

The Positive Illusory Bias in Adolescents with ADHD in Relation to Perceived Social Support



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Background & Objectives

Considerable research indicates that 7 to 12 year old children with ADHD underestimate their behavioural and academic problems compared to parent reports¹. This underestimation of difficulties has been termed the “positive illusory bias” (PIB)¹. Recent evidence from a small-scale study suggests that the PIB continues to be present in 13 to 17 year old male adolescents with ADHD for externalizing behavioural problems (i.e., oppositionality and ADHD symptoms)². However, it is not yet known if the PIB occurs in female adolescents with ADHD or in other domains of functioning (i.e., internalizing symptoms and learning problems). Therefore, the first objective of this study was to examine if the PIB persists in both male and female adolescents with ADHD for externalizing, internalizing, and learning problems.

The second objective of this study was to examine whether adolescents’ perceptions of social support from family and peers are negatively associated with the PIB. A leading hypothesis for the PIB is self-protection, whereby individuals underestimate their problems as a coping mechanism to protect self-esteem¹. According to this hypothesis, if individuals receive positive feedback from others, they no longer have the need to self-protect, and as a consequence have more realistic perceptions of their difficulties³. Therefore, if the self-protection hypothesis is correct, perceived social support (i.e., a form of positive feedback) from others should be negatively associated with the PIB.

Methodology

Sample:

N= 58 male and female adolescents (30 ADHD, 28 Control) between 13-18 years of age and their parents. All adolescents in the ADHD group had a previous diagnosis of ADHD.

Measures

Conners 3 Parent and Self-Report⁴: The Conners 3 are norm-referenced rating scales that are used to evaluate externalizing problems (i.e., inattention, hyperactivity-impulsivity, oppositionality, conduct) and learning problems in adolescents. Parents and adolescents completed these forms and made ratings of adolescents’ difficulties in these domains on a 4-point scale.

Achenbach Child Behavior Checklist (CBCL) and Youth Self-Report (YSR)⁵: The CBCL is a questionnaire containing statements about adolescents’ behavioural and emotional problems in various domains. Parents of adolescents rated their adolescent on how true each item was within the past 6 months on a 3-point scale. The YSR is a parallel questionnaire that adolescents completed to provide self-ratings. For this study, the Anxiety Problems and Affective Problems subscales were used to determine if adolescents have a PIB for internalizing symptoms.

Social Support Behaviors Scale (SSBS)⁶: The SSBS was used to assess adolescents’ perceptions of social support they receive from family and peers. Five modes of social support (i.e., emotional, socializing, practical assistance, financial assistance, and advice/guidance) are assessed and a total support score is computed for family and peers each.

Procedure

Participants were recruited through flyers and pamphlets distributed in the community, word of mouth, newspaper advertisements, and from a list of participants from our previous studies. Adolescents completed questionnaires in individual testing sessions at OISE/UT. Questionnaires were mailed to parents.

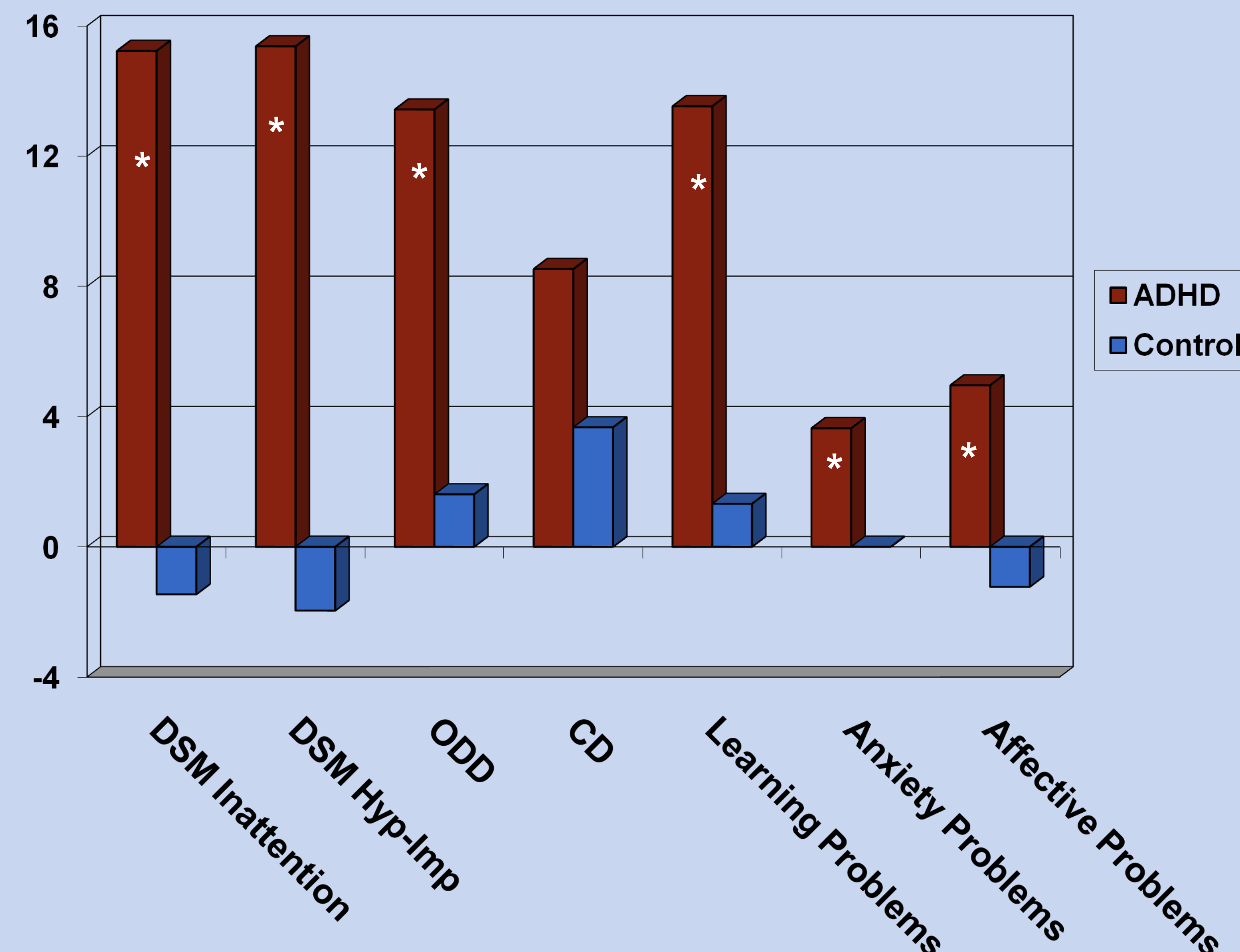
Results

Objective 1: Do Adolescents with ADHD have a PIB for Externalizing, Internalizing, & Learning Problems?

To quantify the PIB, discrepancy scores were computed by subtracting adolescent self-report ratings from parent ratings for the following subscales on the Conners 3: DSM Inattention, DSM Hyperactivity/Impulsivity, ODD, Conduct Problems, Learning Problems, and the Achenbach Anxiety Problems and Affective Problems subscales.

Independent *t*-tests indicated a significant difference between ADHD & Control parent-adolescent subscale discrepancy ratings for all subscales, $*p < .05$, with the exception of Conduct Problems. No significant gender differences emerged.

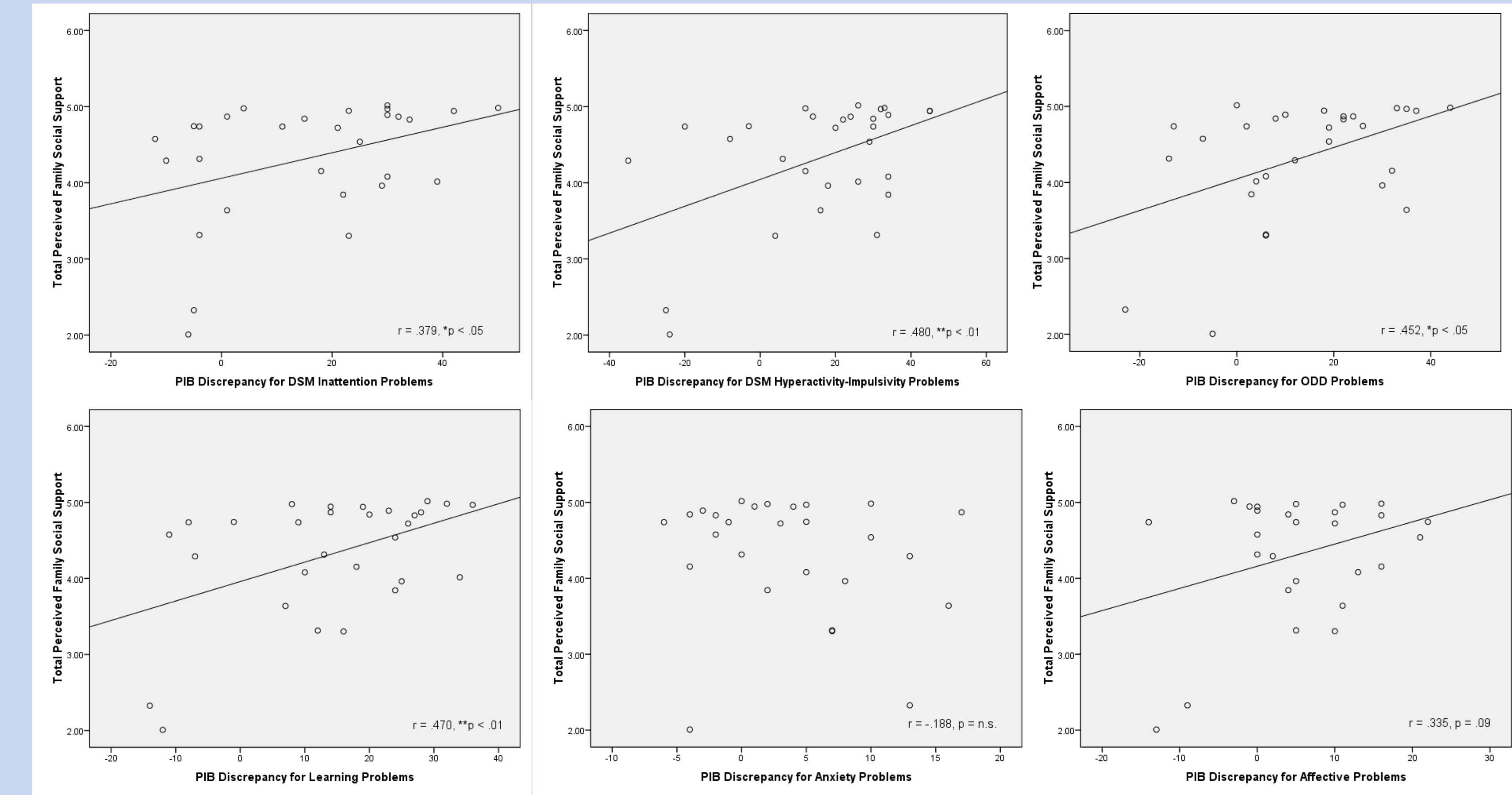
Parent-Adolescent Discrepancy Ratings



Objective 2: Is there a Negative Association between Perceived Social Support & the PIB?

Pearson’s correlations indicated significant positive correlations between perceived social support with the PIB for externalizing behaviour problems, learning problems, and approached significance for internalizing affective problems. No significant correlations emerged between total perceived peer social support and the PIB discrepancies.

Correlations between Total Perceived Familial Social Support and PIB Discrepancies



Discussion

The above results indicate that 13-18 year old male and female adolescents with ADHD have a PIB for externalizing behaviours, learning problems, and internalizing symptoms.

Significant positive correlations were found between the PIB and total perceived familial support for externalizing behaviours and learning problems. The more support adolescents with ADHD perceived from their family, the greater their PIB. Similar to the PIB, where youth underestimate their difficulties, adolescents with ADHD may inflate their perceptions of social support. Alternatively, supportive families may focus on increasing adolescents’ self-esteem while overlooking their awareness of their problems. Families may need to provide balanced support, emphasizing adolescents’ awareness of their difficulties in a supportive fashion.

The results of this study suggest that adolescents with ADHD may not be engaging in self-protection. The presence of positive feedback in the form of social support did not result in more realistic self-perceptions (i.e., a reduced PIB). Therefore, alternative hypotheses for the PIB may need to be considered.

Clinical Implications

In order for treatment to be successful, individuals typically need to be aware of their problem behaviours and recognize the need to change them. During treatment of youth with ADHD, mental health professionals may need to increase their level of awareness for externalizing behaviours, learning problems, and internalizing symptoms.

REFERENCES

- Owens, J.S., Goldfine, M.E., Evangelista, N.M., Hoza, B., Kaiser, N.M. (2007). A critical review of self-perceptions and the positive illusory bias in children with ADHD. *Clinical Child Family Psychological Review*, 10, 335-351.
- Varma A., Muradian, N., & Wiener, J. (2009, June). Do adolescent boys with attention-deficit/hyperactivity disorder (ADHD) have a positive illusory bias? In J. Wiener (Chair), Positive illusory bias in children with ADHD and learning disabilities: Development and measurement issues. Symposium conducted at the Canadian Psychological Association 70th Annual Convention, Montreal, Quebec.
- Diener, M.B., & Milich, R. (1997). Effects of positive feedback on the social interactions of boys with attention deficit hyperactivity disorder: A test of the self-protective hypothesis. *Journal of Clinical Child Psychology*, 26, 256-265.
- Conners, C.K. (2008). *Conners-3rd Edition*. Toronto, ON: Multi-Health Systems Inc.
- Achenbach, T.M. (2001). *The Child behavior checklist and youth self-report form*. Burlington, VT: ASEBA, University of Vermont.
- Vaux, A., Riedel, S., & Stewart, D. (1987). Modes of social support: The social support behaviors (SS-B) scale. *American Journal of Community Psychology*, 15, 209-237.