content-specificity hypothesis. *Journal of Abnormal Psychology, 113*(3), 464-470.

Schultheiss, O. C., & Brunstein, J. C. (2001, August). Assessment of implicit motives with a research version of the TAT: Picture profiles, gender differences, and relations to other personality measures. *Journal of Personality Assessment, 77*(1), 71-86, Special issue: More data on the current Rorschach controversy.

Seifer, R., Dickstein, S., Sameroff, A. J., Magee, K. D., & Hayden, L. C. (2001). Infant mental health and variability of parental depression symptoms. *Journal of the American Academy of Child and Adolescent Psychiatry, 40*, 1375-1382.

Seiner, S. H., & Gelfand, D. M. (1995). Effects of mothers' simulated withdrawal and depressed affect on mother-toddler interactions. *Child Development, 66*, 1519-128.

Seligman, M. E. (1984, May). Attributional style and depressive symptoms among children. *Journal of Abnormal Psychology, 93*(2), 235-238.

Seroczynski, A. D., Cole, D. A., & Maxwell, S. E. (1997). Cumulative and compensatory effects of competence and incompetence on depressive symptoms in children. *Journal of Abnormal Psychology, 106*(4), 586-597.

Shaw, D. S., Bell, R. Q., & Gilliom, M. (2000). A truly early starter model of antisocial behavior revisited. *Clinical Child and Family Psychology Review, 3*(3), 155-172.

Shaw, D. S., Keenan, K., & Vondra, J. I. (1994, May). Developmental precursors of externalizing behavior: Ages 1 to 3. *Developmental Psychology, 30*(3), 355-364.

Shaw, D. S., Owens, E. B., Vondra, J. I., Keenan, K., & Winslow, E. B. (1996). Early risk factors and pathways in the development of early disruptive behavior problems. *Development and Psychopathology, 8*, 679-699.

Sheeber, L., Hops, H., & Davis, B. (2001). Family processes in adolescent depression. *Clinical Child and Family Psychology Review, 4*(1), 19-35.

Sheeber, L., & Sorensen, E. (1998). Family relationships of depressed adolescents: A multimethod assessment. *Journal of clinical child psychology, 27*(3), 268-277.

Shiner, R. L., & Marmorstein, N. R. (1998, November). Family environments of adolescents with lifetime depression: Associations with maternal depression history. *Journal of the American Academy of Child and Adolsecent Psychiatry, 37*(11), 1152-1160.

Shirk, S. R. (1998). Interpersonal schemata in child psychotherapy: A cognitive-interpersonal perspective. *Journal of Clinical Child Psychology, 27*(1), 4-16.

Shirk, S. R., Boergers, J., Eason, A., & Van Horn, M. (1998, March). Dysphoric interpersonal schemata and preadolescents' sensitization to negative events. *Journal of Clinical Child Psychology, 27*(1), 54-68.

Silberg, J., Pickles, A., Rutter, M., Hewitt, J., Simonoff, E., Maes, H., et al. (1999, March). The influence of genetic factors and life stress on depression among adolescent girls. *Archives of General Psychiatry, 56*, 225-232.

Smith, C. P. (1992). Reliability issues. In C. P. Smith & J. W. Atkinson (Eds.), *Motivation and personality: Handbook of thematic content analysis* (pp. 126-139). New York: Cambridge University Press.

Smithmyer, C. M., Hubbard, J. A., & Simons, R. F. (2000). Proactive and reactive aggression in delinquent adolescents: Relations to aggression outcome expectancies. *Journal of Clinical Child Psychology, 29*(1), 86-93.

Soygut, G., & Savasir, I. (2001). The relationship between interpersonal schemas and depressive symptomatology. *Journal of Counseling Psychology, 48*(3), 359-364.

Speltz, M. L., DeKlyen, M., Calderon, R., Greenberg, M. T., & Fisher, P. A. (1999). Neuropsychological characteristics and test behaviors of boys with early onset conduct problems. *Journal of Abnormal Psychology, 108*(2), 315-325.

Speltz, M. L., DeKlyen, M., & Greenberg, M. T. (1999). Attachment in boys with early onset conduct problems. *Development and Psychopathology, 11*, 269-285.

Stahl, N. D., & Clarizio, H. F. (1999). Conduct disorder and comorbidity. *Psychology in the Schools, 36*(1), 41-50.

Stark, K. D., Humphrey, L. L., Laurent, J., Livingston, R., & Christopher, J. (1993). Cognitive, behavioral, and family factors in the differentiation of depressive and anxiety disorders during childhood. *Journal of Consulting and Clinical Psychology, 61*(5), 878-886.

Stark, K. D., Printz, B., Livingston, R., & Tsai, S. L. (1992). Cognitive triad inventory for children: Development and relation to depression and anxiety. *Journal of Clinical Child Psychology, 21*(4), 339-347.

Stark, K. D., Schmidt, K. L., & Joiner, T. E. (1996, October). Cognitive Triad: Relationship to depressive symptoms, parents' cognitive triad, and perceived paternal messages. *Journal of Abnormal Child Psychology, 24*(4), 615-631.

Stein, K. F. (1994, April). Complexity of the self-schema and responses to disconfirming feedback. *Cognitive therapy and research, 18*(2), 161-178.

Stice, E., Raglan, J., & Randall, P. (2004, February). Prospective relations between social support and depression: Differential direction of effects for parent and peer support. *Journal of Abnormal Psychology, 113*(1), 155-159.

Stormshak, E. A., Bierman, K. L., McMahon, R. J., Lengua, L. J., & Conduct Problems Prevention Research Group (2000). Parenting practices and child disruptive behavior problems in early elementary school. *Journal of Clinical Child Psychology, 29*(1), 17-29.

Stouthamer-Loeber, M., Loeber, R., Homish, D. L., & Wei, E. (2001). Maltreatment of boys and the development of disruptive and delinquent behavior. *Development and Psychopathology, 13,* 941-955.

Sullivan, P. F., Kessler, R. C., & Kendeler, K. S. (1998). Latent class analysis of lifetime depressive symptoms in the national comorbidity study. *American Journal of Psychiatry, 155,* 1398-1406.

Swearer, S. M. (1998). The comorbidity of depression and conduct disorder: Factors that differentiate adolescents in residential treatment (Doctoral dissertation, The University of Texas at Austin, 1998). *Dissertation Abstracts International, 58* (7-B), 3935B.

Teichner, G., & Golden, C. J. (2000). The relationship of neuropsychological impairment to conduct disorder in adolescence: A conceptual review. *Aggression and Violent Behavior, 5*(6), 509-528.

Thapar, A., & McGuffin, P. (1996). The genetic etiology of childhood depressive symptoms: A developmental perspective. *Development and Psychopathology, 8,* 751-70.

Thomas, A. M., & Forehand, R. (1991, March). The relationship between paternal depressive mood and early adolescent functioning. *Journal of Family Psychology*, *4*(3), 260-271.

Tiet, Q. Q., Bird, H. R., Hoven, C. W., Moore, R., Wu, P., Wicks, J., et al. (2001). Relationship between specific adverse life events and psychiatric disorders. *Journal of Abnormal Child Psychology, 29*(2), 153-164.

Tolan, P. H., & Thomas, P. (1995). The implications of age of onset for delinquency risk II: Longitudinal data. *Journal of Abnormal Child Psychology, 23*(2), 157-181.

Toupin, J., Dery, M., Pauze, R., Mercier, H., & Fortin, L. (2000). Cognitive and familial contributions to conduct disorder in children. *Journal of Child Psychology and Psychiatry, 41*(3), 333-334.

Tram, J. M., & Cole, D. A. (2000). Self-percieved competence and the relation between life events and deprsesive symptoms in adolescence: Mediator or moderator? *Journal of Abnormal Psychology, 109*(4), 753-760.

Tremblay, R. E. (2004). Decade of behavior distinguished lecture: Development of physical aggression during infancy. *Infant Mental Health Journal, 25*(5), 399-407.

Tremblay, R. E., Masse, L. C., Vitaro, F., & Dobkin, P. L. (1995, Fall). The impact of friends' deviant behavior on early onset of deliquency: Longitudinal data from 6 to 13 years of age. *Development and Psychopathology, 7*(4), 649-667.

Underwood, M. K., Coie, J. D., & Herbsman, C. R. (1992). Display rules for anger and aggression in school-age children. *Child Development, 3*, 366-380.

Verschueren, K., & Marcoen, A. (1999, February). Representation of self and socioemotional competence in kindergartners: Differential and combined effects of attachment to mother and father. *Child Development, 70*(1), 183-201.

Wagner, K. D., & Ambrosini, P. J. (2001). Childhood depression: Pharmacological therapy/treatment (pharmacotherapy of childhood depression). *Journal of Clinical Child Psychology, 30*(1), 88-97.

Wakschlag, L. S., & Hans, S. L. (1999, March). Relation of maternal responsiveness during infancy to the development of behavior problems in high-risk youths. *Developmental Psychology, 35*(2), 569-579.

Wallace, J., Schnieder, T., & McGuffin, P. (2002). Genetics of depression. In I. H. Gotlib & C. L. Hammen (Eds.), *Handbood of Depression* (pp. 169-191). New York, NY: Guilford Press.

Waters, E., Posada, G., Crowell, J., & Lay, K.-L. (1993). Is attachment theory ready to contribute to our understanding of disruptive behavior problems? *Development and Psychopathology, 5*, 215-224.

Webster-Stratton, C. (1998, October). Preventing conduct problems in head start children: Strengthening parenting competencies. *Journal of Consulting and Clinical Psychology, 66*(5), 715-730.

Weisz, J. R., Southam-Gerow, M. A., & McCarty, C. A. (2001). Control-related beliefs and depressive symptoms in clinic-referred children and adolescents: Developmental differences and model specificity. *Journal of Abnormal Psychology, 110*(1), 97-109.

Westen, D. (1991). Clinical assessment of object relations using the TAT. *Journal of Personality Assessment, 56*(1), 56-74.

Westen, D., Lohr, N., Silk, K. R., Gold, L., & Kerber, K. (1990, December). Object relations and social cognition in borderlines, major depressives, and normals: A thematic apperception test analysis . *Psychological Assessment, 2*(4), 355-364.

Whiffen, V. E., & Gotlib, I. H. (1989, August). Infants of postpartum depressed mothers: Temperament and cognitive status. *Journal of Abnormal Psychology, 98*(3), 274-279.

Wichstrom, L. (1999, January). The emergence of gender difference in depressed mood during adolescence: The role of intensified gender socialization. *Developmental Psychology, 35*(1), 232-245.

Williamson, D. E., Birmaher, B., Frank, E., Anderson, B. P., Matty, M. K., & Kupfer, D. J. (1998, October). Nature of life events and difficulties in depressed adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry, 37*(10), 1049-1057.

Wyatt, L. W., & Haskett, M. E. (2001, November). Aggressive and nonaggressive young adolescents' attributions of intent in teacher/student interactions. *Journal of Early Adolescence, 21*(4), 425-446.

Young, J. E., & Lindemann, M. D. (1992, Spring). An integrative schema-focused model for personality disorders. *Journal of Cognitive Psychotherapy, 6*(1), 11-23.

Zakriski, A. L., & Coie, J. D. (1996). A comparison of aggressive-rejected and nonaggressive-rejected children's interpretations of self-directed and other-directed rejection. *Child Development, 67*, 1048-1070.

Zoccolillo, M. (1992, May). Co-occurrance of conduct disorder and its adult outcomes with depressive and anxiety disorders: A review. *Journal of the American Academy of Child and Adolescent Psychiatry, 31*(3), 547-556.

Vita

Melanie Elizabeth Ballatore was born on October 5, 1972, in San Diego, California, the child of Gil and Lexi Ballatore. After graduating from Marian Catholic High School in 1990, she entered Southwestern College in Chula Vista, California, transferring to the University of California, Berkeley in fall, 1992. Melanie received her Bachelor of Arts in Psychology in 1995. Following her graduation Melanie worked for two years doing intervention and research in the lab of Stephen P. Hinshaw at the University of California, Berkeley. In August of 1997 she entered the Department of Educational Psychology's School Psychology Program at the University of Texas where she received her Masters of Arts in Educational Psychology in 2001.

Permanent address: 3940 Bardaguera Pl.
Bonita, CA 91902

This dissertation was typed by the author.