

# Parent and child perceptions of behaviours associated with ADHD: An investigation of the positive illusory bias

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## Background

- This study investigated the concordance between parent and child perceptions of Attention-Deficit Hyperactivity Disorder (ADHD) symptoms.
- A positive illusory bias occurs when children report fewer or less severe symptoms than their parents (Hoza, 1993).
- Research shows that children with ADHD exhibit a PBI that inflates their self-perception of competence.

## Methods

### Participants

- 127 9-15 year old children and their parents.
- 70 children with ADHD (49 males, 21 females) and 57 children without ADHD (38 males, 19 females).

### Measures

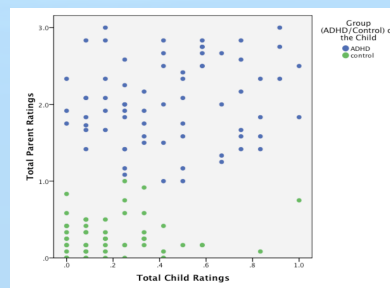
- **Conners' Parent Rating Scale (CPRS-R:L;** Conners, 1997), an 80-item questionnaire that assesses problem behaviors.
- **Dominic-R** (Valla et al., 1997), a series of 99 pictures of a unisex child named Dominic/Dominique engaging in behaviors that are symptomatic of various childhood DSM-IV mental disorders. For each picture, a statement depicting the symptoms was read to the participants, who were asked to indicate whether they behave in a similar way to Dominic/Dominique. **12 Dominic-R pictures** depicting ADHD symptoms (7 hyperactivity, 5 inattention) were selected for this study. Internal consistency was high (.833). These 12 pictures were closely **matched to 12 CPRS-R:L items** (i.e., "Like Dominic, do you often talk too much?" was matched to the CPRS-R:L item "Talks excessively"). Internal consistency of the 12 CPRS-R:L items corresponding to the ADHD problem behaviors used was high (.962)

## Results

- We created two variables: **Total Parent Ratings**, representing the means of all parent ratings on all 12 CPRS-R:L items, and **Total Child Ratings**, representing the means of all child ratings on the 12 items on the Dominic-R.
- To explore the concordance between parents' and child reports of ADHD problem behaviors a 2 X 2 repeated measures ANOVA was conducted. The parent by group (ADHD, Control) interaction effect was significant, Wilks'  $\lambda = .251$ ,  $F(1,125) = 3.73$ ,  $p < .01$ .

## Results

### Concordance between parent and child perceptions of ADHD symptoms



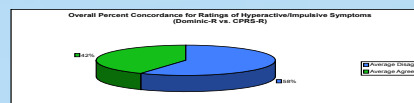
• By graphing the interaction we can see that there is a greater discrepancy between child and parent ratings in the ADHD group, which suggests that children with ADHD exhibit a positive illusory bias (PIB).

### Percent of children disagreeing with parents' ratings

- CPRS-R:L responses rated as *pretty much true* (often, quite a bit) and compared to Dominic-R responses. Results of Crosstabulations very much true (very often, very frequent) were analyses with the ADHD participants are shown separately for hyperactive/impulsive and inattentive symptoms. Each grouping contains selected CPRS-R:L items paired with the corresponding Dominic-R:

#### •Hyperactivity/Impulsive

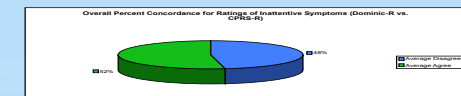
CPRS-R:L	Dominic-R	Percentage Disagreement
Item 80: Blunts out answers.	Item 4: Do you often call out the answer before the question has been completed?	80%
Item 42: Has difficulty waiting in lines.	Item 7: Is it hard for you to wait for your turn?	70.7%
Item 66: Disturbs other children.	Item 24: Do you often disturb other children when they are playing?	65.1%
Item 59: Has difficulty playing or engaging in leisure activities quietly.	Item 13: Do you have difficulty playing quietly?	58.1%
Item 76: Leaves seat in classroom or in other situation in which remaining seated is expected.	Item 20: Do you find it difficult to remain seated?	53.5%
Item 39: Talks excessively.	Item 9: Do you often talk too much?	40.4%
Item 55: Fidgets with hands or feet.	Item 10: Do you fidget with your hands or your feet?	39.6%



## Results

### Inattention

CPRS-R:L	Dominic-R	Percentage Disagreement
Item 29: Does not follow through on instructions.	Item 19: Is it hard for you follow directions?	52.5%
Item 10: Has difficulty sustaining attention in tasks or play activities.	Item 1: Is it hard for you to keep your mind in your work?	48.9%
Item 38: Inattentive, easily distracted.	Item 28: Are you easily distracted?	48.5%
Item 20: Does not seem to listen to what is being said to him/her.	Item 10: Is it hard for you to pay attention when people are talking to you?	48.3%
Item 71: Loses things necessary for tasks or activities.	Item 23: Do you often lose things?	40%



## Discussion

- There is greater parent-child (with ADHD) disagreement for the hyperactive symptoms, which suggests that the positive illusory bias seems to be more predominant for hyperactive behaviors.
- The Dominic-R is a useful tool for tapping into the PIB because the visual pictures as well as reading the items out loud to the children reduces demands on working memory and processing speed, thus improving children's self-report abilities.
- Awareness of one's own deficits serves a motivating function in behavioural treatment while inaccurate estimations of one's competence may interfere with treatment progress. Thus, a better understanding of the self-perception of children with ADHD may have important implications for the treatment of this population.

## References

Conners, K. (1997). *Conners' Rating Scales-Revised*. North Tonawanda, NY: Multi-Health Systems Inc.  
 Hoza, B., Pelham, W.E., Milich, R., Pillow, D., & McDevide, K. (1993). The self-perceptions and attributions of attention-deficit hyperactivity disorder and non-disordered boys. *Journal of Abnormal Child Psychology*, 21, 271-286.  
 Valla, J.P., Bergeron, L., Bilaud-Russel, M., St-Georges, M., & Gaudet, N. (1997). Reliability of Dominic-R: A young child mental health questionnaire combining visual and auditory stimuli. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 38, 717-724.