A School Psychology Lens to Understand Biased Self-Perceptions & ADHD

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Agenda
- Purpose & learning Objectives
  - Findings related to biased self-perceptions (aka PIB) among students with ADHD symptoms as well as how adults (parents/teachers) may observe these biases
  - Select appropriate methods to measure the presence or absence of PIB in both research and practice contexts
- Identify whether PIB may influence assessment and intervention practices
- Problem Solving Model
  - Non-traditional Vignette

NASP Practice Model: Relevant Domains
Practices That Permeate All Aspects of Service Delivery
- Data-Based Decision Making and Accountability
- Consultation and Collaboration
- Direct and Indirect Services for Children, Families, and Schools
  - Interventions and Instructional Supports to Develop Academic Skills
  - Interventions and Mental Health Services to Develop Social and Life Skills
- School-Wide Practices to Promote Learning
  - Prevention and Reparative Services
  - Family-School Collaboration
  - School-Community Collaboration
  - Data-Driven Decision Making
- Foundations of Service Delivery
  - Diversity Development and Multicultural
  - Research and Program Evaluation
  - Legal, Ethical, and Professional Practice

“He thinks he is better behaved than he is” – Ethan’s Mom

ADHD
ADHD is one of the most common reasons for a child to be referred for support services in schools.
- Affects approximately 3–7% of elementary school children (NASP, 2013)
- Characterized by persistent inattention and/or hyperactive-impulsive behavior that is developmentally inappropriate
- Typically present at an early age and can persist into adulthood (Wehr, 2001)
- Associated with functional impairment in the academic, social, and behavioral domains (Wehr, Schacht, & Barkley, 2010)

Step 1
Problem Identification
Positive Illusory Bias (PIB)

- PIB refers to a phenomenon in which children with ADHD unexpectedly provide extremely positive reports of their own competence in comparison to other criteria reflecting actual competence (Owens et al., 2007, p. 335).
- Most commonly occurs in the area of greatest impairment (Hoza et al., 2004).
- Domain specific.
- Depends on context.

Does the PIB exist?

- Research suggests that children with ADHD overestimate their functioning and competence, however...
- Not all children with ADHD demonstrate a PIB.
- Different levels of overestimation are found across domains of competence and over time (Bourchtein et al., 2017).

What Does PIB Look like in Real Life?

- "Limited Awareness" vs. "Awareness".
- "He is very articulate about problems, about his abilities, plus or minus. So he's pretty self-reflective about when he's in a situation that's challenging, how to describe what specifically is challenging." (Owens et al., 2007).

What does it look like when a child responds to evidence of impairment?

- **Discounting**
  - Makes excuses
  - Argues/Bargains
  - "Save Face"

- **Reactive**
  - Emotional
  - Frustrated
  - Gives up

- Hinders ability to problem solve, move past situations, or accurately perceive their areas of difficulty.

Step 2

Problem Analysis

Competing Hypotheses

- Two main hypotheses that have been proposed to explain the PIB and its function:
  - Self-Protective Hypothesis
  - Ignorance of Incompetence Hypothesis
  - "They don’t know what they don’t know" (Owens et al., 2007).
Self-Protective Hypothesis

When children with ADHD feel threatened by a difficult task, they:
• Try to hide their feelings of inadequacy by providing inflated reports of competence (Owens et al., 2007)
• Increase their reports of self-competence in an attempt to protect their self-esteem and prevent feelings of inadequacy (Diener & Milich, 1997)

Evidence for the Self-Protective Hypothesis

• Overestimating competence as a coping mechanism (Hoza et al., 2002, 2004)
• With external motivation, children with ADHD may be more willing to admit impairments (Hoza, Vaughan, Washburn, Murray-Close & McCabe, 2012)
• Children with ADHD inflate reports of own competence but not the competence of others (Evanglista, Owens, Golden, & Falham, 2007)
• Inflated self-perceptions of boys with ADHD in the social domain (Diener & Milich, 1997)
• When given positive feedback, children become more accurate in their ratings of competence (Ohara & Johnston, 2002)

Ignorance of Incompetence Hypothesis

Individuals overestimate self-competence because...
• They lack skill in a given domain and therefore can’t recognize deficits (Kruger & Dunning, 1999)

This hypothesis also implies that...
• Children with ADHD who show chronic and significant deficits are incompetent in multiple domains
• Children have inaccurate perceptions of their own abilities and the abilities of others

Evidence for Ignorance of Incompetence Hypothesis

• Overestimate competence in most domains of greatest deficit (Hoza et al., 2002)
• Overestimate competence even with a potent monetary motivator to match others’ ratings of competence (Hoza et al., 2012)
• Continue to indicate more positive perceptions of competence than reported by adults even when self-perceptions are measured implicitly (Smahel et al., 2013; McCubbin et al., 2010)

Lessons Learned

The level of empirical support for each hypothesis varies, more research in this area is needed!

Function of the PIB will influence the style of our interventions!

There is a range of ADHD presentations and a range of PIB presentations and the variability likely depends on a variety of factors that have not yet been identified!

Step 3

Plan Development
Assessment

Traditional Measurements
• **Absolute self-perceptions:** Comparing the self-perceptions of children with ADHD to a control group (without ADHD).
• **Pre-task prediction with post-performance ratings:** Children predict or rate their performance on a task which is then compared to their actual performance or the performance of control children.
• **Discrepancy ratings:** Comparing the actual performance of children with ADHD to objective criteria (e.g., teacher or parent ratings, standardized test score)

Owens et al., 2007

Limitations of Traditional Measurement
• Low reliability
• Ambiguous interpretation
• Ceiling/Floor Effect
• Pre-task prediction only has been researched with contrived tasks that are not relevant to the school setting
• Absolute perceptions lacks comparison to objective criteria

Multimethod and Multisource

RIOT
- **Review:** Records (medical and school)
- **Interview:** Teacher, Parent, Coach or adult mentor
- **Observation:** Classroom, home, public, extracurricular activity, specialist (art, music, gym)
- **Test:** Absolute self-perceptions, pre-task/post-performance, discrepancy ratings

ICEL
- **Instruction:** Does the instruction provide timely corrective feedback?
- **Curriculum:** Is the curriculum in the area of weakness sufficient for progress?
- **Environment:** Availability of peer comparison, ability factor, setting-like factor
- **Learner:** What is the student's point of view. What is the student's perceived ability? What is the student's impairment?

Linking School Psych Practices to assessment of the PIB
• Performance Deficit? or Skill Deficit?
• PIB in the FBA framework
• Interview multiple adults – child with a PIB has different reactions depending on who their audience is
• Observe with typical peers – can better gauge level of self-awareness with strengths and difficulties
• Observe and test in different domains – PIB is often present in one domain and not the others
• Present child with a challenging task – more likely to observe a reaction and overestimation of competence

Assessment Tools
• **Modified Impaired Self-Awareness/Denial of Disability rating scale (ISA/DD; Prigatano & Kloff, 1998)**
• **Child Self-Awareness Scale for Parents** (Feller et al., under review)
  - ISA – child does not know or understand that they have impairment
  - DO – child may have some understanding of their impairments but resists acknowledging the difficulties
• **Self-Perception Profile for Children (SPPC; Harter, 1985)**
  - Example training items
Strategies and Interventions

Prevent
- Be aware of situations that may cause behavior problems
  - Difficult tasks
  - Home setting
- Evaluate self-worth in peer comparison situations
- Involving parents in interventions for children with ADHD (Emeh & Mikami, 2012)
- Positive relationship between parent criticism and social PB in children with ADHD (Emeh & Mikami, 2012)
- Positive feedback and supportive environments are shown to increase awareness (Ohan & Johnston, 2002)
- Strategies in line with common PBS practices (e.g., clear expectations, visual prompts)

Teach
- Engage in psychoeducation surrounding ADHD
- Teach child how to “take a break”
- Naturally occurring opportunities for social referencing (school, sport teams, extracurriculars)
- Social skills or self-evaluation strategies (Flax, Pelham Jr., DelDel, Chiesa, & Ribic, 2002)

Reinforce
Existing Behavioral Strategies
- Self-monitoring with a reward for accurate monitoring
  - Structured, specific, and consistent feedback
- Think about the way feedback is presented
- Think about who presents the feedback
Interventions that address the nature of the response
- Discounting & minimizing academic tasks
- Emotional & arguing in the home setting
- General unawareness & discounting

Questions? Comments?

Step 4
Plan Evaluation

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