

*Inequitable Access to Education for
Canadian Students with ADHD*



About This Paper

CADDAC, a national not-for-profit organization that provides leadership in education, awareness, and advocacy for Attention Deficit Hyperactivity Disorder (ADHD) organizations and individuals with ADHD across Canada, has developed this white paper to bring attention to the current inequities that exist for students with ADHD when accessing education across Canada.

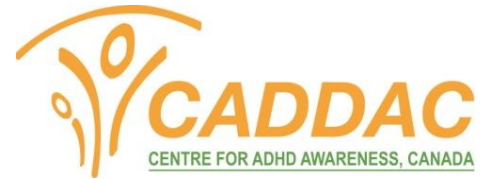
Within this paper, we include examples of inequities that have come to our attention through our continuous contact with parents, educational advocates, medical professionals, and educators. Unfortunately, these examples have changed little over the last twenty years of CADDAC's advocacy work on these issues with Ministries of Education.

It is our sincere hope that this paper will not only increase awareness of the current inequities, but also give parents and students the strength to not only continue, but increase their efforts, for equal access to education services for those with ADHD in order to bring about change.

This paper may be freely shared under a creative commons licence that allows for free distribution with restrictions on commercial use, modification or removal of CADDAC's name or logo.

© CADDAC 2017





Summary of the Existing Situation:

- At least five percent of the Canadian student population suffer from Attention Deficit Hyperactivity Disorder (ADHD), a neurodevelopmental disorder and the most common childhood psychiatric disorder.
- ADHD significantly impairs learning.
- Unlike the United States, the Canadian government does not document the obligation of schools to provide students with Attention Deficit Hyperactivity Disorder (ADHD) the right to an equal educational opportunity.
- This has allowed ministries of education and school boards to develop policies leading to inequitable access to education for students with ADHD.
- Most often educators receive superficial, inadequate and not medically up-to-date information on ADHD and the learning impairments that can result.
- Most educators receive inadequate training on appropriate teaching strategies and classroom accommodations for students with ADHD.
- Requiring that psycho-educational testing indicate impairment in a student with ADHD for them to be deemed disabled and receive accommodations is unreasonable, invalid and discriminatory.
- When we fail to recognize and assist students with ADHD struggling in our school systems, we squander socioeconomic capital as well as precious school resources.
- Ministry and school board systems of special education across Canada, in combination with lack of educator training, are prohibiting students with ADHD equal access to education resources to accommodate their disability.
- Canadian students with ADHD face great inconsistency and inequity when accessing education across Canadian school boards and provinces.

Asks of Government

CADDAC, Parents of Children with ADHD, and Children with ADHD are Asking the Federal and Provincial Governments to:

1. Officially recognize ADHD as a significant risk to learning and uphold these students' rights to accessible education as done in the US
2. Ensure that educators are trained in ADHD impairments and appropriate teaching methods and classroom accommodations
3. Ensure that all provincial and territorial special education systems officially acknowledge that ADHD significantly impacts learning and allow students with ADHD to be recognized as exceptional learners securing their legal right to accommodations for their disability

Inequitable Access to Education for Canadian Students with ADHD

Introduction

At least five percent of the Canadian student population suffer from Attention Deficit Hyperactivity Disorder (ADHD), the most common worldwide childhood psychiatric disorder. Although ADHD is also the most common neurodevelopmental disorder that impairs Canadian students' learning, ADHD has not been officially recognized as a learning risk by Ministries of Education and the Canadian government. Unlike the [United Statesⁱ](#), the Canadian government has not documented the obligation of schools to provide students with ADHD the right to an equal educational opportunity. This lack of formal recognition of ADHD as a significant learning risk has allowed the development of Ministry of Education and school board policies that have created a situation of inequity for students with ADHD.

ADHD Seriously Impacts Learning

If you believe that ADHD is a simple disorder of unruly, undisciplined boys, children who can't sit still, or students who lack willpower and motivation; you can't be more wrong. While most people know that ADHD impairs attention regulation, and may include hyperactivity and impulsivity, most do not understand how complex, pervasive and disabling ADHD impairments actually are. Research over the past two decades has shown that ADHD significantly impairs: processing speed; executive functioning skills which impede the acquisition of reading fluency and comprehension, written expression and mathematical problem solving; and the acquisition of learning strategies, study and organizational skills^{ii,iii,iv,v,vi,vii,viii,ix}.

Students with ADHD are at high risk for academic underachievement or failure, even without an accompanying learning disability^{x,xi,xii}. Students with ADHD suffer an 8%-10% decline in academic attainment over a 4-yr period. They are also three times more likely to drop out of high school than their peers^x. Studies indicate that ADHD impedes academic attainment and increases a student's risk of grade repetition, special education, suspension/expulsion, and lower grade point average^{xi}. Students with ADHD have fewer years of education and are less likely to attend college. This occurs despite students with ADHD having average or above average intellectual abilities and the capacity to learn.^{xiii,x} It is inattention during the elementary years that predicts long-term academic impairment^{xiv}. Although some educators incorrectly believe medication will treat all ADHD impairments, research shows that medication treatment alone does not improve many of the skills required to be academically and socially successful^{xv}. For better learning and academic outcomes to happen, specific interventions targeting learning deficits and accommodating and improving cognitive difficulties need to be implemented^{xvi}.

Factors Contributing to Inequitable Education for Students with ADHD

1. Provincial Systems of Special Education

Ministries of education across Canada use two different models, or systems, to dispense special education services to students with special needs, one of "Identification" and one of "Inclusion." To view how all provincial and territorial systems of special education meet the needs of students with ADHD, and the

grades they received from CADDAC, please access CADDAC's [2010 Provincial Report Card: ADHD in the School System](#).

The Identification Model of Special Education

Four provinces, Ontario, Quebec, British Columbia and Alberta, use a system of "Identification" which allows a student with learning impairments to be officially recognized as an exceptional learner, or pupil with exceptional learning needs. These systems use categories of exceptionality to define a student's type of learning impairment or disability. Once designated an exceptional learner, students acquire the right to special education resources. At present, three provinces, British Columbia, Ontario, and Quebec do not include ADHD under any of their categories of exceptionality. Alberta does have a code under which students with ADHD can be identified, but has started moving away from identifying students with ADHD.

Consequences of this System

When a disorder such as ADHD is not included within a category of exceptionality, students are barred from being officially recognized as exceptional learners unless they have a coexisting disorder that is listed in a category. By excluding ADHD from a category of exceptionality, ministries of education can be interpreted as saying that ADHD symptoms do not significantly impair a student's learning. Whether intentional or not, a message is being sent to school boards and educators that ADHD is not as important a risk to learning as other disorders such as learning disabilities (LDs), Autism Spectrum Disorder (ASD), other mental health disorders or physical medical disorders that are listed in categories. As a result, the special needs of these students are not taken seriously. Limited teacher training on ADHD occurs, teaching strategies and accommodations are not implemented and less information is accessible through Ministry and board resources.

Many parents are confused as to why ADHD is not categorized as a learning disability since it affects learning across all subjects. While it can be thought of as a disorder that impacts learning, it is not medically categorized or recognized as a learning disability.^{xvii} Nor is it assessed or documented in the same way as is a specific learning disability. This distinction allows students with ADHD to be excluded under LD in the communication category.

While ministries state that it is the impairment level and not a particular diagnosis that leads to identification as an exceptional learner, in reality, this is often not what is happening. CADDAC has received countless reports from parents stating that their child has been denied identification as an exceptional learner, and/or an Individualized education plan before impairments are even reviewed or quantified. The reason given is that ADHD is not under a category of exceptionality.

In addition, physicians have reported that they are being asked by parents if a diagnosis of ASD can be made rather than, or as well as, a diagnosis of ADHD. Parents are well aware that one diagnosis will lead to school resources when another will not. Although this may seem ludicrous to many and physicians would only diagnose a child if that child's symptom profile warrants a diagnosis, this clearly demonstrates the inequity that exists and the desperation of parents.

Example - Inequity of Access to Education: A mother whose eight year old has been reassessed and found to have ADHD rather than ASD as diagnosed when he was younger, refuses to inform the school because

her child's special education resources will be withdrawn despite the fact that his impairment level is the same regardless of the diagnosis.

Since [CADDAC's 2010 Provincial Report Card](#), three out of four provinces using a system of identification have made changes, or are proposing changes in how students with ADHD are recognized under their systems.

Alberta: While Alberta was the only province to receive a grade of “very good” in CADDAC’s report card, because they did have a code under which students with ADHD could be identified, the actual use of this code seems to have declined. At the time that CADDAC was researching provinces’ special education systems, Alberta shared that they were considering moving away from a system of identification and to a system of inclusion. The reason given was concern about the delay in getting services to students. Apparently, this was due to the amount of documentation required before identification could occur. Alberta did not end up transitioning to a system of inclusion. However, according to parents, medical professionals, and educators, Alberta is also not identifying students with ADHD as exceptional learners. The reason for these changes is unknown.

British Columbia: According to parents, students in BC have struggled for decades to receive accommodations for their disability through an Individual Education Plan (IEP). The reason for denial given was that ADHD was not included in a category of exceptionality. CADDAC met with the BC Ministry of Education in 2014 and 2016 to discuss these issues and ask the Ministry to include ADHD under a category. Good news may be forthcoming. The most recent draft of the new BC Ministry of Education Special Education Guidelines has added a specific category for ADHD. This will allow for the official recognition of students with ADHD as exceptional learners when learning is impaired. While not yet approved, if this change occurs, it will send an important message to educators that ADHD should be taken seriously as a risk to learning. Unfortunately, additional funds will not flow from this change, however, rights for students with ADHD will be recognized, and the hope is that training on ADHD for educators will be a result.

Quebec: The situation in Quebec has not altered since CADDAC’s provincial report card in 2010. ADHD is not included under a category of exceptionality.

Ontario: CADDAC has been advocating for ADHD to be recognized under a category of exceptionality in Ontario since our inception. As a result, an ongoing discussion has occurred with this ministry over many years. While there was some hope of movement, little has changed.

Guidelines to Special Education: While a recent Ministry of Education document, [Ontario’s Education Equity Action Plan](#), states that the province will be “making the education system fairer and more inclusive for all students by identifying and eliminating systemic barriers” and applying “an equity, inclusion and human rights perspective to internal organizational structures, policies, programs and practices” with the recent release of the Ministry’s draft of their new guidelines to special education, this does not seem to be the case for students with ADHD. The draft continues to list the same five categories of exceptionality with definitions that exclude ADHD. While the Ministry states that these categories are meant to provide only broad categories and not list all possible diagnosed disorders that could impact learning, school boards, with the Ministry’s approval, are using the category definitions to deny students with ADHD the right to be deemed exceptional learners.

Memorandum: It was hoped that a Ministry of Education memorandum released in December of 2011 [memorandum on categories of exceptionalities](#) would result in change. The memorandum informed school boards that students with ADHD could be identified as exceptional learners under any of the existing five categories of exceptionality, behaviour, intellectual, communication, physical or multiple, if impairment to learning existed. The memorandum stipulates that students with ADHD need not have a diagnosis of an LD to be recognized under the Communication (LD subcategory). However, most boards continue to insist that the full criteria (definition) for a category be met before a student can be identified. This essentially disqualifies most students with ADHD as being officially recognized as students with exceptional learning needs, unless they have an additional diagnosis such as a learning disability or Autism Spectrum Disorder.

Example - Inequity of Access to Education: *A family who has three children, one with ADHD, one with an LD and ADHD, and one with ASD, lament the fact that they are unable to receive a designation as an exceptional learner for their son with just ADHD. Both his siblings have been officially identified as exceptional learners, have an IEP, and receive special education resources, despite the fact that the son with only ADHD is more significantly impaired in his learning.*

Individual Education Plans: While the Ontario Ministry of Education states that students in Ontario may receive an IEP (an IEP is meant to describe a student's strengths and needs and define accommodations and or modifications required to address a student's exceptional learning needs or disabilities) without official recognition as an exceptional learner, there is no consistency or equity in how this occurs across Ontario boards and even within a board. It is entirely up to an individual school, often solely at the principal's discretion, whether an IEP is implemented and remains in place. CADDAC has received many calls from parents informing us that their child's principal will not consider an IEP without an official designation as an exceptional learner. However, with official recognition as an exceptional learner, a student's legal rights to special education resources become active, and an IEP becomes a legal must until the end of a student's high school career.

Example - Inequity of Access to Education: *A family has been informed that their daughter's IEP will not follow her to high school since she has had it in place for the last three years and should have learned to overcome her difficulties by now. When the parents complain that she still needs accommodations since her disability has not magically disappeared, they are told that high schools rarely implement IEPs for students with ADHD anyway.*

The Ontario Human Rights Commission: The OHRC recognizes ADHD as a disability and clearly states that the availability of educational accommodations are a student's intrinsic right as documented in the OHRC's document "[Guidelines on Accessible Education](#)". However, even though the OHRC supersedes any ministry on human rights decisions, the method used to recognize students with disabilities cannot be dictated by the Commission. Therefore, the Ministry is able to exclude ADHD from a category of exceptionality, excluding students with ADHD from being officially recognized as having a disability and having their rights secured.

Example - Human Rights Violation - *Since a 13-year-old with ADHD is not designated as an exceptional learner his impulsivity (a core symptom of his ADHD) is not taken into account when consequences are implemented for his impulsive reaction to being bullied. This results in the student being suspended for five days and barred from his grade eight class trip while the student who perpetrated the bullying was allowed to join the trip.*

Being impaired enough in Ontario: This current situation has allowed school boards to dictate which students are “impaired enough” to meet a board’s criteria as having a disability that qualifies them to receive educational accommodations. This has led to inconsistency and inequity across the province, and even within school boards. Students with similar levels of impairment may be identified as an exceptional learner in one board and denied an IEP in another board. Decisions about whether a student receives an IEP are influenced by an administrators’ knowledge level of ADHD and their understanding of how ADHD impacts a student’s ability to learn. For instance, some school boards refuse to identify a student unless he/she is at least two years behind academically, while others refuse to identify students unless behavioural issues are extreme. Other factors that determine whether a child will receive classroom accommodations are the availability of school resources, medical documentation, and the ability of the parents to advocate for their child.

Example - Inequity of Access to Education - The need for an IEP is being questioned for a ten-year-old girl because her parents have hired a tutor and work with her for hours every evening to keep her functioning just below grade level. The school states that she must be functioning two years below grade level to qualify. The parents question whether they should withdraw their supports, allowing her to get further behind so she can access resources.

The Inclusion Model of Special Education

All other provinces and territories in Canada use a system of “inclusion” This system does not officially identify students with special learning needs but simply mandates principals to meet their needs. This means that principals determine which students are demonstrating exceptional learning needs and what those needs might be. While this system could result in more students with ADHD receiving accommodations they require for their disability, **a lack of educator knowledge often prevents this from occurring.** Educators cannot be expected to easily identify a student’s invisible yet harmful impairments if they are not adequately trained to understand ADHD. Without training, educators most often flag the more annoying symptoms of ADHD, the hyperactivity and impulsivity, and miss the truly impairing symptoms of attention dysregulation and executive functioning deficits. **The result becomes a focus on behaviour control rather than recognition of specialized leaning needs.** This will be discussed in greater depth in the section on “Educator Knowledge and Training.”

Therefore for students with ADHD, the system of inclusion has also resulted in total inconsistency and equity in access to accommodations of their disability.

In addition, many provincial special education guidelines for these provinces fail to identify ADHD in their list of possible causes of learning impairment, despite the inclusion of other neurodevelopmental disorders such as LDs. This again results in a message being sent to educators that ADHD does not impair learning enough for it to be prioritized.

In summary

Both special education systems have led to little consistency or equity in how the needs of students with ADHD are recognized and met.

2. Lack of Educator Knowledge and Training

Many educators still lack adequate knowledge on ADHD and its deleterious effect on a student's learning^{xviii} even though they have at least 1 to 3 students with ADHD in their classroom every year. **Ministries of education, school boards, and some teachers' colleges have failed to keep up with current medical research on ADHD and how it impacts learning.** ADHD is now conceptualized and [classified in the DSM-5 as one of several Neurodevelopmental Disorders](#) (as learning disabilities are) and no longer as a disruptive behaviour disorder. However, many educators still perceive ADHD as a disorder of "bad behaviour." In fact, in some provinces, behaviour is the only category of exceptionality that students with only ADHD can be classified under.

Although superficial training may occur, educators rarely receive in-depth, up-to-date training on complex issues of attention regulation, executive functioning impairment, and self and emotional regulation impairment. Also, mainstream classroom teachers generally do not receive in-depth training on appropriate teaching strategies, and appropriate classroom accommodations, despite that fact that the vast majority of students with ADHD are in mainstream classrooms. Interestingly, teaching strategies that are essential for students with ADHD can also be beneficial for all students. Most students with ADHD just need educators who "get ADHD" and the impairments it causes. Simple teaching strategies and individually targeted accommodations with additional monitoring can make a huge difference to a student's academic success and mental well-being.

Research has found positive outcomes when educators are trained in ADHD

- Systematic monitoring of students with a diagnosis of ADHD or suspected ADHD can identify cognitive deficits, gaps in learning and academic difficulties early so appropriate supports can be provided ensuring that these students don't fall behind their peers^{xix}.
- When teachers are provided with information and professional development on ADHD, a marked reduction in both the child's ADHD symptoms and improved academic test scores can be observed^{xx}.
- A large-scale Australian study reported substantial improvements in core symptoms of ADHD and academic attainments following brief but intensive and focused teacher professional development^{xxi}.
- A UK study reported substantial behavioural and academic benefits from simply providing teachers with brochures containing information about ADHD and advice on effective teaching approaches^{xxii}.
- Web-based platforms have shown potential as an effective and more cost-efficient tool for providing professional development on ADHD^{xxiii,xxiv}.
- A new online professional development program for educators out of Dalhousie University, called *Teacher Help for ADHD*, is showing that providing information on ADHD and step-by-step guidance on implementing evidence-based interventions in the classroom can increase teachers' confidence in working with students with ADHD and improve teachers' ratings of students' core ADHD symptoms in a statistically significant and clinically relevant way^{xxv}.

Example - Lack of Teacher Knowledge - A teacher tells a student with ADHD who is struggling due to her executive functioning impairments that she needs to stop being lazy, grow up and take responsibility for her assignments despite the fact that no accommodations have been implemented to assist her with accomplishing this.

3. Required testing and Documentation

All current Clinical Practice Guidelines for ADHD (including the Canadian guidelines), as well as the DSM-5 diagnostic criteria for ADHD, require evidence that symptoms impair social, academic, or occupational functioning. Thus, evidence of impairment is one of the required diagnostic criteria for ADHD. Currently, there are no agreed-upon national or provincial standards for assessment and documentation to assure fair access to accommodations and services for students with ADHD. There is marked inequity across and within Canadian Provinces, with many school boards requiring similar documentation for ADHD and for Learning Disabilities: that is, they require neuropsychological or psycho-educational testing to determine the severity of ADHD and to quantify the impact of ADHD on cognitive or academic functioning. This is not a reasonable or valid requirement since few if any of the standardized tests quantify accurately the nature of the cognitive or academic impairments of ADHD. Neuropsychological assessments that test for executive function impairments have low ecological validity. Not all students with ADHD who are functionally impaired show impairment levels in test data alone on standardized psycho-educational assessments^{xxvi}.

Furthermore, if testing has been done, testing results should not be required to demonstrate below “average” functioning in anything other than attention regulation for a disability to be recognized and for the student to qualify for services and accommodations. Doing so would be discriminatory. Schools cite the need for psycho-educational testing and lengthy wait lists of two or more years as a reason to delay and bar students from being identified as exceptional learners.

Example - Inequity of Access to Education: *A school board will only officially identify a student’s learning impairments caused by ADHD if functioning is shown to be below average through psychoeducational testing.*

Additional Consequences When Students with ADHD Receive Inequitable Access to Education

Squandering Human Capital and School Resources

Without appropriate accommodations and teaching strategies in place, there is a substantial human and economic cost paid by children and their families, the education system and society as a whole.^{xxvii} When we fail to recognize and assist students with ADHD struggling in our school systems, we squander their socioeconomic human capital, but we also squander precious school resources. When the needs of students with ADHD go unrecognized and unsupported, these students do not quietly disappear into the school population. Their inattention, distractibility, hyperactivity, impulsiveness, and impairment with self-regulation can be disruptive in a classroom setting and time-consuming for teachers and administrators to deal with. Research informs us that when we focus on learning impairments, behaviour improves as well. This does not occur when we only focus on behaviour^{xxviii, xxix}. This should inform us that the behaviour of a student with ADHD is negatively impacted when their learning needs are not met. Spending time and resources reacting to student behaviours that are fuelled by a lack of resources seems insanely wasteful. If we are going to deplete school resources would they not be best spent proactively applying appropriate accommodations and proven teaching methods leading to better outcomes for all?

Increasing Mental Health Disorders in Students with ADHD

Without comprehensive knowledge of ADHD, educators often misinterpret symptoms and disabling impairments they witness as laziness, a lack of discipline or motivation, or worse yet, simple bad behaviour or defiance. It is through this lens that teachers then interact with these students. Students with ADHD can tell you what it feels like to be chastised in front of their peers for being unable to understand a list of instructions, misinterpreting or incorrectly copying down homework assignments, missing due dates, speaking without putting their hand up, or fidgeting in their seats. All of these are common symptoms of ADHD. Many parents and medical professionals strongly believe that this lack of understanding of ADHD in school systems directly impacts the mental wellbeing of students with ADHD. Many of these students face a barrage of negative messages and misplaced judgement throughout their days at school. This in turn contributes to the high rates of anxiety, depression and substance use disorder we see in adults who had childhood-onset ADHD, irrespective of whether they continue to meet full diagnostic criteria for ADHD in adulthood^{xxx,xxxi}.

Human Rights Violations

The lack of general recognition in school systems across Canada that ADHD is a medical disability which significantly impairs learning has resulted in many scenarios that can be considered human rights violations. Attempts to motivate or discipline ADHD symptoms out of a student does not lead to an increase in academic success or improvement in behaviour, but rather leads to frustration and demoralization. Punishing behaviour caused by a disabling medical impairment is not only a waste of time and energy, it is a human rights violation.

Example - Human Rights Violation: A well-meaning but uninformed teacher, attempting to motivate a child with hyperactivity to sit still, places bright green tape on the floor around the student's chair telling him that if he can keep his chair and feet within the designated boundary for the day, he will earn a reward. No accommodation such as movement breaks or fidget toys have been implemented. By sheer force of will, the child is able to stay within these boundaries for the day, by focusing all of his attention on this task rather than the teacher and his work. Upon returning home, the child explodes yelling and throwing objects. When finally calmed by his mother, he reports what occurred, his resulting feeling of shame and embarrassment in front of the other children and the taunting and bullying of his classmates that resulted at recess and lunch.

In Conclusion

Due to the lack of official recognition of ADHD - one of the most common childhood disorders to impair learning - many, if not most, students with ADHD do not receive equitable access to education. This lack of formal recognition by our federal government, ministries of education and school boards has allowed the development of ministry of education and school board policies that often bar students with ADHD from being identified as exceptional learners securing their right to special education resources. Even in provinces where formal identification is not required, students with ADHD often do not receive the resources they require because educators are not trained to identify the special learning needs of these students. Most educators in all provinces only receive superficial, out-of-date, training on ADHD and appropriate teaching strategies and classroom accommodations that these students require to succeed academically. School boards are not using current medical data to determine the most accurate way of quantifying impairments in these students, which is resulting in further inequities in the access to education.

The human capital of these students, who can learn, with many possibly going on to post-secondary institutions, is being squandered along with our precious education resources due to reactive rather than proactive implementation of those resources. In addition, the human rights of these students are often violated, sometimes even by well-meaning educators and administrators who are not sufficiently trained in ADHD.

Ministry and school board systems of special education across Canada, in combination with lack of educator training, are prohibiting students with ADHD equal access to education resources to accommodate their disability. Canadian students with ADHD face great inconsistency and inequity when accessing education across Canadian school boards and provinces.

Asks of Government

CADDAC, Parents of Children with ADHD, and Children with ADHD are asking the federal and provincial governments to:

1. Officially recognize ADHD as a significant risk to learning and uphold these students' rights to accessible education as done in the US
2. Ensure that educators are trained in ADHD impairments and appropriate teaching methods and classroom accommodations
3. Ensure that all provincial and territorial special education systems officially acknowledge that ADHD significantly impacts learning and allow students with ADHD to be recognized as exceptional learners securing their legal right to accommodations for their disability

BIBLIOGRAPHY

- i U.S. Department of Education Releases Guidance On Civil Rights of Students with ADHD, <https://www.ed.gov/news/press-releases/us-department-education-releases-guidance-civil-rights-students-adhd>
- ii Breslau J, Miller E, Breslau N, Bohnert K, Lucia V, Schweitzer J. (2009) The impact of early behavior disturbances on academic achievement in high school. *Pediatrics*. 123(6):1472-6.
- iii Loe IM, Feldman HM. (2007). Academic and educational outcomes of children with ADHD. *J Pediatr Psychol*. ;32(6):643
- iv Re AM, Pedron M, Cornoldi C.(2007). Expressive writing difficulties in children described as exhibiting ADHD symptoms. *Journal Learning Disabilities*, 40 (3): 244-255.
- v Capano L, Minden D, Chen SX, Schacher RJ, Ickowicz A.(2008).Mathematical learning disorder in school-age children with attention-deficit hyperactivity disorder. *Can J Psychiatry*.;53(6):392-9
- vi Frazier TW, Youngstrom EA, Glutting JJ, Watkins MW. (2007) ADHD and achievement: meta-analysis of the child, adolescent, and adult literatures and a concomitant study with college students. *J Learn Disabil*.40(1):49-65
- vii Volpe RJ, DuPaul GJ, DiPerna JC et al (2006). Attention Deficit Hyperactivity Disorder and Scholastic Achievement: A Model of Mediation via Academic Enablers. *School Psychology Review* 35(1): 47-61
- viii Fletcher J, Wolfe B (2008). Child mental health and human capital accumulation: The case of ADHD revisited. *J Health Economics* 27: 794-800.
- ix Mayes SD, Calhoun SL(2007). Learning, attention, writing, and processing speed in typical children and children with ADHD, autism, anxiety, depression, and oppositional-defiant disorder. *Child Neuropsychol*; 13(6):469-93.
- x Currie, Janet & Stabile, Mark, 2006. "Child mental health and human capital accumulation: The case of ADHD," *Journal of Health Economics*, Elsevier, vol. 25(6), pages 1094-1118, November.
- xi Fletcher J, Wolfe B. Child mental health and human capital accumulation: the case of ADHD revisited. *J Health Econ*. 2008 May;27(3):794-800. doi: 10.1016/j.jhealeco.2007.10.010.
- xii Frazier TW et al. ADHD and achievement: meta-analysis of the child, adolescent, and adult literatures and a concomitant study with college students. *J Learn Disabil*. 2007 Jan-Feb;40(1):49-65
- ^{xiii} Arnold, L. E., Hodgkins, P., Kahle, J., Madhoo, M., & Kewley, G. (2015). Long-Term Outcomes of ADHD Academic Achievement and Performance. *Journal of Attention Disorders*, 1087054714566076
- ^{xiv} Pingault JB et al. Childhood trajectories of inattention and hyperactivity and prediction of educational attainment in early adulthood: a 16-year longitudinal population-based study. *Am J Psychiatry*. 2011 Nov;168(11):1164-70. doi: 10.1176/appi.ajp.2011.10121732.
- ^{xv} The MTA Cooperative Group (1999). A 14-month randomized clinical trial of treatment strategies for attention-deficit/hyperactivity disorder. The MTA Cooperative Group. Multimodal Treatment Study of Children with ADHD. *Archives of General Psychiatry*, 56, 1073-1086.
- ^{xvi} Martinussen R, Tannock R, with McInnes A, Chaban P (2006). TeachADHD Teacher's Resource Manual (DVD enclosed; Website: www.teachADHD.ca). TVOntario, Toronto, Canada [www.tvontario.org/sales/teachadhd]
- ^{xvii} Association, A. (2013). *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5®)*. Washington, D.C.: American Psychiatric Publishing.
- ^{xviii} Tannock R, Martinussen R. Reconceptualizing ADHD. (2001) *Educational Leadership* ; 59(3)
- ^{xix} Jitendra AK, Dupaul GJ, Someki F, Tresco KE.(2008). Enhancing academic achievement for children with Attention-Deficit Hyperactivity Disorder: evidence from school-based intervention research. *Dev Disabil Res Rev*. 14(4):325-30.
- xx Mirande A. Effectiveness of a School-Based Multicomponent Program for the Treatment of Children with ADHD. *J Learn Disabl* 2002; 35(6):547-563
- ^{xxi} Rowe K, Pollard J, Rowe K, 2005. Literacy, behaviour and auditory processing: Does teacher professional development make a difference? Australian Council for Educational Research.
- ^{xxii} Tymms P, Merrell C. The impact of screening and advice on inattentive, hyperactive and impulsive children. *European Journal of Special Needs Education* 2006; 21(3):321-337
- ^{xxiii} Barnett B, Corkum P, Elik N (2012). A web-based intervention for elementary school teachers of students with attention-deficit hyperactivity disorder (ADHD). *Psychological Services* 9(2): 227-230
- ^{xxiv} Alloway T, Elliott J, Holmes J. The Prevalence of AD(H)D-Like Symptoms in a Community Sample. *Journal of Attention Disorders Online*, doi:10.1177/1087054709356197.

^{xxv} Corkum, P., Elik, N., Blotnick, P., McGonnell, M., & McGrath, P. (2015). Web-based Intervention for Teachers of Elementary Students with ADHD: Randomized Controlled Trial. *Journal of Attention Disorders*, 1 - 13. doi: 10.1177/1087054715603198

^{xxvi} Barkley, R. A., & Fischer, M. (2011). Predicting impairment in major life activities and occupational functioning in hyperactive children as adults: Self-reported executive function (EF) deficits versus EF tests. *Developmental Neuropsychology*, 36(2), 137-161.

^{xxvii} Matza LS, Paramore C, Prasad M. A review of the economic burden of ADHD. *Cost Effectiveness and Resource Allocation* 2005, 3:5.

^{xxviii} DuPaul G.J., Gormley M.J., Laracy S.D., School-based Interventions for Elementary School Students with ADHD, *Child Adolesc Psychiatr Clin N Am* 23 (2014) 687-697,

^{xxix} Eiraldi RB, Mautone JA, Power TJ, Strategies for implementing evidence-based psychosocial interventions for children with attention-deficit/hyperactivity disorder. *Child Adolesc Psychiatr Clin N Am*. 2012 Jan;21(1):145-59, x. doi: 10.1016/j.chc.2011.08.012

^{xxx} Barkley RA Murphy KR. Fischer M. ADHD in Adults: What the Science Says, New York Guilford Press, 2008

^{xxxi} Barbaresi WJ, Colligan RC, Weaver AL, Voigt RG, Killian JM, Katusic SK. Mortality, ADHD, and Psychosocial Adversity in Adults With Childhood ADHD: A Prospective Study. *Pediatrics*. 2013 Mar 4.