

Parent Characteristics and Positive Illusory Bias in Children with ADHD

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Background & Objectives

Research indicates that children with Attention-Deficit/Hyperactivity Disorder (ADHD) underestimate the severity of their difficulties in the social, scholastic, and behavioral domains compared to parent reports; this has been termed the Positive-Illusory Bias (PIB).

Several child-based explanations have been proposed to account for the PIB observed in children with ADHD including cognitive immaturity, ignorance of incompetence, and self-protection (See Owens et al., 2007 for a full review). According to the cognitive immaturity hypothesis, immature cognitive functions prevent children with ADHD from accurately estimating their deficits. The ignorance of incompetence hypothesis postulates that individuals who lack skills in a given domain are unable to recognize their incompetence in that domain. The self-protection hypothesis posits that individuals with ADHD make inaccurate estimations of their deficits as a coping mechanism to protect their self-esteem.

Each of these hypotheses presumes that the PIB is child-driven, with children under-reporting deficits. However, the possibility that the PIB is driven by parents over-reporting the severity of their children’s difficulties has not been explored.

The present study investigated whether parent characteristics were associated with the degree of discrepancy between parent and children reports of ADHD behaviors. Specifically, we explored the impact of parent affect, parent attributions for children’s behaviors, and parenting style on the PIB. If parent characteristics were found to be correlated with the degree of the discrepancy in the PIB, this would support a parent-driven, rather than child-driven, explanation for the discrepancy.

Methodology

Sample:
N= 152 (86 ADHD, 66 Control), male and female children (ages 9-14) and their parents. All children in the ADHD group had a previous diagnosis of ADHD.

Measures
Adapted Dominic-R (Valla et al., 1997). This pictorial measure was given to participants to assess self-reported ADHD symptoms. Participants were presented with 12 pictures of a gender-neutral child depicting ADHD symptoms and were asked to indicate whether or not they were like Dominic/Dominique.

Conner's Parent Rating Scale (CPRS; Conners, 1997). The CPRS is a norm-referenced rating scale that is used to evaluate externalizing problems (i.e., inattention, hyperactivity-impulsivity, oppositionality, conduct) and learning problems in children. Parents rated their children’s difficulties on a 4-point scale.

Parent Affect Questionnaire (PAQ; developed for this study). This measure assessed parental affect. Scales assessed the degree of upset, anger, irritation, frustration, and helplessness parents would feel after imagining themselves and their children interacting in scenarios characteristic of ADHD behaviors.

Ideas About Parenting (Heming, Cowan, & Cowan, 1990). This measure was used to assess the degree to which parents identify with authoritative, authoritarian, and permissive parenting styles.

Thinking About Child Behavior Questionnaire-Revised (TCB-R; modified from Johnston & Freeman, 1997). This questionnaire assessed the attributions parents offer when making judgments about the causes of child misbehavior.

Results

Do children with ADHD display a Positive Illusory Bias?

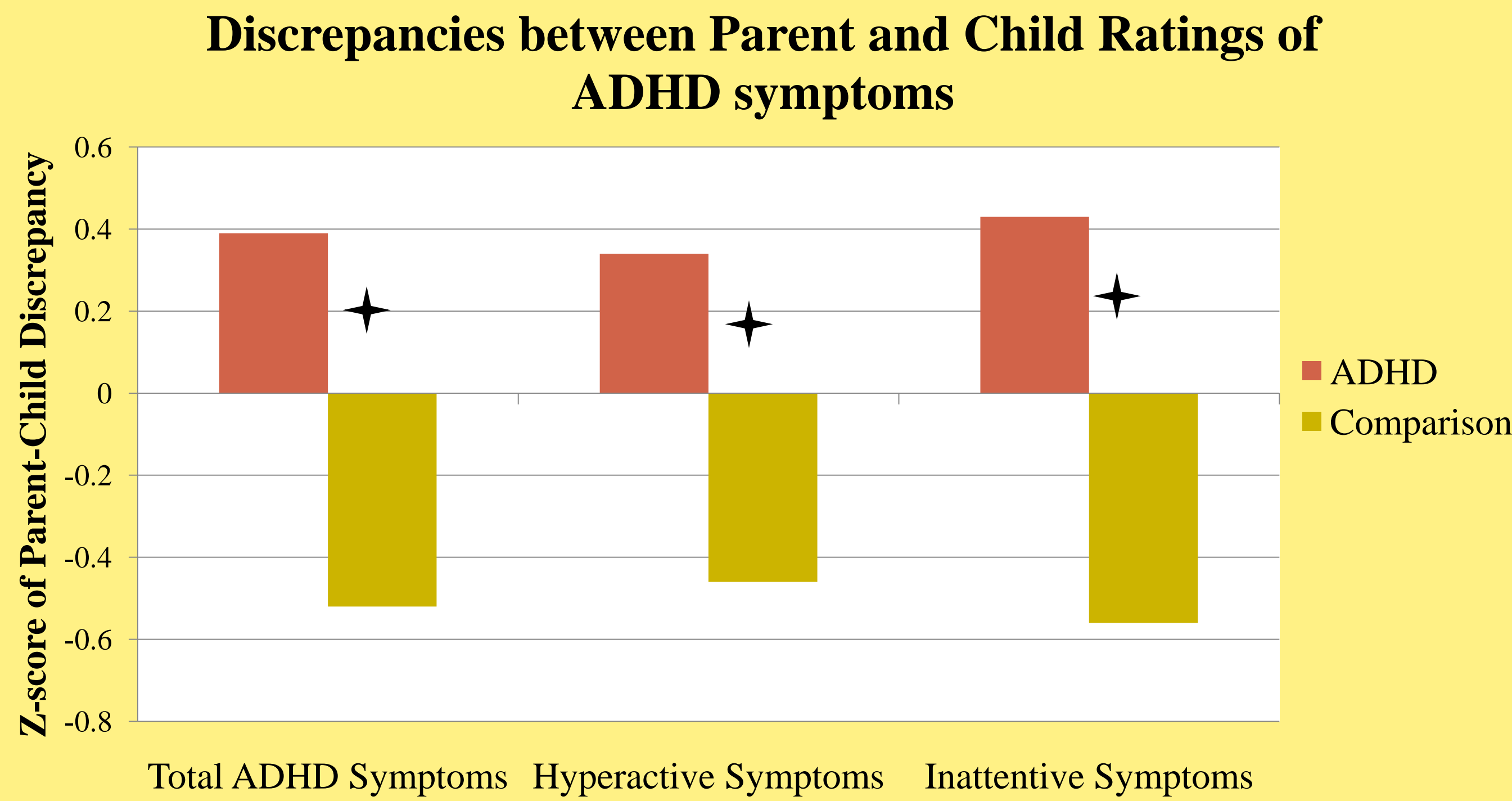


Figure 1. The PIB was investigated using a discrepancy score calculated by subtracting the standardized total child-rated ADHD scores from the standardized total parent-rated ADHD scores ✦ denotes a significant difference between discrepancies

Analyses indicated the presence of a PIB in children with ADHD, compared to controls. The discrepancy between parent and child ratings were significantly higher for children with ADHD for total ADHD symptoms ($t(148)=6.270$, $p<.001$), hyperactive symptoms ($t(145)=5.147$, $p<.001$), and inattentive symptoms, ($t(148)=6.871$, $p<.001$).

Do parents of children with and without ADHD differ in terms of affect, parenting styles and attributions for their children’s behavior?

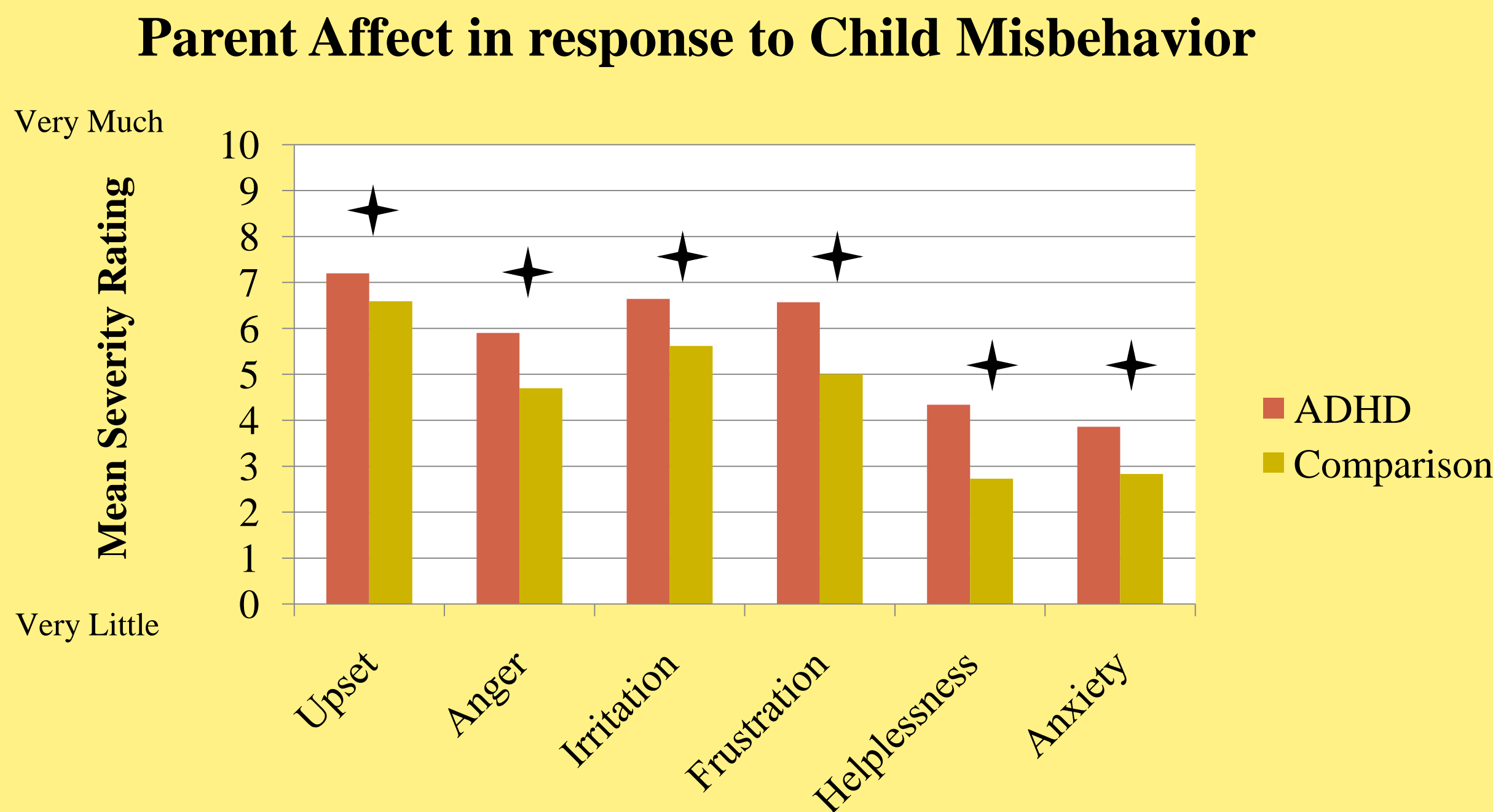


Figure 1. Parent affect ratings in response to children engaging in behaviors characteristic of ADHD & oppositionality ✦ denotes a sig. difference between groups

Parents of children with and without ADHD differed in their reports of affective responses to their children’s misbehavior. Specifically, parents of children with ADHD showed increased levels of upset ($t(111)=2.578$, $p=.01$), anger ($t(147)=4.218$, $p<.001$), irritation ($t(147)=3.760$, $p<.001$), frustration ($t(147)=5.467$, $p<.001$), helplessness ($t(147)=5.573$, $p<.001$), and anxiety ($t(144)=3.690$, $p=.001$).

Parents of children with ADHD reported lower levels of identification with the authoritative parenting style ($t(146)=4.450$, $p<.001$) than parents of children in the comparison group. Parents of children with and without ADHD did not differ in terms of levels identification with permissive or authoritarian parenting styles.

Parents of children with ADHD also made more negative attributions about their children's behavior than did parents of controls. Specifically, they described their children’s behavior as being more problematic ($t(149)=2.67$, $p=.008$), and were more likely to attribute the behavior to internal ($t(149)=-2.54$, $p=.012$), global ($t(149)=11.84$, $p<.001$), and stable ($t(149)=11.91$, $p<.001$) causes. They also reported that their children were less in control of their behaviors ($t(146.79)=6.235$ $p<.001$) and held them less responsible ($t(143.28)=3.75$, $p<.001$) for these behaviors than parents of controls.

You and your child are in a grocery store. As you are picking out your shopping items, he runs back and forth down the aisles. Not paying attention to where he is going, he bumps into a display of sale items, and they crash to the ground.

1. How much of a problem did you feel the behavior was?
- 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10
Not at all Very Much
2. To what extent do you think your child’s behavior was caused by something about him versus something about other people or the situation?
- 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10
Something about the child Something about the other people/situation

Although the above findings confirm the presence of significant group differences in parent characteristics, none of these parent characteristics were significantly correlated with the PIB.

Discussion

The current findings indicate a discrepancy in child and parent ratings for inattentive and hyperactive behaviors in children with ADHD that is significantly greater than in children without ADHD. Additionally, parents of children with ADHD exhibit significantly different parent characteristics than parents of children without ADHD (e.g., more anger/frustration/upset, greater problematic/global/stable attributions for children’s behavior problems, less authoritative parenting). Despite these differences in parent characteristics, there was no relationship between these characteristics and the PIB in children with ADHD.

These results suggest that the discrepancy in child and parent reports of problematic behaviors for the PIB is child-driven, such that the locus of the discrepancy in reports of children’s behavior problems is due to the children’s under-reporting.

Clinical Implications & Future Directions

Future research will need to determine which child-driven mechanisms (i.e., cognitive immaturity, ignorance of incompetence, self-protection) contribute to children with ADHD under-reporting their behavior problems. If children with ADHD indeed are under-reporting due to self-protection, as Owens and colleagues suggest (2007), this may impact how clinicians approach treatment with children with ADHD. Practitioners may wish to increase level of awareness for behavior problems to help change these behaviors. However, increasing awareness may potentially harm self-esteem, indicating that treatment may need to be approached more sensitively.

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