Original Research

Executive Function Impairments in Children With Attention-Deficit Hyperactivity Disorder: Do They Differ Between School and Home Environments?

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Objective: The primary purpose of this study was to compare parent and teacher reports of executive function (EF), as measured by the Behavior Rating Inventory of Executive Function (BRIEF), on a sample of children who had been diagnosed with attention-deficit hyperactivity disorder (ADHD). If differences were found, the secondary purpose was to explore these differences by determining which of the 8 BRIEF scales, each representing a different EF, would best predict symptoms of ADHD by the 2 proxy reporters.

Method: We performed a secondary data analysis on the assessment information pertaining to 240 children, aged 5 to 15 years, accessing services at an urban Toronto psychiatric program specializing in ADHD. We compared parent and teacher ratings and applied logistical binary regressions to predict the probability of a child's meeting the criteria for clinically significant inattention and hyperactivity–impulsivity on the ADHD Rating Scale-IV.

Results: As expected, teachers reported more variety and severity of EF impairments than did parents. In addition, teachers used inhibition, organization of materials, and planning and organizing as predictors of ADHD symptoms, whereas parents relied predominantly on inhibition, working memory, and planning and organizing as the risk factors.

Conclusion: Consistent with the current theory, EF impairments, particularly in inhibition, appear to underlie the behavioural manifestation of ADHD. However, parents and teachers do not always agree when reporting EF impairments at home and in school. Thus information from both types of informants is essential for understanding and treating children with this disorder.

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Clinical Implications

- Given that many children with ADHD struggle with various difficulties, clinicians should routinely use the BRIEF to obtain a more comprehensive understanding of each child.
- Teachers should be regularly included in this assessment process because they are more familiar with age-appropriate expectations in the school setting and may play an important role in the early identification of EF problems not recognized by parents.

Limitations

- The generalizability of results from this clinical sample may be limited to nonclinical populations.
- The staff psychiatrists providing diagnoses were not blind to the results of the BRIEF when conducting the assessment, which affects the internal validity.
- Instrument bias may be present, given that items differ across the parent and teacher reports; however, both versions of the BRIEF measure identical constructs.

Key Words: *executive function, attention-deficit hyperactivity disorder, parent and teacher behaviour rating scales, children and adolescents*

Attention-deficit hyperactivity disorder is defined as a neurodevelopmental disorder characterized by persistent patterns of inattention and (or) hyperactivity–impulsivity accompanied by social impairment.[1] The current diagnostic classification of ADHD relies predominantly on the presence of symptoms associated with these 3 behavioural constructs. This discrete classification system, however, fails to account for many of the cognitive and affective deficits experienced by individuals with this disorder. Children diagnosed with ADHD are reported to exhibit impairments with emotional control, behaviour regulation, planning and organizing, and working memory.[2] These impairments are associated with reduced capacity in the executive system that consists of EFs. EFs are defined as a series of interrelated mental operations that govern cognitive, emotional, and behavioural functioning.[3]

Formal neuropsychological testing and clinical observations indicate support for the growing consensus that EF deficits are the primary cognitive impairment underlying ADHD.[4] The theory suggests that tasks and expectations for performance often differ across home and school environments, potentially placing different demands on a child's EFs.[2] Further, the more complicated the task, the greater the need for effective planning, organizing, monitoring, and regulating of behaviour. Across different environments, children diagnosed with ADHD display observable behavioural differences relative to their peer group.[2]

Presently, the BRIEF is the only behaviour rating scale that has been developed to explore childhood EFs in home and school environments. The BRIEF uses parent and teacher ratings to sample children's everyday executive skills.[3] Most studies using the BRIEF to examine the EFs of children diagnosed with ADHD have limited their scope to parent ratings.

Abbreviations used in this article	
ADHD	attention-deficit hyperactivity disorder
BRI	Behavioral Regulation Index
BRIEF	Behavior Rating Inventory of Executive Function
EF	executive function
GEC	Global Executive Composite
MI	Metacognition Index
OR	odds ratio
SD	standard deviation

Only 2 known studies have used both parent and teacher versions of the BRIEF to investigate EFs within an ADHD sample. Kenealy[5] found low agreement between parent and teacher ratings, with teachers reporting less EF impairment than parents. Blake-Greenberg[6] also found large discrepancies between raters in the 2 contexts and reported parent ratings to be lower. The scope of these studies did not include a comparison of the children's EFs across the 2 settings.

To elaborate on the previous findings of Kenealy[5] and Blake-Greenberg,[6] we focused on exploring EFs in the home and school settings for a population of children diagnosed with ADHD. Our objective was to contrast parent and teacher ratings on the BRIEF to understand how a child's executive functioning compared between the 2 settings. If we found differences, our secondary purpose was to explore these differences by determining which of the 8 BRIEF scales would best predict symptoms of ADHD by the 2 proxy reporters. Our primary hypothesis was that teachers would report more impairments on the BRIEF than would parents because the school environment tends to be more structured and demanding and requires more child behaviour regulations. The conditional secondary hypothesis was that teacher ratings of EFs would be better able to predict symptoms of ADHD than would parent ratings.

Method

We performed a secondary data analysis on the assessment information pertaining to children and adolescents accessing services at an urban Toronto psychiatric program specializing in ADHD. The final sample of 240 (190 boys and 50 girls) was gathered from a data file of 337 consecutive referrals to this clinic between June 2003 and May 2004. Inclusion criteria for the study consisted of meeting the DSM-IV criteria for ADHD and the receipt of parental consent for the use of secondary data. In addition, all subjects ranged between the ages of 5 and 15 years to conform to the protocol of the BRIEF and the mandate of the clinic (which services children and adolescents up to age 16 years).

Each child or adolescent attending the clinic received a psychiatric evaluation consisting of a semistructured interview and standardized rating scales. Parents and teachers completed the BRIEF before the assessment; therefore, the staff psychiatrist was not blind to the results of the BRIEF. In addition to the BRIEF, the psychiatric assessment included the ADHD Rating Scale-IV[7] and Conners' Behavior Rating Scales-Revised.[8] Following the assessment process, a diagnosis consistent with the DSM-IV was provided when applicable. Written informed consent to use the unidentifiable information for research purposes was obtained from the parent(s) during the psychosocial assessment. This study was

approved by the ethics committee of the hospital wherein the clinic is located.

The majority of this sample ($n = 151$, 63%) met the criteria for ADHD, combined type; 83 (35%), for ADHD, predominantly inattentive type; and 6 (2.5%) met criteria for ADHD, predominantly hyperactive-impulsive type. We did not exclude those with comorbid disorders from this study because it is common for children diagnosed with ADHD to have coexisting psychiatric disorders.[2] Sixty-one (25%) met the criteria for oppositional defiant disorder, and 3 (1.3%) were diagnosed with conduct disorder. Forty-three (18%) met the criteria for a learning disorder, and 17 (7%) had an anxiety disorder. Parent reports indicated that some were taking medication during the assessment process; 46 (19%) were taking methylphenidate; 6 (2.5%), dextroamphetamine; and 5 (2%), other psychotropic drugs.

The BRIEF was designed to assess EF behaviours in children and adolescents aged 5 to 18 years.[3] The parent and teacher forms each contain 86 items, which yield 8 nonoverlapping but correlated clinical scales and 2 validity scales. By circling "never," "sometimes," or "often," the raters indicate whether the youth has experienced problems over the last 6 months with a given behaviour as described in a particular item. These theoretically derived scales are as follows:

- Inhibit, which measures the ability to control impulses.
- Shift, which measures the ability to transition between tasks and mindsets.
- Emotional Control, which measures the ability to modulate emotional responses.
- Initiate, which measures the ability to begin a task or activity independently.
- Working Memory, which measures the ability to hold relevant information in mind for the purpose of completing a task.
- Plan–Organize, which measures the ability to plan ahead and organize for future events and goals.
- Organization of Materials, which measures the ability to keep workspace and materials organized.
- Monitor, which measures the ability to monitor one's behaviour and performance.

The BRIEF also provides 2 summary indices (the BRI and the MI), as well as a global score (the GEC).

Both parent and teacher forms of the BRIEF have been validated against known standardized scales related to ADHD populations.[3] To assess the concurrent validity of the BRIEF, Mahone and colleagues[9] compared the GEC with the Child Behavior Checklist ($r = 0.82$) and the ADHD Rating Scale-IV totals for inattention ($r = 0.79$) and for hyperactivity–impulsivity symptoms ($r = 0.69$). The internal consistency ranged from 0.80 to 0.98 in clinical and normative samples. Interrater agreement for parents and teachers ranged from 0.15 to 0.50 for the normative sample. The BRIEF has also demonstrated adequate stability over a 2-week period for parents ($r = 0.76$ to 0.85) and for teachers ($r = 0.83$ to 0.92).

We used SPSS Version 12.0 (SPSS Inc, Chicago, IL, 2003) to analyze all data. Differences between parent and teacher ratings were initially analyzed from the complete sample to examine the agreement between parent and teacher ratings for all the scales of the BRIEF. Our analysis included a Pearson correlation, paired-samples t tests, and a McNemar test of dependent proportions. Following these analyses, we applied logistical binary regressions to predict the probability of a child's meeting the criteria for clinical significance for ADHD (> 97th percentile) on the ADHD Rating Scale-IV,[7] using predictors including the 8 scales of the BRIEF, dichotomized into clinically elevated (T score ≥ 65) and subclinical (T score < 65) scores. Additional variables (that is, sex, age, grade levels, and medication use status) were also included in the regression equations. We used a forward stepwise regression procedure to provide the most stringent inclusion of variables into the prediction models. We fitted separate regression equations for parent and teacher ratings on the ADHD Rating Scale-IV, using at or above the 97th percentile for the target group. We ran separate regression equations for the Inattention and Hyperactivity–Impulsivity scales to conform with predictors from both parent and teacher ratings.

Results

Rater Agreement

We computed Pearson correlation coefficients to examine the agreement between parent and teacher ratings for all the scales of the BRIEF (Table 1). Consistent with Cohen's guidelines,[10] we used correlation coefficients of $r = 0.10$, $r = 0.30$, and $r = 0.50$ as thresholds to define small, medium, and large effect sizes, respectively. The correlations between parent and teacher ratings were small (overall mean $r = 0.16$). Only 4 scales (Inhibit, Shift, Emotional Control, and Plan–Organize) and the BRI reached a statistically significant level. In general, the results suggested that there was little agreement between parents and teachers in this sample when children's behaviour was rated on scales measuring EFs.

Differences Between Raters

We examined differences between the BRIEF score levels of parents and teachers, using paired-samples t tests, and observed that all differences were significant (Table 1). Compared with parents, teachers rated children as having greater problems on all the scales. The means of the teacher scores fell above the cut-off for clinically elevated scores (T score ≥ 65)

Table 1 Pearson correlations coefficients and differences between parent and teacher ratings on all the scales and indices of the BRIEF

		Parents		Teachers			
BRIEF scales	*r*	Mean	SD	Mean	SD	df	*t*
Inhibit	0.26[a]	64.12	12.90	69.42[c]	14.73	229	–4.92[b]
Shift	0.19[a]	59.01	12.68	63.48	13.68	229	–4.34[b]
Emotional Control	0.20[a]	58.54	13.32	64.79	16.22	230	–5.42[b]
Initiate	0.11	62.62	10.99	71.15[c]	11.43	229	–8.95[b]
Working Memory	0.17	68.94[c]	10.36	74.60[c]	12.91	230	–5.86[b]
Plan–Organize	0.27[a]	68.66[c]	11.04	71.96[c]	12.22	226	–3.76[b]
Organization of Materials	0.12	58.32	10.20	71.82[c]	18.10	230	–10.37[b]
Monitor	0.09	63.88	11.18	72.63[c]	12.39	230	–8.50[b]
BRI	0.18[a]	62.28	12.72	67.98[c]	14.14	230	–5.36[b]
MI	0.13	67.49[c]	10.37	74.79[c]	12.47	229	–7.48[b]
GEC	0.09	66.80[c]	10.83	74.03[c]	12.56	229	–7.32[b]

[a] $P < 0.01$

[b] $P < 0.001$

[c] Means are considered clinically elevated.

on all the scales except for the Shift and Emotional Control scale. Conversely, the means of the parent scores fell below the clinical cut-off on all the scales except for the Working Memory and the Plan–Organize scales. (The means considered clinically elevated are noted in Table 1.)

We also examined differences between parent and teacher ratings by dividing the scores into 2 categories based on the clinical cut-off. A *T* score of 65 is the point that represents 1.5 SDs above the mean, which is the recommended cut-off for a clinically elevated score.[3] We used a McNemar test of dependent proportions to determine whether parents and teachers differed significantly in placing children into the clinically elevated category (*T* score ≥ 65). We found statistically significant differences on all scales and indices, except for the Plan–Organize scale (Table 2). Teachers rated significantly more children above the clinical cut-off than did parents.

Predicting ADHD Symptoms From Parent and Teacher Ratings

Using logistic regression, we produced 4 separate models to predict the probability of a child's meeting the criteria for clinical significance for ADHD. Table 3 presents the ORs for all 4 models. The first model pertaining to parent-reported variables revealed that the EFs of inhibition, working memory, and planning–organizing, as well as the sex of the child, accounted for 52.9% ($r^2 = 0.529$) of the variance associated with clinical levels of inattention symptoms, as measured by the parent form of the ADHD Rating Scale-IV. A sensitivity level of 90.7% was recorded, indicating that parent-reported variables correctly predicted clinical cases of inattention (the target group) in the vast majority of cases. The specificity of this model was lower, indicating that parent-reported variables correctly identified nonclinical cases with an accuracy of 65.4%. The overall predictive ability of parent-reported variables for clinical inattention was 81.4%.

The second model explored the ability of parent-reported variables to predict clinical levels of hyperactivity–impulsivity. In this model, the EF of inhibition along with age and sex variables explained 49.7% ($r^2 = 0.497$) of the presence of a clinical level of hyperactivity–impulsivity symptoms. This model had a sensitivity level of 82.7%, a specificity level of 72.6%, and an overall predictive ability of 77.4%.

Teacher-reported variables predicting the clinical level of inattention composed the third logistic regression model. Results from this model showed that the EFs of organization of materials and planning–organizing along with the grade level of the child accounted for 28.7% ($r^2 = 0.287$) of the variance associated with clinical levels of inattention symptoms within the school setting. A very low sensitivity level of 46.3% was reported, indicating that teacher variables correctly identified clinical cases of inattention (the target group) in just under one-half of the cases. The specificity of this model was much better, predicting nonclinical cases 90.5% of the time. The overall predictive power of this model was 76.6%.

The fourth regression model revealed that the EFs of inhibition and organization of material along with the child's

Table 2 Percentage of ratings above the clinical cut-off for parent and teacher forms

BRIEF scales	Parents % ≥ 65	Teachers % ≥ 65	χ^2	*P*
Inhibit	47	61	10.56	0.01
Shift	29	43	11.23	0.01
Emotional Control	30	46	13.61	0.001
Initiate	49	70	20.04	0.001
Working Memory	68	79	7.11	0.01
Plan–Organize	67	75	3.56	ns
Organization of Materials	36	63	29.80	0.001
Monitor	52	73	21.24	0.001
BRI	42	56	9.09	0.01
MI	66	80	10.92	0.01
GEC	60	75	10.14	0.01

Table 3 ORs for final models related to parent and teacher reports of clinical levels of inattention and hyperactivity–impulsivity

	Parent reports		Teacher reports	
Predictors	Inattention	Hyperactive–impulsive	Inattention	Hyperactive–impulsive
BRIEF scales				
Inhibit	3.27 ($P = 0.003$)	19.62 ($P < 0.001$)	ns	28.54 ($P < 0.001$)
Shift	ns	ns	ns	ns
Emotional Control	ns	ns	ns	ns
Initiate	ns	ns	ns	ns
Working Memory	5.95 ($P < 0.001$)	ns	ns	ns
Plan–Organize	6.07 ($P < 0.001$)	ns	4.04 ($P = 0.01$)	ns
Organization of Materials	ns	ns	6.13 ($P < 0.001$)	2.42 ($P = 0.05$)
Monitor	ns	ns	ns	ns
Sex	0.282 ($P = 0.02$)	0.152 ($P < 0.001$)	ns	ns
School grade	ns	ns	0.827 ($P = 0.005$)	ns
Age	ns	0.877 ($P = 0.05$)	ns	ns
Medication	ns	ns	ns	0.327 ($P = 0.03$)

medication use status explained 41.2% ($r^2 = 0.412$) of the clinical level of hyperactivity–impulsivity symptoms within the school environment. Results showed a sensitivity level of 76.3%, a specificity rate of 77.4%, and an overall prediction rate of 77.1% for this final teacher-reported model.

Discussion

This investigation examined executive functioning in home and school settings by means of parent and teacher reports for a sample of children diagnosed with ADHD. We used the BRIEF to define and measure EFs in this study. The major findings were that teachers reported greater levels of EF impairment, compared with parents, and that key EF deficits were risk factors for ADHD.

Consistent with our hypothesis, teachers reported more variety and severity of EF impairments and identified more children as displaying clinically significant levels of EF deficits. In fact, teachers reported higher levels of EF impairments across all scales of the BRIEF. These results suggest either that teachers may be better able than parents to identify EF deficits in children with ADHD or that children with ADHD

may be experiencing more difficulties with their executive functioning at school than at home.

Despite the greater ability of teachers to identify various EF deficits in children with ADHD, our findings suggest that teachers consider only impairments in inhibition, planning and organizing, and organization of materials as risk factors for ADHD. Specifically, a deficit in inhibition, as reported by teachers, was found to be the single greatest risk factor. The teacher-reported presence of impairments in inhibition within the school environment was associated with an almost 30 times greater likelihood that a child would be reported as having clinically significant symptoms of hyperactivity–impulsivity (OR 28.54; $P < 0.0005$). Parents were also found to use inhibition as their main predictor for hyperactivity–impulsivity (OR 19.62; $P < 0.0005$). Although it did not translate into a major risk factor, the organization of the child's workspace and school materials appeared to be viewed by teachers as a predictor of hyperactivity–impulsivity. The commonality of inhibition as a risk factor across home and school environments suggest that this is both the most recognizable construct and likely the defining impairment associated with ADHD. This finding supports previous work conducted by Gioia and colleagues[3] that linked the Inhibit scale of the BRIEF with hyperactivity–impulsivity symptoms as measured by the ADHD Rating Scale-IV.

Parents indicated that deficits in planning and organizing (OR 6.07; $P < 0.0005$), inhibition (OR 3.27; $P = 0.003$), and working memory (OR 5.95; $P < 0.0005$) were the key risk factors for reporting clinical levels of inattention. Teachers concurred with parents that planning and organizing was a key risk factor (OR 4.40; $P = 0.01$) for inattention but also used the child's organization of workspace and school materials as a predictor (OR 6.13; $P < 0.0005$). Although teachers were more able than parents to draw on EF deficits to correctly specify which children were not at risk for clinical levels of inattention, the statistical sensitivity of teacher reports to accurately predict clinical inattention was no better than that of chance.

Discrepancies between reporters may be the result of cross-situational differences in childrens' behaviour or of differences in raters' perceptions and expectations. The relatively low agreement does not necessarily indicate that one type of informant was providing invalid or unreliable information.[11] The findings of poor interrater agreement are consistent with many studies that have reported low-to-moderate correlations between the 2 types of raters on various behaviour rating scales assessing psychological and emotional problems.[11,12] Some studies using the BRIEF have also found low and largely nonsignificant correlations between parents and teachers for an ADHD sample[5] and moderate correlations for a normative sample.[3] Future studies may need to explore the source of these discrepancies by using an independent rater who would observe the child in the school and home settings.

The finding that teachers reported more EF impairments than did parents may suggest that teachers' training and familiarity with age-appropriate behaviour enables them to more readily recognize difficulties within the EF domain. Teachers may be better attuned to developmental changes in children and may have more opportunities to make age-appropriate comparisons. Teacher observations of ADHD symptoms have been reported to be reliable and to agree with direct observation more than do parent ratings.[13]

In addition, the school environment may be more structured and less flexible than the home environment, and school work is often novel and future-oriented. In school, the child is required to regulate and monitor his or her behaviour, plan and organize for the future, and use working memory to complete tasks and solve problems. Conversely, the home environment can be more accommodating and tolerant of deficits associated with executive functioning impairment. At home, parents are dealing with fewer children than are teachers at school; thus, they are more likely to function as the child's "frontal lobes" when necessary. Consequently, a child or adolescent with ADHD struggling with executive functioning may be more stressed in school than at home.

The general literature on behaviour rating scales does not support our finding that teachers reported more behaviour problems and ADHD symptoms than parents.[12,14] Other studies using the BRIEF have also found that parents reported more EF difficulties than teachers. For example, Kenealy[5] examined the differences between parent and teacher ratings on the BRIEF in an ADHD sample and found that teachers reported less impairment than parents. Parent ratings fell within the clinical range on all the scales, whereas teacher ratings fell below the cut-off for clinical significance. Gioia and colleagues[15] also reported higher parent ratings for their normative sample. However, a few researchers have reported opposite findings. Blake-Greenberg[6] found lower parent ratings on the BRIEF for a sample of children with and without ADHD, while Mitsis and associates[16] reported lower parent ratings of ADHD symptoms in the school setting. More studies are needed to understand the source of these differences.

Limitations

Several limitations of this study should be considered when the results are interpreted. First, generalizability may be limited because the sample was drawn from a clinical population, specifically, from a clinic specializing in ADHD. The fact that physicians referred the participants to an ADHD clinic could have biased the sample toward parents who were willing to seek help in a mental health clinic or toward behavioural

presentations of an extreme nature. Thus the results cannot be generalized to the entire ADHD population. Future research may need to examine EF processes in a community-based sample to determine whether the current results will be comparable to those for children displaying less severe impairment.

Another limitation pertains to the fact that the staff psychiatrists were not blind to the results of the BRIEF when conducting the assessment. However, ratings from this measure were unlikely to influence the diagnostic status of the current sample because the criteria for ADHD were met by using information sources consistent with current practice parameters. Please refer to the Method section for further information on assessment processes.

In addition, 18 items differ on the parent and teacher forms of the BRIEF. However, these differences are not consistent across the scales. Some scales have more items that overlap on the 2 forms than others. For example, all items in the Working Memory scale are found in both forms of the BRIEF. Conversely, only 50% of the items within the parent version of the Organization of Materials scale are found in the teacher version of this scale. The scales with the most overlap are the Working Memory, Emotional Control, and Planning–Organizing scales. The scales with the least overlap are the Organization of Materials, Initiate, and Inhibit scales. The modest overlap of items within some scales may partly explain some of the small and nonsignificant correlations found between parent and teacher ratings in this study.

Conclusions

Notwithstanding the limitations of the present study, our findings have several clinical implications and offer support for the current theory that EF impairments, particularly in inhibition,[2] underlie the behavioural manifestation of ADHD. The results also generally support the idea that EFs are impaired in ADHD populations in both the home and school environments. New studies have begun to provide evidence of EF deficits in children diagnosed with ADHD in real-world activities.[4] Although it is still unclear whether behaviour ratings and structured EF measures are related and measure the same construct, it is clear that they both identify some type of deficit associated with the EF domain in children diagnosed with ADHD.

Currently, clinical practice focuses on the 3 core symptoms of ADHD to determine a diagnosis. Our study findings support the notion that many children with ADHD struggle with EF difficulties beyond those captured by the current diagnostic criteria, both at home and in the school setting. Therefore, the use of the BRIEF along with other standardized measures is needed for assessment to obtain a more comprehensive understanding of each child suspected of having ADHD.

Moreover, our results emphasize the importance of including the teacher's report of the child's school functioning for the assessment of ADHD and of involving the school in the treatment plans. Treatment may focus on modifying the school environment to accommodate the child's needs and (or) to adjust the expectations of the teacher. Our findings also emphasize the important role teachers play in the early identification of EF problems not recognized by parents. Early identification may allow teachers and parents to implement behavioural and academic programming prior to the onset of any learning, social, or behavioural problems commonly associated with ADHD. Teacher reports can also be used to inform parents who are unaware of some of the difficulties their child might be experiencing at school and perhaps even at home. We hope the results of this study emphasize the importance of using teacher reports for clinical and research purposes. Future research may expand current findings by seeking to understand how differences between parent and teacher reports are a source of valuable information.

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Résumé : Déficiences de la fonction exécutive chez les enfants souffrant du trouble d'hyperactivité avec déficit de l'attention : diffèrent-elles entre l'école et la maison?

Objectif : Cette étude visait principalement à comparer les cotes des parents et des enseignants de la fonction exécutive (FE), mesurée par l'inventaire de comportement de la fonction exécutive (BRIEF), dans un échantillon d'enfants ayant reçu un diagnostic de trouble d'hyperactivité avec déficit de l'attention (THADA). Si des différences étaient observées, l'objectif secondaire était d'explorer ces différences en déterminant laquelle des 8 échelles de BRIEF, chacune représentant une FE différente, prédirait le mieux les symptômes du THADA par les 2 répondants par procuration.

Méthode : Nous avons effectué une analyse de données secondaire de l'information d'évaluation sur 240 enfants, de 5 à 15 ans, qui avaient recours aux services d'un programme psychiatrique urbain de Toronto spécialisé en THADA. Nous avons comparé les cotes des parents et des enseignants, et appliqué des régressions logistiques binaires pour prédire la probabilité qu'un enfant satisfasse aux critères d'inattention et d'hyperactivité-impulsivité cliniquement significatives de l'échelle IV d'évaluation du THADA.

Résultats : Comme prévu, les enseignants déclaraient plus de variété et de gravité des déficiences de FE que ne le faisaient les parents. En outre, les enseignants utilisaient l'inhibition, l'organisation du matériel, et la planification et l'organisation comme prédicteurs des symptômes de THADA, alors que les parents se fiaient surtout à l'inhibition, à la mémoire opérationnelle, et à la planification et l'organisation comme facteurs de risque.

Conclusion : Conformément à la théorie actuelle, les déficiences de FE, particulièrement de l'inhibition, semblent être à la base de la manifestation comportementale du THADA. Cependant, les parents et les enseignants ne sont pas toujours d'accord lorsqu'ils cotent les déficiences de FE à la maison et à l'école. L'information des deux types de répondants est donc essentielle pour comprendre et traiter les enfants souffrant de ce trouble.