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COGNITIONS, EMOTIONS, AND DISCIPLINE STYLE IN PARENTS OF ADOLESCENTS WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER

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COGNITIONS, EMOTIONS, AND DISCIPLINE STYLE IN PARENTS OF ADOLESCENTS WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER

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ABSTRACT

COGNITIONS, EMOTIONS AND DISCIPLINE STYLE IN PARENTS OF ADOLESCENTS WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER

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This study examined the associations between parent cognitions, parent emotions and parent distress tolerance and overreactive or lax discipline strategies. Parent behavior was hypothesized to be predicted by parent cognitions, emotions, and distress tolerance. Parent behavior was evaluated to be a predictor of adolescent behavior among parents of adolescents diagnosed with ADHD and an undiagnosed group. Participants included 174 parents of adolescents aged 10-17, who completed several self-report measures. Both clinical and non-clinical groups were identified by the presence or lack of a diagnosis of ADHD. Parents of adolescents with ADHD had significantly less distress tolerance compared to the non-clinical group. Correlation analyses found that there were significant correlations between parents' irrational beliefs, negative emotions, and distress tolerance in both groups. Regression analyses indicated that parental negative emotion and parent anger did not predict parents' use of overreactive discipline. Also, parents with a lower tolerance for distress were more likely to engage in overreactive discipline but not lax discipline. Due to the lack of relationship found between the variables, the proposed mediation model was not conducted. These findings further our understanding of factors that could impede effective parenting practices and our understanding of ADHD. They

highlight distress tolerance as having an influential role in dysfunctional discipline and suggest that tolerating parent distress could improve parent effectiveness

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Introduction

Statement of Problem

Parenting a child or adolescent with a Neurodevelopmental Disorder, such as attention deficit hyperactivity disorder (ADHD), places a larger strain on parents compared to raising typically developing children (Craig et al., 2016). Parents of children diagnosed with ADHD face a unique challenge managing the child's symptoms, specifically with the need to address challenging behaviors such as more frequent occurrences of noncompliance such as difficulties following through with parent directions (Anastopoulous, Guevremont, Shelton, & DuPaul, 1992). Additionally, parents of children with ADHD may experience an added stressor within the family dynamic, as they may more frequently find themselves involved in peer and sibling difficulties that begin in childhood and continue into adolescence (Barkley, Anastopoulous, Guevremont, & Fletcher, 1991). Children and adolescents diagnosed with ADHD have difficulty controlling their behavior; symptoms can be characterized by inattention, hyperactivity, or impulsiveness that is inconsistent with the norms expected for their age (Munoz-Silva, Lago-Urbano, & Sanchez-Garcia, 2017). Although we know that parenting style and family dynamics are not a cause of ADHD, research has suggested that parenting behavior can influence the child's behavior and the child's behavior, in turn, affects parenting behavior (Munoz-Silva, Lago-Urbano, & Sanchez-Garcia, 2017; Pardini, 2008). Well-established literature exists that demonstrates a bidirectional association between parent and child behavior (Pardini, Fite, & Burke, 2008; Sameroff, 1975; Shaw & Bell, 1993). Challenging early childhood behaviors may initially influence parenting behavior, leading to ineffective parenting strategies. However, over time, the child's

challenging behaviors and ineffective parenting behaviors may actually be maintained by each other and continue on into the child's adolescent years (Johnston & Jassy, 2007).

A large body of research suggests that parents' experience of emotions such as anger, depression, and anxiety can impact parenting behavior through the use of inconsistent or intrusive discipline. Furthermore, parents' expression of these negative emotions may increase the frequency of disruptive behaviors in at-risk children and could also negatively impact the social-cognitive development of young typically developing children 2-9 years old (Duncome et. al, 2012; Adam, Gunnar & Tanaka, 2004; Carpenter & Halberstadt, 2000). Research also suggests that parental cognitions can have both positive and negative influences on parenting behavior. Parents' negative cognitions related to their abilities as parents were found to be associated with more frequent use of intrusive and manipulative parenting styles (Walling, Mills & Freeman, 2007; Hess, Teti & Hussye-Gardner, 2004). Conversely, mothers who were more knowledgeable, satisfied, and believed in their successes as parents demonstrated more supportive parenting during joint activity tasks with their 4-10 year old children (Walling, Mills & Freeman, 2007; Hess, Teti & Hussye-Gardner, 2004; & (Bornstein, Putnick & Suwalsky, 2017). Although these findings are well established amongst the population of non-clinical young children and their parents, there are less studies focused on clinical samples, more specifically, adolescents diagnosed with ADHD.

Adolescents diagnosed with ADHD who present with impulsivity face increased risks compared to young children with the same diagnosis. Adolescents' impulsivity could result in serious accidents (e.g., car accidents) or engagement in other dangerous activities (e.g., drug use) without the understanding of the elevated consequences

compared to a younger child's impulsive behaviors. Adolescents who experience inattention coupled with increasing academic demands as they progress through high school risk jeopardizing their secondary level academic success (McCleary, 2002). This could potentially impact post-secondary plans and future career opportunities (Hechtman, 1996). Furthermore, adolescents' inattentive or hyperactive symptoms could negatively impact their social functioning by hindering their ability to learn and attend to social skills and cues (Mrug et al., 2001). Research suggests that positive parent practices may serve as a buffer for these harmful outcomes for children and adolescents (Kaiser et al., 2011 and Khodabakhshi, Shahi, Navidian & Mosalanejad, 2015). Adolescents studied within a general sample were suggested to benefit from increased involvement from their parents during this critical developmental period (Wang & Sheikh-Khalil, 2014; Bhargava & Witherspoon, 2015; & Hill et al., 2004). This could be problematic for parents of adolescents diagnosed with ADHD who are experiencing negative emotions or cognitions themselves and may be parenting ineffectively during this important developmental stage.

It is critical to investigate the factors, such as cognitions and emotions, that impede parents' ability to effectively assist and discipline their children. Understanding the difficulties faced by a parent of an adolescent diagnosed with ADHD, would allow clinicians to develop tailored interventions to address these unique parent-adolescent relationships. These individualized interventions may also decrease symptomology of externalizing behaviors and potential possibilities of further disruptive behavior disorders. The goal of the present study is to investigate factors such as parental emotions, beliefs, and distress tolerance and their influence on ineffective parenting

practices including overreactive and lax discipline strategies among parents of adolescents diagnosed with ADHD. As children diagnosed with ADHD get older, the way in which the disorder impacts them and their families differs (Harpin, 2005). Due to the critical nature of the adolescent developmental period, this study will specifically focus on adolescents diagnosed with ADHD as the target population.

Review of Literature

Parenting and Child Externalizing Behaviors

Dating as far back as 50 years ago, the association between parenting style and child behavior outcomes was established and has since become widely recognized and accepted. Baumrind's conceptualization of parenting style and subsequent research of patterns of behavior in preschoolers initially demonstrated this association (Baumrind, 1966 & Baumrind, 1967). As such, parenting can be considered the primary context in which a child learns and maintains behaviors. Research continues to identify more specific parenting variables that are correlated with child behavior, particularly concerning externalizing problems. Externalizing behaviors include aggressive, hyperactive, and delinquent behaviors. Parental inconsistency and punitive discipline can both be linked to children engaging in such behaviors (Fletcher & Johnston, 2016; Chang et al., 2009). Externalizing behaviors in children can be predicted by quality of parenting (Gryczkowski, Jordan, & Mercer, 2010; Stanger, Dumenci, Kamon & Burnstein, 2004; Narusyte, Andershed, Neiderhiser, & Lichtenstein, 2007; & Olson et al., 2000). Inept parenting practices that have been significantly associated with child externalizing behaviors include: poor monitoring (Stanger et al, 2004), corporal punishment (Deater-Deckard, Dodge, Bates & Pettit, 1996), and coercion (Gartstein & Fagot, 2003).

Coercion, which is an element of an overreactive discipline style, will be explored in this present study. Furthermore, the inverse relationship was demonstrated as well. Positive parenting practices were negatively associated with externalizing behavior. Mothers who showed significantly more positive parenting during toddlerhood correlated to lower levels of externalizing behavior in childhood (Boeldt et al, 2012). Arnold, O'Leary, Wolff, and Acker (1993) presented stable factors of dysfunctional discipline: Laxness, Overreactivity, and Verbosity. This study will specifically focus on laxness and overreactive discipline styles. Overreactive discipline can be characterized by excessively harsh, angry, or coercive parenting behaviors. Research demonstrates an association between overreactive parenting and child externalizing behaviors. For example, lax discipline can be characterized as a permissive style in which the parent complies with the child's demands (O'Leary & Vidair, 2005, Guajardo, Snyder & Petersen, 2009; Prinzie et al., 2003). In a clinical sample of children aged 4-12 diagnosed with ADHD, mothers who reported using overreactive discipline and coercive parenting before treatment had children who displayed more negative behaviors (McKee, Harvey, Danforth, Ulaszek & Friedman, 2004). It is not only necessary to understand the association between parenting practices and child behavior outcomes, but more importantly to investigate the variables that may predict dysfunctional parenting strategies with the goal of establishing an early intervention point to prevent these harmful outcomes amongst children and families.

Emotions and Parenting

Parents' emotional experiences play a significant role in parenting behavior (Dix, 1991), just as one's emotions would play an important role in their everyday behaviors.

Research has shown that mothers' experience of negative emotions is associated with the use of overreactive discipline (Lorber & Slep, 2005, Slep & O'Leary, 1998). From a functionalist perspective based in emotion theory, emotions function to motivate behavior in order to achieve particular goals (Izard, 1991). This perspective can be applied to parenting. Within the parenting context, children's misbehaviors will typically elicit negative emotions in parents because the behavior is seen as problematic. When a parent experiences a negative emotional state, they may be more likely to utilize an overreactive discipline method in an effort to stop the problematic behavior (Lorber & Slep, 2005; Lorber & O'Leary, 2005). Specific emotions such as sadness or depression, anger, and anxiety can elicit these negative emotional states and interactions experienced by parents and children. Campbell, Pierce, March and Ewing (1991) found that depressive symptoms in mothers may be associated with dysfunctional parenting behaviors, such as overreactive and lax discipline, and predict a higher frequency of externalizing behaviors in young boys. Additionally, parents who experience heightened levels of anxiety are more likely to employ an overreactive discipline style (Gallagher & Cartwright-Hatton, 2008; Robinson & Cartwright-Hatton, 2008). Parents of adolescents with ADHD face an added challenge when it comes to these problematic behaviors and discipline. In fact, higher levels of depressive symptoms were reported in mothers of children with a disruptive behavior disorder, such as ADHD (Nigg & Hinshaw, 1998; Befera & Barkley, 1985) compared to mothers of children without a disruptive behavior disorder. These negative overreactive discipline encounters can become taxing for both parents and children and can further exacerbate the difficulties experienced by parents when attempting to employ an effective discipline strategy.

Parent Anger and Discipline. Anger is a negative emotional state that leads to emotional arousal (Williams, 2017). To a certain degree, anger can be motivating. However, when individuals are unable to manage or regulate their intense emotional states, they are more likely to engage in ineffective or negative behaviors (Ben-Porath, 2010). Parents who present with elevated levels of anger are associated with utilizing dysfunctional discipline strategies (Baydar, Reid, & Stratton, 2003; Del Vecchio & O'Leary, 2008) which can be characterized as overreactive or lax parenting styles (Arnold, O'Leary, Wolff, & Acker, 1993; & Leung & Slep, 2006). Parents' anger is also associated with child externalizing problems (Denham et al., 2000). Furthermore, parental trait anger was found to be higher in a group of children (aged 6-14) diagnosed with ADHD compared to a same age healthy control group while parental anger control was found to be lower within the group of children diagnosed with ADHD compared to the control group (Kara et al., 2015). Due to these associations, it is imperative to investigate the impact that anger, a negative emotion, has on subsequent parent behavior and adolescent behavior outcomes within the context of ADHD.

Cognitions and Parenting

In addition to emotions, there is also well demonstrated research indicating that parental cognitions play a large role in parenting behaviors, specifically regarding parent evaluations of their child's behaviors (Bugental & Happaney, 2004; Atteah & Durrant, 2005; Dadds, Mullens, McAllister, & Atkinson, 2003). Literature regarding appraisals and evaluations suggest that cognitions are antecedents of emotions. That is, experienced emotions depend on one's cognitive appraisals of the event (David, Schnur, & Belloiu, 2002). Applying this to the context of parenting, parents will evaluate their child's

behaviors and, as a result, specific emotions will be activated. That being so, parents' cognitions strongly influence their emotional reaction and ultimately their parenting behavior and discipline strategy. Research has found that parents who appraise their children's negative behavior as purposeful or intentional are more likely to engage in harsh or dysfunctional discipline practices (Ateah & Durrant, 2005 & Lorber & O'Leary, 2005) and that a negative emotion, anger, plays a mediating role in the relationship (Del Vecchio & O'Leary, 2008). In addition to appraising their child's intentions, parents' appraisals of how irritating, aversive, and annoying their child's behaviors are is also associated with parents' use of harsh discipline strategies in a non-clinical sample (Lorber & O'Leary, 2005; Del Vecchio & O'Leary, 2008). This research suggests that parental cognitions not only affect specific emotional arousal, but also impact parents' decision-making process as to how to cope with their child's misbehaviors. Lorber (2012) found that parents of typically developing children who attempt to regulate their emotions and utilize a reappraisal strategy to alter their cognitions may experience fewer negative emotions when addressing their child's behaviors and, as a result, employ less overreactive or harsh discipline. These positive findings regarding the use of this cognitive strategy is promising. Within the ADHD population, research conducted by Beaulieu and Sylvie (2012) found that parents who appraised their child's (ages 6-9) disobedience to the child's lack of effort was associated with severe and inconsistent discipline. That is, parents who thought that their children were deliberately disobedient lead to the use of ineffective parenting strategies.

Given the pervasive nature of ADHD, parents may become entangled in an ineffective negative discipline style. They may expect that their child's misbehaviors are intentional

and may engage in problematic parenting behaviors due to their prior learned experiences. These automatic negative appraisals of their child's behaviors may result in an immediate use of an overreactive or harsh discipline style. Furthermore, research by Hoza et al. (2000) found that parent cognitions could predict child treatment response in a sample of ADHD children. More specifically, father's appraisals of noncompliance to their child's insufficient effort and mothers' thoughts of low parenting efficacy and low self-esteem predicted poorer child treatment outcome in a sample of ADHD children. This suggests that parental cognitions may not only influence chosen parenting strategies but may also influence parents' treatment of their child.

Distress Tolerance and Parenting

Distress tolerance can be defined as the capacity to withstand or tolerate a negative emotional state (Simons & Gaher, 2005). The experience of distress is often characterized by behavioral tendencies to alleviate the negative emotional experience (Simons & Gaher, 2005). Within the parenting context, understanding the ways in which distress tolerance impact parent behavior and discipline style is important and essential when providing parent intervention. Although there is well-established research regarding the association between psychological distress (anger, depressive symptoms, and lower emotional well-being) of parents and discipline strategies (overreactive and laxness), there is less research on the relationship between parents' ability to tolerate their distress and their parenting behaviors (Leung & Slep, 2004 & Regalado, 2004). Pochtar (2014) found that parents of children (ages 2-5) that presented with lower distress tolerance were more likely to utilize overreactive and lax discipline practices. In fact, distress tolerance was found to mediate the association between parent's attributions about their child's

behavior, parent anger, and overreactive discipline. Jablonka (2017) conducted similar research and found that parent distress tolerance mediated the relationship between parent affect and overreactive discipline indicating that distress tolerance may play an important role as a mechanism in which a parent engages in dysfunctional discipline practices. Within the ADHD population, Barkley (1990) found that distressed mothers have negatively skewed perceptions of their child's misbehaviors and a lower tolerance for their behaviors. Lastly, Harrison and Sofronoff (2002) investigated parent psychological distress and its predictors within an ADHD population of children. They found that a greater severity of child misbehaviors and lower perceived parental control over child behaviors were directly associated with higher levels of parenting stress. While this study addresses parenting stress and related factors, it does not address the mothers' ability to tolerate her own distress while parenting and specifically for mothers of adolescents diagnosed with ADHD. Thus, it is still necessary to examine parents' ability to tolerate distress and its impact on parenting behavior. This should be done through an investigation on the role of distress tolerance, amongst other factors, to determine whether it could serve as an explanation for the impact on parenting behavior.

Parent Beliefs

According to the cognitive behavioral framework, thoughts that are regarded as dysfunctional or harmful are known as cognitive distortions. The rational emotive and behavioral therapy (REBT) approach conceptualizes these dysfunctional thoughts as irrational beliefs (Ellis, 1994). Both of these frameworks assert that the maintenance of these distortions and irrational beliefs result in maladaptive behaviors and psychological disorders. Within the parenting context, beliefs, or schemas, can refer to beliefs about

child rearing, parental expectations of their child's behavior and development, parental attribution and perception of their child's behavior, and parental perception of their role as parents (Azar, Nix, & Makin-Bryd, 2005). When parents make absolutistic and unrealistic demands of themselves or their child, they are maintaining irrational beliefs. Within the REBT framework, this demandingness tends to lead to unhealthy emotions or maladaptive behaviors (Bugenthal & Johnston, 2000; DiGiuseppe & Kelter, 2006) of individuals. Literature regarding rational and irrational beliefs in the parenting context emphasize the importance of these cognitions in parenting behaviors due to the negative impact that irrational beliefs could have on parenting practices (Joyce, 1990; Ellis, Moseley & Wolfe, 1966; & Bugenthal & Johnston, 2000). When parents assert unrealistic demands or beliefs about their child, they are likely to experience a negative emotion when the child is unable to fulfill their demands. In line with this literature, Del Vecchio and O'Leary (2008) found that when mothers believed that their child intentionally behaved aggressively, they were more likely to evaluate the child's aggression negatively and, as a result, were more likely to endorse overreactive discipline responses. That is, maternal cognitions and beliefs predicted parent behavior (i.e. discipline) and this relationship was mediated by maternal anger. Additionally, research by Andreea, Fluckiger, Holtforth & David (2015) found that irrational beliefs were positively associated with various types of distress, such as general distress, anxiety, depression, anger, and guilt. This continues to demonstrate the possible relationship between irrational beliefs and other various emotions. With regard to the ADHD population, research suggests that parents of children with ADHD experienced negative psychological effects such as irrational beliefs (Cappe et al, 2016).

Overview of the Present Study

It is critical to investigate the factors, such as cognitions and emotions, that impede parents' ability to effectively assist and discipline their children. Understanding the difficulties faced by a parent of an adolescent diagnosed with ADHD, as well as how these challenges may differ when compared to parents of typically developing adolescents, would allow clinicians to develop tailored interventions to address these unique parent-adolescent relationships. These individualized interventions may also decrease symptomology of externalizing behaviors and potential possibilities of further disruptive behavior disorders. Prior studies have examined parents' emotions, beliefs, and distress tolerance and their association to overreative and lax discipline styles in non-ADHD populations. Prior studies have also examined these variables in parents of younger children. Gaps in the literature exist with regard to studying parents of adolescents and, more specifically, parents of adolescents with ADHD. The goal of the present study is to investigate factors such as parental emotions, beliefs, and distress tolerance and their association influence on with ineffective parenting practices including overreactive and lax discipline strategies among parents of adolescents diagnosed with ADHD. As children diagnosed with ADHD get older, the way in which the disorder influences them and their families differs (Harpin, 2005). Due to the critical nature of the adolescent developmental period, this study will specifically focus on adolescents diagnosed with ADHD as the target population.

Hypotheses

Hypothesis 1

I hypothesized that there would be group differences in the types of parent cognitions and beliefs experienced by parents of ADHD adolescents and parents of non-ADHD adolescents.

Hypothesis 1a: Parents of ADHD adolescents would score higher on a scale of irrational beliefs compared to parents of non-ADHD adolescents.

Hypothesis 1b: Parents of ADHD adolescents would score lower on a scale measuring distress tolerance compared to parents of non-ADHD adolescents.

Hypothesis 2a: Higher scores on an irrational belief scale would predict higher scores on a parent feelings inventory of negative emotions and higher scores on a parent anger inventory experienced in the parenting context for all parents regardless of child's clinical status.

Hypothesis 2b: Lower scores of distress tolerance within the parenting context would predict higher scores of on a parent feelings inventory of negative emotions and higher scores on a parent anger inventory in both the ADHD group and the non-clinical group.

Hypothesis 3

Higher scores of negative emotions and parent anger experienced within the parenting context would predict an overreactive discipline style utilized among parents in both the ADHD group and the non-clinical group.

Hypothesis 4

Parents' use of ineffective parenting strategies, lax and overreactive, would predict higher scores of ADHD symptoms reported of the adolescent.

Hypothesis 5

I hypothesized a comprehensive mediation model in which the relationship between scores on an irrational beliefs inventory and parenting behavior inventory and lower scores of distress tolerance within the parenting context would be associated with higher scores of negative parent emotions within the parenting context, which would ultimately lead to the employment of an overreactive discipline style in both the ADHD and the non-clinical group. Parent behavior would be associated with higher scores of ADHD symptoms experienced by the adolescent (adolescent behavior). That is, parent behavior (overreactive and lax discipline styles) would be mediated by parent cognitions and emotions and would predict adolescent behavior.

Method

Participants

Two hundred and eighty-nine parents of adolescents aged 10-17 were recruited via Facebook. One hundred and fifteen of those participants completed less than half (50%) of the survey and thus, did not provide sufficient data to analyze. Therefore, the final count of participants in this study was 174 parents of adolescents aged 10-17 years old. Participants included in this study were parents of adolescents diagnosed with ADHD who are between the ages of 10-17 years old as well as parents of adolescents that are not diagnosed with ADHD or another psychiatric disorder who are between the ages of 10-17 years old. Parents had to be 18 years old or older in order to participate and were recruited from various parent support groups on a social media outlet, Facebook (e.g., support group for parents of children diagnosed with ADHD and support group for parents of teenagers). Facebook provides a valid approach to collecting large amounts of anonymous data on a targeted population. For the clinical group, the parent support groups that participants were recruited from included: Parents with Children with ADHD, Parenting A Child with ADHD Support Group, Parents with Children with ADHD, ODD, Autism, Conduct Disorder, SPD, or PTSD, Support group for Parents with kids with ADHD, ADD, Autism, and other issues, Parents of Children with ADHD, and ADHD Together - Support Group for Parents of Children with ADHD. For the nonclinical group, the parent support groups that participants were invited from included: Westchester Moms, Somers Moms, Somers Parents, Westchester, NY Parents, Brewster/Southeast Parents, Dissertation Support Group, Upper West Side Parents & Nannies, and School

Psychology Forum. Only parents who have a child that is not diagnosed with ADHD or another psychiatric disorder were included in the non-clinical group. A majority of the parents in the sample were aged 30-49 years old (83.9%) and 86.2% of the sample identified as the biological mother of the adolescent. The adolescents were on average 12.24 years of age (SD = 2.32) and 68.4% were male. Eighty percent of the parents who participated were married. Forty-two percent of parents reported a family income of $90,000 or above (range= $30,000 or less-$90,000 or above). The majority of parents reported their race as Caucasian (83.9%); 4% reported their race as Hispanic; 4% reported their race as other; 2.9% reported their race as African American; 2.9% identified as multi-racial; 1.1% identified as Asian; and 1.1% reported their race as American Indian/Alaska Native. One hundred and sixty-one parents reported that their child has a diagnosis of ADHD. Within this group, 57 parents indicated a diagnosis of ADHD-Combined Type; 53 parents reported a diagnosis of ADHD-Inattentive Type, and 39 parents reported a diagnosis of ADHD-Hyperactive/Impulsive Type. Thirteen parents reported that their child did not have a diagnosis of ADHD or another psychiatric, genetic, or developmental disorder.

Procedure

A Facebook post was made on each support group page that explained the study and invited parents to participate. Parents who expressed an interest in completing the survey and were eligible to participate were provided with a link to the online survey. The questionnaire was administered online via Qualtrics software. Once participants accessed the survey, they were provided with additional information about the present study, including risks and benefits of participation. Participants provided consent

electronically prior to initiating the survey and were made aware of their voluntary participation in the present study. The completed questionnaires were kept anonymous and contained a consent form (Appendix A), demographic form (Appendix B), The Parent Rational and Irrational Beliefs Scale (Appendix C), The Distress Tolerance Scale (Appendix D), The Parent Anger Scale (Appendix E), The Parental Feelings Inventory (Appendix F), The Parenting Scale (Appendix G), and the Conners-3 ADHD Index (Appendix H). Upon completion of the survey, participants were given the option to enter a raffle to receive a $50 Amazon gift card by providing their email address. One participant from the clinical and non-clinical group was chosen at random and was awarded the e-gift card via email.

Measures

Demographics. Parents were administered a demographics questionnaire that asked them to report information regarding their child, spouse, and self. The information consisted of parent's age, ethnicity, educational background, socio-economic status, and relationship to the child. Information on children's gender, age, and ethnicity was also included on the questionnaire as well.

Parental Beliefs. The Parent Rational and Irrational Beliefs Scale (P-RIBS; Gavita, DiGiuseppe, David, & Del Vecchio, 2011) is a 24-item self-report measure to assess parents' rational and irrational beliefs relevant to parenting. It evaluates parents' cognitions and beliefs related to child behavior and parent-role. The instrument includes twelve statements that reflect rational cognitions and twelve statements that reflect irrational (dysfunctional) cognitions. Parents rate each of the items using a 5-point Likert scale (1= "strongly disagree" to 5 = "strongly agree"). A higher score on the irrational

beliefs questions indicates higher levels of irrational beliefs. A higher rational beliefs score indicates higher levels of rational beliefs. Sample items include: “When my child engages in challenging behaviors, I think that my child is bad, worthless, or condemnable.” (irrational belief) and “I really do not want my child to engage in challenging behaviors, but I realize and accept that things do not have to always be the way I want them to be” (rational belief). Psychometric properties of this instrument have been found to be strong, with a moderate internal consistency of the total score and the three subscales (ranging from .71 to .83), concurrent validity with several other measures related to rational and irrational cognitions (ranging from .54 to .62), and a solid test-retest reliability of .78 (Gavita et al., 2011).

Distress Tolerance. The Distress Tolerance Scale (DTS; Simons & Gaher, 2005) is a 15-item self-report measure intended to assess parental distress tolerance. On each item, parents are asked to rate on a five-point scale how much they agree or disagree with the statement related to the parenting context. Higher scores represent a higher distress tolerance and lower scores represent a lesser ability to tolerate distress. The scale used in this study was a modified version created by Pochtar (2014) to be more closely related to distress tolerance within the parenting context. The scale includes four types of items regarding the perceived ability to tolerate distress (e.g., I can’t handle my child feeling distressed or upset), the subjective appraisal of distress (e.g., My child’s feelings of distress or being upset are not acceptable), attention being absorbed by negative emotions (e.g., When my child feels distressed or upset, I cannot help but concentrate on how bad the distress actually feels), and efforts to alleviate distress (e.g. When my child feels distressed or upset I must do something about it immediately). The present study will

utilize a total DTS score as a measure of overall distress tolerance. Results of a validation study of the original scale found the DTS to have good reliability (.82) for the total scale with a Cronbach's alpha of .94 (Simons & Gaher, 2005).

Parent Anger. The Parent Anger Scale (PAS; DiGiuseppe, Del Vecchio, & Gavita, 2012) is a 30-item self-report measure of anger related to the parenting context. The PAS measures parent anger experience and parent anger expression. The anger experience scale measures intensity, frequency, and anger behavior. The anger expression scale measures intensity, frequency, and length of parent anger episodes, as well as cognition and motives (e.g., I think my anger with my child is justified because of the way my child behaves). The anger behavior factor assesses the behaviors and actions that a parent engages in when angered (e.g., I get so angry with my child that I scream or yell at my child). Parents will be asked to rate on a six-point scale (0= "never or no not at all" to 6 = "several times a day") how frequently they experience the feelings and actions described. They will also be asked to rate the intensity of their anger. The PAS has the ability to predict discipline behaviors uniquely above those of which are predicted by parents' general anger or general anxiety. The PAS is a valid measure for assessing anger specific to the parent-child context. Validation studies indicate that the PAS has sound internal consistency. Reliability analyses indicated good internal consistency (Cronbach's $\alpha = 98$) for the total score (Notti & Del Vecchio, 2010).

Parental Emotion. The Parental Feelings Inventory (PFI; Bradley, Hurwitz, Harvey, Hodgson, & Perugini, 2012) assesses parental emotions within the parenting role. Parents are presented with emotion adjectives and are asked to indicate the degree to which they experienced that emotion during the last week in their role as parents. Thirty-

one emotion adjectives are assessed, and respondents utilize a 7-point Likert scale (1= "not at all" to 7= "extremely"). The emotion adjectives are separated into three groups (Happy, Angry, Anxious/Sad). For the purpose of this study, parents' feelings were separated into Positive and Negative groups. Psychometric properties of this measure have been found to be strong, with a high internal consistency for the individual factors (Cronbach is above 0.90), and a solid concurrent validity with several other similar measures of parent and child functioning.

Parenting Behavior. The Parenting Scale (PS; Arnold, et al., 1993) is a 30-item self-report questionnaire that measures discipline practices that are considered dysfunctional. Parents are presented simple hypotheticals and are asked to use a 7-point Likert scale to indicate how they would react. The Likert scale ranges between effective and ineffective parenting techniques. Higher scores indicate more dysfunctional discipline. The scale measures the parents on three subscales: Laxness, Overreactivity, and Hostile parenting. Laxness refers to a parents' inconsistent parenting, while overreactivity refers to a parents' harsh or punitive parenting. A study by Salari, Terreros, & Sarkadi, 2012) found that only Laxness and Overreactivity subscales were found to be reliable. For the purpose of this study, only the Laxness and Overreactivity subscales will be utilized. In a psychometric evaluation study conducted by Arnold et al., (1993), the Laxness subscale was found to have good internal consistency (Cronbach's $\alpha = .83$) with a strong test-retest reliability after two weeks ($r = .83$). The Overreactivity subscale also had a good internal consistency (Cronbach's $\alpha = .82$) with a strong test-retest reliability after two weeks ($r = .82$). In a more recent study assessing the psychometric properties of this measure, Lorber, Xu, Slep, Bulling, and O'Leary (2014) found that the Laxness

subscale had an overall reliability of .89 for women and .87 for men. They also were able to demonstrate the possibility of discriminating parents with average to above average levels of lax discipline. The Overreactivity subscale continued to demonstrate high internal consistency (Cronbach's α = .83 for women and .81 for men). The subscale was also able to discern between average to above average levels of overreactive discipline.

ADHD Symptoms. The Conners 3rd Edition (Conners-3) is an assessment of attention-deficit/hyperactivity disorder (ADHD) in children and adolescents aged 6-18 years old. The internal consistency of the empirical scales ranged from acceptable to very high levels (Cronbach's alpha ranged from .84 to .97). A validation study found strong inter-item correlations across all the Conners 3 scales and a strong likelihood that the items within each scale are measuring the same construct (Conners, 2008). Included in the full-length Conners-3 is the Conners 3 ADHD Index Scale (Conners 3AI). The Conners 3AI consists of 10 items that are able to differentiate between youth with ADHD and youth in the general population. Items are based on DSM-5 criteria and are scored on a four-point Likert scale. The scale provides T-scores with a cut-off for elevated scores (T=65-69) and very elevated scores ($T \geq 70$). Parent rating forms for the Conners 3AI have shown a high internal reliability, with a Cronbach's alpha of .90 (Conners, 2008).

Results

Descriptive Statistics

Skewness and kurtosis values were used to assess data normality. All variables were normally distributed. The Parents Irrationality subscale had a slightly high kurtosis. Means, standard deviations, ranges, and internal consistency coefficients for all measures used in the study appear in Table 1. To test my hypotheses, I computed Bivariate correlations between all of the measures in Table 2. Parental irrational beliefs were positively and significantly correlated with parental rational beliefs, parental negative emotions, and parent anger. Parental irrational beliefs were also negatively correlated to parents' positive emotions and overall distress tolerance. Parental negative emotions were significantly correlated to parent anger. Parental negative emotions were negatively and significantly correlated to parental distress tolerance. Parents report of their child's ADHD symptoms had a significant, but weak, correlation to parental negative emotions, parental positive emotions, and parental anger. There were no significant correlations found between parenting behavior (overreactive or lax discipline) to any of the other variables.

Differences Between Clinical and Non-Clinical Groups

An independent samples t-test was conducted to test the first hypothesis that group differences would exist between parents of adolescents diagnosed with ADHD and parents of adolescents not diagnosed with ADHD. There were significant differences found on ADHD symptom measures between adolescents with ADHD (M = 32.56, SD = 6.66) and adolescents not diagnosed with ADHD (M = 16, SD = 3.82); $t(83) = 6.47$, $p =$

.001). Additionally, adolescents in the non-clinical group did not represent a sub-threshold clinical group based on their responses. There were also significant differences in the distress tolerance of parents with adolescents with ADHD (M = 50.76, SD = 9.56) and adolescents not diagnosed with ADHD (M = 56.71, SD = 7.06); t (83) = -1.60, p = .022. Additionally, there were significant differences in parents' irrational beliefs between adolescents diagnosed with ADHD (M = 26.73, SD = 4.55) and adolescents not diagnosed with ADHD (M = 28.81, SD = 7.45); t(164) = -1.398, p = .040. Lastly, there were no significant group differences found in parent emotions as assessed by the PFI and the PAS.

Parental Beliefs, Distress Tolerance, and Parental Emotions

A regression analysis was conducted to test the first part of the second hypothesis that parental irrational beliefs would predict parental negative emotions experienced within the parenting context in both groups as assessed by the PFI and PAS. The results of the analysis indicated that parents' irrational beliefs were a significant predictor of parents' negative emotions, R^2 = .081, F(2,107) = 4.694, p = .011. Another regression analysis was conducted to test the second part of the second hypothesis that parents' level of ability to tolerate distress would predict parents' negative emotions in both groups. Results of the analysis indicates that parents' distress tolerance was a significant predictor of parents' negative emotions, R^2 = 0.49, F(1, 113) = 5.77, p =.018,

Relation Between Parental Feelings and Parenting Behavior

A regression analysis was conducted to test the third hypothesis that parental negative emotions on the PFI and parent anger on the PAS experienced would predict the degree to which parents engaged in an overreactive parenting style. Results of the

analysis indicated that parental experience of negative emotions was not a significant predictor of overreactive discipline, $R^2 = 0.10$, $F(1,93) = .939$, $p > 0.05$. Results of the analysis indicated that parental anger was not a significant predictor of overreactive discipline, $R^2 = 0.13$, $F(1,89) = 1.149$, $p > 0.05$

Relation Between Parenting Behavior and Adolescent ADHD Symptoms

Two separate regression analyses were conducted for each type of dysfunctional parent discipline style to test the fourth hypothesis that parent behavior would predict adolescent's presentation of ADHD symptoms for the clinical group. Results of the first analysis indicated that overreactive discipline style was not a significant predictor of ADHD symptoms experienced by the adolescent, $R^2 = .000$, $F(1, 82) = .000$, $p > .05$. Results of the second analysis indicated that lax discipline style was not a significant predictor of ADHD symptoms experienced by the adolescent, $R^2 = .001$, $F(1,81) = .101$, $p > .05$.

Mediation Analysis

The fifth hypothesis intended to utilize a mediation model in order to evaluate the relationship between parent cognitions, emotions, parent anger, distress tolerance, parent behavior, and ADHD symptoms. It was hypothesized that parent behavior would mediate the relationship between parent cognitions, emotions, parent anger and distress tolerance, and ultimately predict adolescent behavior. However, bivariate correlations found that all of these variables did not correlate with one another. Several variables did correlate with one another which are shown in Table 3. Parent rationality and parent positive emotions had a weak and negatively correlation, $r(113) = -.266$, $p = .004$. Parent irrationality and parent negative emotions had a weak and positively correlation, $r(114) = .261$, $p = .005$.

Parent irrationality and parent anger had a weak and positive correlation, $r(115) = .210$, $p = .023$. Distress tolerance and parent negative emotions had a weak and negative correlation, $r(113) = -.220$, $p = .018$. Distress tolerance and parent positive emotions had a weak and positive correlation, $r(114) = .221$, $p = .017$. Bivariate correlations were also conducted to assess the relationships between these variables and parenting behavior. Distress tolerance was found to be weakly and negatively correlated with overreactive parenting style, $r(92) = -.204$, $p = .049$. There were no other correlations found in regard to parenting behavior. Lastly, bivariate correlations were conducted to assess the relationship between all of the variables to ADHD symptoms of the adolescent. Parent negative emotions and total score on the Conner's abbreviated scale had a weak and positive correlation, $r(92) = .242$, $p = .019$. Additionally, parent anger and ADHD symptoms had a weak and positive correlation, $r(89) = .270$, $p = .010$. There were no other significant correlations found in regard to ADHD symptoms. When placed in a regression altogether, these variables did not relate to one another. That is, none of the variables predicted ADHD symptoms. As a result, we could not test the mediational model because it requires the variables within the model to correlate with one another.

Supplementary Analyses

Due to the significant difference found between groups for distress tolerance, a regression was conducted to determine whether distress tolerance could predict the use of an overreactive discipline style for parents within the clinical group. Results indicated that distress tolerance was a significant predictor of overreactive discipline style in parents of children diagnosed with ADHD, $R^2 = .045$, $F(1,84) = 3.989$, $p = .04$. Moreover, distress tolerance was a significant predictor of overreactive discipline,

regardless of group, $R^2 = .041$, $F(1,92) = 3.982$, $p = .04$. Distress tolerance was not a significant predictor of a lax discipline regardless of group, $R^2 = .022$, $F(1,91) = 2.033$, $p > .05$.

Because there were no significant results found in the prediction of child behavior outcome from parent discipline style in both groups, additional analyses were done to determine if there were significant relationships found specifically within each group. A regression analysis was conducted and found that in the non-clinical group, a lax discipline style predicted ADHD symptoms experienced by the adolescent, $R^2 = .728$, $F(1,6) = 6.767$, $p = .041$. No additional significant relationships were found in the clinical group regarding discipline style.

Discussion

Prior research has demonstrated the negative impact of ineffective discipline on child behavior outcomes (Fletcher & Johnson, 2016; Chang et al., 2009). Additionally, the association between parents' experience of negative emotions and cognitions and the use of overreactive, more intrusive and manipulative parenting styles has been well established within non-clinical groups (Lorber & Slep, 2005; Slep & O'Leary, 1998; Walling, Mills & Freeman, 2007; & Teti & Hussye-Gardner, 2004). Parenting a child with ADHD can be more challenging compared to raising a typical developing child (Craig et. al, 2016). For children or adolescents diagnosed with ADHD that are exhibiting challenging behaviors, parents are faced with the need to employ effective parenting strategies in order to successfully manage their child's behaviors. Less research has been focused on the parents of the adolescent ADHD population. This study sought to investigate factors, such as cognitions, emotions, and distress tolerance, that may impede parents' ability to effectively employ discipline strategies.

It was hypothesized that there would be group differences in parent cognitions, distress tolerance, and child behavior in the clinical and non-clinical group. As predicted, parents within the clinical group reported increased symptom frequency compared to the non-clinical group. This finding was to be expected and confirms that groups were appropriately established. Furthermore, there were significant differences in parents' distress tolerance within the clinical group compared to the non-clinical group. Parents of adolescents with ADHD had a lower ability to tolerate their child's distress compared to parents of adolescents not diagnosed with ADHD. Supplementary analyses found that

parental distress tolerance predicted an overreactive discipline style in the clinical group. In other words, parents that presented with lower distress tolerance were more likely to employ an ineffective parenting strategy (i.e., overreactive discipline). Parent distress tolerance did not predict the utilization of a lax discipline style within the clinical group. This is somewhat consistent with prior research which found that parents of young children with lower distress tolerance were more likely to utilize overreactive discipline practices (Pochtar, 2014). However, unlike Pochtar (2014), distress tolerance did not predict a lax discipline style in the current study. In addition to distress tolerance, there were significant group differences found in parents' irrational beliefs. Contrary to our original hypothesis, parents of adolescents without ADHD reported having more irrational beliefs than parents of adolescents with ADHD, although the variance for the non-clinical group was higher. Perhaps, parents of adolescents with ADHD may not internalize their parenting behaviors as frequently or intensely as parents of adolescents without ADHD, but rather, externally attribute their parenting choices to their child's diagnosis. In other words, parents of adolescents with ADHD may understand the added strain they are facing as they parent their child and, as a result, have less irrational or distorted beliefs about their parenting choices. They also may have a more rational understanding of their child's misbehaviors due their diagnosis of ADHD. Lastly, there were no significant group differences found regarding parent's emotions or state anger. This is inconsistent with prior research which found that parental trait anger was higher in a group of children diagnosed with ADHD compared to a healthy control group (Kara et. al, 2015) as well as research which found that mothers of children with a disruptive behavior disorder, such as ADHD, reported higher levels of depressive symptoms (Nigg

& Hinshaw, 1998; Befera & Barkley, 1985). Perhaps the measures used in this present study did not adequately assess the specific emotions of parents and, rather, looked at a full range of many different emotions of parents.

Our second hypothesis concerning parents' irrational beliefs and parents' negative emotions was confirmed. In both groups, parents' irrational beliefs were a significant predictor of parents' negative emotions as assessed by a parent feeling measure as well as a parent anger measure. That is, parents who experienced more irrational beliefs also reported more frequent experiences of negative emotions within the parenting context. Additionally, parents' distress tolerance was also found to be a significant predictor of parents' negative emotions. Thus, parents who had a lower ability to tolerate distress also reported more frequent negative emotions. Prior research has suggested that lower perceived parental control and greater severity of child misbehaviors were directly associated with higher levels of parenting stress (Harrison & Sofronoff, 2002). The findings in this present study may explain the specific mechanisms by which parents' stress could be increased as their child's behaviors worsen (i.e. distress tolerance and negative emotions experienced).

The third hypothesis investigated the impact that parent emotions have on parent discipline style, specifically negative emotions. Neither parent experience of negative emotions nor parent anger was a significant predictor of an overreactive discipline style, regardless of grouping. Supplementary analyses did not reveal any significant relationships between negative emotions and lax discipline style or parents' positive emotions and discipline style. This finding conflicts with prior research that suggested that parents who are experiencing a negative emotional state may be more likely to utilize

an overreactive discipline method (Lorber & Slep, 2005; Lorber & O'Leary, 2005). However, the research by Lorber & Slep (2005) and Lorber & O'Leary (2005) this finding seems to focus on parents utilizing a dysfunctional discipline method "in-the-moment" in an effort to stop the problematic behavior rather than assessing global emotions. In other words, there is a difference in assessing state versus trait emotions that could be contributing to the unexpected finding. For example, parents who present with elevated levels of state anger would experience increased anger in specific interactions with their child, while parents who present with elevated levels of trait anger would generally experience anger more often, regardless of the context or specific interaction. The lack of significant findings regarding parent anger is also inconsistent with findings from Baydar, Reid and Stratton, 2003 which found that parents who presented with elevated levels of anger were associated with utilizing dysfunctional discipline strategies. Future research should further explore the discrepant findings by administering multiple measures of emotions, including anger, to better capture the full range of emotions. Additionally, consideration should be given to administer trait-specific measures as well as state-specific measures to assess context or overall patterns of emotions.

The fourth hypothesis sought to investigate the relationship between parent discipline style and reported adolescent behavior. Parenting behavior (overreactive and lax) was not found to be a significant predictor of ADHD symptoms experienced by the adolescent, regardless of grouping. Supplementary analyses examined potential differences between groups. Results found that a lax discipline style predicted adolescent ADHD symptoms in the non-clinical group. That is, parents of adolescents that were not diagnosed with ADHD that tended to utilize a lax discipline style also reported elevated

levels of inattentive behaviors and/or hyperactive/impulsive behaviors as assessed by the Conners-3 abbreviated rating scale. This finding could have implications for the dysfunctional nature of a lax discipline style, which is well supported in research. That is, parents who utilize more coercive and permissive parenting styles reported that their adolescents engage in more disruptive and challenging behaviors. This demonstrates an association between lax discipline style and behavioral issues among adolescents, in a non-clinical group. Interestingly, the same result was not found in the clinical group of ADHD adolescents. It is unclear as to why a similar result was not found, but perhaps it could be attributed to the behavioral issues of ADHD being a biological and neurological disorder rather than a function of ineffective parenting practices.

The last hypothesis attempted to use a mediational model to further understand the relationship between parenting emotions, anger, cognitions, and distress tolerance and parenting behavior and ADHD symptoms experienced by the adolescent. However, because all of the variables within the proposed model did not correlate, it was not possible to run the mediation model. Several variables were found to have a weak correlation with one another when analyzed individually. That is, parent negative emotions and parent anger were found to be significantly correlated to ADHD symptoms. However, when placed in a regression altogether, these variables were not found to be predictive of one another. None of the parenting variables predicted ADHD symptoms in a regression model. In other words, parent cognitions, emotions, distress tolerance, and parent behavior did not predict ADHD symptoms and appear independent of one another. Parent anger and parent negative emotions were significantly correlated to ADHD symptoms and could be an area of behavioral intervention for the parent. Future research

should explore in what direction does this relationship exist. Are parents experiencing increased negative emotions and anger because of their child's disruptive behavior or does the child's disruptive behavior worsen when the parent expresses increased negative emotions? Future research should also explore effective interventions for parent anger and negative emotions in an effort to improve disruptive behaviors of the adolescent.

Clinical Implications

The results of the present study found that parents' ability to tolerate their own distress significantly impacts their chosen discipline style and behavior. That is, parents were more likely to utilize an overreactive style. This result replicates previous study findings. Contrary to those previous studies, this study focused on parents of adolescents diagnosed with ADHD. These findings call attention to the importance of parent training and improving the parent-child dynamic in clinical practice. Further focus of clinicians should be given to improving to address distress tolerance in parents, especially of adolescents with behavioral disorders. Dialectical Behavior Therapy (DBT), developed by Marsha M. Linehan, provides a skill-based evidence-based approach in treating various mental disorders. One module of the treatment manual includes teaching distress tolerance skills. Future research should address whether DBT could be adapted to effectively provide skills and strategies to parents who have limited levels of distress tolerance that could ultimately improve their parenting behaviors and child-interactions. These distress tolerance skills typically range from utilizing distraction strategies, making physiological changes in the body (e.g. breathing, muscle relaxation, temperature changes), self-soothe techniques, and radical acceptance. Providing psychoeducation to parents regarding these skills could assist parents with viewing a situation more rationally

and making more thoughtful and effective parenting decisions, especially as it relates to discipline.

Moreover, supplementary findings in the current study found that a lax discipline style predicted ADHD symptoms in the non-clinical group. This finding is worth noting because it demonstrates the dysfunctional use of a lax discipline style, regardless of a child's diagnosis or lack of diagnosis. Attention and focus should be given to all parents, where possible, on the importance of utilizing effective discipline strategies to alleviate challenging child behaviors.

Additionally, the results of the present study also demonstrated a connection between various emotions and cognitions of parents. Irrational beliefs of parents and parent distress tolerance both predicted parents' negative emotions and parent anger. This is especially important for clinicians as they work with parents who face challenges. Parents difficulties may be multi-faceted and interconnected. When addressing a point of intervention for clinicians, it is necessary to determine where the parent is most significantly impaired in their functioning. Although these variables may be intertwined, it may be helpful to trace parents' behavior or emotions back to its origin. It is most likely that parents' beliefs about themselves as parents or about their expectations for their children are contributing to their negative state, anger, and possibly their inability to tolerate distress. For instance, if a parent understands the limitations of their child and thinks rationally about their behavior (e.g., "I really would like for my child to complete his homework right after school; however, I realize that after school he needs a short break and then can work on his homework afterwards"), they are more likely to experience less frustration and anger towards their child when he/she does not complete

his homework immediately after school. Moreover, parents who have this rational understanding/belief regarding their child may not only experience less distress regarding the situation, but they may also be able to tolerate their distress more efficiently with a rational perspective of the situation.

Lastly, the lack of association between the variables in the proposed mediation model sheds an interesting light on parenting and ADHD. First, ADHD, which is largely biological in nature, is not caused by ineffective parenting practices (Craig et al, 2006). Our model confirms this, as these variables were found to be independent of one another. Moreover, parent cognitions, emotions, and ability to tolerate stress do not influence ADHD symptoms of the adolescent.

Overall, the results of this study continue to demonstrate the importance of providing evidence-based, yet individualized, interventions to meet the needs of parents, children, and families as a whole. While the general treatment model may look similar across different families, each parent may bring a different set of irrational beliefs, negative emotions, or level of distress tolerance to the parent-child interactions. As shown in this study, these varying factors are inter-connected and impact over one another. Providing psychoeducation to parents about the connection between these influences as well the specifics such as rational versus irrational beliefs, distress tolerance and strategies for improvement, and about specific parenting strategies would be greatly beneficial when addressing effective discipline strategies and should have positive outcomes for child and adolescent behaviors.

Limitations of the Current Study and Future Directions

There are several limitations to consider when interpreting the results of this current study. First, it is important to consider the limitations of the sample represented. The sample size was relatively small with a majority of the respondents identifying as Caucasian mothers. Less than 20% of the sample was represented by fathers. It is interesting to note that although participants were recruited via Facebook, which does not place geographical limits on respondents, the sample was still relatively homogenous in terms of race and ethnicity. This may help us better understand the type of respondent that participated in the current study as opposed to the respondents who did not participate in the study. Despite the global nature of Facebook, the lack of diversity within the sample could indicate difficulties with accessibility to the study (access to internet or a device) or understanding the usefulness of completing the questionnaires. Additionally, another limitation of the sample includes the participants in each group (clinical vs. non-clinical). The group sizes are significantly different with 161 parents in the clinical group and only 13 parents in the non-clinical group. Each of these methodological limitations could have implications for the generalizability of the findings. Future research would benefit from replicating this study with a larger sample size and a more ethnically diverse sample. As we have seen in this current study, utilizing a global company such as Facebook is not sufficient to gather a diverse sample. Thus, more efforts should be made to access parents of specific regions and locations across the country. Moreover, a sample with a higher representation of fathers would be beneficial, especially in two parent households where discipline style may differ.

A second limitation of the current study is that self-report measures were utilized. Self-report measures can be associated with self-report bias and shared method variance which could impact the reliability of the findings. Despite this, self-report assessment tools have many advantages in research such as time, accessibility, and cost. Additionally, findings from self-report measures are correlational and not causal. Thus, it would be important to consider alternative ways to measure the variables in the present study such as observational data between parents and adolescents.

Third, parent emotions were assessed using a global instrument as opposed to a context-specific measure. This could have impacted the findings in the present study and although the instrument used provided some valuable information, future research should utilize emotion-specific instruments that adequately assess emotions of parents with regard to the context of parenting.

Lastly, distress tolerance is a construct that could encompass a range of emotions such as anger, anxiety, fear, or guilt. For parents with limited insight into their emotion identification or parents who experience other barriers such as heightened levels of physiological arousal, it may be difficult for them to understand or control and accept what is preventing them from tolerating a situation. It is also a subjective measure of one's perceived ability to tolerate distress that may not truly reflect behaviors or emotions during a particular parent-child interaction. This complicated construct may be more challenging to capture with just an inventory of questions. For example, parents who have a limited insight into their emotions or what they are experiencing and may report that they have a better ability to cope effectively and tolerate distress than how they truly behave and react in a stressful situation.

In conclusion, the present study investigated several factors which were believed to negatively impact parenting behavior through the use of dysfunctional parenting strategies. This study explored these relationships more specifically within a group of parents who had adolescents diagnosed with ADHD. Group differences were found regarding adolescent behavior, parent distress tolerance, and parent irrational beliefs. While parent negative emotions, parent anger, parent irrational beliefs, and parent distress tolerance were all found to be associated with one another, distress tolerance was the only variable found to predict an overreactive discipline style, regardless of grouping. Parents who reported a greater difficulty tolerating their distress within the parenting context were more likely to engage in overreactive discipline practices. Moreover, parents of adolescents diagnosed with ADHD had lower levels of distress tolerance. Together, these findings suggest that distress tolerance abilities of parents are a significant factor that should be addressed in parenting interventions in an effort to improve parent-adolescent dynamics.

Implications for School Psychologists

The results from the present study provide additional information for working with adolescents diagnosed with ADHD in schools. Adolescents diagnosed with ADHD face increased risks compared to young children (McCleary, 2002) along with a hindered social functioning (Mrug et al., 2001). Moreover, adolescents who experience inattention along with the increasing demands in high school face greater academic risks that could potentially impact post-secondary plans and career opportunities (Hechtman, 1996). Thus, it is imperative for school psychologists to be prepared for working with adolescents with ADHD. The findings from this study highlight the importance of ADHD

as a biological disorder. That is, limited information was found in the association of parenting cognitions, emotions, or behaviors and reported ADHD symptoms. It also demonstrates that we do not have a strong cognitive-behavioral model to explain what cognitions and emotions interfere with parent behaviors for adolescents diagnosed with ADHD. Parenting practices do not contribute to the presence of ADHD symptoms in adolescents. School psychologists should focus on specific deficits of adolescents with ADHD and tailor interventions to those target areas. For instance, for an adolescent struggling with impulsivity and poor decision making, school psychologists should focus on providing strategies for students to recognize their impulsive decision making and to stop and think before doing acting. Additionally, school psychologists can teach skills and strategies for an adolescent with executive functioning deficits such as initiating tasks, time management, or self-monitoring. Focusing on the adolescent first provides them with a feeling of efficacy, mastery of a skill, and feeling of empowerment despite their diagnosis.

Although ineffective parenting does not contribute to ADHD symptoms, there were a few variables that were somewhat correlated to ineffective parenting that could be beneficial for school psychologists to address when working with families. Parents with limited distress tolerance may utilize an overreactive discipline style. Additionally, negative beliefs and emotions experienced by parents could negatively impact the family dynamic. Regardless of whether this impacts ADHD symptoms or not, providing parents with healthy strategies to manage their distress, and reframe irrational beliefs and automatic negative thoughts, could lead to more effective parenting and more positive family interactions and outcomes.

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Table 1
Demographic Characteristics

Characteristic	%	M *(SD)*
Parent Gender (females)	86.2	
Parent Age (30-49 years old)	83.9	
Parent Education		
High school diploma or equivalent (GED)	9.2	
Some college	19.5	
Technical Training	2.3	
College graduate	31.0	
Some post graduate work	4.0	
Post graduate degree	33.9	
Parent Marital Status		
Single	10.9	
Married	79.9	
Divorced/Separated	6.3	
Widowed	.6	
Would rather not say	1.7	
Race		
African American	2.9	
American Indian or Alaska Native	1.1	
Asian	1.1	
Caucasian	83.9	
Hispanic	4.0	
Multiracial	2.9	
Other	4.0	
Child Gender (male)	68.4	
Child Age		12.24 (2.32)

Table 2

Descriptive Statistics and Internal Reliability of Subscales

Scale	M	SD	Min	Max	α
P-RIBS: Rational	22.59	4.23	13.00	36.00	0.64
P-RIBS: Irrational	26.87	4.79	13.00	43.00	0.69
P-DTS: Total	49.88	10.17	25.00	70.00	0.87
PAS: Total	52.95	17.01	22.00	98.00	0.94
PFI - Positive	57.77	14.23	18.00	84.00	0.95
PFI - Negative	66.23	24.02	22.00	117.00	0.94
PS: Overreactive	37.44	7.24	21.00	63.00	0.38
PS: Lax	39.43	8.24	19.00	58.00	0.57
Conners-AI: Total	31.00	7.97	10.00.	40.00	0.92

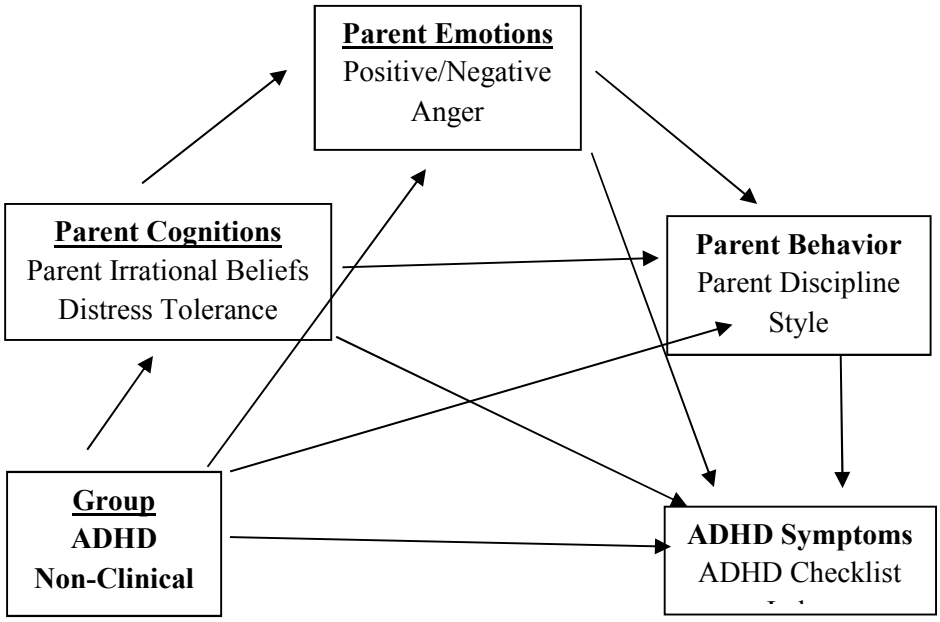
Note. P-RIBS = Parent Rational Irrational Belief Scale, P-DTS = Parent Distress Tolerance Scale, PAS = Parent Anger Scale, PFI = Parent Feelings Inventory, PS = Parenting Scale

Table 3
Summary of Intercorrelations between Subscales

Scale	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*
1. CON	--								
2. RATI	0.57	--							
3. IRRAT	-.011	.470**	--						
4. NEG	.242*	.101.	.261**	--					
5. POS	-.176	-.266**	-.125	-.300**	--				
6. DTS	-.122	-.252**	-.482**	-.220*	.221*	--			
7. OVER	.004	.133	.079	.100	-.133	-.204*	--		
8. LAX	0.43	-.025	.034	.184	-.005	-.148	.066	--	
9. ANG	.270**	.174	.210*	.586**	-.361**	-.154	.113.	.197	--

Note. CON = Conners Abbreviated Index Scale, RATI = Parents rationality subscale, IRRAT = Parents irrationality subscale, NEG = Negative emotions subscale, POS = Positive emotions subscale, DTS = Parents Distress Tolerance Scale, OVER = Overreactivity subscale, LAX = Laxness subscale, ANG = Parent Anger Scale.
* $p < 0.05$. ** $p < 0.01$.

Figure 1. Proposed Mediation Model



Appendix A
Parent Consent Form

Department of Psychology

Parent Consent Form

Project Title: Cognitions, Emotions and Discipline Style in Parents of Adolescents with Attention Deficit Hyperactivity Disorder (ADHD)
Principal Investigator: Nicole Crispinelli, M.S.

Purpose: The purpose of this project is to gain a better understanding of how parent's thoughts and emotions about their parenting role influences disciplinary style among parents of adolescents with ADHD. The information gained from this study will inform the field and help us develop better interventions to address the needs of parents.

Procedures: This study consists of an online survey. You will be asked to complete a demographics questionnaire and 6 brief questionnaires concerning your thoughts and feelings about your parenting role, and how you respond to your child's behavior. The estimated participation time is between 25 – 35 minutes.

Risks and Benefits: There are no physical risks associated with your participation in this research beyond those of everyday life. Participation is voluntary, and you may withdraw from participation at any time. You have the right not to answer questions you are not comfortable answering. Although there are no direct benefits to you for your participation in this study, the information obtained from this study will further the knowledge and understanding of thoughts and emotions in parents. At the conclusion of your participation, you will have the option to enter your name in a raffle to receive a $50 Amazon gift card. Please note that an email address will need to be provided for this incentive. It will not be tied to your responses in any way.

Confidentiality: It is important for you to know that confidentiality is of the utmost importance. The information that will be collected will not be used to identify any individuals for any purpose, and will be accessed only by the researcher and supervisor mentioned above for research purposes. If any publications result from this study, you will not be identified. Any data from this study will be reported in aggregate form only;

individual data responses will not be reported. Data from this study will be kept in a password-protected file.

Contact Information: If you have any further questions about the study, please do not hesitate to contact me at nicole.crispinelli17@my.stjohns.edu or (845) 260-1385, or my supervising mentor, Dr. Raymond DiGiuseppe, at (718) 990-1955. For questions regarding your rights as a research participant, please contact Marie Nitopi from the Institutional Review Board at (718) 990-1440.

Thank you very much for your time and consideration.

Statement of Consent: I have read and understand the purpose and procedures of the study, as well as the risk/benefits, and voluntary nature of participation. By signing this form with my typed name, I provide consent to participate in the present study. Please select below whether you agree or do not agree to participate.

- I **agree** to participate in this study
- I **do not agree** to participate in this study

Appendix B
Demographics Form

Please answer the following questions

About yourself:

1. Please identify your gender.
    - Male
    - Female

2. What is your age?
    - 18 to 29 years old
    - 30 to 49 years old
    - 50 to 64 years old
    - Above 65

3. How would you classify yourself?
    - American Indian or Alaska Native
    - Asian
    - Black or African-American
    - Hispanic
    - Native Hawaiian/Pacific Islander
    - White
    - Multiracial
    - Other:_____

4. What is the highest level of education that you have completed?
    - Some high school
    - High school graduate
    - Some college
    - Technical training
    - College graduate
    - Some post graduate work
    - Post graduate degree

5. What is your current marital status?
    - Single
    - Married
    - Divorced/Separated
    - Widowed
    - Would rather not say

6. What is your total annual income?
    - $30,000 or less
    - $40,000-$50,000
    - $50,000-$60,000
    - $60,000-$70,000
    - $70,000-$80,000
    - $80,000-$90,0000
    - $90,000 or above

About your child:

1. What is your relationship to this child?
    - Biological Mother
    - Biological Father
    - Adopted Mother
    - Adopted Father
    - Other: _____

2. Please identify your child's gender.
    - Male
    - Female

3. Please indicate what race(s) you consider your child to be?
    - American Indian or Alaska Native
    - Asian
    - Black or African-American
    - Hispanic
    - Native Hawaiian/Pacific Islander
    - White
    - Multiracial
    - Other:_____

4. What is your child's age?
    - 10 years old
    - 11 years old
    - 12 years old
    - 13 years old
    - 14 years old
    - 15 years old
    - 16 years old

- 17 years old

4. Does your child have a diagnosis of Attention Deficit Hyperactivity Disorder (ADHD)?
    - Yes
    - No

5. If so, what is the diagnosed type?
    - Combined Type
    - Inattentive Type
    - Hyperactivity/Impulsivity Type
    - I don't know

6. Does your child have any other psychological or genetic diagnoses? (Please select all that apply):

- Autism Spectrum Disorder (or Autistic Disorder, Asperger's Syndrome, or Pervasive
  Developmental Disorder – Not Otherwise Specified [PDD-NOS])
- Anxiety Disorder
- Bipolar Disorder
- Depression
- Disruptive Disorder (Oppositional Defiant, Intermittent Explosive, or Conduct Disorder)
- Down Syndrome
- Fragile X Syndrome
- Obsessive Compulsive Disorder (OCD)
- No diagnosis
- Other: _____

Appendix C
The Parent Rational and Irrational Beliefs Scale

The Parent Rational and Irrational Beliefs Scale (P-RIBS)

Instructions: Please think about a situation during the past week when your child(ren) engaged in challenging behaviors (e.g., tantrum, aggression, self-injury, etc.). Try to recall the thoughts that you have had in such situations. When faced with adverse situations, some parents tend to think that situations absolutely must be the way they want (in terms of absolute must). In the same situation, other people think in preferential terms and accept the situation, even if they want very much that those situations do not happen and even they might try to change it. In light of these possibilities, please estimate how much the statements below represent the thoughts that you have in such situations when your child engages in challenging behavior.

	Strongly disagree	disagree	neutral	agree	agree strongly
1. My child absolutely must behave appropriately.	1	2	3	4	5
2. If my child engages in challenging behavior, it doesn't mean that I am a worthless person.	1	2	3	4	5
3. I think it is awful when my child engages in challenging behavior.	1	2	3	4	5
4. If my child engages in challenging behavior, it means that I am worthless.	1	2	3	4	5
5. It is unbearable when my child engages in challenging behavior.	1	2	3	4	5
6. I am always optimistic about my future.	1	2	3	4	5
7. I can stand it when my child engages in challenging behavior, although it is difficult for me to tolerate it.	1	2	3	4	5
8. It is important for me to keep busy.	1	2	3	4	5
9. I really do not want my child to engage in challenging behaviors, but I realize and accept that things do not have to always be the way I want them to be.	1	2	3	4	5

10. It is unpleasant and unfortunate when my child engages in challenging behaviors, but it is not terrible.	1	2	3	4	5

	Strongly disagree	disagree	neutral	agree	strongly agree
11. When my child engages in challenging behaviors, I think that my children are bad, worthless, or condemnable.	1	2	3	4	5
12. When my child engages in challenging behaviors, I accept them as being worthwhile despite her/his poor behavior.	1	2	3	4	5
13. I absolutely must be a good parent.	1	2	3	4	5
14. If I am not a good parent, it doesn't mean that I am a worthless person.	1	2	3	4	5
15. I think it is awful to be a bad parent.	1	2	3	4	5
16. If I am not a good parent, it means that I am worthless.	1	2	3	4	5
17. It is unbearable to think of myself as a bad parent.	1	2	3	4	5
18. I am always optimistic about my future.	1	2	3	4	5
19. I can stand to be a bad parent.	1	2	3	4	5
20. It is important for me to keep busy.	1	2	3	4	5
21. I really want to be a good parent, but I realize and accept that I may not always be as good at parenting as I want to be.	1	2	3	4	5
22. It is unpleasant and unfortunate to be a bad parent, but it is not terrible.	1	2	3	4	5
23. If I am not a good parent, I think that my children are bad, worthless, or condemnable.	1	2	3	4	5
24. When I am not a good parent, I can accept my children as being worthwhile and not condemnable.	1	2	3	4	5

Appendix D
Parent Distress Tolerance Scale

Directions: Think of times that you feel distressed or upset as a parent. Select the item from the menu that best describes your beliefs about feeling distressed or upset.

1. Strongly agree
2. Mildly agree
3. Agree and disagree equally
4. Mildly disagree
5. Strongly disagree

1. My child feeling distressed or upset is unbearable to me.

2. When my child feels distressed or upset, all I can think about is how bad he/she feels.

3 .1 can't handle my child feeling distressed or upset.

4. My child's feelings of distress are so intense that they completely take over.

5. There's nothing worse than my child feeling distressed or upset.

6 . 1 can tolerate my child being distressed or upset as well as most people.

7. My child's feelings of distress or being upset are not acceptable.

8 . I'll do anything to avoid my child feeling distressed or upset.

9. Other people seem to be able to tolerate their child feeling distressed or upset better than I can.

10. My child being distressed or upset is always a major ordeal for me.

11. I am ashamed of myself when my child feels distressed or upset.

12. My child's feelings of distress or being upset scare me.

13. I'll do anything to stop my child feeling distressed or upset.

14. When my child feels distressed or upset, I must do something about it immediately.

15. When my child feels distressed or upset, I cannot help but concentrate on how bad the distress actually feels.

Appendix E
Parent Anger Scale

Instructions: At one time or another, most parents feel angry. For each of the following items, circle the response that best describes you.

0	1	2	3	4	5	6
Never/ not at all	less than once a month	about once a month	about once a week	several days a week	every day	several times a day

1. I use my anger to get my child to behave: 0 1 2 3 4 5 6
2. I lose my temper with my child: 0 1 2 3 4 5 6
3. When I get angry with my child, I feel like Screaming or yelling at my child: 0 1 2 3 4 5 6
4. When I feel angry with my child, I boil inside, Don't show it, and keep things inside of me. 0 1 2 3 4 5 6
5. I get angry and have a problem controlling my behavior toward my child: 0 1 2 3 4 5 6
6. I lose control of my anger with my child: 0 1 2 3 4 5 6
7. I get angry with my child and I feel my muscles get tight: 0 1 2 3 4 5 6
8. I get angry with my child and I feel like spanking or hitting my child: 0 1 2 3 4 5 6
9. I get angry and cannot stop thinking about the way my child behaved: 0 1 2 3 4 5 6
10. Even though I hold it in and do not show it, I get angry with my child: 0 1 2 3 4 5 6
11. I think that I have a harder job being a parent than other people: 0 1 2 3 4 5 6
12. I think that my child deserved to be Punished for misbehaving: 0 1 2 3 4 5 6

13. I get so angry with my child that I do not do things that I know my child wants me to do: 0 1 2 3 4 5 6

14. I get so angry with my child that I cannot control my behavior: 0 1 2 3 4 5 6

15. When I get angry with my child, I tell relatives and friends so they will know how bad my child has behaved: 0 1 2 3 4 5 6

16. I get angry and have broken or thrown away some of my child's things: 0 1 2 3 4 5 6

17. I get angry with my child: 0 1 2 3 4 5 6

18. I think my anger with my child is justified because of the way my child behaves: 0 1 2 3 4 5 6

19. I get angry with my child and feel like throwing things, slamming doors, or banging the table: 0 1 2 3 4 5 6

20. When I get angry with my child, I stay angry for:
1) only a few minutes.
2) less than an hour.
3) about 1-2 hours.
4) several hours.
5) about 1-2 days.
6) several days.

21. On average how angry do you get at your child?
1) Not at all angry
2) Somewhat angry
3) Mildly angry
4) Moderately angry
5) Very angry
6) Extremely angry.

22. I resent the time and energy I put into parenting:
1) less than once a month
2) about once a month
3) about once a week

4) several days a week
5) every day
6) several times a day.

23. I get so angry with my child that I just want to make the tension go away:
1) less than once a month.
2) about once a month.
3) about once a week.
4) several days a week.
5) every day.
6) several times a day.

24. I get so angry with my child that I grab or push my child:
1) less than once a month.
2) about once a month.
3) about once a week.
4) several days a week.
5) every day.
6) several times a day.

25. I get so angry with my child that I say mean things, use bad language, curse or insult my child:
1) less than once a month.
2) about once a month.
3) about once a week.
4) several days a week.
5) every day.
6) several times a day.

26. I get so angry with my child that I scream or yell at my child:
1) less than once a month.
2) about once a month.
3) about once a week.
4) several days a week.
5) every day.
6) several times a day

27. I get angry with my child and I spank, slap or hit my child:
1) less than once a month.
2) about once a month.
3) about once a week.
4) several days a week.
5) every day.

6) several times a day.

28. I get angry and break or throw away some of my child's things:
- **1) less than once a month.**
- **2) about once a month.**
- **3) about once a week.**
- **4) several days a week.**
- **5) every day.**
- **6) several times a day.**

29. I get angry with my child and throw things, slam doors, or bang the table:
- **1) less than once a month.**
- **2) about once a month.**
- **3) about once a week.**
- **4) several days a week.**
- **5) every day.**
- **6) several times a day.**

30. When I get angry with my child, I feel like saying mean things to my child:
- **1) less than once a month.**
- **2) about once a month.**
- **3) about once a week.**
- **4) several days a week.**
- **5) every day.**
- **6) several times a day.**

31. I get so angry with my child that I feel my blood boil:
- **1) less than once a month.**
- **2) about once a month.**
- **3) about once a week.**
- **4) several days a week.**
- **5) every day.**
- **6) several times a day.**

32. When my child misbehaves, I use my annoyance to discipline my child:
1) **Less than once a month**
2) **About once a month**
3) **About once a week**
4) **Several days a week**
5) **Every day**
6) **Several times a day**

33. When I get annoyed at my child, I am able to explain assertively what my child has done wrong

1) less than once a month.
2) about once a month.
3) about once a week.
4) several days a week.
5) every day.
6) several times a day.

34. I get annoyed at my child and I express my feelings about my child's behaviors:

1) less than once a month.
2) about once a month.
3) about once a week.
4) several days a week.
5) every day.
6) several times a day.

35. I get annoyed at my child and I can control myself:

1) less than once a month.
2) about once a month.
3) about once a week.
4) several days a week.
5) every day.
6) several times a day.

36. I get annoyed at my child and my thoughts about what my child has done usually go away a short time afterwards:

1) less than once a month.
2) about once a month.
3) about once a week.
4) several days a week.
5) every day.
6) several times a day.

Appendix F
Parent Feelings Inventory

Instructions: Parenting can be filled with many different moods and feelings, both positive and negative. Please indicate below the degree to which you have experienced each mood or feeling during the last month in your role as a parent/guardian.

During the last month did you feel the following in your role as a parent/guardian?

	Not at all						Extremely
1. Angry	1	2	3	4	5	6	7
2. Afraid	1	2	3	4	5	6	7
3. Annoyed	1	2	3	4	5	6	7
4. Calm	1	2	3	4	5	6	7
5. Cheerful	1	2	3	4	5	6	7
6. Contented	1	2	3	4	5	6	7
7. Discouraged	1	2	3	4	5	6	7
8. Energetic	1	2	3	4	5	6	7
9. Excited	1	2	3	4	5	6	7
10. Frightened	1	2	3	4	5	6	7
11. Frustrated	1	2	3	4	5	6	7
12. Grouchy	1	2	3	4	5	6	7
13. Guilty	1	2	3	4	5	6	7
14. Happy	1	2	3	4	5	6	7
15. Hopeless	1	2	3	4	5	6	7
16. Impatient	1	2	3	4	5	6	7
17. Irritated	1	2	3	4	5	6	7
18. Loving	1	2	3	4	5	6	7
19. Miserable	1	2	3	4	5	6	7
20. Nervous	1	2	3	4	5	6	7
21. Patient	1	2	3	4	5	6	7
22. Peaceful	1	2	3	4	5	6	7
23. Pleased	1	2	3	4	5	6	7
24. Relaxed	1	2	3	4	5	6	7
25. Sad	1	2	3	4	5	6	7
26. Satisfied	1	2	3	4	5	6	7
27. Scared	1	2	3	4	5	6	7
28. Tense	1	2	3	4	5	6	7
29. Unhappy	1	2	3	4	5	6	7
30. Worn out	1	2	3	4	5	6	7
31. Worried	1	2	3	4	5	6	7

Appendix G
Parenting Scale

Instructions: At one time or another, all children misbehave or do things that could be harmful, that are "wrong," or that parents don't like. Examples include:

hitting someone	whining	not picking up toys
throwing food	lying	refusing to go to bed
having a tantrum	arguing back	wanting a cookie before dinner

Parents have many different ways or styles of dealing with these types of problems. Below are items that describe some styles of parenting.

For each item, fill in the circle that best describes your style of parenting during the past two months with the child indicated above.

SAMPLE ITEM:

At meal time…

I let my child decide how much to eat — 0---0---□---0---0---0---0 — I decide how much my child eats.

1. When my child misbehaves…

I do something right away. 0---0---0---0---0---0---0 I do something about it later.

2. Before I do something about a problem…

I give my child several reminders or warnings. 0---0---0---0---0---0---0 I use only one reminder or warning.

3. When I'm upset or under stress…

I am picky and on my child's back. 0---0---0---0---0---0---0 I am no more picky than usual.

4. When I tell my child not to do something…

I say very little. 0---0---0---0---0---0---0 I say a lot.

5. When my child pesters me…

I can ignore the pestering. 0---0---0---0---0---0---0 I can't ignore pestering.

6. When my child misbehaves…

I usually get into a long argument with my child. 0---0---0---0---0---0---0 I don't get into an argument.

7. I threaten to do things that…
I am sure I can carry out. 0---0---0---0---0---0---0 I know I won't actually do.

8. I am the kind of parent that…
set limits on what my child is allowed to do. 0---0---0---0---0---0---0 lets my child do whatever he/she wants.

9. When my child misbehaves…
I give my child a long lecture. 0---0---0---0---0---0---0 I keep my talks short and to the point.

10. When my child misbehaves…
I raise my voice or yell. 0---0---0---0---0---0---0 I speak to my child calmly.

11. If saying "No" doesn't work right away…
I take some other kind of action. 0---0---0---0---0---0---0 I keep talking and try to get through to my child.

12. When I want my child to stop doing something…
I firmly tell my child to stop. 0---0---0---0---0---0---0 I coax or beg my child to stop.

13. When my child is out of my sight…
I often don't know what my child is doing. 0---0---0---0---0---0---0 I always have a good idea of what my child is doing.

14. After there's been a problem with my child…
I often hold a grudge. 0---0---0---0---0---0---0 things get back to normal quickly.

15. When we're not at home…
I handle my child the way I do at home. 0---0---0---0---0---0---0 I let my child get away with a lot more.

16. When my child does something I don't like…

I do something about it. 0---0---0---0---0---0---0 I often let it go. every time it happens.

17. When there is a problem with my child…
things build up and I do 0---0---0---0---0---0---0 things don't get out of hand. things I don't mean to do.

18. When my child misbehaves, I spank, slap, grab, or hit my child…
never or rarely. 0---0---0---0---0---0---0 most of the time.

19. When my child doesn't do what I ask…
I often let it go or end 0---0---0---0---0---0---0 I take some other action. up doing it myself.

20. When I give a fair threat or warning…
I often don't carry it out. 0---0---0---0---0---0---0 I always do what I said.

21. If saying "No" doesn't work…
I take some other kind of action. 0---0---0---0---0---0---0 I offer my child something nice so he/she will behave.

22. When my child misbehaves…
I handle it without getting upset. 0---0---0---0---0---0---0 I get so frustrated or angry that my child can see I'm upset.

23. When my child misbehaves…
I make my child tell me why he/she did it. 0---0---0---0---0---0---0 I say "No" or take some other action.

24. If my child misbehaves and then acts sorry…
I handle the problem like I usually would. 0---0---0---0---0---0---0 I let it go that time.

25. When my child misbehaves…
I rarely use bad language or curse. 0---0---0---0---0---0---0 I almost always use bad language.

26. When I say my child can't do something…
I let my child do it anyway. 0---0---0---0---0---0---0 I stick to what I said.

27. When I have to handle a problem…
I tell my child 0---0---0---0---0---0---0 I don't say I'm sorry.
I'm sorry about it.

28. When my child does something I don't like, I insult my child, say mean things, or call my child names…
never or rarely. 0---0---0---0---0---0---0 most of the time.

29. If my child talks back or complains when I handle a problem…
I ignore the complaining 0---0---0---0---0---0---0 I give my child a talk about not
and stick to what I said. complaining.

30. If my child gets upset when I say "No" …
I back down and 0---0---0---0---0---0---0 I stick to what I said.
give in to my child.

Appendix H
Conners-3 ADHD Index

Instructions: Here are some things parents might say about their children. Please tell us about your child and what he/she has been like in the ***past month***. Read each item carefully, then mark how well it describes your child or how frequently it has happened in the past month.

0= In the past month, this was ***not true at all*** about my child. It never (or seldom) happened.
1= In the past month, this was ***just a little true*** about my child. It happened occasionally.
2= In the past month, this was ***pretty much true*** about my child. It happened very often (very frequently).
3=In the past month, this was ***very much true*** about my child. It happened very often (very frequently).

1. Fidgets or squirms in seat.	0	1	2	3
2. Restless or overactive.	0	1	2	3
3. Excitable, impulsive.	0	1	2	3
4. Is easily distracted by sights or sounds.	0	1	2	3
5. Is sidetracked easily.	0	1	2	3
6. Fails to complete schoolwork or tasks (even when he/she understands and is trying to cooperate).	0	1	2	3
7. Avoids or dislikes things that take a lot of effort and are not fun.	0	1	2	3
8. Does not seem to listen to what is being said to him/her.	0	1	2	3
9. Has trouble concentrating.	0	1	2	3
10. Inattentive, easily distracted.	0	1	2	3

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