Introduction

Sluggish Cognitive Tempo (SCT) is characterized by behaviors associated with pathological inattention, physical underarousal and slowed thinking often seen in children with Attention Deficit/Hyperactivity Disorder (ADHD) (Becker, et al., 2016).

There is increasing evidence that SCT makes up a separate set of symptom dimensions than any other DSM-5 diagnosis indicating that it leads to its own set of impairments separate from ADHD and all the subtypes (Barley, 2013).

Increasing evidence suggests SCT symptoms in children with ADHD are associated with lower academic achievement (Tamm, et al., 2016).

It has been found that parents and teachers view the relationship between SCT impairments and academic functioning differently, thus examining this further is important (Watabe, et al., 2013).

Objective: To determine if SCT related impairments are related to children’s ability to complete academic work and succeed in an academic environment.

Methods

Participants

Sixty-four children, their parents and teachers

Ages: 6-13 years old

Sex: 17.2% Female, 82.8% Male

All child participants attend a school-based behavioral health program for children with ADHD.

Measures


Three items from the SWAN, thought to measure cognitive tempo were selected to derive an SCT index score; “challenges in completing tasks,” and “difficulties in engaging in goal-directed activities.”

Academic achievement for the child participants was measured using the Wide Range Achievement Test, fourth edition (WRAT4) (Willson, et al., 2006).

Procedures

Parent and Teacher ratings using the SWAN were completed.

Thirty-three of the child participants completed the self-report SWAN in a group setting.

The WRAT4 was administered by trained staff to participants in small groups for older children, and individually for young children.

SCT items from the SWAN for each rater (child, parent, teacher); were calculated. Those with an average score of one or more from the SCT subscale were identified as ‘at-risk’ for SCT.

Mean SCT scores for each rater were correlated with mean academic achievement across four domains: Reading, Sentence Completion, Spelling, and Math.

Teacher ratings of the SCT index were strongly and negatively correlated with all measures on the WRAT4, indicating that children with lower academic achievement are perceived by their teachers to also demonstrate greater impairment from SCT symptoms with small to medium effect sizes. (Reading: r = -0.377, p < 0.002; Sentence Completion: r = -0.380, p < 0.002; Spelling: r = -0.292, p < 0.019; Math: r = -0.378, p < 0.002.)

Parent ratings on the SCT index were not significantly correlated with any area of academic achievement. Reading: r = -0.018, p = 0.889; Sentence Completion: r = -0.035, p = 0.785; Spelling: r = -0.083, p = 0.512; Math: r = -0.229, p = 0.068.)

Similarly, child self-reports of SCT symptoms did not significantly correlate with academic achievement. (Reading: r = -0.054, p = 0.765; Sentence Completion: r = -0.033, p = 0.855; Spelling: r = 0.150, p = 0.406; Math: r = -0.072, p = 0.692.)

Of interest, parent, teacher, and child self-report total SWAN did not correlate with one another. (Parent with teacher: r = 0.143, p = 0.260; Teacher with child: r = 0.247, p = 0.166; Parent with child: r = -0.215, p = 0.229.)

Introduction

Parent Versus Teacher Ratings of Sluggish Cognitive Tempo; Implications for Identifying Risk Among Children with ADHD for Poor Academic Achievement.

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Results

Teacher ratings of children's cognitive tempo may be unique predictors of risk for low academic achievement and more informative than parent and child ratings.

Considering the context in which teachers interact with children and their opportunity to observe many children, it is likely that teachers more accurately identify symptoms of SCT thought to be associated with academic problems not observed by parents in the home setting.

Teacher ratings of SCT symptoms are likely be valuable in assisting practitioners to identify risk for low academic achievement and tailoring interventions designed specifically for SCT.

Studies examining the relationship of teacher, parent, and child ratings of sluggish cognitive tempo using multiple measures and multiple methods of assessment are indicated.

There is a clear indication that children who are rated as being impaired by SCT have extra challenges on tests of academic achievement as evidenced by lower achievement than for children who were rated as not being impaired by SCT.

Future examination of the relationship between IQ scores and ratings of SCT may lead to a more in depth understanding of how SCT may uniquely impact academic functioning independent of IQ.

Results suggest teacher ratings of cognitive tempo among children with ADHD may be helpful for developing supports tailored to this unique group and the development of programs that may better prevent school attrition.

Discussion


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