

Teachers and Parents as Partners: How it works for Students with ADHD

Matthew J. Gormley

Paul Dizona

4.25.2018

Agenda

- ADHD Background
- Teachers and Parents as Partners (TAPP)
- Overview of current study
- Procedures
- Results
- Key takeaways and future directions



Who has worked with or known a child with ADHD?



How many people children have ADHD?

- Most common mental health diagnosis among school-aged children
- Estimates range based on method
 - Strict Criteria:
 - 5-7% of school aged children
 - Parent reported diagnosis:
 - 9.4% ages 2-17
 - 2.4% ages 2-5
 - 9.6% ages 6-11



That is:

6.1 million nationwide

• 3,820 in LPS

- 1 or 2 students per classroom in LPS
 - LPS reported median elementary classroom has 20 students http://home.lps.org/hr/



Who is most likely to be diagnosed

- Males (at least 2x more likely)
- Children living in poverty (22% more likely)
- Children living in a rural area (30% more likely)
- African Americans (27% more likely)*
- Children with public insurance (64% more likely)
 - 2x more likely if public and private insurance
- Living in the Midwest (49% more likely)

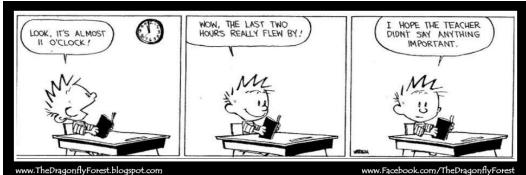


What comes to mind when thinking of a child with ADHD?











What is ADHD?

<u>Developmentally inappropriate</u> levels of inattention and/or hyperactivity/impulsivity

Inattention

- Low attention to detail
- Difficulty sustaining attention
- Does not seem to listen
- Struggles to follow through
- Disorganized
- Avoids sustained mental effort
- Looses important items
- Easily distracted
- Forgetful

Hyperactivity-Impulsivity

- Fidgets
- Leaves seat
- Runs/Climbs excessively
- Difficulty playing quietly
- Always "on the go"
- Talks excessively
- Blurts out answers
- Difficulty awaiting turn
- Interrupts/intrudes on others



ADHD – Functional Impairment

- Academic Underachievement
 - Lower grades
 - More course failure
 - Greater rates of retention
- Behavioral Difficulties
 - Office Disciplinary referrals
 - Suspensions/Expulsions
- Social Difficulties
 - Peer rejection
 - Risky health behaviors



The good news...

- We have effective treatments!
 - Psychostimulant Medications
 - Ritalin, Vyvanse, Concerta, Strattera
 - Psychosocial Interventions
 - Behavioral Parent and Teacher Training
 - Token economies, school-home notes
 - Combined treatment
 - Facilitates lower doses of both components
 - Evidence suggests behavioral interventions first

Pelham et al., 2016



The bad news...

- Intervention improvements do not last
 - Immediate with medication

- Slower with psychosocial interventions
 - Few studies look at long-term changes
 - Within ~24 months, all improvements fade away



Some more good news...

- Teachers and Parents as Partners (TAPP)
 - Evidence-based intervention
 - Recent evidence suggesting maintenance at a 1year follow up
 - However, this was not specific to students with ADHD
 - Small studies have shown TAPP is effective for students with ADHD in the short term



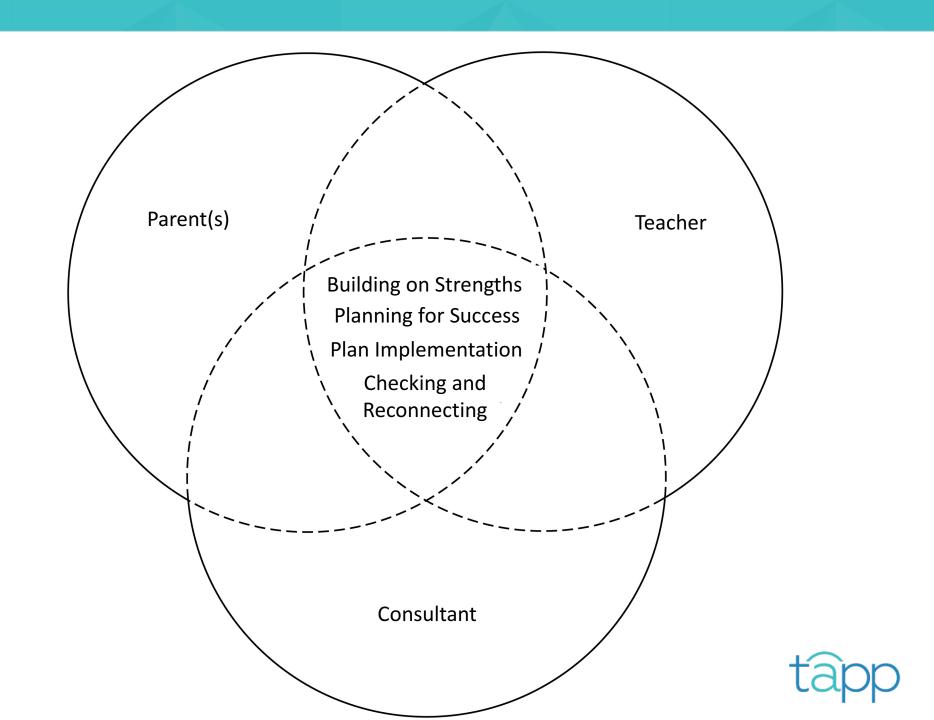
So what is TAPP?

Brief (8-12 week) strengths-based problem solving procedure

Brings together a parent, a teacher, and a consultant

 Facilitates parent-teacher partnerships to help a student succeed





TAPP Goals

- Improve communication
- Address difficulties across settings
- Promote shared ownership
- Establish (or strengthen) home-school partnerships and improve the family-school relationship
 - Mutual effort toward a shared goal
 - Fundamental philosophy, attitude, and belief that families and educators are *essential* for a child's progress



Ultimately

- Identify and define specific needs of a student at home and school
- Build on existing strengths to produce improved functioning for the student
- Plan for generalization and maintenance



In summary

- ADHD is pervasive, detrimental, and expensive
- We have treatments that work; however, effects generally do not last
- TAPP offers advantages over previous treatments, and prior work shows it has been effective for students with ADHD (in small studies), and that treatment effects persist



The current project

 Evaluate if TAPP is effective for students with ADHD using data from a large randomized control trial

 Determine if the 1-year outcomes of TAPP are any different for students with ADHD



Primary Measures

- Behavioral Assessment System for Children 2
 - Attention Problems
 - Hyperactivity
 - Behavioral Symptoms Index
- Social Skills Improvement System
 - Social Skills
 - Problem Behaviors
- Completed 4 times during the study period by parents and teachers



Outcome Variables

- ADHD Symptoms
 - BASC Attention Problems
 - BASC Hyperactivity
- Behavior Problems
 - BASC Behavioral Symptoms Index
- Social Functioning
 - SSiS Social Skills
 - SSiS Problem Behaviors



Participants

- 267 K-3rd grade students from 152 classrooms in 45 rural schools in three Midwestern states recruited over 5 years
 - 24% female
 - 6.9 years old on average
 - 86% non-Hispanic Caucasian
- Their parents
 - 90% female
 - 34 years old on average
 - 90% non-Hispanic Caucasian



Participants

- Their teachers
 - 97% female
 - 41 years old with 15 years teaching experience on average
 - 100% non-Hispanic Caucasian
- Consultants
 - 14 Master's level clinicians
 - 93% female
 - 30 years old on average
 - 100% non-Hispanic Caucasian



Design

- "Five-cohort cluster-randomized" design
- Teachers were randomized to TAPP or Treatment as Usual
 - Any student participant (up to 3 per classroom) would be in the same group as their teacher
- Four assessment points
 - Pre-treatment (T1)
 - Post-treatment (~12 weeks later; T2)
 - Follow-up 1 (Beginning of next school year; T3)
 - Follow-up 2 (~12 months after treatment; T4)



Intervention Groups

TAPP

- Building on Strengths
 - Identify/define interfering behavior
- Planning for Success
 - Co-construct an intervention plan for home and school
- Plan Implementation
 - Do it!
- Checking and Reconnecting
 - Review progress and goals

Business as Usual

- "Traditional" school support
 - Office Referrals
 - Removal from Classroom
 - Pull-out for special education
- Parent-initiated community supports
 - Counseling
 - OT/PT



TAPP Interventions

- Collaboratively developed by parents, teachers, and consultants
- One of four types of intervention
 - Positive reinforcement/consequences
 - Attention / rewards
 - Environmental structuring & antecedent control
 - Structured prompts, precision requests
 - Skills training
 - Social skills training / behavioral rehearsal
 - Reductive techniques
 - Removing privileges



Data Analysis

- "Repeated measures multilevel piecewise growth model"
 - SAS v9.4 using PROC MIXED (Snijders & Bosker, 2011)
- Controls for missing data, the time the student enrolled in the project, and nesting*
 - Nesting recognizes that each student is unique, as is every classroom

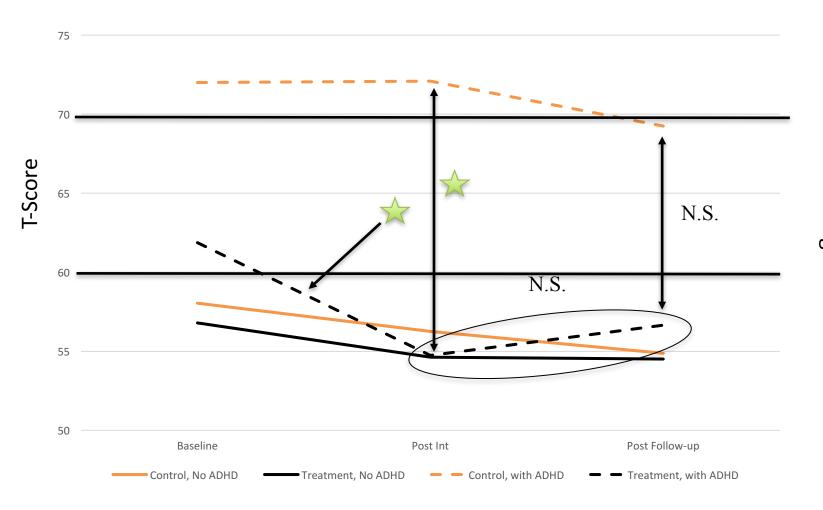


Results

- ADHD Status
 - 22% of this sample met research criteria for ADHD
 - Clinically significant parent AND teacher ratings on the BASC Hyperactivity and/or Attention Problems
- Significant Differences for parent rated:
 - Behavioral Symptoms Index
 - Hyperactivity



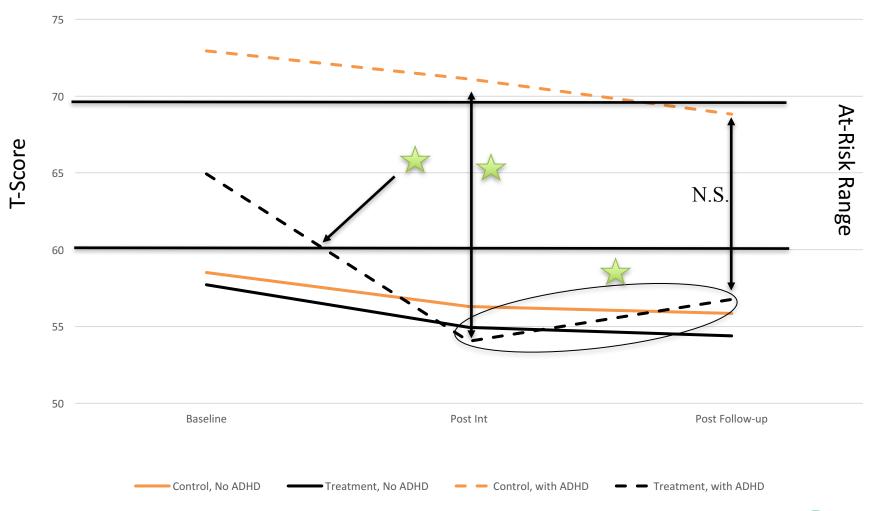
Behavioral Symptoms Index





At-Risk Range

Hyperactivity





Key Takeaways

- TAPP is effective for young students with ADHD
 - Core symptom of ADHD
 - Behavioral Functioning

 Unfortunately, the effect of TAPP does not persist for students with ADHD over a 12month period



Key Takeaways

 This finding is in line with previous literature looking at maintenance of treatment gains

ADHD is chronic and pervasive

- One-time intervention is likely insufficient
 - At least the interventions we currently have



Limitations

- Underpowered
 - Only 46 students with ADHD to compare
- Students were not formally assessed for ADHD
- Did not find changes for teacher ratings



Future Directions

- TAPP-Vertical
 - Maintain and transfer the parent-teacher partnership across grade-level (vertical) transitions
 - Provide consistent (but flexible) support over time
 - Ensure intervention is developmentally matched to the needs of the student
 - Considering the chronic nature of ADHD, programing for increasing participation as the student ages
 - Keeping the ultimate goal in mind



Thank you!

Questions?

