



# **Outline**

• The Challenge - ADHD in the Schools

• Phase 1 – Development & Usability

• Phase 2 – Pilot Study

Phase 3 - Randomized Controlled Trial

• Take Home Message & Future Plans

The Challenge –

ADHD in Schools



## **ADHD** in the Schools

- Highly prevalent disorder (~3-5% of school-aged children are diagnosed with ADHD)
- ADHD results in poor outcomes, especially in school (e.g., grade failure, special education placement, impaired achievement, lower educational attainment)
- Effective school interventions exist but are not being delivered knowledge to practice gap

#### Why?

 Teachers are not trained in these interventions during their teacher training AND have limited PD opportunities to develop these skills once teaching

# Why an Internet Intervention?

- Limited opportunities and time available for teachers to learn strategies
- Limited capacity within schools to support teachers implementing these interventions
- Ability to reach a large audience in a timely manner



### Phase 1

Developing the Teacher
Help for ADHD Online
Intervention & Usability
Testing



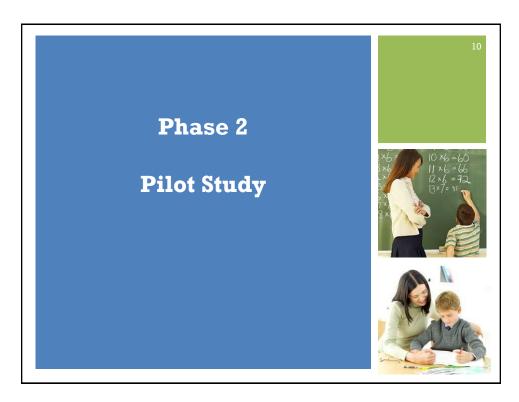


# Intervention Development & Usability

- Intervention strategies developed based on empirical literature, best clinical practice and Theory of Reasoned Action
- Platform Blackboard Learning System
- Intervention features (psychoeducation, CBT, BT, MI)
  - Introductory videos by investigators
  - Powerpoint presentations
  - Worksheets
  - Supplemental materials
  - Discussion board
- Usability Program (content and delivery) was reviewed by key stakeholders (e.g., ADHD experts, student services personnel, teachers) and feedback was incorporated

# **Intervention Sessions**

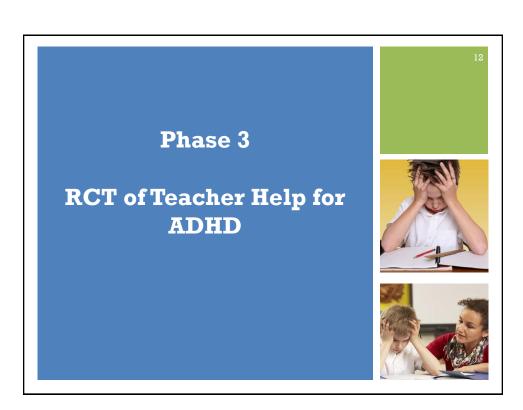
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- Session 1: Information about ADHD, impact, diagnosis, etiology
- <u>Session 2</u>: Teacher's role, goal setting, introducing behaviour program
- Session 3: Developing and implementing behaviour program
- Session 4: Classroom structure, school work, teacher-student relationship
- Session 5: Academic and cognitive needs, instructional interventions,
   ADHD and learning disabilities
- Session 6: Improving meta-cognition, study skills, and social skills; fading the reward program, dealing with relapses of unwanted behaviours, and rewarding teachers and students for their efforts



# **Pilot Study**

- 20 teachers, grades 1-6
- Evaluated mechanisms of change- as per Theory of Reasoned Action
  - ADHD knowledge
  - Attitudes (e.g., perceived competence)
  - Behaviour
- Satisfaction ratings
  - Highly satisfied with the intervention
  - Moderately satisfied with the discussion board
- Constructive feedback
  - Requested the addition of coach support for future versions of the intervention
- Feedback was used to revise the Teacher Help for ADHD intervention

Barnett, B, Corkum, P., & Elik, N. (2011). A Web-Based Intervention for Elementary School Teachers of Students with ADHD. Psychological Service



# **Intervention Components**



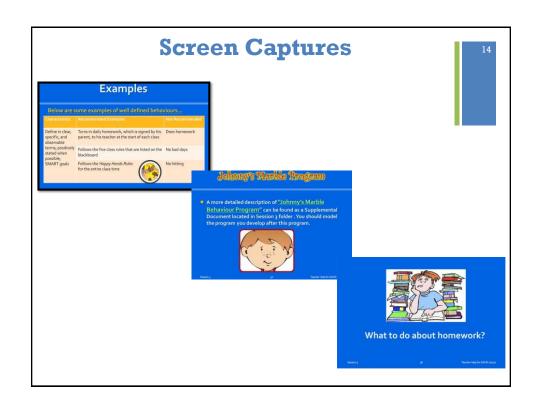
#### **Core Components**

- Power points
- Worksheets

#### **Additional Components**

- Supplemental Materials
- Discussion board
- ADHD Coach





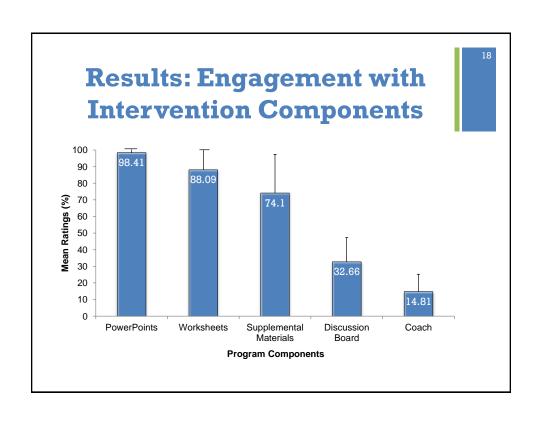
- 58 grade 1-6 students with ADHD, along with their classroom teachers and parents, were recruited from 7 public school boards in Nova Scotia, Canada
- 3 teachers left the study after pre-intervention measures were collected for reasons unrelated to the study; an additional 3 teachers did not complete post-intervention and/or follow-up data
- 90% completion rate
- Final analyzed sample consisted of 52 teachers (24 treatment & 28 waitlist control). Groups did not differ on relevant demographic variables or on baseline characteristics

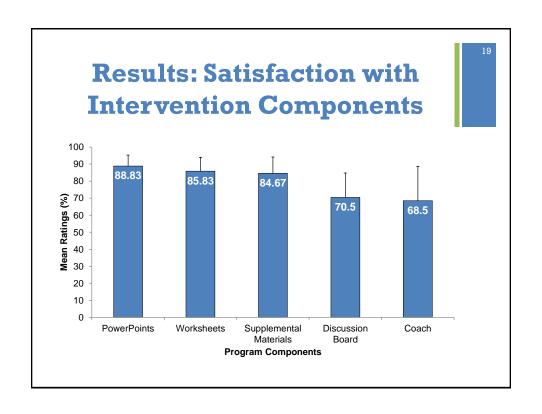
# **Outcome Measures**

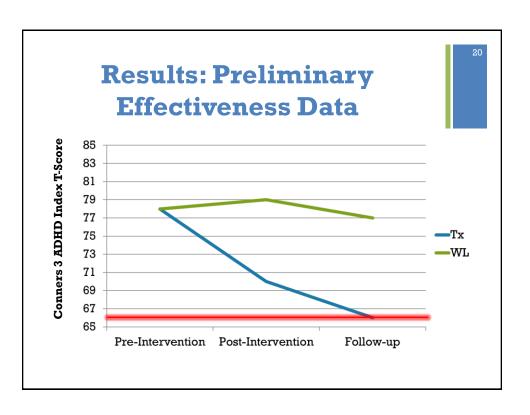
- Conners 3<sup>rd</sup> Edition Teacher Rating Scale ADHD Index Scale
  - 10 most discriminating items pertaining to ADHD symptoms
  - 4-point Likert scale from "not true at all" to "very much true"
- Teacher Satisfaction Rating
  - 6-point Likert scale ranging from "strongly disagree" to "strongly agree" (e.g., "The information provided in the PowerPoint Presentation was useful")
- Adherence Measure
  - (e.g., "What percentage of the previous session's Worksheets did you work through?")

## **Procedures**

- Pre-Intervention
  - Teachers randomly assigned to Treatment or Waitlist Control condition
  - Demographic questionnaire & Conners 3 ADHD Index-Teacher form completed by both groups prior to intervention
- Intervention
  - Intervention program consisted of 6 weekly sessions, all completed via a password-protected site hosted on secure university server
- Post-Intervention (6 weeks) and Follow-Up (12 weeks)
  - Satisfaction, adherence and ADHD symptom measures completed by both groups







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# Take Home Message & Future Directions

#### ■ Take Home Message

The online intervention is an effective and feasible way to train teachers to use evidence-based treatments to reduce the symptoms and impact of ADHD in the classroom

#### ■ Future Directions

- Working with school boards in NS to have this as an ongoing PD opportunity for teachers
- Looking into expanding to other provinces
- Currently developing an online Teacher Help for Learning Disabilities program



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