Translating Research into Action

Beth Pollock, Ph.D., C.Psych.
Clinical Director, RARC

Lunch and Learn
July 2025

Assessment Resource Centres (ARCs)

In 1997, the Ontario government created a Learning Opportunities Task Force (LOTF) to:

- investigate the status of post-secondary students with learning disabilities
- to make recommendations that would enhance access and services for students with specific learning disabilities.

The final report, submitted to the Ontario Ministry of Training, Colleges and Universities (MTCU) in 2002, contained 7 key findings and 24 recommendations. One of the key findings was that:

> *"A significant majority of the students arrived at (post-secondary) institutions with no, or at best **inadequate, diagnostic information**. As a result, students had **neither appropriate documentation nor an understanding of their own learning disabilities**. A comprehensive, up-to-date diagnostic assessment is essential for the provision of requisite supports, services, programs and accommodations for students with learning disabilities."*
>
> Learning Opportunities Task Force, 1997 to 2002, Final Report

Assessment Resource Centres (ARCs)

- Since opening in 2002, the ARCs have expanded their mandate to include students with other neurodevelopmental disorders.
- Services focus on supporting incoming and current post-secondary students with neurodevelopmental disorders to help them understand and mitigate the impact of functional impairments in an academic context.

Regional Assessment Resource Centre (RARC)

www.queensu.ca/rarc

Our vision is to enable students with neurodevelopmental disabilities to thrive in post-secondary education.

Services provided under 4 pillars:

Transition

Research

Training

Assessment

Transition Navigator Hub

- With support from the **Ontario Ministry of Education**, we're building the **Transitions Navigator Hub.**
- As a **service provider**, your experiences and insights are essential. We're looking to better understand:
  - What resources are currently supporting students with special education needs;
  - Where the gaps are in student readiness;
  - And what knowledge or tools would make the biggest impact as students choose their next steps after high school.
- **Take our quick 5-minute survey**—available in both **English and French**—to help us create meaningful, practical resources that truly support student success. You are also welcome to share this email and survey link with other colleagues and professionals who may be able to contribute.
- **As a thank you, you can enter a draw to win a $50 gift card for Uber Eats, Amazon, Starbucks, Tim Hortons, iTunes, or Google Play!**
- **Deadline: July 10, 2025- TODAY!**
- Survey on Student Transition Resources and Preparedness

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Outline

- Translating Research Into Action
  - Extended Time Accommodation Conundrum
  - Processing Speed and Timed Academic Skills
  - Impact of Disability and Accommodations on Students' Online Learning
  - Educational Accommodations for AD/HD
  - AD/HD Symptoms in Post-Secondary Students: Has the COVID-19 Pandemic Made a Difference?

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REPORT

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The Extended Time Test Accommodation Conundrum: Accessing Test Process Data to Help Improve Decision-Making

Sara E. Witmer[a], Elizabeth Barker[b], Nathalie Marinho[a] and Courtenay A. Barrett[a]

[a]Michigan State University, East Lansing, Michigan, USA; [b]NWEA, Portland, Oregon, USA

ABSTRACT

Extended time for testing is frequently recommended despite the possibility that it may have unintended negative effects. Test process data, now commonly available *via* computer-based testing programs, can offer objective information about who uses and experiences higher scores when using more than typical testing time. NWEA MAP test process data from five school districts were analyzed to identify which students deemed eligible for extended time actually used more than typical testing time, and who obtained higher test scores when using more than typical testing time. Findings indicated many eligible students did not use more than typical testing time, but many students who did use it obtained their highest test score when using it. Implications are discussed, including how IEP teams could incorporate test duration data as part of a process to better identify specific educational strengths and needs for individual students.

ARTICLE HISTORY

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KEYWORDS

Achievement testing; students with disabilities; accommodation; extended time

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Study 1- Rationale

- Despite a lack of clear guidance to inform decisions about extended time test accommodation, it remains one of the most frequently provided test accommodations.
- In theory, the accommodation should remove test irrelevant factors to allow a student to demonstrate their knowledge.
- Experts express concern that provision and use of extended test time may in fact correspond to long-term unintended negative consequences, such as:
  - unwittingly reducing expectations.
  - allowing more time to engage in ‘mind wandering.’
  - allowing student to ‘overthink’ their responses and change responses.
  - functioning as an ‘avoidance-oriented’ strategy.

Study 1- Procedure and Participants

- Used test process data, specifically information collected on the overall duration of a test without specific time limits to describe the extent to which students identified as eligible for extended time use more than the typical test time and whether they do so more commonly than students not identified as eligible for extended time.
- The dataset analyzed included a total of 51,404 test events (assessing reading and math) completed by a total of 4,797 unique student cases in grades 3–8. Of these student cases, 372 (7.8%) were students with disabilities identified as eligible for extended time.

Study 1- Results

- In reading, IEP eligibility for extended time use did not correspond to more than typical test time use. In math, IEP eligibility for extended time was identified as corresponding to a difference in time use compared to students without such eligibility; however, it was in the direction opposite than what was expected.
- In reading, those eligible for extended time who used more than the typical test time performed significantly better than those who were eligible for extended time but did not use it, though this was not consistent across tests taken. In math, there was not a significant difference in means identified.

Study 1- Conclusions

- Relatively few grade 3–8 students with disabilities deemed eligible for extended time based on their IEP were found to actually use more than a typical amount of time to complete the math and reading tests. In fact, students who were *not* eligible were ultimately more likely to take more than the typical amount of time to complete the test.
- The fact that many students eligible for extended time may not use more time raises a variety of questions for potential further exploration and consideration.

Study 1- Implications for your work

- Having data available regarding test time usage is helpful to inform student accommodation needs. If a student is not making use of extended time, do they truly not need it or does the student need to be taught strategies for making better use of time during testing?
- Using data from Test Centers regarding test performance may help in building a student's self-efficacy and help address a mistaken perception that they need more time.
- Not all assessments are the same! Ensure that extended time accommodations are tailored to address the student's unique functional impairments (FIs) and that their FIs cannot be addressed in an alternate way (computer access for handwriting challenges).

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Processing speed and timed academic skills in children with learning problems

Benjamin J. Lovett[a], Allyson G. Harrison[b], and Irene T. Armstrong[b]

[a]School Psychology, Teachers College, Columbia University, New York, New York, USA; [b]Regional Assessment and Resource Centre, Queen's University, Kingston, Canada

ABSTRACT

Information processing speed is commonly measured in intelligence and neuropsychological testing, and the scores from speed measures are considered in diagnostic and management recommendations for students with academic learning problems. However, this score usage often depends on assumptions about strong relationships between cognitive speed and the ability to perform actual academic tasks under time pressure. The primary purpose of the present study was to test the strength of these relationships empirically. In the present study, children with prior learning disability diagnoses (146 girls and 301 boys, ages 10–14 years old) completed diagnostic batteries that included measures of cognitive speed as well as timed academic skills. The relationships between the two types of measures were often modest (median $r = 0.25$), and the gap between processing speed and timed academic scores was typically approximately 1 standard deviation. The pattern of relationships suggested that superficial similarity in stimuli and task demands affected the strength of associations. These results suggest that timed academic skills cannot be reliably estimated based on processing speed scores, and there will often be significant gaps between the two. Therefore, making diagnostic judgments (e.g., learning disability diagnoses) or management recommendations (e.g., for extended time testing accommodations) should be based on more direct measures of relevant academic skills.

KEYWORDS

Academic skills; assessment; processing speed

Study 2- Rationale

- Processing speed (PS) is commonly measured in intelligence and neuropsychological testing, and the scores from speed measures are considered in diagnostic and management recommendations for students with academic learning problems.
- However, this score usage often depends on assumptions about strong relationships between cognitive speed and the ability to perform actual academic tasks under time pressure.
- The exploratory investigation aimed to determine the strength of relationships (a) among PS measures, and (b) between PS measures and timed measures of academic skills.

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Study 2- Procedures and Participants

- The participants were 447 students with diagnosed learning disabilities, aged 10 to 14 years old, from Southern Ontario.
- Students underwent a comprehensive psychoeducational assessment, including measures from the :
  - WISC (Processing Speed),
  - WJ-Cog (Cognitive Processing Speed), and/or
  - CTOPP (Naming Speed), as well as
  - WIAT (Essay Composition),
  - WJ-Ach (Sentence Reading Fluency, Sentence Writing Fluency, Math Fluency),
  - TOWRE (Sight Word and Phonemic Decoding Efficiency),
  - GORT (Reading Rate and Fluency scores), and/or
  - TOWL (Contextual Conventions- punctuation and spelling, Contextual Language- grammar and diction, and Story Construction- adequate plot, under timed conditions).

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Study 2- Results

Interpretation of the Pearson's and Spearman's correlation coefficients.

Correlation Coefficient		Dancey & Reidy (Psychology)	Quinnipiac University (Politics)	Chan YH (Medicine)
+1	−1	Perfect	Perfect	Perfect
+0.9	−0.9	Strong	Very Strong	Very Strong
+0.8	−0.8	Strong	Very Strong	Very Strong
+0.7	−0.7	Strong	Very Strong	Moderate
+0.6	−0.6	Moderate	Strong	Moderate
+0.5	−0.5	Moderate	Strong	Fair
+0.4	−0.4	Moderate	Strong	Fair
+0.3	−0.3	Weak	Moderate	Fair
+0.2	−0.2	Weak	Weak	Poor
+0.1	−0.1	Weak	Negligible	Poor

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Study 2- Results

- Correlations between measures of processing speed:
  - The intercorrelation of the two core WISC-IV subtests (r = 0.56) was similar to that of either subtest with the WJ-COG PS composite score (rs of .55 and .50), whereas all of these measures had lower correlations with the CTOPP rapid naming score (rs ranging from .23 to .40).

Study 2- Results

- Correlations between PS composite scores and timed reading scores.
  - The WISC-IV PSI had higher correlations (rs ranging from .10 to .48) with each of the timed reading scores than did the WJ PS composite score (rs ranging from .11 to .25).
  - The CTOPP rapid naming score was almost always a stronger predictor of timed reading scores (rs ranging from .34 to .54) than were either of the other PS scores.
  - The WISC and WJ PS scores had their highest correlations with the WJ Reading Fluency score, whereas the two highest correlations of the CTOPP rapid naming score were the TOWRE scores.

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Study 2- Results

- Correlations between PS composite scores and timed writing and math scores.
  - All of the correlations between the TOWL essay quality scores (by PS measures) were lower (rs ranging from .08 to .24) than those between either the WIAT Essay Composition score (rs ranging from .27 to .53) or the WJ writing fluency score (rs ranging from .37 to .51).
  - The single timed math score—the WJ math fluency score—was predicted best by the WISC-IV PSI, $r(240). = 52$, $p < .01$, followed by the WJ PS composite score, $r(245) = .44$, $p < .01$, and least well by the CTOPP rapid naming score, $r(185) = .39$, $p < .01$.

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Study 2- Results

- Using the absolute values of the differences (discrepancies) between participants' scores on various measures, the researchers calculated the mean and standard deviation of those absolute differences. The mean absolute differences were between 10 and 19 standard score points; therefore, the typical participant would show about a 1 SD difference between their scores on any two PS measures, or between their scores on a PS measure and a timed academic measure.

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Study 2- Discussion

- Overall, the study found that different abstract PS tasks correlated with each other at a median r of 0.56, but these abstract tasks correlated with rapid naming at a more modest level, median r = 0.25.
- PS composite scores showed highly variable relationships with timed academic measures, ranging from nonsignificant and negative (as low as r = -0.11) to as high as 0.54, with a median of 0.25.
- Superficially observable similarities in task demands and stimuli often appeared to account for the variability in correlations between PS and academic skill measures.
  - The highest correlation found was between rapid oral naming of unrelated letters and digits (the CTOPP Rapid Naming Composite) and rapid oral reading of a list of unrelated words (the TOWRE Sight Word Efficiency score).
  - More generally, rapid naming exhibited a stronger relationship with measures of timed reading than did PS for abstract stimuli.
  - On timed writing tasks, PS measures predicted productivity of simple sentence writing fluency best on average, followed by prediction of performance on a timed essay, followed by prediction of grammatical and literary quality of a timed fictional story.

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Study 2- Discussion

- PS scores are a very poor index of timed academic skills (e.g., they average only 6% overlap in variance), and so if a student's levels of timed academic skills are an object of interest in a clinical evaluation, they should be measured directly rather than inferred on the basis of PS scores.
- Clinicians should pay close attention to the precise features of task demands and stimuli when making inferences about relationships between diagnostic tests and real-world functioning. Academic skill measures will generally have more ecological validity (closeness to real-world academic tasks) than will PS measures, but even within those academic skills measures, some tasks will be far better than others at approximating real-world school activities.

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Study 2- Implications for your work

- No such thing as a Learning Disability in Processing Speed (or working memory or other cognitive processing weakness)!
- Scores from measures of processing speed should not be used as evidence of a functional limitation that requires an extended time accommodation.
- Look to measures of academic skill fluency to indicate the student's likely functioning in analogous assessment tasks.

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Sage Journals

Article

Exploring the Impact of Disabilities and Accommodation on Students' Online Learning Experiences

Othelia EunKyoung Lee [1] **and Stella Y. Kim** [2]

Abstract

This study investigates the correlation between how learners are classified in terms of disability and their perceptions of (1) the effectiveness of online instructional methods, (2) their self-efficacy levels, and (3) the accommodations they need. Conducted during the COVID-19 pandemic and subsequent lockdown, the study included 278 higher education students with disabilities who participated in an online survey, with 50 of them undergoing in-depth interviews. Using an embedded mixed methods design, the research aimed to explore participants' experiences with online classes. Data triangulation was employed to better comprehend the adequacy of accommodations and accessibility in online learning. The findings indicate that individuals with disabilities experience diverse benefits and challenges in online learning, influenced by their specific disability classifications and social contexts in which they engage with the learning environment. Further research is necessary to gain a more profound understanding of the challenges and opportunities faced by students with disabilities in the realm of online learning.

Study 3- Rationale

- The success of students in online learning is influenced by the flexibility it offers, as well as their self-accommodation and self-advocacy skills.
- However, barriers such as impairments, personal and situational circumstances, and the learning environment itself can still hinder online learning and retention rates.
- Terras et al. (2015) explored the experiences of graduate students with disabilities who received accommodations in online courses, categorized by their disability classifications. Interestingly, all participants appeared to self-accommodate in online courses, managing without specifically requesting accommodations. Among the learners, those with ADHD reported various challenges in the online environment, while individuals with visual impairments and chronic health conditions seemed to be least affected in the online learning environment.

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Study 3- Rationale

- Drawing from the self-efficacy theory, online learning self-efficacy refers to a learner's perception of their ability to successfully complete specific assignments in a virtual setting.
- Notably, self-efficacy in completing an online course and interacting with instructors has emerged as significant predictors of student satisfaction, academic success, and learning motivation.

Study 3- Rationale

- The specific challenges that students face within online learning environments remain poorly understood.
- Key Research questions
  - Are there any associations between students' specific types of disabilities and the following factors: (1) perceived effectiveness of online instructional methods, (2) level of self-efficacy in online learning, and (3) accommodations requested and granted?
  - What are the perceived benefits and challenges that students with disabilities encountered during online learning?

Study 3- Methods and Participants

- Mixed methods research design.
- 278 students with at least one type of disability responded to the online survey.
- Survey included:
  - Demographic questionnaire
  - Evaluation of usefulness of instructional methods for online learning
  - Assessment of the participants' online learning self-efficacy (adopted from Shen et al., 2013)
  - Information on accommodations used

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Study 3- Methods and Participants

- 50 students agreed to participate in an in-depth interview.
- To grasp the perceived benefits and challenges of online learning amid the COVID-19 pandemic, participants were posed with open-ended questions:
  - (1) What advantages do you find in taking classes online?
  - (2) What difficulties do you encounter in taking classes online?
  - (3) Please share information about the accommodation you need.

Study 3- Results

Table 1. Demographic Profiles of Students With Disability (n = 231).

	M	S.D.
Age	23.93	7.78
	N	%
Gender		
Woman	150	64.9
Man	69	29.9
Non-binary	7	3.0
Transgender	3	1.3
Race		
African American/Black	41	17.7
Asian/Pacific Islander	11	4.8
Biracial	9	3.9
Hispanic/Latinix	19	8.2
Native american/Indigenous	8	3.5
White	162	70.1
Other	3	1.3
First gen		
Yes	65	28.1
Degree program		
Undergrad	157	68.3
Masters	45	19.6
Doctorate (Ed.D. and Ph.D.)	23	10.0
Certificate	9	3.9
Others	12	5.2

	n	%
Disability		
ADHD	104	45.0
Psychological	86	37.2
Medical	62	26.8
Learning	57	24.7
Physical	15	6.5
Autism	10	4.3
Mobility	9	3.9
Hearing	9	3.9
Brain injury	9	3.9
Vision	9	3.9
Temporary disability	1	.4
Accommodation		
Additional time	182	78.8
Attendance	119	51.5
Record lectures	100	43.3
Captions	14	6.1
Class notes	78	33.8
Assistive technology	31	13.4

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Study 3- Types of Disability and Online Instruction

Table 2. T Statistics, Cohen's d, Means and Standard Deviations of Students' Ratings on Instructional Effectiveness.

	t statistics (*p*-value)	Cohen's *d*	Students with disability type – *M* (*SD*)/*n*	Students without disability type – *M* (*SD*)/*n*
Group project				
Psychological	2.234 (p = .027)	.31	3.09 (2.72)/82	4.01 (3.07)/134
Autism spectrum disorder	−2.929 (p = .004)	1.06	6.63 (2.97)/9	3.54 (2.92)/208
Online discussion				
Autism spectrum disorder	−2.252 (p = .025)	.77	7.00 (2.60)/9	4.76 (2.94)/211
Synchronous instruction				
Vision	−2.515 (p = .013)	.85	8.44 (1.74)/9	6.05 (2.84)/215

Study 3- Disability and Online Learning Self-Efficacy

- Students with ADHD and learning disabilities generally revealed a lower level of OLSE, and students with chronic medical conditions generally had a higher level of OLSE.
- Students with ADHD selected a significantly lower rating on all sub-factors, except for the third factor concerning the technological aspect of OLSE.
- Similarly, those with a learning disability reported challenges in exercising self-efficacy, except they did not face difficulties with social interactions (the second factor of the OLSE scale).

Study 3- Disabilities and Accommodations in Online Classes

Table 4. Contingency Table of Types of Disability and Types of Accommodation Granted.

	Additional test time	Assistive technology	Attendance	Captions	Supplemental class notes or PPT notes	Recorded lectures
ADHD	94 (8)	13 (89)	41 (61)	5 (97)	63 (39)	53 (49)
Psychological	73 (14)	11 (76)	57 (30)	5 (82)	46 (41)	43 (44)
Medical	46 (24)	8 (62)	61 (9)	1 (69)	37 (33)	24 (46)
Learning disability	56 (2)	18 (40)	16 (42)	7 (51)	36 (22)	34 (24)
Physical	14 (0)	2 (12)	10 (4)	0 (14)	9 (5)	4 (0)
Autism	9 (0)	2 (7)	4 (5)	1 (8)	4 (5)	4 (5)
Mobility impairment	5 (4)	2 (7)	5 (4)	0 (9)	3 (6)	4 (5)
Hearing	6 (3)	2 (7)	4 (5)	5 (4)	5 (4)	6 (3)
Traumatic brain injury	9 (0)	2 (7)	7 (2)	1 (8)	6 (3)	4 (5)
Vision	8 (1)	5 (4)	6 (3)	1 (8)	8 (1)	8 (1)
Temporary	2 (0)	0 (2)	2 (0)	0 (2)	2 (0)	0 (2)

Note. The numbers inside the parenthesis indicate the number of students who did not request or were not granted the accommodation.

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Study 3- Challenges and Opportunities with Online Learning

Table 5. Emerging Themes in the Interviews About Benefits With Online Class (n = 50).

Themes		Examples	*N*
Benefits	Accessibility	Get all course materials; class recording is very helpful	16
	Learning	Do it on my own pace; self-directed learning	10
	Instructors	Did great job transition into online; instructors are willing to help	9
	Accountability	Take responsibility for my learning	8
	Safety	Work effectively at home	9
	Time	Save commute time	5
	Communication	Get prompt answers	4
	Synchronous	Help to see everybody	3
	Instructional modality	Would not go back to f2f	2
Challenges	Motivation	Learn better in person; are less motivated online	18
	Interaction	Miss social interactions with peers and instructors	10
	Instruction	Instructors need better training to teach online: Need better accessibility for class recordings and transcript	8
	Learning	Difficult to focus	8
		Zoom fatigue	6
		Too much distraction at home	4
		Challenges for lab and STEM classes	4
		Challenges with group work	4
		Need different time management skills	3
		More test anxiety for online classes	2
	Technology	Internet connection; need more accessible LMS	2
		Need to learn about functions (recording, transcript)	2
Wish list	Instructors	Make extra effort for accessible LMS (instructional videos, office hours, check-in, breakout rooms)	10
	Instruction	Need workshop on study habits and learning styles	2
	Counseling	Need free counseling	2
	Accommodation	Unsure about accommodation in online learning	3
		Do not ask for accommodation	4
Hybrid	Instructional modality	For certain class online is better	5
		Depend on professor	2
		Prefer hybrid	4

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Study 3- Discussion

- Learners with disabilities perceived differential benefits and challenges in online learning, depending on their disability classification and social contexts in which they engage with the learning environment.
- Students with ADHD and learning disabilities require support to enhance their self-efficacy in the online learning environment.
- Conversely, individuals with chronic medical conditions excel in the virtual classroom.
- Learners facing psychological disabilities benefit from increased socioemotional support to successfully navigate group projects. The virtual setting has proven advantageous for students with ASD, fostering their active participation in online discussion forums.
- Additionally, learners with vision impairments have found synchronous class sessions to be conducive to their academic success.

Study 3- Implications for your work

- As many appropriate accommodations for various types of disability in online teaching and learning are ill-defined, instructors and administrators accustomed to only considering disability in the physical campus environment should rethink digital accessibility.
- In this age of digital transformation, more accommodations can be provided virtually, and many may be provided without explicit disclosure, merely by the nature of online instruction.
- Consider the student's disability type, those with MH, ADHD, and LD, may have specific challenges with online learning, while those with ASD, chronic physical disabilities, and visual impairments might thrive.

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REVIEW

Systematic Review: Educational Accommodations for Children and Adolescents With Attention-Deficit/ Hyperactivity Disorder

Benjamin J. Lovett, PhD, and Jason M. Nelson, PhD

Objective: Children and adolescents with attention-deficit/hyperactivity disorder (ADHD) often receive instruction and take tests using educational accommodations. This review aims to summarize and integrate the research literature on accommodations for this specific population.

Method: Electronic databases in medicine (MEDLINE), psychology (PsycINFO), and education (ERIC) were systematically searched (last update January 13, 2020), with inclusion criteria selecting any document with a focus on accommodations in educational settings or on academic tasks for children or adolescents with ADHD. The search yielded 497 unique documents. Additional searches yielded 13 more documents. Of the 510 total potentially useful documents, 68 met criteria for topical relevance and age range, to be discussed in the narrative review. The wide range of document types led to a qualitative synthesis.

Results: Accommodations are by far the most common response to ADHD in educational settings, with testing accommodations such as extended time being particularly prevalent. However, most accommodations fail to show evidence of benefits that are specific to students with ADHD, and many of the more common accommodations have few or no experimental studies supporting them. An exception is read-aloud accommodations, which have two randomized experiments finding specific benefits for younger students with ADHD. Students and those who work with them often express ambivalence and dissatisfaction over the accommodations process.

Conclusion: More empirical research is needed to examine the effects of these extremely common supports. In the absence of supportive evidence, health professionals should be hesitant to recommend accommodations immediately after a diagnosis. Even when such evidence exists, educational accommodations should only be provided along with evidence-based interventions, or after interventions have failed, as suggested by the "life course" model of managing ADHD.

Key words: ADHD, educational accommodations, school services

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Study 4- Rationale

- Systematically reviewed the research literature on educational accommodations for children and adolescents with ADHD. The goal was to integrate this information to learn:
  - when and how accommodations are being provided to this population,
  - how useful and appropriate such accommodations are,
  - and how they are perceived by stakeholders in the accommodations process.

Study 4- Method

- Literature review- Topically, the principal inclusion criteria were that a document was required (a) to have a significant focus on the topic of ADHD, (b) to specifically concern children or adolescents, and (c) to concern accommodations (or have clear, explicit implications for accommodations) in school settings or on academic tasks (including testing).
- A total of 68 documents met full inclusion criteria (31 empirical articles in peer-reviewed journals; 9 dissertation studies; 3 reports covering empirical studies by research institutes; 12 conceptual/review articles in peer reviewed journals; 9 reports from government entities or foundations; 3 chapters in edited books; and 1 authored book).

Study 4- Results

- Many studies have found that accommodations are the most common management strategy for ADHD in educational settings.
- Their frequency is high, both relative to other strategies and in an absolute sense; studies generally find that the most common accommodation—namely, extended time on tests—is provided to over 80% of students with school-recognized ADHD.
- Other very common accommodations are alterations to assignments (e.g., extended time or shorter assignments), access to a calculator for mathematics, a separate setting in which to take tests, and preferential seating (e.g., near the teacher).

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Study 4- Results

- Evidence-based interventions, such as behavior management plans, are less common than accommodations.
- For instance, in one study of a representative sample of 107 high school students with ADHD who had special education or accommodation plans, 87.9% received extended testing time accommodations, but only 24.1% had a behavior management program and only 37.1% received learning strategies or study skills assistance.

Study 4- Results

- 22 documents included information about the effectiveness of accommodations.
- 9 studies examined the effects of extended testing time.
  - On time-pressured tests, this accommodation does lead to higher test scores for students with ADHD, but it also has this effect for nondisabled students, according to studies of middle school students and high school students.
  - Few differences were found in performance on a battery of timed reading measures and instead found more evidence of making careless mistakes by students with ADHD, which would support prompts to check for mistakes rather than a simple provision of additional time.
  - Lack of an association between receiving services such as extended time and grade point average (GPA) in students with ADHD.

Study 4- Results

- 2 randomized experiments found that at least for younger children with ADHD (aged at or below 14 years), read-aloud accommodations improved performance beyond any benefit seen in nondisabled peers.
  - It may be that the presence of a 1:1 adult proctor reading test items helps to focus the student's attention; whether the benefits have to do with reading deficits or redirection is unclear, although many students with ADHD also have academic skill deficits.

Study 4- Results

- Some accommodations that have a conceptual relationship to ADHD symptoms have nonetheless failed to show significant benefits.
  - Students with ADHD completed a greater proportion of test-like worksheets when in a larger group than a smaller one.
  - Breaking assignments into smaller units failed to show any benefit for elementary and middle school students with ADHD in terms of productivity or on-task behavior.
  - Calculator accommodation failed to demonstrate any effects on performance on a conceptual/application mathematics task.

Study 4- Results

- There were 6 documents that contained information from studies examining what various stakeholders in the accommodations process think about current practices.
  - Adolescents were significantly less positive toward testing accommodations, compared to parents, teachers, health care providers, and school personnel. However, respondents from other groups expressed concerns over how testing accommodations, by physically segregating students, could lower self-esteem.
  - Approximately half of teachers and parents had wholly positive views toward an extended time accommodation, but many of each group were ambivalent, and some teachers were actively opposed. Perhaps surprisingly, students were the least positive group, with two-thirds expressing ambivalence.

Study 4- Results

- 6 documents focused on how to improve current practices.
  - A conceptual article proposed the use of functional assessment for improving the process of determining which accommodations to provide a student with ADHD.
  - An intensive small-scale study examined a training program to teach high school students with ADHD to self-advocate for needed accommodations (through practice in steps such as reporting past accommodations and their perceived efficacy), and this program was found to be effective at making the students better self-advocates.
  - 3 conceptual/review articles endorsed essentially the same approach, reserving accommodations as either (1) a temporary measure to use while trying out interventions, or (2) a final measure to use when interventions have failed.

Study 4- Discussion

- 4 key conclusions were evident:
  - First, educational accommodations are extremely common, the primary response to ADHD in schools.
  - Second, experimental studies of accommodations often fail to find any efficacy in the sense of improving students' performance, and it is even rarer that they are found to have benefits that are specific to students with ADHD. Read-aloud accommodations for younger students with ADHD emerged as the exception here.
  - Third, common accommodations have few or no experimental studies directly investigating their efficacy.
  - Fourth, surveys of students with ADHD, as well as those who work with them, have repeatedly found ambivalence and dissatisfaction about accommodations (and the accommodations process) from many stakeholders.

Study 4- Discussion

- These conclusions appear to provide additional support for the life-course model of ADHD services, in which interventions and other strategies are first attempted, and accommodations are best viewed as either stop-gap measures while a student's skills undergo intervention, or as a concession made when the student fails to respond sufficiently to well-implemented, evidence-based interventions.
- Health and mental health professionals who diagnose ADHD should therefore be hesitant to recommend most accommodations immediately after a diagnosis, without ensuring that interventions are in place and have time to work.

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Study 4- Implications for your work

- Educational accommodations have the potential to backfire, creating dependency on supports that cannot be used indefinitely. Extended time for testing, the most common accommodation, can even lead to students slowing their rate of work productivity, keeping them from learning time management skills. Worse still, the perception of accommodations as “quick fixes” may lead students and their families seek unwarranted accommodations.
- Focusing on skill development may be more beneficial, not only in the short-term but also in the long-term success of the student.

Study 5- AD/HD Symptoms in Post-Secondary Students: Has the COVID-19 Pandemic Made a Difference?

Emma Jamieson, Beth Pollock, Ph.D., C.Psych., Nathaniel Davin, & Allyson G. Harrison, Ph.D., C.Psych.

Regional Assessment and Resource Centre

Study 5- Rationale

- Anecdotally, individuals reporting symptoms of Attention Deficit/Hyperactivity Disorder (AD/HD) seem to have increased over the past few years, particularly since the onset of the Coronavirus disease 2019 (COVID-19) pandemic.
- In reviewing a U.S. database of over three million patients diagnosed with AD/HD between 2010 and 2022, Russell et al. (2023) found that the incidence of adult AD/HD in their study population had tripled between 2010 and 2022, with the largest increase occurring between 2020 and 2022. Notably, these researchers identify that the main driver of this increase was a doubling of new diagnoses of females between 23 to 49 years of age during this time period.
- As such, this study aimed to objectively investigate the validity of this observation in a post-secondary population.

Study 5- Method and Participants

- Using archival data from 667 students assessed in a University-based clinic between 2018 and 2024, self-reported AD/HD symptoms on the Conners' Adult AD/HD Rating Scales–Self-Report: Long Version (CAARS–S:L) were compared across three time periods:
  - pre-COVID (January 2018 to March 2020, n = 407),
  - during COVID (March 2020 to September 2022, n = 110), and
  - post-COVID (September 2022 to current 2024, n = 150).

Study 5- Results

- Results indicate a significant increase in reported symptoms of inattention/memory, impulsivity/emotional lability, DSM-IV inattentive and hyperactive-impulsive symptoms, total AD/HD symptoms, and AD/HD index after the pandemic.
- Notably, there was a significant increase in problems with self-concept during and after the pandemic, and there were no significant changes in symptoms of hyperactivity/restlessness across all time points.
- However, the actual rate of diagnosed AD/HD in the sample did not significantly change across these periods.

Study 5- Discussion

- The findings support anecdotal observations and suggest that the pandemic may have exacerbated AD/HD-like symptoms, even among individuals without formal AD/HD diagnoses.
- Increases in reported AD/HD symptoms may be related to COVID-19 pandemic factors such as heightened stress, disrupted routines, and increased screen time, with persistent sequelae.
- The results underscore the need for careful diagnostic practices and further research on the impact of environmental factors on AD/HD symptomatology in young adults.

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Study 5- Implications for your work

- Base rates matter- think horses not zebras when a student presents with concerns about possible symptoms of AD/HD.
- Self-report questionnaires can be misleading, given the numerous AD/HD “mimics”- comprehensive assessment is required to diagnose AD/HD.
- Many students, with and without AD/HD, are struggling with symptoms of inattention, emotional lability, and problems with self-concept- increasing access to counselling services and learning strategies support will be helpful.

https://www.queensu.ca/rarc/training/workshops-and-conferences

Lunch and Learn Series

RARC hosts a series of monthly professional development lunch and learn sessions for accessibility services staff, educators and other professionals in the field of psychological assessment and post-secondary accessibility and transition services. Slides will be made available to download following each session.

We are offering a Summer Lunch and Learn Series from June - August 2025. Information about our summer sessions can be found below. Details to join the zoom calls can be found in the info flyer.

Summer 2025 Lunch and Learn Info Flyer (PDF 713KB)

Functional Impairments 101: What they are, what they aren't, and how they inform accommodations **Download Session Slides (PDF 2.7 MB)**
Thursday, June 12th, 2025

Translating Research into Action: How recent findings might impact your work
Thursday, July 10th, 2025

Tricky Accommodations Issues
Thursday, August 14th, 2025

Expand All

Winter 2025 Lunch and Learn Sessions & Slides +

Fall 2024 Lunch and Learn Sessions & Slides +

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Questions?

Thank You!

Regional Assessment and Resource Center (RARC): www.queensu.ca/rarc
Queen's University, Kingston, Ontario Canada

Beth Pollock, Clinical Director (RARC) : beth.pollock@queensu.ca

Connect with RARC:


rarc@queensu.ca


www.queensu.ca/rarc


613-533-6311


Mackintosh-Corry Hall,
B100
68 University Avenue
Kingston, Ontario, Canada
K7L 3N6

RARC
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