

Applied Behaviour Analysis: Risk of Harm and Oversight

The Health Professions Regulatory Advisory Council (HPRAC) Recommendations to the Minister

Volume 2

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Literature Review



Section 1: Literature Review

1.1 Objective

The Minister of Health and Long-Term Care (Minister) requested the Health Professions Regulatory Advisory Council's (HPRAC) to provide advice on:

- What activities or aspects associated with ABA therapy pose a significant and inherent risk of harm (if any), and whether the risk of harm of this therapy varies by client population (e.g., children and adult); and
- If there is a risk of harm, what is the range of options for an approach to oversight that could be considered?

The Minister's request noted that the Ontario government had transformed service delivery and supports for children and youth with Autism Spectrum Disorder (ASD) through the new Ontario Autism Program (OAP). The Ministry of Children and Youth Services (MCYS) had previously contracted a study on Ontario-based certification for ABA providers working with clients with ASD as a preliminary step in ensuring appropriate quality and accountability of these services.

The objective of the literature review is to investigate key issues, the results of which are used by HPRAC in its deliberations when providing advice to the Minister. The literature review is part of the evidence gathering undertaken by HPRAC, in addition to the jurisdictional and jurisprudence reviews. The reviews, along with stakeholder consultations, were useful in assisting HPRAC during its deliberations.

The results of the literature presented here supplements findings on the key issues which were researched in the literature review but already covered in Volume 1 of the report. These focused mainly on:

- Risk of harm of ABA intervention procedures
- Risk of harm experienced by client populations receiving ABA services, and
- Oversight options

1.2 Methodology

Due to the tight timelines in which HPRAC had to provide advice to the Minister, the focus of the literature review was an examination of the referral's key issues. HPRAC engaged the Research, Analysis and Evaluation Branch (RAEB) of the Ministry of Health and Long-Term Care (MOHLTC) which provided several literature reviews related to ABA. The RAEB findings were related to risk of harm of ABA intervention and oversight options implemented in other

jurisdictions. In addition, HPRAC referred to the SEG report¹ commissioned by MCYS on the subject of ASD.

For the purpose of this report, ABA intervention refers to a broad range of activities which include ABA procedures used to address a client's concerns and needs so as to reduce problem behaviour and increase desirable behaviour.

While the information provided by the SEG report and RAEB was useful in identifying the key risks of harm associated with ABA and oversight options, both sources were not comprehensive enough when it came to assessing ABA procedures for potential risks of harm, and if these varied based on population, and even setting. As a result, HPRAC identified additional gaps and supplemented information contained in both the SEG report and RAEB reviews on risks of harm associated with ABA intervention.

HPRAC's supplementary review used varied sources and methods including: peer-reviewed journal articles, meta analyses, single-subject studies, Google Scholar, as well as institutional websites of professional associations. Key words searched, alone or in combination, included: "applied behaviour analysis", "intensive behavioural analysis", "autism spectrum disorder", developmental disabilities", "dementia", "behaviour assessment" "ABA intervention plan", "harm", "side effects" and "forensic". Articles included in the review covered the period starting from the 1980s to 2017.

Due to the breadth of the search terms, over 80 sources were examined for the literature review. Because of the narrow timeline to complete this referral and a literature review, the results included below may not reflect all the available articles relevant to the topic of risk of harm of ABA intervention. The main topics of this review focused on the following:

- Tiered service delivery of ABA intervention
- Effectiveness of ABA
- Client populations receiving ABA, and
- Settings where ABA is provided

1.3 Limitations

HPRAC identified key limitations during the course of the literature review and research phase. One limitation included the availability of recent peer reviewed articles that demonstrate risk of harm of ABA activities. However, as reported by ABA researchers, a publication bias exists in

¹ SEG Management Consultants Inc. (2014). *Certification/Regulation for ABA Practitioners* (Rep.). SEG Management Consultants Inc. Retrieved from http://www.ontaba.org/pdf/SEG%20FINAL%20REPORT%20Dec%2017%202014.pdf

ABA literature, where studies with favorable results are more likely to be reported than are studies with null findings.² Other limitations included:

- Time constraint for HPRAC to complete the report meant using primarily Englishlanguage, North American sources providing limited alternative jurisdictional and literature views, and
- Focus on the breadth of topics dealing with ABA did not permit HPRAC to go into depth on certain topics such as the use of ABA in organizational development

1.4 Summary of Main Findings

Phases of ABA Intervention

ABA has recognized and established standards of practice for activities across the phases of intervention outlined below.^{3, 4, 5, 6} The activities utilized by providers during ABA intervention can be grouped into the following phases:^{7,8}

- Conducting a Behaviour Assessment: a target behaviour is selected, measured and assessed based on the goals of intervention (reduce problem behaviour and/or increase a desirable behaviour)
- **Designing an Intervention Plan**: an intervention plan is developed based on assessment results that include a combination of behaviour change procedures
- Implementing an Intervention Plan: an intervention plan is implemented directly with a client by an ABA provider or, in some cases, a caregiver
- Monitoring and Evaluating the Intervention Plan: client data is collected and monitored before and throughout the intervention

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² Sham, E., & Smith, T. (2014). Publication bias in studies of an applied behavior-analytic intervention: An initial analysis. *Journal of Applied Behavior Analysis*, 47(3), 663-678.

³ Behavior Analyst Certification Board. (2018). Professional and ethical compliance code. Retrieved January 17, 2018, from https://www.bacb.com/ethics/ethics-code/

⁴ Association for Behavior Analysis International. (1989, October). Statement on the right to effective behavioral treatment. 1989. Retrieved January 19, 2018, from https://www.abainternational.org/about-us/policies-and-positions/right-to-effective-behavioral-treatment,-1989.aspx

⁵ Cooper, J. O., Heron, T. E., & Heward, W. L. (2007). *Applied behavior analysis* (2nd ed.). Upper Saddle River, NJ: Pearson - Merrill Prentice Hall.

⁶ Vollmer, T. R., Hagopian, L. P., Bailey, J. S., Dorsey, M. F., Hanley, G. P., Lennox, D., and Spreat, S. (2011). The association for behavior analysis international position statement on restraint and seclusion. *The Behavior Analyst*, *34(1)*, 103-110.

⁷ Behavior Analyst Certification Board. (2018). *About behavior analysis*. Retrieved from https://www.bacb.com/about-behavior-analysis/

⁸ Cooper et al., (2007).

Client populations

HPRAC also examined the client populations receiving ABA intervention and determined that several factors contribute to their experience of risk of harm. Volume 1 of the report describes in detail, the characteristics which HRPAC observed, based on stakeholder input and evidence gathering, contributed to how a client population experiences risk of harm when receiving ABA intervention. These characteristics include vulnerability, setting, and severity of condition. The latter is based on degree of problem behaviour, client characteristics, and quality of ABA intervention.

While ABA may be applied to almost any client population, evidence gathering and stakeholder input pointed to some populations which are more likely to receive it. These client populations which will be examined later include:

- Individuals diagnosed with ASD, and
- Adults suffering from dementia

Settings where ABA is provided

ABA may be provided in several settings, both clinical and non-clinical. This section of the report will concentrate on identified settings to provide a lens on the adaptability of ABA. The settings to be covered in more detail include:

- Educational settings
- Forensic settings such as hospitals or prisons, and
- Use of telemedicine in providing ABA across rural and remote geographical areas

The following section will provide details on the risk of harm associated with ABA intervention, how ABA is delivered, selected client populations, and settings.

1.5 Detailed findings

Risk of Harm associated with ABA intervention

HPRAC determined that the main phases of ABA intervention pose a risk of harm to many client populations Evidence gathering point to a risk of harm inherent in the following ABA activities:

• **ABA assessment:** There is an inherent risk in selecting appropriate assessment methods and analyzing the results. This is particularly true when the method involves creating situations which trigger the undesired behaviour in order to confirm the client's issue and

determine its cause (Functional Analysis). Associated risks include physical harm to the client or provider. ^{9,10,11}

- **Designing an ABA intervention plan**: There is an inherent risk in designing intervention plans. Selecting the wrong behaviour change procedure may not only be ineffective but exacerbate the client's inappropriate behaviour. If the inappropriate behaviour includes self-harm, the risk of harm to the client can easily escalate. ABA behaviour change which may be applied during this stage include punishment, extinction and reinforcement based procedures, both of which carry inherent risks for many clients which may increase problem behaviour. ^{12,13,14,15}
- **Delivering an ABA intervention plan:** There is inherent risk in how an intervention plan is delivered to a client or caregiver. Negative implications such as an increase in problem behaviour may result if an ABA provider does not deliver the plan as written, or misses steps due to lack of competency. One of the risks associated with delivering an ABA intervention plan is that the selected procedure may not translate well when delivered in a non-clinical setting such as an educational setting. ¹⁶
- Monitoring and evaluation: ABA providers rely on making decisions such as introducing, modifying, and discontinuing intervention plans based on analyzing client data. Most intervention plans require adjustment based on early feedback. Ignoring or failing to interpret the feedback necessary to make adjustments could lead to negative implications that include extreme undesirable behaviour. A key risk is when the wrong method of data collection is used, which in turn affects the effectiveness of the ABA intervention for the client. ^{17,18}

⁹ Hanley G.P. (2012) Functional assessment of problem behavior: Dispelling myths, overcoming implementation obstacles, and developing new lore. *Behavior Analysis in Practice*, *5*(1), 54-72

¹⁰ Kahng, S., Hausman, N.L., Fisher, A.B., Donaldson, J.M., Cox, J.R., Lugo, M., & Wiskow, K. M. (2015) The safety of functional analyses of self-injurious behavior. *Journal of Applied Behavior Analysis*, 48(1), 107-114 ¹¹ Wiskirchen, R.R., Deochand, N., & Peterson, S.M. (2017). Functional analysis: A need for clinical decision support tools to weigh risks and benefits. *Behavior Analysis: Research and Practice*, 17(4), 325-333.

¹² Lerman, D. C., & Vorndran, C. M. (2002). On the status of knowledge for using punishment: Implications for treating behavior disorders. *Journal of Applied Behavior Analysis*, 35(4), 431-464.

¹³ Ward, S., Parker, A., & Perdikaris, A. (2017). Task as reinforcer: A reactive alternative to traditional forms of escape extinction. *Behavior Analysis in Practice, 10*(1), 22-34.

¹⁴ Lerman, D. C., Iwata, B. A., & Wallace, M. D. (1999). Side effects of extinction: Prevalence of bursting and

¹⁵ Lerman, D. C., Iwata, B. A., & Wallace, M. D. (1999). Side effects of extinction: Prevalence of bursting and aggression during the treatment of self-injurious behavior. *Journal of Applied Behavior Analysis*, 32(1), 1-8 ¹⁵ DeLeon, I. G., Williams, D., Gregory, M. K., & Hagopian, L. P. (2005). Unexamined potential effects of the noncontingent delivery of reinforcers. *European Journal of Behavior Analysis*, 6(1), 57-69.

¹⁶ Fryling et al. (2012); (Rispoli et al. (2011); Suhrheinrich, J., Stahmer, A. C., Reed, S., Schreibman, L., Reisinger, E., & Mandell, D. (2013). Implementation challenges in translating pivotal response training into community settings. *Journal of Autism and Developmental Disorders*, 43(12), 2970-2976.

¹⁷ Cook, J. E., Subramaniam, S., Brunson, L. Y., Larson, N. A., Poe, S. G., & Peter, C. C. S. (2015). Global measures of treatment integrity may mask important errors in discrete-trial training. *Behavior Analysis in Practice*, 8(1), 37-47.

¹⁸ Wirth, O., Slaven, J., & Taylor, M. A. (2014). Interval sampling methods and measurement error: A computer simulation. *Journal of Aapplied Bbehavior Aanalysis*, 47(1), 83-100.

Additionally, HPRAC identified other risks of harm associated with ABA intervention. These include "missed ABA intervention." When ABA intervention is not offered within the window of opportunity when would most likely benefit from it, it may lead to delayed and poor outcomes later on life. 20, 21 Provider competency, when clinical supervisors overseeing ABA intervention, act beyond their competency and training, 22 was also identified as a risk of harm. 23

How is ABA Intervention delivered?

According to Baer, ABA is the process of systematically applying interventions based upon the principles of behaviour to improve socially significant behaviours to a meaningful degree, and to demonstrate that the interventions employed are responsible for the improvement in behaviour.²⁴

When providing ABA intervention, providers follow an individualized approach whereby activities, such as (but not limited to) selecting applying data collection and measurement methods, assessment methods, behaviour change procedures and determining how to deliver the intervention plan, are based on a combination of the client's strengths and needs, setting, characteristics, best available evidence, and the judgment of the provider.²⁵ Best practice requires that ABA providers select behaviour change procedures that are supported by research and datadriven. 26 This individualized approach continues throughout intervention. Decisions about modifying and discontinuing the intervention plan are based on how a client responds.

Most ABA intervention plans involve a tiered service delivery model in which more than one provider is involved in delivering ABA activities.²⁷ However, with the appropriate competency and training, ABA intervention may be conducted by a provider outside a tiered system. ²⁸ Examples of tiered service delivery models include: ²⁹

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¹⁹ Richards, C., Moss, J., Nelson, L., & Oliver, C. (2016). Persistence of self-injurious behaviour in autism spectrum disorder over 3 years: A prospective cohort study of risk markers. Journal of Neurodevelopmental Disorders, 8(1),

²⁰ Koegel, L. K., Koegel, R. L., Ashbaugh, K., & Bradshaw, J. (2014). The importance of early identification and intervention for children with or at risk for autism spectrum disorders. International Journal of Speech-Language Pathology, 16(1), 50-56.

²¹ Perry, A., Cummings, A., Geier, J. D., Freeman, N. L., Hughes, S., Managhan, T., & Williams, J. (2011). Predictors of outcome for children receiving intensive behavioral intervention in a large, community-based program. Research in Autism Spectrum Disorders, 5(1), 592-603
²² Sellers, T. P., Alai-Rosales, S., & MacDonald, R. P. F. (2016). Taking full responsibility: The ethics of

supervision in behavior analytic practice. Behavior Analysis in Practice, 9(4), 299–308. Retrieved from http://doi.org/10.1007/s40617-016-0144-x

23 Leblanc et al.(2016); Turner, L. B., Fischer, A. J., & Luiselli, J. K. (2016). Towards a competency-based, ethical,

and socially valid approach to the supervision of applied behavior analytic trainees. Behavior Analysis in Practice, 9(4), 287-298.

²⁴ Baer, D. M., Wolf, M. M., & Risley, T. R. (1968). Some current dimensions of applied behavior analysis. *Journal* of Applied Behavior Analysis, 1(1), 91-97.

Slocum, T. A., Detrich, R., Wilczynski, S. M., Spencer, T. D., Lewis, T., & Wolfe, K. (2014). The evidence-based practice of applied behavior analysis. The Behavior Analyst, 37(1), 41-56.

²⁶ Slocum et al., (2014).

²⁷ Ibid.

²⁸ Behavior Analyst Certification Board. (2018). Board certified behavior analysts. Retrieved from https://www.bacb.com/bcba/
²⁹ Ibid.

a) Provider A is responsible for clinical direction and supervision



Provider B delivers the ABA intervention plan directly with client or caregivers

b) Provider A is responsible for clinical direction and supervision



Provider B provides clinical support and case management



Provider C delivers the ABA intervention plan directly with client or caregivers

Client populations receiving ABA

This section will review, in more detail, aspects on selected client populations which receive ABA such as individuals with ASD and dementia. Common issues to be addressed in this section include:

- General characteristics and concerns, and
- Common skills deficits and behaviours addressed by ABA

Table 1 lists many of the client populations who receive ABA intervention. While the focus here will be on ASD and dementia, the purpose of the list is to show that many other client populations benefit from ABA.

Table 1: Client populations receiving ABA

Client Populations³⁰

- Children and adults with Autism Spectrum Disorder (ASD)
- Children and adults with developmental disabilities
- Children and adults with fetal alcohol syndrome
- Children and adults with mental health and/or behavioural difficulties
- Adults with dual diagnosis (i.e., developmental disabilities and mental health issues)
- Adults with addiction/substance abuse issues
- Seniors with dementia
- Field of Organizational Behaviour Management to improve the performance of employees and worker safety
- Sports and health to help people with their physical performance, lose weight or stop smoking

³⁰ SEG Management Consultants Inc. (2014).

Individuals with ASD

Autism Spectrum Disorder, or ASD, refers to a range of conditions characterized by challenges with social skills, repetitive behaviours, speech and non-verbal communication, as well as by unique strengths and differences. There is not one type of autism but many types caused by different combinations of genetic and environmental influences. ³¹ In Ontario, the prevalence of individuals with ASD is not determined. Additionally, the Ministry of Education (EDU) estimates the number of students with ASD at 40,000 within Ontario's school systems. 32 Several estimates put the general incidence of ASD at 1 in 68 children.³³

Several meta-analytic studies have found comprehensive ABA-based approaches effective in children with autism and result in positive outcomes. ^{34, 35, 36} Wong et al (2013) characterized ABA-based interventions as being "established" and with evidenced based treatments for individuals with ASD. ³⁷According to the National Academy of Science, 40 years of singlesubject-design research support the efficacy of time-limited, focused applied behavior analysis methods in reducing or eliminating specific problem behaviors and in teaching new skills to children and adults with ASD or other developmental disorders.³⁸

ABA is applied to individuals with ASD to address key concerns which include skill deficits, challenging behaviours, and psychopathology to deal with a mental health condition. Skill deficits range from simple (using utensils to eat) to complex ones (reading). Social skills which may be addressed by ABA range depending on the child. For instance, complex social skills experienced by an individual include conversational skills. Adaptive behaviours addressed by ABA include feeding and toilet training. ABA has also been proven in addressing or decreasing the incidence of some challenging behaviours associated with ASD. These include self-injury, aggression, and pica.

³¹ Autism Speaks Canada. What is Autism? (2018). Retrieved from https://www.autismspeaks.ca/about-autism/what- <u>is-autism/</u>
³² Discussion. (December 2018). Ontario Ministry of Education staff members.

³⁴ Grindle, F.C., Hastings, R., Sevile, M., et al. (2012). Outcomes of a Behavioral Education Model for Children With Autism in a Mainstream School Setting. Behavior Modification, 36 (3).

³⁵ Reichow B., et al. (2012). Early intensive behavioral intervention (EIBI) for young children with autism spectrum disorders (ASD). Cochrane Database of Systematic Reviews 2012 (10). Retrieved from http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD009260.pub2/abstract

³⁶ Reichow, B., Wolery, M. (2009). Comprehensive synthesis of early intensive behavioral interventions for young children with autism based on the UCLA Young Autism Project model. Journal of Autism and Developmental Disorders, 39, 23-41. Retrieved from

https://scholar.google.com/scholar lookup?hl=en&publication year=2009&pages=23-41&author=B.+Reichow&author=M.+Wolery&title=Comprehensive+synthesis+of+early+intensive+behavioral+int erventions+for+young+children+with+autism+based+on+the+UCLA+Young+Autism+Project+model

³⁷ Wong, C., Odom, S. L., Hume, K., Cox, A. W., Fettig, A., Kucharczyk, S., et al. (2014). Evidence-based practices for children, youth, and young adults with autism spectrum disorder. Journal of Autism Spectrum Disorder: A Comprehensive Review. 45(7): 1951-1966. Retrieved from https://doi.org/10.1007/s10803-014-2351-z

³⁸ National Research Council. Committee on Educational Interventions for Children with Autism, (2001). Educating Children with Autism. The National Academies Press. Retrieved from http://www.nap.edu/catalog/10017.html

Research also supports the use of Intensive Behaviour Intervention (IBI) to treat children who are diagnosed early with ASD. According to Scott et al, providers have a role in ensuring that early intervention maximizes the child's functional independence and quality of life. Early application of IBI, the intensive form of ABA, supports improvements in children with ASD. Children who receive this treatment have been shown to make substantial, sustained gains in IQ, language, academic performance, and adaptive behavior as well as some measures of social behavior, and their outcomes have been significantly better than those of children in control groups. Al,

Based on the established research supporting the efficacy of using ABA, including IBI, in improving functional independence and quality of life for many children with ASD, several regulatory bodies now encourage its usage. For instance, the State of California Department of Insurance's (CID) independent clinical reviewers determined that ABA was medically necessary in treating individuals with ASD. ⁴² New Zealand's Ministry of Health developed guidelines which recommended using ABA to treat individuals with ASD. ⁴³ Additionally, clinician reviewers consistently found that ABA therapy was neither experimental nor investigational. Their findings were in line with key researchers who found that ABA led to significant improvements in IQ, communication and language skills, and adaptive behaviors; as well as to a reduction in self injurious behaviors.

Individuals with Dementia

A client population which may benefit from ABA to decrease behavioural issues is that of individuals who are diagnosed with dementia. It is a progressive disease which encompasses several symptoms ranging from mild (forgetfulness) to more severe (memory loss). Dementia can be caused by many diseases including Alzheimer's disease, vascular dementia (due to strokes), Lewy Body disease, head trauma, fronto-temporal dementia, Creutzfeldt-Jakob disease, Parkinson's disease, and Huntington's disease. A person with dementia may also experience changes in mood or behaviour. 44

To date, studies on ABA have mainly focused on its use for certain populations, especially individuals with ASD who tend to be younger than clients suffering from dementia.

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³⁹Scott M., Johnson, Chris Plauche, and the Council on Children With Disabilities. (2007). Management of Children With Autism Spectrum Disorders. *Pediatrics* 120 (5): 1162-1182. Retrieved from http://pediatrics.aappublications.org/content/pediatrics/120/5/1162-full.pdf

http://pediatrics.aappublications.org/content/pediatrics/120/5/1162.full.pdf

40 Perry, A. Cummings, A., Dunn Geier, J., Freeman, N., Hughes, S., LaRose, L., Managhan, T.,Reitzel, J., & Williams, J. (2008). Effectiveness of Intensive Behavioral Intervention in a large, community-based program. Research in Autism Spectrum Disorders, 2, 621-642.

⁴¹ Scott et al (2007).

⁴² State of California Department of Insurance. (July 13, 2011). Senate Select Committee on Autism & Related Disorders Informational Hearing on Health Insurance Coverage for Autism Spectrum Disorders (ASD): Current Regulatory Oversight of Behavioral Intervention Therapy. Retrieved from http://www.insurance.ca.gov/0100-consumers/0070-health-issues/upload/PartISenateSelect-CommitteeSubmissionV2.pdf

⁴³ New Zealand Ministry of Health. (May 2010). Guideline Supplementary Paper -- New Zealand Autism Spectrum Disorder Guideline Supplementary Evidence on Applied Behaviour Analysis. Retrieved from http://www.health.govt.nz/system/files/documents/publications/asd-guideline-supplementary-paper.pdf

⁴⁴ Alzheimer's Society. (2018). Retrieved from http://alzheimer.ca/en/Home/About-dementia/What-is-dementia?gclid=EAIaIQobChMI1 Sxx6i62QIVFFuGCh0a4wFIEAAYASAAEgI1zPD BwE

Increasingly, researchers are now examining how ABA may be used to improve behavioural issues and skills deficits which may be a result of dementia. Engstrom et al carried out a study which looked at increasing activity engagement among individuals with severe dementia. A baseline was established for five residents on their activity engagement. The study involved staff checking in with the residents every 15 minutes and providing praise if the resident engaged in appropriate behaviour. If the individual was not sufficiently engaged, staff provided a choice between at least two activities. The results pointed to increased activity engagement among four of the five residents. 46,47

One of the symptoms experienced by many clients with dementia is aggression. ⁴⁸ Earlier studies put the incidence of aggression among clients with dementia at approximately 86%. ⁴⁹ Research has also found that chemical and physical restraints are commonly used to address aggression. ⁵⁰ ABA has been found to be effective in addressing aggression. ⁵¹ Baker et al carried out a single-subject study on a client with dementia who was being administered with a chemical restraint to calm her agitation. A functional analysis over three months was carried out to compare levels of aggressions in three conditions (control, attention, escape). A time-based delivery of the reinforcer was implemented. ⁵² The data showed a decrease in aggression during the period of ABA intervention. ⁵³

Reinforcement is used as part of extinction based procedures when applying an ABA intervention plan to reduce problem behaviour exhibited by clients. ⁵⁴ In this instance, the problem behaviour was aggression. Extinction occurs when problem behaviour takes place, and the item or event that was increasing or maintaining the problem behaviour (the "reinforcer") is not provided to the client. The theory is that not providing the client with the reinforcer will eventually lead to a decrease in the occurrence of the problem behaviour. ⁵⁵ However, this can also increase risks.

⁴⁵ Engstrom, E., Mudford, Oliver C., and Brand. D. (2015). Replication and Extension of a Check-in Procedure to increase Activity among People with Severe Dementia. *Journal of Applied Behavior Analysis*, 48(2), 1-6.

⁴⁶ Ibid

⁴⁷ Engelman, K. K., Altus, D. E., and Mattews, R. M. (1999). Increasing engagement in daily activities by older adults with dementia. *Journal of Applied Behavior Analysis*, 32, 107-110.

⁴⁸ Baker, J., Hanley G., Fisher, A. B., and Hausman, N. L. (2006). Staff-administered functional analysis and treatment of aggression by an elder with dementia. *Journal of Applied Behavior Analysis*, 39(4), 469-474. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1702326/

⁴⁹ Zimmerman J.G, Watson N, Treat A. Behavioral problems among patients of skilled nursing facilities. *American Journal of Public Health*. 1984;74:1118–1121. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/6476166
⁵⁰ Baker, J., Hanley, G. P., and Mathews, R.M. (2006). Staff-Administered Functional Analysis and Treatment of Aggression by an Elder with Dementia. *Journal of Applied Behavior Analysis*, 39(4), 469–474. Retrieved from http://doi.org/10.1901/jaba.2006.80-05

⁵¹ Ibid.

⁵² Ibid.

⁵³ Ibid.

⁵⁴ Greer, B. D., Fisher, W. W., Saini, V., Owen, T. M., & Jones, J. K. (2016). Functional communication training during reinforcement schedule thinning: An analysis of 25 applications. *Journal of applied behavior analysis*, 49(1), 105-121.

⁵⁵ DeLeon, I. G., Williams, D., Gregory, M. K., & Hagopian, L. P. (2005). Unexamined potential effects of the noncontingent delivery of reinforcers. *European Journal of Behavior Analysis*, 6(1), 57-69.

In the study carried out by Baker et al, the reinforcement for the client with dementia was based on several activities including having the caregiver (a) deliver attention non-contingently, (b) place no demands on the participant, and (c) provide no consequences for hitting.⁵⁶ These activities were provided in timed intervals which were decreased over time. As a result, the caregiver was given sufficient training to carry out a functional analysis of the problem behavior (aggression) and to implement time-based reinforcement to decrease aggression of the client. Baker et al acknowledge the limitations of their study since conditions may differ.⁵⁷

Additionally, ABA has been found to be effective in addressing other problem behaviours which are prevalent among clients with dementia such as wondering.⁵⁸ ABA was also been effective in improving communication skills of clients with dementia.⁵⁹

Settings where ABA is provided

ABA is provided in both clinical and non-clinical settings. A client's characteristics and vulnerability may determine the setting in which ABA intervention is provided. For instance, children with ASD who are under 18 years of age are more likely to receive ABA within their homes and educational settings. In Ontario, these programs will likely be funded by MCYS or EDU. Once a child or adolescent ages out of programs funded by EDU and MCYS, they are required to meet eligibility criteria to participate in ABA programs funded by MCSS.

Additionally, the vulnerability of the client also determines whether they receive ABA intervention within a group home setting, long-term care facility, mental health facility or a similar setting. Less intrusive types of ABA, such as organization behaviour management, are offered to clients who are not deemed as vulnerable. Settings for this include business, industry, and government bodies. Less intrusive ABA is also offered in sports/ health facilities to improve athletic performance. Additionally, behavioural economics is another application of ABA whereby incremental behavioural changes are implemented to bring desired change in consumer behaviour (e.g., provide reinforcement to increase saving patterns). 60

Table 2 lists examples of settings where ABA is provided. While the focus here will be on ABA in educational and forensic settings, as well as delivered via telemedicine, the purpose of the list is to show that ABA is delivered in different settings beyond the ones mentioned here.

⁵⁸ Heard, K., and Watson, T. S. (1999). Reducing wandering by persons with dementia using differential reinforcement. *Journal of Applied Behavior Analysis*, 32(3), 381–384. Retrieved from

http://doi.org/10.1901/jaba.1999.32-381

⁵⁶ Baker et al (2006)

⁵⁷ Ibid.

⁵⁹ Trahan, M. A., Donaldson, J. M., McNabney, M. K. and Kahng, S. (2014), Training and maintenance of a picture-based communication response in older adults with dementia. *Journal of Applied Behavior Analysis*, 47: 404–409. ⁶⁰ Reed, Derek D., Niileksela, C.R., and Kaplan, B.A. (2013). Behavioral Economics: A Tutorial for Behavior Analysts in Practice. *Behavior Analysis in Practice*, 6(1), 34-54. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3680155/

Table 2: Settings where ABA is provided

Settings where ABA is Provided⁶¹

- School boards
- Home
- Applied clinical settings
- Medical and health care agencies
- Mental health agencies
- Hospitals especially for behavioural paediatrics and pain management clinics
- Corrections/forensics facilities
- Geographical locations including rural and remote areas
- Addiction facilities
- Long-Term Care
- Business, industry and government organizational behaviour management facility (Organizational Behaviour Management)
- Sports /health facilities or sports psychology/medical clinics

The following section will examine the provision of ABA within the selected settings of education, forensics and via telemedicine to service rural and remote geographical locations.

ABA in Educational Settings

ABA is offered in educational settings, such as classrooms, to support children with their learning outcomes and reduce problem behaviour. Specifically, ABA is used to encourage student learning and development during the time students are in school. ABA procedures may be applied to improve socialization and communication of students with ASD. Depending on the school board, ABA intervention is usually not offered in a tiered service-delivery model. However, some issues may arise depending on how ABA is provided. These include the challenge to translate ABA learnings in a classroom setting, treatment integrity within the classroom, and teacher training to apply some ABA procedures.

In 2016/17, the Ontario government allocated \$11.7 million under the Grants for Students Needs with an emphasis on Behaviour Expertise Amount (BEA).⁶³ This allocation was in addition to the original funding of 2008/09 given to school boards to hire ABA expertise professionals. As a result of these investments, Ontario school boards are mandated to provide supports to students who may benefit from ABA interventions.

⁶¹ SEG Report. (2014)

⁶² Myers, Scott M., Johnson, C.P., and the Council on Children with Disabilities. (2018). Management of Children With Autism Spectrum Disorders. *Pediatrics*, 120 (5), 1162-1182. Retrieved from http://pediatrics.aappublications.org/content/pediatrics/120/5/1162.full.pdf

⁶³ Ministry of Education. (2018). A Guide to the Special Education Grant. Retrieved from http://www.edu.gov.on.ca/eng/funding/1718/2017 18 special edu grant en.pdf

In 2007 EDU developed the Policy and Program Memorandum (PPM) No. 140, or PPM 140.⁶⁴ This directive requires Ontario school boards to provide ABA methods with students with ASD, as appropriate, following a student's Individual Education Plan. Due to how ABA is delivered within certain school boards, the majority of the ABA procedures may be delivered by Education assistants (EAs) and some teachers. With the added funding, some of these front-line ABA providers may be supervised by a BACB provider (Board Certified Behavior Analyst (BCBA) or Board Certified Behavior Analyst with a PhD (BCBA-D)). However, a tiered service delivery is not consistently in place across all school boards in Ontario.

When offered in a tiered service delivery model, teachers and other front-line providers may receive some form of training to implement ABA procedures. ⁶⁵ When given effective training to apply ABA procedures, teachers and other front-line providers such as EAs, are found to be successful in implementing them. For instance, a systematic review of studies where front-line providers are trained to implement some form of intervention found that, in 92% of cases, the implementation led to some improvement in children with ASD. ⁶⁶

Additionally, studies support training teachers in more complex ABA procedures such as implementing extinction. ⁶⁷ Extinction is applied when problem behaviour happens, and the item or event that was increasing or maintaining the problem behaviour (the "reinforcer"), is not provided to or removed from the client or student. The theory is that not providing the reinforcer of the problem behavior, will eventually lead to a decrease in the occurrence of the problem behaviour. ⁶⁸

However, the potential success in training teachers and other front-line providers to deliver ABA procedures in educational settings must take into consideration the likely downside associated with training on a specific ABA procedure. For instance, most ABA procedures are studied within controlled clinical settings. One issue is translating learnings into non-clinical settings such as educational settings. ⁶⁹ In a study of teachers applying a form of reinforcement within classroom settings, Suhrheinrich et al reiterated the need for additional resources to translate the application more effectively with students with ASD. ⁷⁰ For instance, the study identified the need to use appropriate objects which are available within a classroom setting. ⁷¹ Therefore,

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⁶⁴ Ministry of Education. (2007). *Incorporating methods of applied behaviour analysis (ABA) into programs for students with autism spectrum disorder (ASD)* (Rep.). Retrieved from http://www.edu.gov.on.ca/extra/eng/ppm/140.pdf

⁶⁵ Mason, R. A., Schnitz, A. G., Wills, H. P., Rosenbloom, R., Kamps, D. M., and Bast, D. (2017). Impact of a teacher-as-coach model: Improving paraprofessionals fidelity of implementation of discrete trial training for students with moderate-to-severe developmental disabilities. *Journal of Autism and Developmental Disorders*, 47(6), 1696-1707.

⁶⁶ Rispoli, M., Neely, L., Lang, R., & Ganz, J. B. (2011). Training paras to implement interventions for people autism spectrum disorders: A systematic review. *Developmental Neurorehabilitation*, 14, 378–388.

⁶⁷Burt, J. L., & Pennington, R. C. (2017). A teacher's guide to using extinction in school setting. *Hammill Institute on Disabilities*, *53*(2), 107-113

⁶⁸ DeLeon, I. G., et al. (2005).

⁶⁹ Suhrheinrich, J., Stahmer, A. C., Reed, S., Schreibman, L., Reisinger, E., & Mandell, D. (2013). Implementation challenges in translating pivotal response training into community settings. *Journal of Autism and Developmental Disorders*, 43(12), 2970-2976..

⁷⁰ Fryling, M. J., Wallace, M. D., & Yassine, J. N. (2012). Impact of treatment integrity on intervention effectiveness. *Journal of Applied Behavior Analysis*, *45*(2), 449-453.

⁷¹ Ibid.

support and resources to ensure treatment integrity is one method of addressing the challenge of translating ABA procedures into a classroom setting.

ABA in Forensic Settings

ABA is also delivered in forensics mental health settings such as hospitals and prisons. Forensic mental health refers to when an individual who has committed a crime is determined by the courts to receive treatment for the underlying mental health condition which may have led them to carry out a criminal act. The delivery of ABA in forensic settings, as in other settings, seeks to address and decrease problem behaviour while seeking to build skills.

MOHLTC funds approximately 10 hospitals in Ontario, such as the Centre for Addiction and Mental Health (CAMH), to hire providers who deliver ABA to support clients who have committed a crime and have mental health needs. CAMH also offers ABA to clients with a dual diagnosis. The HPRAC held discussions with CAMH to understand how ABA is applied to this client population and the unique needs addressed by this form of treatment.

The initial assessment for a client who is admitted in a forensics program is different from that of an ABA assessment but both may overlap. For instance, at intake into a forensics program, a client may be assessed by a forensics psychiatrist to determine the client's mental health state. Other providers may also carry out assessments, including those delivering ABA activities within forensic settings. ABA providers trained to work with clients in this setting use the results of the ABA assessment to develop an intervention plan which would address problem behaviour associated with the original forensics assessment. ABA providers work with other clinical and non-clinical providers, such as nurses and social workers, when providing care to the client.

Providing ABA via Telemedicine to Rural and Remote Areas

Access to ABA services may be encumbered by geographical setting, especially for individuals living in rural and remote areas, such as the Indigenous population. Most trained ABA providers, especially clinical supervisors, are concentrated in urban areas. Likewise, access to ABA services by clients in rural and remote areas is hampered by transportation costs, availability of front-line providers and clinical supervisors. Telemedicine may be utilized to address ABA access issues based on geography is the use of.⁷⁴

⁷² Centre for Mental Health. (2018). The Forensic Mental Health System in Ontario: An Information Guide. Retrieved from

http://www.camh.ca/en/hospital/health_information/the_forensic_mental_health_system_in_ontario/Pages/forensic_mhontario_introduction.aspx

⁷³ Ibid.

⁷⁴ Barrett, A., Wacker, D.P., Harding, J., Lee, J., and Berg, W.K. (2006). Using Telemedicine to Conduct Behavioral Assessments. *Journal of Applied Behavior Analysis*, 39(3), 330-340. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1702392/

The Ontario Telemedicine Network (OTN) provides the infrastructure to deliver some medical and clinical services virtually within and outside of the province.⁷⁵ The client must attend their appointment in a setting with the technology to support the service. Both the client and provider must have access to a virtual connection to support the consultation. OTN connections are secure and the privacy of clients and patients is protected. ABA delivered via telemedicine may entail having a clinical supervisor who is in another location (host site), provide advice and training to a front-line provider or caregiver, somewhere else (remote site), to then deliver the ABA procedure to the client.

Barrett et al found that using telemedicine to conduct behavioural assessments to clients in rural areas was effective. 77 Assessments of two clients were conducted virtually, using telemedicine in separate areas, with one client being assessed in a rural-based classroom (remote site). In both cases, data was collected which contributed to effective intervention of the client. As a result, the problem behaviour observed and the data collected in each case led to the providers delivering the appropriate intervention to address the problem behaviour.⁷⁸

With developments in technology, some ABA procedures can be delivered via virtual care to children with ASD.⁷⁹ Peterson et al support the use of virtual care to effectively offer some ABA activities to clients in rural and remote areas. While traditional telemedicine may improve access to ABA services, virtual care reinforces learning of new skills. For instance, the use of avatars in virtual environments may enhance learnings of social skills in children with ASD. 80,81 Despite technological advancements which enhance delivery of ABA activities, the concern remains that the effectiveness of ABA intervention is determined by a client's characteristics including their vulnerability. 82 Therefore, using technology to deliver part or most of the ABA activities for a client must take into consideration other factors which affect the client's experience of the intervention.

Additionally, other risk of harm issues may be present and even exacerbated when technology, such as virtual care and emersion, are used. For instance, the provider must be competent to assess the client and have the knowledge, skills and judgement to use an appropriate procedure which addresses the problem behaviour or enhances a skill. 83 The use of technology does not absolve a provider, rather it requires the provider to be more aware of the limits of technology in

⁷⁵ Ontario Telemedicine Network. (2018). What is Telemedicine? Retrieved from https://otn.ca/what-istelemedicine/
76 Ibid.

⁷⁷ Barrett et al (2006).

⁷⁹ Peterson, Kathryn M.,Piazza, Cathleen C.,Luczynski, Kevin C.,Fisher, Wayne W. (2017). Virtual-care delivery of applied-behavior-analysis services to children with autism spectrum disorder and related conditions. Behavior Analysis: Research and Practice, 17(4), 286-297.

⁸⁰ Miller, H.L., nd, N.L. (April 2016). Level of Immersion in Virtual Environments Impacts the Ability to Assess and Teach Social Skills in Autism Spectrum Disorder. Cyberpsychology, Behavior and Social Networking, 19(4), 246-256. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4827274/

⁸¹ Grynszpan O, Weiss PL, Perez-Diaz F, et al. (2014). Innovative technology-based interventions for autism spectrum disorders: a meta-analysis. *Autism*, 18:346–361.

⁸³ Sellers et al (2016).

addressing problem behaviour or building a skill. Also, consistent follow through by the front-line provider and caregiver is important to ensure the client's progress.⁸⁴

1.6 Conclusion

ABA intervention is offered to an array of client populations and within different settings. These include client populations with ASD or those suffering from dementia. Settings where ABA is offered are exhaustive and include education, forensics and rural and remote geographical environments via telemedicine.

Of note, ABA activities have been found to carry a risk of harm for many client populations. These risks of harm include the major ABA procedures such as assessments, planning asnd delivering an intervention plan, monitoring and evaluating of the plan. Additionally, the experience of risk of harm, regardless of the setting in which ABA is delivered, is determined by the client's characteristics and their vulnerability.

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⁸⁴ Mason et al (2017).

References

Asmus JM, Ringdahl JE, Sellers JA, Call NA, Andelman MS, Wacker DP. (2004). Use of a short-term inpatient model to evaluate aberrant behavior: Outcome data summaries from 1996 to 2001. *Journal of Applied Behavior Analysis*, 37(3), 283-304.

Association for Behavior Analysis International. (1989, October). Statement on the right to effective behavioral treatment. 1989. https://www.abainternational.org/about-us/policies-and-positions/right-to-effective-behavioral-treatment,-1989.aspx

Autism Speaks Canada. *What is Autism*? (2018). https://www.autismspeaks.ca/about-autism/what-is-autism/

Baer, D. M., Wolf, M. M., & Risley, T. R. (1968). Some current dimensions of applied behavior analysis. *Journal of Applied Behavior Analysis*, *1*(1), 91-97.

Baker, J., Hanley G., Fisher, A. B., and Hausman, N. L. (2006). Staff-administered functional analysis and treatment of aggression by an elder with dementia. *Journal of Applied Behavior Analysis*, 39(4), 469-474. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1702326/

Baker, J., Hanley, G. P., and Mathews, R.M. (2006). Staff-Administered Functional Analysis and Treatment of Aggression by an Elder with Dementia. *Journal of Applied Behavior Analysis*, 39(4), 469–474. http://doi.org/10.1901/jaba.2006.80-05

Barrett, A., Wacker, D.P., Harding, J., Lee, J., and Berg, W.K. (2006). Using Telemedicine to Conduct Behavioral Assessments. *Journal of Applied Behavior Analysis*, 39(3), 330-340. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1702392/

Behavior Analyst Certification Board. (2018). Professional and ethical compliance code. . https://www.bacb.com/ethics/ethics-code/

Brenske S, Rudrud E, Schulze K, Rapp J. Increasing activity attendance and engagement in individuals with dementia using descriptive prompts. *Journal of Applied Behavior Analysis*. 2008;41, 273–277.

Brosnan J, Healy O.(2011) A review of behavioral interventions for the treatment of aggression in individuals with developmental disabilities. *Research in Developmental Disabilities*; 32(2): 437-446. [PubMed]

Burt, J. L., & Pennington, R. C. (2017). A teacher's guide to using extinction in school setting. *Hammill Institute on Disabilities*, 53(2), 107-113

Call, N.A., Simmons, C.A., Mevers, J.E.L. et al. J *Autism Dev Disord* (2015) 45: 2105. https://doi.org/10.1007/s10803-015-2375-z Centre for Mental Health. (2018). The Forensic Mental Health System in Ontario: An Information Guide.

http://www.camh.ca/en/hospital/health_information/the_forensic_mental_health_system_in_ontario/Pages/forensic_mhontario_introduction.aspx

Cook, J. E., Subramaniam, S., Brunson, L. Y., Larson, N. A., Poe, S. G., & Peter, C. C. S. (2015). Global measures of treatment integrity may mask important errors in discrete-trial training. *Behavior Analysis in Practice*, 8(1), 37-47.

Cooper, J. O., Heron, T. E., & Heward, W. L. (2007). *Applied behavior analysis* (2nd ed.). Upper Saddle River, NJ: Pearson - Merrill Prentice Hall.

DeLeon, I. G., Williams, D., Gregory, M. K., & Hagopian, L. P. (2005). Unexamined potential effects of the noncontingent delivery of reinforcers. *European Journal of Behavior Analysis*, 6(1), 57-69

Dwyer-Moore K, Dixon M. Functional analysis and treatment of problem behavior of elderly adults in long-term care. Journal of Applied Behavior Analysis. 2007;40:679–683.

Engelman, K. K., Altus, D. E., and Mattews, R. M. (1999). Increasing engagement in daily activities by older adults with dementia. *Journal of Applied Behavior Analysis*, 32, 107-110.

Engstrom, E., Mudford, Oliver C., and Brand. D. (2015). Replication and Extension of a Checkin Procedure to increase Activity among People with Severe Dementia. *Journal of Applied Behavior Analysis*, 48(2), 1-6.

Faith G. Miller, David L. Lee. (2013) Do Functional Behavioral Assessments Improve Intervention Effectiveness for Students Diagnosed with ADHD? A Single-Subject Meta-Analysis. *Journal of Behavioral Education* 22(3),253-282.

Feldman, M. A., Condillac, R. A., Tough, S. E., Hunt, S., & Griffiths, D. (2002). Effectiveness of community positive behavioral intervention for persons with developmental disabilities and severe behavioral challenges. *Behavior Therapy*, 33, 377-398.

Fixsen, D. L, Blasé, K. A., Timbers, G.D. & Wolf, M. M. (2007). In Search of Program Implementation: 792 Replications of the Teaching-Family Model. *The Behavior Analyst Today*, 8(1), 96-105. www.baojournal.com

French, S. A., & Gendreau, P. (2006). Reducing prison misconducts: What works! *Criminal Justice and Behavior*, 33, 185-218.

Fryling, M. J., Wallace, M. D., & Yassine, J. N. (2012). Impact of treatment integrity on intervention effectiveness. *Journal of Applied Behavior Analysis*, 45(2), 449-453.

- Greer, B. D., Fisher, W. W., Saini, V., Owen, T. M., & Jones, J. K. (2016). Functional communication training during reinforcement schedule thinning: An analysis of 25 applications. *Journal of applied behavior analysis*, 49(1), 105-121.
- Grynszpan O., Weiss P.L, Perez-Diaz F, et al. (2014). Innovative technology-based interventions for autism spectrum disorders: a meta-analysis. *Autism*, 18:346–361.
- Grindle, F.C., Hastings, R., Sevile, M., et al. (2012). Outcomes of a Behavioral Education Model for Children With Autism in a Mainstream School Setting. *Behavior Modification*, 36 (3).
- Hagopian LP, Leon.,M (2017). Self-injurious Behavior among Individuals with Intellectual and Developmental Disabilities. *Acta Psychopathologica* 3:70.
- Hagopian, L. P., Rooker, G. W., & Rolider, N. U. (2011). Identifying empirically supported treatments for pica in individuals with intellectual disabilities. *Research in Developmental Disabilities*, 32, 2114–2120.
- Hanley G.P. (2012) Functional assessment of problem behavior: Dispelling myths, overcoming implementation obstacles, and developing new lore. *Behavior Analysis in Practice*, 5(1), 54-72
- Heard, K., and Watson, T. S. (1999). Reducing wandering by persons with dementia using differential reinforcement. *Journal of Applied Behavior Analysis*, 32(3), 381–384. http://doi.org/10.1901/jaba.1999.32-381
- Horner, R. H., & Carr, E. G. (1997). Behavioral support for students with severe disabilities functional assessment and comprehensive intervention. *The Journal of Special Education*, 31(1), 84-104 http://dx.doi.org/10.1037/h0088790
- Hughes, C., Kaplan, L., Bernstein, R., Boykin, M., Reilly, C., Brigham, N., et al. (2012). Increasing social interaction skills of secondary students with autism and/or intellectual disability: A review of interventions. *Research and Practice for Persons with Severe Disabilities*, 37, 288–307. doi:10.2511/027494813805327214.
- Kahng, S., Hausman, N.L., Fisher, A.B., Donaldson, J.M., Cox, J.R., Lugo, M., & Wiskow, K. M. (2015) The safety of functional analyses of self-injurious behavior. *Journal of Applied Behavior Analysis*, 48(1), 107-114
- Koegel, L. K., Koegel, R. L., Ashbaugh, K., & Bradshaw, J. (2014). The importance of early identification and intervention for children with or at risk for autism spectrum disorders. *International Journal of Speech-Language Pathology*, 16(1), 50-56.
- Kurtz PF, Fodstad JC, Huete JM, Hagopian LP. (2013). Caregiver- and staff-conducted functional analysis outcomes: A summary of 52 cases. *Journal of Applied Behavior Analysis*, 46(4), 738-749.

- Lang R, Rispoli M, Machalicek W, White PJ, Kang S, Pierce N, Mulloy A, Fragale T, O'Reilly M, Sigafoos J, Lancioni G. (2009). Treatment of elopement in individuals with developmental disabilities: A systematic review. *Research in Developmental Disabilities*, 30(4), 670-681.
- Lang, R., Didden, R., Machalicek, W., Rispoli, M., Sigafoos, J., Lancioni, G. (2009). Behavioral treatment of chronic skin-picking in individuals with developmental disabilities: A systematic review. *Research in Developmental Disabilities*, 31, 304–315.
- Leblanc et al.(2016); Turner, L. B., Fischer, A. J., & Luiselli, J. K. (2016). Towards a competency-based, ethical, and socially valid approach to the supervision of applied behavior analytic trainees. *Behavior Analysis in Practice*, 9(4), 287-298.
- Lerman, D. C., & Vorndran, C. M. (2002). On the status of knowledge for using punishment: Implications for treating behavior disorders. *Journal of Applied Behavior Analysis*, 35(4), 431-464.
- Lerman, D. C., Iwata, B. A., & Wallace, M. D. (1999). Side effects of extinction: Prevalence of bursting and aggression during the treatment of self-injurious behavior. *Journal of Applied Behavior Analysis*, 32(1), 1-8
- Mason, R. A., Schnitz, A. G., Wills, H. P., Rosenbloom, R., Kamps, D. M., and Bast, D. (2017). Impact of a teacher-as-coach model: Improving paraprofessionals fidelity of implementation of discrete trial training for students with moderate-to-severe developmental disabilities. *Journal of Autism and Developmental Disorders*, 47(6), 1696-1707.
- Matson, J. L., & LoVullo, S. V. (2008). A review of behavioral treatments for self-injurious behaviors of persons with autism spectrum disorders. *Behavior Modification*, 32, 61–76. doi:10.1177/0145445507304581.
- McGoey, K. E., & DuPaul, G. J. (2000). Token reinforcement and response cost procedures: Reducing the disruptive behavior of preschool children with attention-deficit/hyperactivity disorder. *School Psychology Quarterly*, 15(3), 330-343.
- Miller, H.L., nd, N.L. (April 2016). Level of Immersion in Virtual Environments Impacts the Ability to Assess and Teach Social Skills in Autism Spectrum Disorder. *Cyberpsychology, Behavior and Social Networking*, 19(4), 246-256. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4827274/

Ministry of Education. (2018). *A Guide to the Special Education Grant*. Retrieved from http://www.edu.gov.on.ca/eng/funding/1718/2017_18 special edu grant en.pdf

Ministry of Education. (2007). *Incorporating methods of applied behaviour analysis (ABA) into programs for students with autism spectrum disorder (ASD)* (Rep.). http://www.edu.gov.on.ca/extra/eng/ppm/140.pdf

Moore K, Delaney J, Dixon M. Using indices of happiness to examine the influence of environmental enhancements for nursing home residents with Alzheimer's disease. *Journal of Applied Behavior Analysis*. 2007;40:541–544.

Myers, Scott M., Johnson, C.P., and the Council on Children with Disabilities. (2018). Management of Children With Autism Spectrum Disorders. *Pediatrics*, 120 (5): 1162-1182. http://pediatrics.aappublications.org/content/pediatrics/120/5/1162.full.pdf

National Autism Centre: May Institute. (2015). National Standards Project, Phase 2. http://www.nationalautismcenter.org/national-standards-project/results-reports/.

National Research Council. Committee on Educational Interventions for Children with Autism, (2001). *Educating Children with Autism*. The National Academies Press. http://www.nap.edu/catalog/10017.html

New Zealand Ministry of Health. (May 2010). Guideline Supplementary Paper -- New Zealand Autism Spectrum Disorder Guideline Supplementary Evidence on Applied Behaviour Analysis. http://www.health.govt.nz/system/files/documents/publications/asd-guideline-supplementary-paper.pdf

Nicole Neil, Emily A. Jones. (2016) Repetitive Behavior in Children with Down Syndrome: Functional Analysis and Intervention. *Journal of Developmental and Physical Disabilities* 28(2) 267-288.

Ontario Telemedicine Network. (2018). What is Telemedicine? https://otn.ca/what-is-telemedicine/

Palmer, A., Didden, R., & Lang, R. (2012). A systematic review of behavioral intervention research on adaptive skill building in high functioning young adults with autism spectrum disorder. *Research in Autism Spectrum Disorders*, 6, 602–617. doi:10.1016/j.rasd.2011.10.001.

Perry, A. Cummings, A., Dunn Geier, J., Freeman, N., Hughes, S., LaRose, L., Managhan, T.,Reitzel, J., & Williams, J. (2008). Effectiveness of Intensive Behavioral Intervention in a large, community-based program. *Research in Autism Spectrum Disorders*, 2, 621-642.

Peterson, Kathryn M., Piazza, Cathleen C., Luczynski, Kevin C., Fisher, Wayne W. (2017). Virtual-care delivery of applied-behavior-analysis services to children with autism spectrum disorder and related conditions. *Behavior Analysis: Research and Practice*, 17(4), 286-297.

Reed, Derek D., Niileksela, C.R., and Kaplan, B.A. (2013). Behavioral Economics: A Tutorial for Behavior Analysts in Practice. *Behavior Analysis in Practice*, 6(1), 34-54. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3680155/

Reichow B., et al. (2012). Early intensive behavioral intervention (EIBI) for young children with autism spectrum disorders (ASD). *Cochrane Database of Systematic Reviews* 2012 (10). http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD009260.pub2/abstract

Reichow, B., Wolery, M. (2009). Comprehensive synthesis of early intensive behavioral interventions for young children with autism based on the UCLA Young Autism Project model. *Journal of Autism and Developmental Disorders*, 39, 23-41.

 $\frac{https://scholar.google.com/scholar_lookup?hl=en\&publication_year=2009\&pages=23-41\&author=B.+Reichow\&author=M.+Wolery\&title=Comprehensive+synthesis+of+early+intensive+behavioral+interventions+for+young+children+with+autism+based+on+the+UCLA+Young+Autism+Project+model$

Richards, C., Moss, J., Nelson, L., & Oliver, C. (2016). Persistence of self-injurious behaviour in autism spectrum disorder over 3 years: A prospective cohort study of risk markers. *Journal of Neurodevelopmental Disorders*, 8(1), 1-12.

Rispoli, M., Neely, L., Lang, R., & Ganz, J. B. (2011). Training paras to implement interventions for people autism spectrum disorders: A systematic review. *Developmental Neurorehabilitation*, 14, 378–388.

Rooker GW, Jessel J, Kurtz PF, Hagopian LP. (2013). Functional communication training with and without alternative reinforcement and punishment: An analysis of 58 applications. Journal of Applied Behavior Analysis, 46(4), 708-722.

Scott M., Johnson, Chris Plauche, and the Council on Children With Disabilities. (2007). Management of Children With Autism Spectrum Disorders. *Pediatrics* 120 (5): 1162-1182. http://pediatrics.aappublications.org/content/pediatrics/120/5/1162.full.pdf

Sellers, T. P., Alai-Rosales, S., & MacDonald, R. P. F. (2016). Taking full responsibility: The ethics of supervision in behavior analytic practice. *Behavior Analysis in Practice*, 9(4), 299–308. http://doi.org/10.1007/s40617-016-0144-x

Sham, E., & Smith, T. (2014). Publication bias in studies of an applied behavior-analytic intervention: An initial analysis. *Journal of Applied Behavior Analysis*, 47(3), 663-678.

Slocum, T. A., Detrich, R., Wilczynski, S. M., Spencer, T. D., Lewis, T., & Wolfe, K. (2014). The evidence-based practice of applied behavior analysis. *The Behavior Analyst*, *37(1)*, 41-56.

State of California Department of Insurance. (July 13, 2011). Senate Select Committee on Autism & Related Disorders Informational Hearing on Health Insurance Coverage for Autism Spectrum Disorders (ASD): Current Regulatory Oversight of Behavioral Intervention Therapy. http://www.insurance.ca.gov/0100-consumers/0070-health-issues/upload/PartISenateSelect-CommitteeSubmissionV2.pdf

Suhrheinrich, J., Stahmer, A. C., Reed, S., Schreibman, L., Reisinger, E., & Mandell, D. (2013). Implementation challenges in translating pivotal response training into community settings. *Journal of Autism and Developmental Disorders*, *43*(12), 2970-2976.

Trahan, M. A., Donaldson, J. M., McNabney, M. K. and Kahng, S. (2014), Training and maintenance of a picture-based communication response in older adults with dementia. *Journal of Applied Behavior Analysis*, 47: 404–409.

Trahan, M. A., Kahng, S., Fisher, A. B., & Hausman, N. L. (2011). Behavior-Analytic Research on Dementia in Older Adults. *Journal of Applied Behavior Analysis*, 44(3), 687–691. http://doi.org/10.1901/jaba.2011.44-687

Virués-Ortega J. (2010). Applied behavior analytic intervention for autism in early childhood: Meta-analysis, meta-regression and dose–response meta-analysis of multiple outcomes. *Clinical Psychology Review*, 30(4), 387–399

Vollmer, T. R., Hagopian, L. P., Bailey, J. S., Dorsey, M. F., Hanley, G. P., Lennox, D., & Spreat, S. (2011). The association for behavior analysis international position statement on restraint and seclusion. *The Behavior Analyst*, *34(1)*, 103-110.

Ward, S., Parker, A., & Perdikaris, A. (2017). Task as reinforcer: A reactive alternative to traditional forms of escape extinction. *Behavior Analysis in Practice*, 10(1), 22-34.

Wirth, O., Slaven, J., & Taylor, M. A. (2014). Interval sampling methods and measurement error: A computer simulation. *Journal of Applied Bbehavior Annalysis*, 47(1), 83-100.

Wiskirchen, R.R., Deochand, N., & Peterson, S.M. (2017). Functional analysis: A need for clinical decision support tools to weigh risks and benefits. *Behavior Analysis: Research and Practice*, 17(4), 325-333.

Wong, C., Odom, S. L., Hume, K., Cox, A. W., Fettig, A., Kucharczyk, S., et al. (2014). Evidence-based practices for children, youth, and young adults with autism spectrum disorder. *Journal of Autism Spectrum Disorder: A Comprehensive Review.* 45(7): 1951-1966. https://doi.org/10.1007/s10803-014-2351-z.

Zimmerman J.G, Watson N, Treat A. (1984). Behavioral problems among patients of skilled nursing facilities. *American Journal of Public Health*. 74,1118–1121. https://www.ncbi.nlm.nih.gov/pubmed/6476166

Appendix 1: ABA methods used to change behaviour and teach new skills in educational settings

Purpose of ABA	Learning Goals for the Student	What does the teacher do?	What would an Educational/Teacher Assistant do?	What would the Team do?
Increase positive behaviours	To increase on-task behaviours	Design the student activities based on student needs and strengths and the expectations of the Ontario Curriculum Design the data collection tools in order to obtain desired data to evaluate student achievement and program success Collaborate with Educational Assistant in order to explain implementation of program.	Allow the student to select a preferred activity as reinforcement after working on a target activity. Collect data to measure on-task behaviours and record reinforcements.	Collaboratively analyze data to set new goals for the student or tweak program as required. Expert member of team may provide student specific training to teacher and/or educational assistant related to ABA strategies when new goals or approaches are introduced (personalize and make precise for the individual student)
Teach new skills	To learn a motor skill such as throwing a ball	Provide step-by step- instruction based on a systematic task analysis-teaching session may be to the individual student or a smaller group of students depending on the skill being taught. Use modelling and forward chaining as part of the presentation of new skill Collaborate with Educational Assistant in order to explain application of program after the discrete teaching	Provide praise as reinforcement as outlined by the teacher as part of the delivery of the student program Collect data to measure accuracy, speed and/or level of independence of student while doing the new task	Collaboratively analyze data to set new goals for the student or tweak program as required. Personalize strategies for the individual student (provide precise training as required)

Purpose of ABA	Learning Goals for the Student	What does the teacher do?	What would an Educational/Teacher Assistant do?	What would the Team do?
		session. Provide praise as reinforcement during a teaching session. Measure progression of skill development and determine whether additional subtasks need to be targeted		
Maintain behaviours	To maintain focus on the task	Systematically teach and prompt a student to use relaxation techniques, such as deep breathing, as a method to maintain focus on the task when a student who becomes distracted from tasks and is upset when other students finish tasks.	Model relaxation techniques and practice step by step with the student Prompt using a visual support for student to use relaxation techniques Praise student when relaxation techniques have been implemented successfully Collect data to measure on-task behaviours and record reinforcements.	Collaboratively analyze data to set new goals for the student or tweak program as required. Meet regularly for discussions about the student's unique learning needs, evidence of progress, and any adjustments to the educational program that may need to be considered. Participate in the Individual Education Plan and Transition process
Generalize or transfer behaviour	To generalize use of a skill that is used in a specific setting to other locations	Use shaping and reinforcements to gradually and systematically encourage self-calming techniques that are effective in the resource room to be used on the playground. Collect data to monitor the effectiveness of self-calming techniques in other locations.	Model self-calming behaviour and practice step by step with the student Provide praise as reinforcement when self-calming techniques are used Use visuals (videos/pictures) for student to see himself in self-calming situations Practice self-calming techniques in	Collaboratively analyze data to set new goals for the student or tweak program as required. Meet regularly for discussions about the student's unique learning needs, evidence of progress, and any adjustments to the educational program that may need to be considered.

Purpose of ABA	Learning Goals for the Student	What does the teacher do?	What would an Educational/Teacher Assistant do?	What would the Team do?
			different settings in order to transfer learned skills. Provide transitional object (prompt) for student to use when transferring from one setting to another Collect data to measure on-task behaviours and record reinforcements.	Participate in the Individual Education Plan and Transition Plan process
Restrict or narrow conditions under which behaviour occurs	To reduce use of inappropriate language	Use Discrete Trial Training and reinforcement to teach the student to replace shouting of inappropriate words with more appropriate language. Collect data to determine the use of replacement language and to track prompts required.	Model for the student appropriate language Praise student when appropriate language is used Role-play situations when inappropriate behaviour may occur and replace with appropriate behaviour Provide social scripts for practice at school and at home to rehearse with Collect data to measure on-task behaviours and record reinforcements.	Collaboratively analyze data to set new goals for the student or tweak program as required. Meet regularly for discussions about the student's unique learning needs, evidence of progress, and any adjustments to the educational program that may need to be considered. Participate in the Individual Education Plan and Transition Plan process

Jurisdictional Review



Section 2: Jurisdictional Review

2.1 Objective

The objective of the jurisdictional review is to provide summary information on how ABA is regulated or approached within jurisdictions with a similar socio-economic profile as Ontario. This review investigated ABA regulation and approaches to oversight within Canadian provinces, US states, and within selected international jurisdictions (several European countries, New Zealand and Australia).

The jurisdictional review is part of the evidence gathering undertaken by HPRAC, in addition to the literature and jurisprudence reviews. The reviews, along with stakeholder consultations, were useful in assisting HPRAC during its deliberations and in formulating its advice to the Minister.

2.2 Context

The jurisdictional review is useful in comparing Ontario's approach, to how ABA intervention is provided, to similar jurisdictions. Further, the review is helpful in identifying how other jurisdictions approach several issues including title protection, education and training of providers who carry out ABA activities and risk of harm.

At the time of writing, Ontario did not regulate ABA providers, such as clinical supervisors or front-line providers. However, Ontario has several government-funded programs with guidelines that outline education and training requirements for ABA providers.

For instance, MCYS funds the Ontario Autism Program⁸⁵ which has updated its guidelines. Additionally, the Ministry of Community and Social Services (MCSS) supports the Community Networks of Specialized Care (CNSC) which bring together various individuals from different sectors.⁸⁶ CNSC developed a set of Consensus Guidelines, which include the use of ABA activities, to assist families, caregivers and agencies in the daily care, support and treatment of adults with a dual diagnosis. The guidelines outline requirements for ABA providers who must have a BCBA qualification when conducting a functional assessment.

The Ministry of Education (EDU) developed its Policy/Program Memorandum No.140 (PPM 140). Under this program, school board must offer students with ASD special education programs, which include, where appropriate, special education using ABA methods.⁸⁷

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⁸⁵ Ontario Ministry of Children and Youth Ontario Autism Program Guidelines. (2018). Retrieved from http://www.children.gov.on.ca/htdocs/English/professionals/specialneeds/autism/oap-guidelines/toc.aspx

⁸⁶ Community Networks for Specialized Care. (n.d.). Complex behaviours. Retrieved from http://www.community-networks.ca/services/care-support-and-treatment/

⁸⁷ Ontario Ministry of Education. (2007). *Incorporating methods of applied behaviour analysis (ABA) into programs for students with autism spectrum disorder (ASD)*. Retrieved from http://www.edu.gov.on.ca/extra/eng/ppm/140.html

2.3 Methodology

Approximately 30 jurisdictions across several countries (including Canada, the United States, Europe, New Zealand and Australia) were reviewed for regulatory approaches to ABA, including the regulation of ABA providers. Specific details will be limited to selected jurisdictions which are mainly US-based.

HPRAC conducted an internet-based search which examined national, provincial, and state government regulation or licensing requirements, especially for North American jurisdictions. HPRAC also contracted the Ministry's RAEB to investigate oversight mechanisms of ABA in jurisdictions where it is regulated or licensed. Additionally, HPRAC relied on the Association for Behavior Analysis International (ABAI)⁸⁸ and Behavior Analyst Certification Board (BACB)⁸⁹ to supplement its findings, where necessary.

The jurisdictional review examined the following issues of select provinces and states:

- Definition of ABA
- ABA providers who are licensed
- Scope of practice of ABA providers, where applicable
- Exemptions to who may provide ABA activities
- Training and certification requirements, and
- Funding of ABA activities

2.4 Summary of Findings

ABA as a profession is not regulated widely beyond North America. However, several states have licensed ABA providers and enacted specific laws which address education, training, and certification requirements. At the time of writing this report, Canadian jurisdictions, with the exception of British Columbia which is considering regulating ABA providers, did not have any regulation for this profession. The summary of findings point to the following:

• Canadian provinces and territories have not adopted regulation of ABA providers, despite the recognition of ABA intervention in improving outcomes for many client populations. More specifically, Canadian provinces are more likely to fund ABA intervention, especially for ASD. Government-funded programs which offer ABA intervention are likely to have guidelines on the training and certification requirements of ABA providers. Accountability and complaints are mainly handled by employers. Additionally, there is an absence of oversight for ABA providers working privately.

⁸⁹ Behavior Analyst Certification Board (BACB). (2018). *Licensure and regulation of Behavior Analysts*. Retrieved from https://www.bacb.com/licensure-regulation/

⁸⁸ Association for Behavior Analysis International (ABAI). (2018). Retrieved from https://www.abainternational.org/welcome.aspx

- US states are more likely to use licensure when it comes to regulating ABA providers. Similarly, states which license ABA providers rely on the BACB certification as the "gold standard" for this profession. To date, over 30 states have licensed ABA providers which may be a result of increased demand for and recognition of ABA.
- Internationally, ABA intervention is not widely recognized. The exception is New Zealand where program guidelines on ABA are available. As a result, regulation of ABA providers is not available. For instance, in the United Kingdom ABA for ASD is provided through private means. Other international jurisdictions reviewed for this exercise did not have oversight mechanisms.

Table 3 lists the status of licensure or regulation of ABA providers in various jurisdictions.

Table 3: Status of ABA provider licensure or regulation

Regulated	Unregulated	Special Case
Alabama	British Columbia (in progress)	New York
Alaska	Prince Edward Island (PEI)	Ohio
Arizona	New Brunswick	
California	Nova Scotia	
Connecticut	Ontario	
Hawaii	Alberta	
Louisiana	Manitoba	
Kansas	Saskatchewan	
Kentucky	Yukon	
Maryland	Germany	
Massachusetts	New Zealand	
Michigan	Denmark	
Mississippi	Sweden	
Missouri	Netherlands	
Montana	United Kingdom	
Nevada	Australia	
North Dakota	Texas (in progress)	
Oklahoma	Remaining 21 US states	
Oregon		
South Dakota		
Tennessee		
Utah		
Vermont		
Virginia		
Washington		
Wisconsin		

2.5 Review of Detailed Findings

This portion of the jurisdictional review provides more detailed information on key issues such as the definition of ABA to augment findings within the literature and jurisprudence reviews. Table 4 lists the regulatory mechanisms applied to ABA across selected Canadian provinces, US states and other international countries. Additional details under each jurisdiction can be found in the Appendix at the end of this section.

Between 2009 to the time of writing this report, approximately 30 US states had instituted some form of licensure. HPRAC made the following observations from its review of US states:

- ABA is regulated on a continuum from title protection only to full licensure under a regulating body which may be a standalone regulatory body. In several instances, ABA is regulated as part of an existing regulatory professional body such as psychologists
- The majority of jurisdictions did not identify risk of harm as a result of ABA intervention. However, Vermont mentions that its legislation covering ABA providers was developed to minimize risk of harm and to protect the public
- Most states define what ABA is while some also describe what does not constitute ABA.
 Some state legislation is specific as to which other professions are exempt from practicing ABA
- New York limits the practice of ABA to address ASD only. ABA intervention to treat other disorders is not recognized

Table 4: Summary of ABA oversight mechanisms

Jurisdiction	Governance (Applicable Regulation, Statute, or Board)	Regulation of ABA providers	
		Yes	No
British Columbia	In progress		
Alberta			✓
Saskatchewan			✓
Manitoba			✓
Quebec	Cuidelines for covernment funded ADA related		✓
New Brunswick	Guidelines for government-funded ABA-related		✓
Nova Scotia	programs		✓
Prince Edward			✓
Island			
Newfoundland			✓
Yukon			✓

United States Jurisdictions				
Alabama ⁹⁰	Alabama Behavior Analyst Licensure Board	✓		
Alaska ⁹¹	Regulation of Behavioral Analysts			
Arizona ⁹²	TITLE 4. Professions and Occupations Chapter 26. ✓			
	Board of Psychologist Examiners – Article 4.			
	Behavior Analysts			
California ⁹³	SB-479 Healing arts: behavior analysis: licensing	\checkmark		
Connecticut ⁹⁴	Public Act No. 11-228: An Act concerning	✓		
	misrepresenting as a Board Certified Behavior Analyst			
Hawaii ⁹⁵	Chapter 465D: Behavior Analysts	✓		
Louisiana ⁹⁶	Louisiana Behavior Analyst Board	✓		
Kansas ⁹⁷	Behavioral Sciences Regulatory Board	✓		
Kentucky ⁹⁸	Applied Behavior Analyst Licensing Board	✓		
New York ⁹⁹	Applied Behavior Analysis licensed under the New	✓		
	York Office of the Professions			
Maryland	Behavior Analysts licensed under the Board of	✓		
	Professional Counselors and Therapists			
Massachusetts ¹⁰⁰	The Board of Allied Mental Health and Human	✓		
	Services licenses Behavioral Analysis professionals			
Michigan ¹⁰¹	Michigan Board of Behavior Analysts licensed under ✓			
	the Department of Licensing and Regulatory Affairs			
Mississippi ¹⁰²	Mississippi Licensing Board for the Practice of	√		
	Applied Behavior Analysis			

⁹⁰ Alabama Behavior Analyst Licensure Board. (2018), Retrieved fromhttp://www.mh.alabama.gov/ID/ABALB.aspx?sm=c h

⁹¹ Alaska Regulation of Behavioral Analysts. (December 2014). Retrieved from https://www.commerce.alaska.gov/web/Portals/5/pub/BehaviorStatutes.pdf

Parizona Board of Psychologist Examiners. (2018). Retrieved from https://psychboard.az.gov/

⁹³ California SB-479 Healing Arts: behavior analysts. (2018). Retrieved from http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill id=201520160SB479

⁹⁴ Connecticut Public Act No. 11-228. (2018) Retrieved from https://www.cga.ct.gov/2011/ACT/PA/2011PA-00228-R00SB-00799-PA.htm

⁹⁵ Hawaii Chapter 465D. (2018). Retrieved from https://cca.hawaii.gov/pvl/files/2015/12/HRS465D-BehaviorAnalysts-0716.pdf

96 Louisiana Behavior Analyst Board. (2018). Retrieved from https://www.lababoard.org/

⁹⁷ Kansas Behavioral Sciences Regulatory Board. (2018). Retrieved from http://ksbsrb.ks.gov/

⁹⁸ Kentucky Applied Behavior Analyst Licensing Board. (2018). Retrieved from http://aba.ky.gov/Pages/default.aspx

99 New York License of the Professions. (2018). Retrieved from http://www.op.nysed.gov/prof/aba/

¹⁰⁰ Massachusetts - The Board of Allied Mental Health and Human Services licenses professionals in Behavioral Analysis, Educational Psychology, Marriage and Family Therapy, Mental Health Counseling, and Rehabilitation Counseling. (2018). Retrieved from https://www.mass.gov/orgs/board-of-registration-of-allied-mental-health-andhuman-services-professions

¹⁰¹ Michigan (2018). Retrieved from http://www.michigan.gov/lara/0,4601,7-154-72600 72603 27529 80658---00.html http://www.michigan.gov/lara/0,4601,7-154-72600 72603 27529 80658---,00.html

Mississippi Licensing Board for the Practice of Applied Behavior Analysis works with the Mississippi Autism Board. (20180. Retrieved from http://sos.ms.gov/autismboard/About.aspx

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http://www.oregon.gov/OHA/PH/HLO/Pages/Board-Behavior-Analysis-Regulatory.aspx

https://www.doh.wa.gov/LicensesPermitsandCertificates/ProfessionsNewReneworUpdate/AppliedBehaviorAnalysis

¹⁰³ Missouri Behavior Analyst Advisory Board. (2018). Retrieved from http://pr.mo.gov/ba.asp

Montana Board of Pscychologt. (2018). Retrieved from http://boards.bsd.dli.mt.gov/psy

Nevada Board of Psychological Examiners. (2018). Retrieved from http://psyexam.nv.gov/

¹⁰⁶ North Dakota State Board of Psychological Examiners. (2018). Retrieved from http://www.ndsbpe.org/index.html

¹⁰⁷ Certified Ohio Behavior Analysts Laws and Rules. (2018). Retrieved from http://psychology.ohio.gov/Laws-Rules/Certified-Ohio-Behavior-Analyst-Laws-and-Rules

Oklahoma Licensed Behavior Analyst Board. (2018). Retrieved from

http://www.okdhs.org/services/dd/Pages/olbab.aspx

Oregon Behavior Analysis Regulatory Board. (2018). Retrieved from

Texas has posted its legislation covering the licensure of ABA providers for public comment until March 5, 2018. (2018). Retrieved from https://www.tdlr.texas.gov/bhv/bhv.htm
111 Vermont Title 26. (2018). Retrieved from https://www.sec.state.vt.us/professional-regulation/list-of-

professions/applied-behavior-analysis.aspx

112 Washington State Department of Health. (2018). Retrieved from

¹¹³ Wisconsin. Subchapter III Behavior Analysts. (2018). Retrieved from http://docs.legis.wisconsin.gov/statutes/statutes/440/I/08

Definition of ABA

ABA is often defined in states where it is regulated and where ABA providers are licensed. Several states rely on one or several aspects of the following BACB definition of ABA:¹¹⁴

• A systematic approach for influencing socially important behaviour through the identification of reliably related environmental variables and the production of behaviour change techniques that make use of those findings.

A detailed review of the ABA definition used by some states indicates that modifications or additions are often made to the BACB definition. For instance, Michigan's definition describes the types of assessments used in ABA (e.g., functional assessment). Commonly used terms of ABA definitions used by states include: relations between behaviour and environment, direct observation and measurement of behaviour, or use of consequences. In conclusion, the states which regulate ABA and license ABA providers are likely to use a standard definition of ABA, with some variance.

Funding of ABA

Funding for ABA intervention varies across the jurisdictions reviewed for this section. In US states which regulate ABA as a practice, public funding may be available to clients who receive Medicaid. Clients and their caregivers may be reimbursed by private insurance for costs incurred when receiving ABA services. Internationally, clients and caregivers are likely to pay out of pocked due to the lack of official regulation and oversight for ABA.

Canadian jurisdictions vary in their approach to funding ABA services. ABA for children with ASD is supported and funded by most provincial governments. However, service delivery varies across provinces:

- British Columbia promotes ABA providers who are registered on its Registry of Autism Service Providers (RASP) registry. Other providers included on the registry such as speech language pathologists, physical therapists, and occupational therapists.
- Alberta requires parents or caregivers to submit treatment/learning plans for the direct payment option whereby parents use government funds to purchase services from a private provider. The treatment/learning plan must take into consideration services other than ABA such as speech therapy.
- Manitoba's Department of Family Services and Labour funds ABA and IBI services through a third party.

¹¹⁴ BACB. (2018). Retrieved from https://www.bacb.com/about-behavior-analysis/

¹¹⁵ Registry of Autism Service Providers. (2018). Retrieved from http://autisminfo.gov.bc.ca/rasp/search/

- Quebec announced annual funding \$60 million for ABA services in March 2017. 116
- The Maritime provinces of Newfoundland, New Brunswick and Prince Edward Island, support ABA for children with autism, especially when offered for Intensive Behavioral Intervention (IBI).

Risk of Harm

Jurisdictions which regulate the practice, have approached risk of harm dealing with ABA by focusing on key matters such as missed ABA intervention and addressing ABA providers who lack training or certification. However, in jurisdictions where ABA providers are not regulated, guidelines are usually available for publically funded programs, especially for programs dealing with ASD. For instance, ABA intervention for children under six years old with ASD is advocated by several Canadian provinces (e.g., Manitoba, Alberta, Newfoundland, Ontario) due to research which points to the efficacy of early intervention. The absence of ABA intervention at early age may result in delayed development in adolescence and into adulthood. As such, several jurisdictions acknowledge the risk of harm due to missed ABA intervention at an early age.

Risk of harm due to ABA providers who are not trained or do not meet certification requirements is addressed by jurisdictions by setting requirements for publically funded ABA programs. For instance, Canadian maritime provinces compel ABA providers working for government-funded ASD programs to meet the requisite training and certification requirements.

Conversely, jurisdictions which do not regulate ABA lack guidelines to address ABA providers who do not work in publically funded programs yet provide services privately. As a result, parents and caregivers may rely on different mechanisms to verify qualifications of ABA providers who are hired privately. For instance, in Ontario, parents and caregivers may search ABACUS¹¹⁸ for private ABA providers. ABACUS is a listing of ABA providers who meet requirements to deliver ABA intervention. Additionally, parents and caregivers may use professional associations to find ABA providers.

All in all, risk of harm due to missed intervention and ABA providers who lack training and certification may be acknowledged by some jurisdictions which do not regulate ABA providers through the use of guidelines for publically funded programs.

¹¹⁶ CBC News. 'It doesn't help with anything': Quebec autism plan leaves parents in despair \$29M plan prioritizes increased applied behavioural therapy services for pre-schoolers. (2017). Retrieved from http://www.cbc.ca/news/canada/montreal/quebec-autism-plan-1.4034060

¹¹⁷ Perry, A., Cummings, A., Geier, J. D., Freeman, N. L., Hughes, S., Managhan, T., & Williams, J. (2011). Predictors of outcome for children receiving intensive behavioral intervention in a large, community-based program. *Research in Autism Spectrum Disorders*, *5*(1), 592-603.

¹¹⁸ ABACUS list for ABA providers working with children with ASD. (2018). Retrieved from https://www.abacuslist.ca/

Regulation/oversight mechanisms of ABA

Jurisdictions apply different mechanisms when it comes to regulation and oversight of ABA providers. For instance, regulation or oversight may be rigorous (full regulation under own body) to less stringent (e.g., title protection only or a registry). Below are examples of regulation/oversight mechanisms employed by select jurisdictions.

- **Licensure under own body:** Several states license ABA providers under their body with a scope of practice and full title protection. For instance, Kentucky licenses ABA providers under the Kentucky Behavioral Sciences Regulatory Board.
- Licensure under another health profession: Where ABA providers are licensed under another health profession, it tends to be that of psychology. Such licensure still contains a defined scope of practice and title protection. Montana and Nevada are examples of where ABA providers are licensed under the state's board of Psychology. In such an instance, some members of the licensing board may be certified ABA providers.
- General regulatory body: Oversight of ABA providers may also be provided under a
 general regulatory body as in the cases of New York (Office of the Professions) and
 Massachusetts (Board of Allied Mental Health and Human Services Professionals).
 Scopes of practice and title protection for ABA providers are still maintained in such
 situations.
- Oversight under an advisory body: Michigan grants oversight of ABA providers using an Advisory Body. The Michigan Department of Licensing and Regulatory Affairs (LARA) has a Behavior Analyst Advisory Board composed of an analyst, assistant analyst, a psychologist and two parents.
- Title protection only: Connecticut is an example where title protection for ABA providers is granted without a scope of practice. At the time of writing this report, Connecticut had not licensed ABA providers nor had it enacted any law regulating ABA. The title protection in the state restricts non-BACBs from using the title of "Board Certified Behavior Analyst" or "Board Certified Assistant Behavior Analyst" or similar titles.
- Registry: Several jurisdictions have put in place registries aimed at capturing ABA providers. New York stands out for having a registry, in addition to the title protection and scope of practice for ABA providers. The registry stands as an additional oversight mechanism to ensure that individuals delivering ABA services are not only registered but meet the requirements as set out by law.

Conversely, British Columbia's RASP and Ontario's ABACUS registries were created in isolation of any regulation. While recognized by several government programs, and in both cases, publically funded, these registries lack the added layer of protection in the form of regulation. Without regulation, both RASP and ABACUS lack robust complaints and

accountability mechanisms should anything go wrong if a parent or caregiver engages a provider from the respective registry.

Unique cases

In reviewing the regulation and oversight mechanisms available, HPRAC noted some unique cases presented below.

- New York: The scope of practice for ABA providers is limited to treating clients with ASD only. New York is unique among the states which license ABA since these do not limit it to ASD only. As a result, the New York State Association for Behavior Analysis (NYSABA) is advocating lifting of the restriction placed on the scope of practice. 119
- **Ohio:** The state is unique in advocating its own certification which is based on the BACB requirements.

Exemptions

US jurisdictions are more likely to provide oversight of ABA providers using different mechanisms. Additionally, several states acknowledge that ABA is not practiced by licensed individuals only. Unlicensed providers are likely to work in a variety of settings including schools and religious settings. As a result, some jurisdictions have exemptions to who may practice ABA such as:

- **Michigan:** Self-care by a patient, behaviour technician implementing a plan under supervision, school-based paraprofessional, individuals working with animals
- Ohio: Certain professions are exempt such as licensed psychologists, counselors, social workers, marriage or family therapists trained in behavioural analysis. Others who are exempt include:
 - Family member under a plan and supervision.
 - Graduate student whose activities are defined under a program of study, and
 - Professional employed in a school setting which is regulated by the State board of education or an individual employed with the departments of developmental disabilities
- **South Dakota:** In addition to the above, the state includes an exemption to individuals practicing ABA services for an organization as a whole which do not involve persons, as well as individuals working with non-humans including animal trainers

¹¹⁹ New York State Association for Behavior Analysis (2018). Retrieved from https://www.nysaba.org/

Titles, Education and Certification

US states where ABA is regulated rely on BACB certification for the different titles such as Behaviour Analyst or Assistant Behaviour Analyst. Only a few states rely on state certification (Ohio for behaviour analyst, Louisiana and Oklahoma for assistant behaviour analyst).

In Canada, requirements for education and training differ depending on guidelines for government funded programs offering ABA services. Some examples for titles and certification requirements are listed below.

- **Alberta:** BACB certification is recommended for individuals providing BA services under the Family Support with Children with Disabilities program ¹²⁰
- **Manitoba:** Government-funded agency has autism consultants with either a Master's or PhD who lead teams and manage interventions¹²¹
- **PEI:** Special Autism Education Coordinator must be BCBA certified; IBI Autism Specialists must have a Master's degree ¹²²
- **New Brunswick:** government requires a team model where members are certified through New Brunswick's Clinical Supervisor or Autism Support worker programs. Team to include 1 clinical supervisor (Master's degree in speech language pathology, psychology, social work or education and have BACB certification), two behaviour consultants working with a team of over 10 behaviour interventionists. 123

¹²⁰ Alberta Human Services - Family Support for Children with Disabilities. (2018) Retrieved from http://www.humanservices.alberta.ca/disability-services/15775.html

Manitoba's Department of Family Services and Labour (Disability Programs and Early Learning and Child Care Division). (2018). Retrieved from https://stamant.ca/programs/clinical-services/behavioural-services/

¹²² Prince Edward Island. Department of Education and Early Childhood Development. (2018). Retrieved from https://www.princeedwardisland.ca/en/department/education-early-learning-and-culture/about

¹²³ New Brunswick's guidelines: Preschool Autism Program. (2018). Retrieved from http://www2.gnb.ca/content/dam/gnb/Departments/ed/pdf/K12/autisme/PreschoolAutismProgramParentHandbook.pdf

2.6 Conclusion

HPRAC's jurisdictional scan examined approximately 30 jurisdictions. Oversight or regulation of ABA providers was dependent on whether a jurisdiction recognized ABA intervention and its application to address several issues such as ASD. HPRAC findings indicate that ABA intervention is recognized within North America; however, internationally, ABA is not yet recognized to the same degree.

Within North America, the United States jurisdictions which license ABA providers rely heavily on the BACB to address issues such as the definition of ABA, titles, certification, and education requirements. Conversely, Canadian jurisdictions are more likely to use guidelines for government funded programs offering ABA.

References

ABACUS list for ABA providers working with children with ASD. (2018). Retrieved from https://www.abacuslist.ca/

Alberta Human Services - Family Support for Children with Disabilities. (2018) Retrieved from http://www.humanservices.alberta.ca/disability-services/15775.html

Alabama Behavior Analyst Licensure Board. (2018), Retrieved from http://www.mh.alabama.gov/ID/ABALB.aspx?sm=c h

Alaska Regulation of Behavioral Analysts. (December 2014). Retrieved from https://www.commerce.alaska.gov/web/Portals/5/pub/BehaviorStatutes.pdf

Arizona Board of Psychologist Examiners. (2018). Retrieved from https://psychboard.az.gov/ California SB-479 Healing Arts: behavior analysts. (2018). Retrieved from https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB479

Association for Behavior Analysis International (ABAI). (2018). Retrieved from https://www.abainternational.org/welcome.aspx

Behavior Analyst Certification Board (BACB). (2018). *Licensure and regulation of Behavior Analysts*. Retrieved from https://www.bacb.com/licensure-regulation/

CBC News. 'It doesn't help with anything': Quebec autism plan leaves parents in despair \$29M plan prioritizes increased applied behavioural therapy services for pre-schoolers. (2017). Retrieved from http://www.cbc.ca/news/canada/montreal/quebec-autism-plan-1.4034060

Community Networks for Specialized Care. (n.d.). Complex behaviours. Retrieved from http://www.community-networks.ca/services/care-support-and-treatment/

Connecticut Public Act No. 11-228. (2018) Retrieved from https://www.cga.ct.gov/2011/ACT/PA/2011PA-00228-R00SB-00799-PA.htm

Hawaii Chapter 465D. (2018). Retrieved from https://cca.hawaii.gov/pvl/files/2015/12/HRS465D-BehaviorAnalysts-0716.pdf

Louisiana Behavior Analyst Board. (2018). Retrieved from https://www.lababoard.org/

Kansas Behavioral Sciences Regulatory Board. (2018). Retrieved from http://ksbsrb.ks.gov/

Kentucky Applied Behavior Analyst Licensing Board. (2018). Retrieved from http://aba.ky.gov/Pages/default.aspx

Manitoba's Department of Family Services and Labour (Disability Programs and Early Learning and Child Care Division). (2018). Retrieved from https://stamant.ca/programs/clinical-services/

Massachusetts - The Board of Allied Mental Health and Human Services licenses professionals in Behavioral Analysis, Educational Psychology, Marriage and Family Therapy, Mental Health Counseling, and Rehabilitation Counseling. (2018). Retrieved from https://www.mass.gov/orgs/board-of-registration-of-allied-mental-health-and-human-services-professions

Michigan (2018). Retrieved from http://www.michigan.gov/lara/0,4601,7-154-72600 72603 27529 80658---,00.html

Mississippi Licensing Board for the Practice of Applied Behavior Analysis works with the Mississippi Autism Board. (20180. Retrieved from http://sos.ms.gov/autismboard/About.aspx

Missouri Behavior Analyst Advisory Board. (2018). Retrieved from http://pr.mo.gov/ba.asp

Montana Board of Pscychologt. (2018). Retrieved from http://boards.bsd.dli.mt.gov/psy

New Brunswick's guidelines: Preschool Autism Program. (2018). Retrieved from http://www2.gnb.ca/content/dam/gnb/Departments/ed/pdf/K12/autisme/PreschoolAutismProgram mParentHandbook.pdf

New York License of the Professions. (2018). Retrieved from http://www.op.nysed.gov/prof/aba/

New York State Association for Behavior Analysis (2018). Retrieved from https://www.nysaba.org/

Nevada Board of Psychological Examiners. (2018). Retrieved from http://psyexam.nv.gov/

North Dakota State Board of Psychological Examiners. (2018). Retrieved from http://www.ndsbpe.org/index.html

Ohio. Certified Ohio Behavior Analysts Laws and Rules. (2018). Retrieved from http://psychology.ohio.gov/Laws-Rules/Certified-Ohio-Behavior-Analyst-Laws-and-Rules

Oklahoma Licensed Behavior Analyst Board. (2018). Retrieved from http://www.okdhs.org/services/dd/Pages/olbab.aspx

Ontario Ministry of Children and Youth Ontario Autism Program Guidelines. (2018). Retrieved from http://www.children.gov.on.ca/htdocs/English/professionals/specialneeds/autism/oap-guidelines/toc.aspx

Ontario Ministry of Education. (2007). *Incorporating methods of applied behaviour analysis* (ABA) into programs for students with autism spectrum disorder (ASD). Retrieved from http://www.edu.gov.on.ca/extra/eng/ppm/140.html

Oregon Behavior Analysis Regulatory Board. (2018). Retrieved from http://www.oregon.gov/OHA/PH/HLO/Pages/Board-Behavior-Analysis-Regulatory.aspx

Perry, A., Cummings, A., Geier, J. D., Freeman, N. L., Hughes, S., Managhan, T., & Williams, J. (2011). Predictors of outcome for children receiving intensive behavioral intervention in a large, community-based program. *Research in Autism Spectrum Disorders*, *5*(1), 592-603.

Prince Edward Island. Department of Education and Early Childhood Development. (2018). Retrieved from https://www.princeedwardisland.ca/en/department/education-early-learning-and-culture/about

Registry of Autism Service Providers. (2018). Retrieved from http://autisminfo.gov.bc.ca/rasp/search/

Texas has posted its legislation covering the licensure of ABA providers for public comment until March 5, 2018. (2018). Retrieved from https://www.tdlr.texas.gov/bhv/bhv.htm

Vermont Title 26. (2018). Retrieved from https://www.sec.state.vt.us/professional-regulation/list-of-professions/applied-behavior-analysis.aspx

Washington State Department of Health. (2018). Retrieved from https://www.doh.wa.gov/LicensesPermitsandCertificates/ProfessionsNewReneworUpdate/AppliedBehaviorAnalysis

Wisconsin. Subchapter III Behavior Analysts. (2018). Retrieved from http://docs.legis.wisconsin.gov/statutes/statutes/440/I/08

Appendix: Detailed review findings of selected jurisdictions

Jurisdiction	Definitions / Scope of Practice of ABA	Titles of ABA Providers/ Funding	Certification/training
British	In the process of regulating ABA providers	D. I. D. I. C. I.	Behavioural consultants who are Board
Columbia		Reliance on the Registry of Autism	Certified Behaviour Analyst (BCBA) or
		Service Providers (RASP) for oversight	an individual with a Bachelor's and
		Funding for children under age six: Families can access up to \$22,000 per	Master's or PhD in Special Education, Educational Psychology or Applied
		year per child to help pay for eligible	Behavioural Analysis may register under
		autism intervention services and therapies.	RASP
		Parents are required to select professional	IVIOI
		service providers from the Registry of	Additional experience includes 2 (with a
		Autism Service Providers (RASP).	Masters) or 1 year (with a PhD)
			experience in direct child experience; or
		Funding for children aged 6-	extensive clinical experience developing
		18: Families can access up to \$6,000 per	and providing intensive supervision to
		year per child to help pay for eligible out-	children diagnosed with ASD
		of-school autism intervention services and	
		therapies. Parents often ask why funding	
		is reduced for children over the age of six.	
		Once children with autism start school,	
		they also benefit from the education programs and services that are available	
		through the school system. Specifically,	
		school districts receive \$18,850 in	
		additional funding for every student with	
		autism in order to provide them with in-	
		school interventions and services.	
		Parents may receive direct funding but	
		this must be spent on eligible expenses	
		under autism funding including ABA	
		services.	

Jurisdiction	Definitions / Scope of Practice of ABA	Titles of ABA Providers/ Funding	Certification/training
Alberta	N/A	No regulation or licensiBehavioural Analysts	Certified under BCBA is recommended but most BA's are not certified beyond university education -May require a Masters' degree (i.e., psychology) to practice as a BA for services provided under Family Support with Children with Disabilities (families receive for a contract /funding based on child's need) Titles are not protected. Anyone can call themselves a Behavioural Analyst as long as they indicate previous experience working with children
Manitoba		No regulation of Behavioural Analysts	Central agency which provides ABA has Autism Consultants who lead the teams and manage intervention for each child. No mention of certification requirements Autism consultants have a PhD or Masters in Behavioural Analysis Senior therapists used by the agency have completed post-secondary courses in BA
New Brunswick	N/A	Requires Clinical supervisors and Autism Support Workers to have certification through the University of New Brunswick's Clinical Supervisor or Autism Support Worker training programs	Clinical Supervisor must have a Master's in: Psychology, speech language pathology, social work, education, or applied behavioural analysis; must complete provincial level 2 autism training and be BACB certified;

Jurisdiction	Definitions / Scope of Practice of ABA	Titles of ABA Providers/ Funding	Certification/training
Julisurction	Definitions / Scope of Fractice of ABA	For agencies providing services to 25 or more children, the government requires a team model based on the following: - 1 Clinical Supervisor - 2+ Behavior Consultants - 12+ Behaviour Interventionists	and must pass Department's criminal checks Behaviour consultant must have a Bachelor's degree in social sciences, health sciences or education with min. 5 years working experience if degree in another area; must complete provincial Education and Early Childhood Development level 2 Autism training and pass criminal background Behavioural Analyst must be at least 18 years old with a high school education and completed provincial Education and Early Childhood
Massachusetts	Scope of practice: The design, implementation and evaluation of systematic instructional and environmental modifications, using behavioral stimuli and consequences, to produce socially significant improvements in human behavior, including the direct observation and measurement of behavior and the environment, the empirical identification of functional relations between behavior and environmental factors, known as functional assessment and analysis, and the introduction of interventions based on scientific research and which utilize contextual factors, antecedent stimuli, positive reinforcement and other consequences to		Applied behavior analyst", an individual who, by training, experience and examination meets the requirements for licensing by the board and is duly licensed to engage in the practice of applied behavior analysis in the commonwealth. BCaBA. A Board Certified Assistant Behavior Analyst certified by the BACB. BCBA. A Board Certified Behavior Analyst certified by the BACB.

Jurisdiction	Definitions / Scope of Practice of ABA	Titles of ABA Providers/ Funding	Certification/training
	develop new behaviors, increase or decrease		Supervision must be provided by a
	existing behaviors and elicit behaviors under		licensed applied behaviour analyst or
	specific environmental conditions that are		BCBA qualified to supervise by BACB
	delivered to individuals and groups of individuals; and provided further, that the		
	scope of practice of applied behavior analysis		
	shall not include psychological testing,		
	neuropsychology, diagnosis of mental health		
	or developmental conditions, psychotherapy,		
	cognitive therapy, sex therapy,		
	psychoanalysis, psychopharmacological		
	recommendations, hypnotherapy or academic		
	teaching by college or university faculty.		
	Exclusions or exemptions:		
3.6. 1.	None	D () LOD D 1 1 1 1 1 1	M: 1: 1 A DACD C
Michigan	In 2016 the state passed into law (Senate Bill 1015 (S-2)) – Public Act 403 of 2016 the	Protected titles : Behavior Analyst and Assistant Behavior Analyst	Michigan relays on the BACB for training and certification standards for
	licensure of BA providers to ensure that	Assistant Benavior Analyst	behaviour analyst and assistant behaviour
	insurance companies reimburse caregivers for	Oversight under the Michigan Department	analyst.
	treatment costs	of Licensing and Regulatory Affairs	anaryst.
	-Prior to licensure, insurance providers were	(LARA)	Certification:
	reluctant to acknowledge BA services and		Must be board certified under the
	parents often paid out of pocket		Behavior Analyst Certification Board
	-Licensed BAs now fall under the oversight of		(BACB) as a Behaviour Analyst
	the Michigan Department of Licensing and		(BCBA)
	Regulatory Affairs (LARA)		
	-Standards are still being developed between		Training requirement under the
	LARA and the Michigan Board of Behaviour		BACB:
	Analysts; however, some are set out in		Requires an acceptable graduate degree
	legislation. Legislations was proclaimed on April 7, 2017 allowing the Michigan Board of		from an accredited university, completion of acceptable graduate
	April 1, 2017 allowing the Michigan Doard of		completion of acceptable graduate

Jurisdiction	Definitions / Scope of Practice of ABA	Titles of ABA Providers/ Funding	Certification/training
	Behaviour Analysts to become part of LARA		coursework in behavior analysis, and a
	and with nine voting members who will		defined period of supervised practical
	provide oversight of Bas		experience to apply for the BCBA exam.
	Definition of Applied Behaviour Analysis		
	(scope of practice)		
	"Practice of applied behavior analysis" would		
	mean the design, implementation, and		
	evaluation of instructional and environmental		
	modifications to produce socially significant		
	improvement in human behavior. The term		
	would include all of the following:		
	- The empirical identification of functional		
	relations between behavior and environmental		
	factors, known as functional assessment and		
	analysis.		
	- Applied behavior analysis interventions that		
	are based on scientific research and the direct		
	observation and measurement of behavior and		
	the environment The use of contextual		
	factors, motivating operations, antecedent		
	stimuli, or positive reinforcement.		
	- The use of other consequences to help		
	individuals develop new behaviors, increase		
	or decrease existing behaviors, and emit		
	behaviors under specific environmental		
	conditions.		
	"Practice of applied behavior analysis" would		
	not include any of the following:		
	-The practice of medicine or osteopathic		
	medicine and surgery or medical diagnosis or		
	treatment.		

Jurisdiction	Definitions / Scope of Practice of ABA	Titles of ABA Providers/ Funding	Certification/training
	-The practice of speech-language pathology,		
	physical therapy, or occupational therapy.		
	-Psychological testing, including standardized		
	testing for intelligence or personality		
	Diagnosis of a mental or physical impairment.		
	The practice of neuropsychology,		
	psychotherapy, cognitive therapy, sex therapy,		
	psychoanalysis, hypnotherapy, or counseling		
	as treatment modalities.		
	Exemptions:		
	a) Self-care by a patient or uncompensated		
	care by a friend or family member who does		
	not represent or hold himself or herself out to		
	be a behavior analyst or assistant behavior		
	analyst. (b) A behavior technician from		
	implementing a care plan under the delegation		
	and supervision of a behavior analyst. (c) A		
	family member from providing a follow-up		
	home program designed by a behavior		
	analyst. (d) A school-based paraprofessional		
	from implementing an applied behavior		
	analysis intervention under the delegation and		
	supervision of a licensed professional		
	described in subdivision (e) or an authorized		
	professional described in subdivision (f). 3		
	ESB 1015 (e) An individual authorized to		
	practice psychology in the state under part		
	182 from providing services included in the		
	practice of applied behavior analysis, if the		
	behavior analysis services provided by that		
	individual are within his or her education,		

Jurisdiction	Definitions / Scope of Practice of ABA	Titles of ABA Providers/ Funding	Certification/training
	training, and experience. (f) An individual		
	who holds a license, certificate, registration,		
	or other authorization from this state that		
	authorizes him or her to perform 1 or more of		
	the services included in the practice of applied		
	behavior analysis, so long as the individual		
	does not do any of the following: (i) Perform		
	any services included in the practice of		
	applied behavior analysis that are not within		
	the scope of practice of his or her profession		
	or occupation. (ii) Perform any services		
	included in the practice of applied behavior		
	analysis that he or she is not qualified by his		
	or her education, training, and experience to		
	perform. (iii) Represent that he or she is a		
	behavior analyst or assistant behavior analyst.		
	(g) An individual who is a matriculated		
	student at a nationally accredited university		
	approved in rules or who is a postdoctoral		
	fellow from performing activities that are		
	considered under this part to be the practice of		
	applied behavior analysis if the activities are		
	part of a defined behavior analysis program of		
	study or practicum approved in rules and if		
	the student or fellow is directly supervised by		
	an individual who is any of the following: (i)		
	Licensed as a behavior analyst under this part.		
	(ii) Appointed as the instructor of a course		
	sequence approved by the BACB or other		
	certification board. (h) An individual who is		
	not licensed under this part from pursuing		
	experience in behavior analysis compatible		

Jurisdiction	Definitions / Scope of Practice of ABA	Titles of ABA Providers/ Funding	Certification/training
	with the BACB's experience requirements for		
	an applied behavior analysis credential, if the		
	experience is supervised by an individual who		
	is licensed as a behavior analyst under this		
	part. (i) An individual from performing		
	activities that are considered under this part to		
	be the practice of applied behavior analysis if		
	the activities are with nonhuman or nonpatient		
	clients or consumers. Individuals described in		
	this subdivision include, but are not limited to,		
	applied animal behaviorists and practitioners		
	of organizational behavior management.		
	What is not considered ABA:		
	ii) The practice of applied behavior analysis		
	does not include any of the following:		
	(A) The practice of medicine, the practice of		
	osteopathic medicine and surgery, or medical		
	diagnosis or treatment.		
	(B) The practice of speech-language		
	pathology.		
	(C) The practice of physical therapy.		
	(D) The practice of occupational therapy.		
	(E) Psychological testing, including		
	standardized testing for intelligence or		
	personality. (F) Diagnosis of a mental or physical		
	impairment.		
	(G) The practice of neuropsychology,		
	psychotherapy, cognitive therapy, sex therapy,		
	psychoanalysis, hypnotherapy, or counseling		
	as treatment modalities.		

Jurisdiction	Definitions / Scope of Practice of ABA	Titles of ABA Providers/ Funding	Certification/training
Kentucky	Definition of Applied Behaviour Analysis:	Protected titles: Protected titles:	Kentucky relies on the BACB for
	"Applied behavior analysis" means the design,	Behavior Analyst and Assistant Behavior	training and certification standards.
	implementation, and evaluation of	Analyst	
	environmental modifications, using		
	behavioral stimuli and consequences, to		
	produce socially significant improvement in		
	human behavior, including the use of direct		
	observation, measurement, and functional		
	analysis of the relationship between		
	environment and behavior; (2) "Applied		
	behavior analysis interventions" means		
	interventions that are based on scientific		
	research and the direct observation and		
	measurement of behavior and environment		
	which utilize contextual factors, establishing		
	operations, antecedent stimuli, positive		
	reinforcement, and other consequences to help		
	people develop new behaviors, increase or		
	decrease existing behaviors, and elicit		
	behaviors under specific environmental		
	conditions"		
	Scope of practice:		
	"Practice of applied behavior analysis" means		
	the application of the principles, methods, and		
	procedures of the experimental analysis of		
	behavior and applied behavior analysis,		
	including but not limited to applications of		
	those principles, methods, and procedures to:		
	(a) Design, implement, evaluate, and modify		
	treatment programs to change the behavior of		
	individuals diagnosed with an autism		

Jurisdiction	Definitions / Scope of Practice of ABA	Titles of ABA Providers/ Funding	Certification/training
	spectrum disorder; (b) Design, implement, evaluate, and modify treatment programs to change the behavior of individuals; (c) Design, implement, evaluate, and modify treatment programs to change the behavior of groups; and (d) Consult with individuals and organizations. The practice of applied behavior analysis shall not include diagnosis, counseling, psychological testing, neuropsychology, psychotherapy, cognitive therapy, sex therapy, psychoanalysis, or hypnotherapy as treatment modalities		
Ohio	No scope of practice Definition of ABA of applied behavior analysis" means the design, implementation, and evaluation of instructional and environmental modifications to produce socially significant improvements in human behavior and includes the following: (a) The empirical identification of functional relations between behavior and environmental factors, known as functional assessment and analysis; (b) Interventions based on scientific research		Relies on state-based certification

Jurisdiction	Definitions / Scope of Practice of ABA	Titles of ABA Providers/ Funding	Certification/training
	and the direct observation and measurement of behavior and the environment;		
	(c) Utilization of contextual factors, motivating operations, antecedent stimuli, positive reinforcement, and other consequences to help people develop new behaviors, increase or decrease existing behaviors, and emit behaviors under specific environmental conditions.		
New York	"Applied behavior analysis" or "ABA" means the design, implementation, and evaluation of environmental modifications, using behavioral stimuli and consequences, to produce socially significant improvement in human behavior, including the use of direct observation, measurement, and functional analysis of the relationship between environment and behavior.	Title protection for the following: LBA – Licensed Behaviour Analyst (must complete a Master's degree or higher CBAA – Certified Behaviour Analyst Assistant (must complete a Bachelor's degree or higher)	
	Scope of practice		
	1.The practice of applied behavior analysis by a "licensed behavior analyst" shall mean the design, implementation and evaluation of environmental modifications, using behavioral stimuli and consequences, to produce socially significant improvement in human behavior, including the use of direct		

Jurisdiction	Definitions / Scope of Practice of ABA	Titles of ABA Providers/ Funding	Certification/training
Jurisdiction	observation, measurement, and functional analysis of the relationship between environment and behavior, pursuant to a diagnosis and prescription or order from a person who is licensed or otherwise authorized to provide such diagnosis and prescription or ordering services pursuant to a profession enumerated in this title, for the purpose of providing behavioral health treatment for persons with autism and autism spectrum disorders and related	Titles of ABA Providers/ Funding	Certification/training
	disorders. 2. The practice of applied behavior analysis by a "certified behavior analyst assistant" means the services and activities provided by a person certified in accordance with this article who works under the supervision of a licensed behavior analyst to perform such patient related applied behavior analysis tasks as are assigned by the supervising licensed behavior analyst. Supervision of a certified behavior analyst assistant by a licensed behavior analyst shall be in accordance with regulations of the commissioner. No licensed behavior analyst		
	shall supervise more than six certified behavior analyst assistants. 3. The practice of applied behavior analysis shall not include diagnosis of a disorder or condition for which ABA may be		

Jurisdiction	Definitions / Scope of Practice of ABA	Titles of ABA Providers/ Funding	Certification/training
Jurisdiction	appropriate, or prescribing or ordering ABA for a particular individual. 4. Any individual whose license or authority to practice derives from the provisions of this article shall be prohibited from: a. Prescribing or administering drugs as defined in this chapter or as a treatment, therapy, or professional service in the practice of his or her profession; or b. Using invasive procedures as a treatment, therapy, or professional service in the practice of his or her profession. For purposes of this subdivision, "invasive procedure" means any procedure in which human tissue is cut, altered, or otherwise infiltrated by mechanical or other means. Invasive procedure includes, but is not limited to, surgery, lasers, ionizing radiation, therapeutic ultrasound, or electroconvulsive therapy.	Titles of ABA Providers/ Funding	Certification/training
	Exemptions: Teachers, students studying to become ABA providers, parents and caregivers are exempt from the restrictions of practicing ABA.		
Texas	At time of writing, the draft law was under public consultation. Proposed law will not cover the following: College or university students, interns, and	As of November 29, 2017: Accepting applications for individuals seeking licensure for the following titles: • Behavior analysts and assistant	

Jurisdiction	Definitions / Scope of Practice of ABA	Titles of ABA Providers/ Funding	Certification/training
	fellows, as part of a program of study, course, practicum, internship, or postdoctoral fellowship • Paraprofessionals, including technicians, providing services under the direction of a licensee • Unlicensed persons pursuing supervised experience in applied behavior analysis • Family members and guardians implementing a behavior analysis treatment plan	behavior analysts licensed by TDLR The following are not covered under the Behaviour Analyst Law: • Applied behavior analysis technician; • Behavior technician; • Tutor; or • Front-line therapist	8
Vermont	Risk of harm: stated under the preamble of Purpose and effect In order to safeguard the life and health of the people of this State, a person shall not hold himself or herself out as practicing, practice, or offer to practice, as an applied behavior analyst or an assistant behavior analyst unless currently licensed under this chapter. (Added 2015, No. 38, § 46, eff. July 1, 2016.) Definition of ABA: 5) "Practice of applied behavior analysis" means the design, implementation, and evaluation of systematic instructional and environmental modifications for the purpose of producing socially significant improvements in and understanding of behavior based on the principles of behavior identified through the experimental analysis of behavior.		

Jurisdiction	Definitions / Scope of Practice of ABA	Titles of ABA Providers/ Funding	Certification/training
	(A) It includes the identification of functional relationships between behavior and environments.		
	(B) It uses direct observation and measurement of behavior and environment. Contextual factors, establishing operations, antecedent stimuli, positive reinforcers, and other consequences are used, based on identified functional relationships with the environment, in order to produce practical behavior change.		
	Scope of practice: (a) A person licensed under this chapter shall only engage in the practice of applied behavior analysis upon, and within the scope of, a referral from a licensed health professional or school official duly authorized to make such a referral.		
	What ABA is not: (b) The practice of applied behavior analysis shall not include psychological testing, neuropsychology, diagnosis of mental health or developmental conditions, psychotherapy, cognitive therapy, sex therapy, psychoanalysis, psychopharmacological recommendations, hypnotherapy, or academic teaching by college or university faculty. (Added 2015, No. 38, § 46, eff. July 1, 2016.)		

Jurisdiction	Definitions / Scope of Practice of ABA	Titles of ABA Providers/ Funding	Certification/training
	Exceptions: This chapter does not prohibit: (1) The practice of a person who is not licensed under this chapter, who does not use the term "behavior analysis" or similar descriptors suggesting licensure under this chapter, and who is engaged in the course of his or her customary duties: (A) in the practice of a religious ministry; (B) in employment or rehabilitation counseling;		
	(C) as an employee of or under contract with the Agency of Human Services;		
	(D) as a mediator;		
	(E) in an official evaluation for court purposes;		
	(F) as a member of a self-help group, such as Alcoholics Anonymous, peer counseling, or domestic violence groups, whether or not for consideration;		
	(G) as a respite caregiver, foster care worker, or hospice worker; or		
	(H) incident to the practice of any other legally recognized profession or occupation.		

Jurisdiction	Definitions / Scope of Practice of ABA	Titles of ABA Providers/ Funding	Certification/training
Jurisdiction	(2) A person engaged or acting in the discharge of his or her duties as a student of applied behavior analysis or preparing for the practice of applied behavior analysis, provided that the person's title indicates his or her training status and that the preparation occurs under the supervision of an applied behavior analyst in a recognized training institution or facility. (3) A behavior interventionist or paraprofessional, employed by a school, from working under the close direction of a supervisor licensed under this chapter, in relation to the direct implementation of skill-acquisition and behavior-modification plans developed by the supervisor or in relation to data collection or assessment designed by the supervisor, provided the supervisor retains ultimate responsibility for delegating professional responsibilities in a manner consistent with 3 V.S.A. § 129a(a)(6). (Added 2015, No. 38, § 46, eff. July 1, 2016.)	Titles of ABA Providers/ Funding	Certification/training
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Jurisprudence Review



Section 3: Jurisprudence Review

3.1 Objective

This jurisprudence review explores legal cases involving risk of harm caused to clients, during the process of, or as a result of ABA. Additional issues covered included a review of any legal cases dealing with oversight of ABA providers.

The jurisprudence review is part of the evidence gathering undertaken by HPRAC, in addition to the literature and jurisdictional reviews. The reviews, along with stakeholder consultations, were useful in assisting HPRAC during its deliberations and in formulating its advice to the Minister of Health and Long-Term Care.

3.2 Methodology

HPRAC contracted an independent legal firm, DDO Health Law, to conduct a jurisprudence review on legal cases involving ABA. Ontario cases, and cases considered by and appealed to the Supreme Court of Canada, were identified. The three topics covered in the jurisprudence review were:

- Are there any legal cases that demonstrate that harm was caused to clients in the process of, or as a result of, ABA?
- Are there any legal cases related to the lack of provision of ABA services, and as a result, impact on the clients or others?
- Are there any legal cases or decisions that specifically reference oversight of ABA providers (legislation/regulation, registry, self-regulation through a professional college or an association, etc.)?

This jurisprudence review explores legal cases involving ABA. This review is arranged by topic (harm resulting from ABA, lack of services and impact on client and others and qualifications of practitioners), however some cases relate to more than one topic. Where they were available, Ontario cases and cases considered by the Supreme Court of Canada are listed first under that topic. Cases that were appealed to the Supreme Court of Canada, but for which leave to appeal was dismissed by that court 124, are identified.

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¹²⁴ Under the *Supreme Court Act*, R.S.C. 1985 c. s-26 the Supreme Court of Canada shall dismiss an application for leave to appeal if it is clear from the written application that it does not warrant an oral hearing and there is no question involved that is "by reason of its public importance or the importance of any issue of law or any issue of mixed law and fact involved in the question, one that ought to be decided by the Supreme Court or is, for any other reason, of such a nature or significance as to warrant decision by it" [s.43].

Some of the listed cases have been decided at more than one level of court. Unless otherwise indicated, this review includes only the decision of the highest level of court at which the relevant substantive issues were decided. The trial level decisions cited in the review are included only for findings of fact that were accepted at higher court levels. Decisions of courts in Canadian provinces other than Ontario, and in the United Sates are also included. Although these decisions are not binding on Ontario courts, they are persuasive. Tribunal decisions do not have persuasive value, but are included for information purposes.

The terms "applied behavioural analysis" and "intensive behavioural intervention" ("IBI") appear in the cases reviewed and are used interchangeably in this jurisprudence review, following *Auton v. B.C.* (2004, Supreme Court of Canada, at paragraph 5). In *Auton* and other cases the term "Lovaas Autism Treatment" or "Lovaas Therapy" might appear; this is a form of intensive early behavioural intervention based on methods developed by Dr. Ivan Lovaas at the University of California (as described in paragraph 5, *Auton et al* v. *AGBC* 2000 BCSC 1142). When used in this review, the term "autism" is meant to include autism spectrum disorder and pervasive developmental disorder.

DDO searched the CanLII and WestLaw legal databases using a variety of search terms including "applied behavioural analysis", "intensive behavioural intervention", "autism" and "autism spectrum disorder". Several cases may be accessed directly by clicking on the Internet web link provided; others may be downloaded from the website address indicated; still others may not be available on-line, and are accessible only through paid subscription or through files of the court.

This review was conducted over three weeks between November 20 and December 8, 2017. An attempt was made to retrieve the relevant citations, but this review does not purport to be an exhaustive list of all cases. Nor does this review purport to examine the psychological, psychosocial or medical literature about applied behavioural analysis or intensive behavioural intervention.

3.3 Summary of Findings

Findings of the jurisprudence review are summarized below based on the decisions made dealing with risk of harm resulting from, or caused by, ABA; the lack of ABA and the impact on clients and others; and oversight of ABA providers.

Harm resulting from, or caused by, ABA: DDO did not find any case law indicating that harm is caused by ABA/IBI. The research did find one case where the court found that a child with autism who did not benefit from ABA/IBI was lawfully discharged from the program and such discharge did not amount to harm [Ceretti v. Hamilton Health Sciences, 2010]. The expert in that case noted that if ABA is not working for a particular child, other therapies should be tried. There was no evidence in Ceretti that ABA was harmful to the client.

Lack of ABA and impact on clients and others: In the case law reviewed, there is considerable judicial recognition of the plight of families with children diagnosed with autism and the evidence-based beneficial effect of providing early IBI [Auton, Wynberg – trial level decisions]. However, this recognition did not translate into decisions requiring provinces to fund ABA/IBI [Auton v. BC (Supreme Court of Canada 2004); Wynberg v. Ontario (Supreme Court of Canada, 2007)].

The case law shows that in 1999, Ontario began funding certain treatments (including IBI) for children diagnosed with autism. Shortly thereafter, there was a plethora of litigation from families of children who received publicly funded IBI therapy for their children up to the age of six, but who were denied continued treatment after the child reached age six. The Ontario parents claimed that the policy requiring cessation of funding for ABA/IBI at age six was contrary to their children's equality rights guaranteed by the *Charter*.

In Ontario, the trial court merged two cases with similar facts and seeking similar relief (*Wynberg* and *Deskin*) and ruled in favour of the plaintiffs, requiring provincial funding for IBI after age six. However the Court of Appeal reversed the decisions of the trial level court (Justice Kiteley), and the province was not required to provide funding for IBI therapy to children at or older than the age of six [*Wynberg* v. *Ontario* (Court of Appeal, 2006)]. The plaintiffs' appeal to the Supreme Court of Canada was dismissed; the Supreme Court of Canada agreed with the decision of the Ontario Court of Appeal and did not find discrimination.

In 2000, a group of parents in B.C. argued that the province's decision not to fund any treatment for children with autism was discriminatory. In B.C. the trial and appeal courts founds discrimination and ordered the province to fund and provide IBI therapy. However, this decision was reversed when B.C. appealed to the Supreme Court of Canada, which found that the children were not entitled to provincial health insurance coverage for ABA therapy as it was not a core service provided by medical professionals and the province had discretion about funding it [Auton]. After the decisions in Auton and Wynberg, the litigation continued for a few years, with litigants trying to distinguish their claims from Wynberg or Auton; in the cases reviewed these litigants were unsuccessful.

Many Ontario claimants sought interim relief (in the form of continued therapy and funding) pending the decision of the trial and appeal courts in the *Wynberg* matter. Part of the legal test for granting interim relief is whether irreparable harm will be suffered by the moving party (i.e. the party seeking the relief) if the order is not granted. In most cases, the courts found irreparable harm where children with autism who had been receiving ABA/IBI prior to age six had "aged out" of the program after they turned six years old and IBI/ABA therapy had been discontinued.

In these cases, the court ordered the interim relief sought and required the province to continue funding the treatment until the decisions about funding were released by either the trial court or the appeal court, depending on the timing of the litigation [Bettencourt v. Ontario, 2005, M.E. v Ontario, 2004, A.L. v. Ontario, 2003].

In two other Ontario cases the court did not find irreparable harm and did not order the continued provision and funding of ABA/IBI where:

- (1) the child would not have aged out of the program prior to the release of the *Wynberg* decision [*Thomas v. Ontario* 2004]; and
- (2) where there was not enough evidence of irreparable harm [Clough v. Ontario, 2003].

Several more recent cases [Solis v. Tibbo Lenoski (Supreme Court of Canada, 2016) and Ermini v. Vittori (2014, U. S. Court of Appeals) considered the risk of harm arising from the lack of provision of ABA therapy to autistic children of divorced parents who resided in different jurisdictions, where one jurisdiction offered ABA and the other did not. These cases triggered the application of the Hague Convention on the Civil Aspects of International Child Abduction (which while interesting, is outside the scope of this review); these cases were uniform in finding that a lack of continued ABA therapy for an autistic child would place the child at risk of harm.

Oversight of ABA Providers: A recent decision at the trial level (*Tibbo Lenoski*, 2015 B.C. Superior Court) accepted evidence about ABA therapy from a board certified behaviour analyst (BCBA) who had a Master of Education in special education.

Earlier cases that were reviewed suggest that ABA/IBI is provided by instructors or therapists who are overseen by clinical psychologists [Wynberg trial decision, 2005]. One case noted that "there is a major problem finding and training appropriate therapists and other staff to operate the program. Simply put, there are not enough therapists to deal with all the children in need (and not simply because there are not funds to pay them)." [paragraph 19, Thomas v. Ontario 2004]. In A.L. v. Ontario (2003, ON SC), the court limited the interim relief granted to completion of the ABA/IBI therapy "set by the child's instructor-therapist and psychologist."

3.4 Detailed Case Findings

Harm Resulting from or caused by ABA

Title of Case	Ceretti v. Hamilton Health Sciences-McMaster Children's Hospital (Ontario
	Superior Court, 2010)
Citation	Ceretti v. Hamilton Health Sciences-McMaster Children's Hospital, 2010
	ONSC 252 (CanLII)
Note up	Cited by 2 documents
Database	CanLII
Search terms	"applied behavioural analysis"
Accessed	November 27, 2017
Link:	http://canlii.ca/t/27c87
Relevance	Harm resulting from or caused by ABA
Summary	This application for judicial review challenged the decision to discharge the applicant, a child with autism, from the Regional Autism Intervention Program delivered by the Hamilton Health Sciences-McMaster Children's Hospital ("HHSC"). HHSC claimed "that the child was not progressing with the treatment and that the parents signed two contracts with HHSC which indicated that their child could be discharged from the program for a lack of progress."[paragraph 2]
	The court noted that Dr. Tristam Smith (an internationally renowned expert in the field of autism and IBI therapy) believes that when IBI is not working for a child, he or she should be discharged and to consider alternative therapies or approaches that are tailored to the child's individual needs.
	The court noted that the regional program offered by HHSC operates under Program Guidelines issued by the Ministry and "while the Guidelines set out eligibility criteria, they do not contain any specific criteria for discharge from the Program. Prior to April 2005, the Ministry had mandated that IBI was to be directed to children aged two to six years. When it removed the age criterion, the Ministry did not replace it with any discharge criteria." [at paragraph 4].
	The court found that HHSC's decision to discharge the applicant "was made following a clearly established process of evaluating the applicant's progress in the Program. Her parents were made aware of the process for making discharge decisions from the time she began therapy. They signed two contracts that explicitly set out the process for making discharge decisions. Those contracts stated that a lack of progress could result in the discharge of a child from the Program. The parents were also given opportunities to provide input into the ongoing planning for the applicant's care and treatment. [paragraphs 38 and 39]

The court found that the HHSC's decision to discharge the applicant was a reasonable one, based on a clinical evaluation of the applicant's lack of progress in the Program. The decision of Dr. Reitzel (a clinical psychologist and the Clinical Director of the Program) was supported by an independent reviewer and an international expert in IBI therapy [paragraph 49] and the application was dismissed.

Lack of ABA- Impact on Client and Others

Title of Case	Tibbo Lenoski v. Solis, 2016 CanLII 20453 (application for leave to appeal
	to the Supreme Court of Canada dismissed, 2016)
Citation	Stefan Mark Gerard Tibbo Lenoski, also known as Mark Tibbo-Lenoski, also known as Mark Tibbo, also known as Mark Gerard Tibbo Lenoski v. Martha Hernandez Solis, 2016 CanLII 20453 (SCC) *Appeal citation: Solis v. Tibbo Lenoski 2015 BCCA 508 (CanLII) (Justices Garson, Kirkpatrick, and Goepel) *Appeal citation for stay of Court of Appeal's decision: Solis v. Tibbo
	Lenoski 2015 BCCA 531 (CanLII) (Justice Harris)
	*Citation for trial level decision: M.S. v. S.L. 2015 BCSC 1446 (CanLII) (Justice Butler)
Note up	Cited by 1 document
Database	CanLII
Search terms	"applied behavioural analysis"
Accessed	December 6, 2017
Link:	http://canlii.ca/t/gphjw
Relevance	Lack of Services – Impact on Client and Others
Summary	This case concerns an autistic boy who has a twin brother. Their parents are divorced and the boys live with their mother in Mexico. The father lives in Canada and has access rights to his children; the boys come to stay with him in B.C. in the summertime. In 2013 the mother was concerned about their sons' development and took them to several doctors in Mexico; she provided the test results to the father in the summer of 2013. The children were assessed in B.C. in the summers of 2013 and 2014. In the summer of 2014, one of the twins, D, was diagnosed with autism and began recommended therapy while staying with his father. At the end of the access period, the father did not return his sons to their mother in Mexico, despite a Mexican custody order requiring their return.

The mother applied for the return of her sons and argued that her ex-husband breached the *Hague Convention on the Civil Aspects of International Child Abduction* by not returning them. The father argued that the lack of access, in Mexico, to suitable therapy for D's autism posed a risk of psychological harm to the children and, according to the *Convention*, they did not have to be returned to Mexico. The father relied on an exception in the *Hague Convention* that permits a foreign court to refuse to return a child (despite a foreign custody order to do so) where doing so exposes the child to a "grave risk" of physical or psychological harm or would place the child in an "intolerable situation".

At trial, the judge made the following findings of fact which were not challenged on appeal: "D (the boy diagnosed with autism) receives ABA therapy in Vancouver and would not receive it in Colima, Mexico; and therapists in Colima are not as well qualified as therapists in BC." [paragraph 12, appeal decision, citing paragraph 60 of the trial decision]. The trial judge found that "D would suffer in his development without the recommended ABA therapy, and that the absence of such treatment constituted a "serious risk" to him" [paragraph 13 of the appeal decision, citing paragraphs 62 and 63 of the trial decision]. However the trial judge also concluded that the boys should be returned to Mexico because the risk to D did not amount to a "grave risk" and because D would not be placed in an "intolerable situation" (as required by the *Hague Convention*).

The trial judge's order was released on August 17, 2015. The father requested an expedited appeal and the Court of Appeal dismissed the father's appeal on December 8, 2015, upholding the decision of the trial judge and ordering the return of the children to Mexico.

The father appealed the operation of the order of the Court of Appeal, pending his application for leave to appeal to the Supreme Court of Canada. The Court of Appeal granted the stay, suspending the operation of the order to return the boys to Mexico until the application to appeal to the SCC was filed. (Once filed, the filing would operate to stay the order of the Court of Appeal.) In granting the stay, the appeal justice noted: "In my view, there is a reasonable possibility that the Supreme Court of Canada might grant leave in this case. The scope and meaning of what constitutes a grave risk of psychological harm or an otherwise intolerable situation has not been considered by that Court in 20 years and has not been considered at all in the context of a serious disability such as autism where critical treatments are

available in some jurisdictions but not others." [at paragraph 13 of the appeal decision granting a stay.]

The appeal justice who granted the stay of the court of appeal's order also affirmed the trial judge's finding that "It seems incontrovertible on the finding of fact made by the court below that the treatment is not only critical and beneficial to D, and its potential benefit is time sensitive. Depriving D of the treatment at his age and for the duration necessarily involved in an appeal if leave is granted would seriously harm D in a way that would not likely be reparable" [at paragraph 15 of the appeal decision granting a stay].

And further the appeals justice noted "the uncontested finding is that withdrawal of the autism treatment will result in serious harm to D" [at paragraph 12 of the appeal decision granting a stay].

*The Supreme Court of Canada dismissed the father's application for leave to appeal on April 14, 2016¹²⁵. The Supreme Court of Canada did not issue reasons.

Title of Case	Auton (Guardian ad litem of) v. British Columbia (Attorney General)
	(Supreme Court of Canada, 2004)
Citation	Auton (Guardian ad litem of) v. British Columbia (Attorney General),
	[2004] 3 SCR 657, 2004 SCC 78 (CanLII)
Note up	Cited by 181 documents
Database	CanLII
Search terms	"applied behavioural analysis"
Accessed	November 24, 2017
Link:	http://canlii.ca/t/1j5fs
Relevance	Lack of services - Impact on Client and Others
Summary	An action was brought against the government of British Columbia for failing to fund Lovaas autism treatment for pre-school aged autistic children. Both at the trial level and at the Court of Appeal, it was found that the children's equality rights (under section 15 of the <i>Charter of Rights and Freedoms</i>) were violated and the province was ordered to provide funding. The province appealed to the Supreme Court of Canada. The Supreme Court of Canada unanimously decided that B.C.'s refusal to fund the treatment did not violate the equality rights of autistic children and that. The court noted that Lovaas autism treatment (and IBI) were not

¹²⁵ See footnote #1.

services that required funding under either the *Canada Health Act* or the provincial health insurance program. The court found that the choice of the B.C. legislature not to include ABA therapy as a core benefit did not violate section 15 of the *Charter*, and the appeal was dismissed.

The Supreme Court of Canada stated:

"[2] One sympathizes with the petitioners, and with the decisions below ordering the public health system to pay for their therapy. However, the issue before us is not what the public health system should provide, which is a matter for Parliament and the legislature. The issue is rather whether the British Columbia Government's failure to fund these services under the health plan amounted to an unequal and discriminatory denial of benefits under that plan, contrary to s. 15 of the Charter. Despite their forceful argument, the petitioners fail to establish that the denial of benefits violated the Charter. [3] The government must provide the services authorized by law in a non-discriminatory manner. Here, however, discrimination has not been established. First, the claim for discrimination is based on the erroneous assumption that the CHA [Canada Health Act] and the relevant British Columbia legislation provided the benefit claimed. Second, on the facts here and applying the appropriate comparator, it is not established that the government excluded autistic children on the basis of disability. For these reasons, the claim fails and the appeal is allowed."

. . .

"[11] ... At the time of trial in 2000, ABA/IBI funding for autistic children was only beginning to be recognized as desirable and was far from universal. Alberta established funding for it in 1999, as did Ontario. Prince Edward Island was providing up to 20 hours of ABA/IBI per week at the time of trial, and Newfoundland and Manitoba had instituted pilot projects in 1999. In the United States "several jurisdictions" included ABA/IBI in educational or Medicaid programs, and the New York State Department Guidelines and the 1999 U.S. Report of the Surgeon General on Mental Health recognized ABA/IBI as the treatment of choice (trial judgment, at para 82)."

... "[46] ... There can be no administrative duty to distribute non-existent benefits equally. Had the legislature designated ABA/IBI therapists (or a broader group of therapists which included them) as "health care practitioners" under the <u>MPA</u> at the time of trial, this would have amounted to a legislated benefit, which the Commission would be charged with implementing. The Commission would then have been obliged to implement that benefit in a non-discriminatory fashion. However, this is not the case. Here, the legislature had not legislated funding for the benefit in question, and the Commission had no power to deal with it."

... "[59] Indeed, the conduct of the government considered in the context of the emergent nature of ABA/IBI therapy for autistic children raises doubts

about whether there was a real denial or differential treatment of autistic children. The government put in place a number of programs, albeit not intensive ABA/IBI therapy, directed to helping autistic children and their families. In the year before the trial, the government had announced an Autism Action Plan and an Autism Action Implementation Plan which acknowledged the importance of early intervention, diagnosis and assessment.

The government's failing was to delay putting in place what was emerging in the late-1990s as the most, indeed the only known, effective therapy for autism, while continuing to fund increasingly discredited treatments. [60] As discussed earlier, the delay in providing funding for ABA/IBI therapy seems to have been related to three factors. The first was the inauspicious decision to transfer child and youth mental health from the Ministry of Health to the Ministry of Children and Families, which meant that the decision makers lacked medical and psychiatric expertise and viewed autism from a social rather than medical perspective. The second was financial concerns and competing claims on insufficient resources. The third was the emergent nature of the recognition that ABA/IBI therapy was appropriate and medically required."

It is important to note that this decision of the Supreme Court of Canada reversed the decision of the B.C. Court of Appeal, which had required the province to fund ABA/IBI treatment for autistic children on the basis that it was a medically necessary service. [Auton (Guardian ad litem of) v. British Columbia (Attorney General), [2002] B.C.J. No. 2258 (B.C.C.A.). The Supreme Court of Canada did not opine on whether lack of ABA constituted harm to the autistic child; it decided that the provision of ABA/IBI therapy to preschool aged children diagnosed with autism was not a benefit prescribed by law.

. . .

The B.C. Court of Appeal stated: "Autism is a neurobehavioural syndrome which, if left untreated, will almost certainly lead to a "life of physical, emotional, social and intellectual isolation and eventual institutionalization" [at paragraph 12].

The B.C. Court of Appeal accepted the trial judge's findings as follows (2002 BCCA 538 (CanLII):

- "[15] Madam Justice Allan found as fact:
- 1. without treatment an autistic child will face the likely prospect of a life of severe isolation and institutionalization;
- 2. the infant petitioners all made significant gains as a result of the Lovaas Autism Treatment they received;

3. Lovaas Autism Treatment is a species of early intensive behavioural intervention, an applied behavioural analysis (ABA) technique. ABA was described by a clinical child psychologist and professor at Ohio State University, Dr. Mulick, in a passage adopted by Madam Justice Allan:

Applied behavioural analysis, or ABA, teaches children, especially those with neurological conditions, small, measurable units of behaviour, and builds in the child more complex and socially useful skills (e.g. attention, compliance, self-monitoring); it also reduces in the child problematic behaviours (e.g. tantrums, withdrawal, and aggression)."

Title of Case	Wynberg v. Ontario (2007, Supreme Court of Canada)
Citation	Robyn Wynberg and Simon Wynberg on their own behalf and in their capacity as joint litigation guardians of Sebastian and Nathaniel Wynberg, et al. v. Her Majesty the Queen in Right of Ontario; Michael Shane Deskin and Noah Samuel Deskin minors by their litigation guardian, Brenda Jill Deskin, Brenda Jill Deskin, Steven Joel Deskin, Sheldon Kosky, Frances Kosky and Betty Deskin v. Her Majesty the Queen in Right of Ontario, 2007 CanLII 11900 (SCC) *The Supreme Court of Canada dismissed the application for leave to appeal. 126 *Court of Appeal decision citation: Wynberg v. Ontario, 2006 CanLII 22919 (ONCA).
Note up	Cited by 0 documents
Database	CanLII
Search Terms	note up of Wynberg v. Ontario 2006 CanLII 22919 (ONCA)
Accessed	Nov 24, 2017
Link	http://canlii.ca/t/1r4r7 (Supreme Court of Canada)
	http://canlii.ca/t/1nwd6 (Court of Appeal decision)
Relevance	Lack of services – impact on client and others; oversight of practitioners
Summary	In this case, the history of publicly funded services for autistic children was reviewed by the trial judge and repeated by the appeal court. Prior to 1998, there were, in Ontario, virtually no publicly funded services for autistic children of any age that included intensive behavioural intervention [paragraph 5]. By September of 2000, the Ontario ministry of community

¹²⁶ See footnote #1.

and social services developed and released guidelines for the Intensive Early Intervention Program; this program applied intensive behavioural invention, including applied behavioural analysis, to autistic children between the ages of 2.5 and 5 [paragraphs 6, 7 and 30 of the appeal court decision].

The plaintiffs alleged that the government's failure to provide IBI/ABA as an educational service to children with autism over age 6, violated sections 7 (life, liberty and fundamental justice) and 15 (equality) of the Charter. The court of appeal overturned the trial judge's findings that the program violated both sections of the Charter. The court found that it was not discriminatory for the province to refuse to fund special education programs for school-aged autistic children that were consistent with the IEIP, when the IEIP was designed for children aged 2-5 based on policy decisions made by the ministry. Leave to appeal to the Supreme Court of Canada was dismissed with costs; the Supreme Court of Canada agreed with the decision of the Court of Appeal.

The appeal court stated, at paragraph 80:

"Viewed from the perspective of a reasonable person in circumstances similar to those of the claimants, this program must be seen as carefully targeted to ameliorate the disadvantage experienced by autistic children age two to five. It is fully focused on their particular capacities and circumstances and their unique potential to benefit from it. Exclusion of the infant plaintiffs because of their age from a program so particularly designed to assist another disadvantaged group does not deny their human dignity or devalue their worth as members of Canadian society." [Wynberg v. Ontario, 2006 CanLII 22919 (ON CA), http://canlii.ca/t/1nwd6]

*The Supreme Court of Canada dismissed the application for leave to appeal¹²⁷.

¹²⁷ See footnote #1.

Title of Case	Sagharian v. Ontario (Education)
Citation	Sagharian v. Ontario (Education), 2008 CanLII 63481 (SCC)
	*appealed from Sagharian v. Ontario (Education) 2008 ONCA 411
	(CanLII)
Note up	Cited by 19 documents
Database	CanLII
Search terms	"applied behavioural analysis"
Accessed	November 27, 2017
Link:	http://canlii.ca/t/21rk4
	*Court of Appeal decision: http://canlii.ca/t/1x03k
Relevance	Lack of services
Summary	This case is a class action against seven named GTA school boards alleging that the boards failed to provide or fund ABA intervention, and denied access to public education for, and failed to accommodate, children diagnosed with autism. There was also an allegation that the school boards provided deficient ABA services and therefore were negligent. The statement of claim was originally issued in 2005 however amended multiple times after the decision in <i>Wynberg</i> was released. Eventually some of the claims were stuck out because they were insufficient or previously decided in <i>Wynberg</i> . Ultimately, although the plaintiffs were given leave to amend one of their claims, the class action was discontinued.

Title of Case	Bettencourt v. Ontario
Citation	Bettencourt v. Ontario, 2005 CanLII 462 (ON SC)
Note up	Cited by 2 documents
Database	CanLII
Search terms	"applied behavioural analysis"
Accessed	November 27, 2017
Link:	http://canlii.ca/t/1j103
Relevance	Lack of services – Impact on Client and Others
Summary	This is a motion for interim relief, pending a trial decision.
	The plaintiffs are six-year-old twin brothers who were diagnosed with ASD shortly before they turned three years old. Ontario's Intensive Early Intervention Program (IEIP) program funded their IBI therapy beginning when they were a little over three years old. The court noted that "[t]hey made significant progress. Funding was terminated on their sixth birthday and their parents attempted to fund this treatment on their own, but they depleted all of their savings and the equity in their home in doing so. The parents tried placing the twins in a public school but IBI therapy was not

available through the public school system. The attempt to integrate Travis into his local public school without any IBI was not successful. Zachary achieved only a partial success. He can manage in a classroom for one half of each school day but he still requires more than a half-day per week of IBI." [paragraph 3]

The judge granted the plaintiffs' motion and required Ontario to continue paying for the twins' ABA/IBI until the trial or until the court of appeal released its decision in *Wynberg* because the judge found on the evidence presented that the plaintiffs would suffer irreparable harm if the interim order sought by the plaintiffs was not granted. The court stated:

"[13] The evidence is that it is imperative at this time that both boys continue to receive IBI intervention if they are to continue to progress, or at the very least preserve the skills that they have acquired. This is a critical time for each boy.

...

- [16] Continuation of the boys' IBI/ABA support is essential for their continued success: in their family, their school and in their community. That support would be supervised and continuously supported by STEP BY STEP. At this time the public and separate school systems are either unable or unwilling to provide the required level of support for children with Autism.
- [17] As a School and Child Clinical Psychologist, Dr. Benedetto-Nasho recommends that each boy continue to receive full IBI/ABA support, within both his home environment and the school setting. If this does not occur, not only will each boy's needs not have been met, but they are at significant risk of regression and at a significant risk of a slowed or nonexistent learning pace.

. . .

[35] On the basis of the facts of this case, I am satisfied that there is a serious risk of regression if the therapy is not continued, and that even though there are no issues here of self-injurious behaviour, aggression or toileting problems, the plaintiffs have established on this motion that they will suffer irreparable harm prior to trial if the interlocutory relief is not granted."

Title of Case	Fleischmann v. Toronto District School Board
Citation	Fleischmann v. Toronto District School Board, 2004 CanLII 29548 (ON
	SCDC)
Note up	Cited by 0 documents
Database	CanLII
Search terms	"applied behavioural analysis"
Accessed	November 27, 2017
Link:	http://canlii.ca/t/1gcmq
Relevance	Lack of services – Impact on Client and Others
Summary	This case relates to a judicial review of the actions of the Toronto District School Board. The parents of a student with autism applied to the court for an interim order requiring the board to keep a specific education assistant (EA) for their daughter pending the hearing of a judicial review. The EA was trained to provide ABA therapy. The board tried to replace the EA with someone who had not been trained in ABA therapy. The court granted the interim order requiring the board to keep the original EA until the hearing of the judicial review. The court stated:
	"[50] There can simply be no dispute here but that a change of the person who works essentially one on one with [the daughter] on a day-to-day basis will be difficult for [her]. [54] For the Board to persist in its position that it alone (through the principal) has the right to make this decision (to replace [the EA]) without a transition plan in place and without ensuring that the replacement person is appropriately trained, seems to me to fly in face of the duties set out in the legislation."

Title of Case	Thomas v. Ontario (2004, Ontario Superior Court)
Citation	Thomas v. Ontario, 2004 CanLII 6250 (ON SC)
Note up	Cited by 1 documents
Database	CanLII
Search terms	"applied behavioural analysis"
Accessed	November 27, 2017
Link:	http://canlii.ca/t/1hn3r
Relevance	Lack of services – Impact on Client and Others
Summary	Andrew was diagnosed with autism at 3.5 years old. This claim is heard when Andrew is eight years old. Andrew and his mother brought a claim for a permanent order requiring the province to pay the actual costs of ABA therapy and any treatment prescribed by Andrew's pediatrician. Prior to the

court's decision, the applicants sought an order requiring Her Majesty the Queen in Right of Ontario to fund for Andrew, the actual costs of ABA therapy, and any treatment prescribed by Andrew's developmental pediatrician, until the final determination of the principal claim for a permanent order.

After reviewing the history of Ontario's funding of IBI and its IEIP (reproduced below from paragraphs 3 and 4 of the judgement), the judge did not require funding for Andrew's ABA because he had never received it and the judge was not being asked to fund a treatment that had been discontinued. The judge expressly noted (at paragraph 13) that if Andrew had received ABA/IBI and then discontinued treatment, the court's order might be different. The court stated:

"[3] As a result of the apparently proven success of IBI, in the spring of 1999, the Ontario government announced funding for a new program to assist children under the age of six years with autism. This program is called the Intensive Early Intervention Program (IEIP). The program was regionalized, an initial budget was set and staff were recruited. Assessments of children for inclusion in the program began in the summer of 2000 and by later summer/fall of 2000 IBI services began to be offered. This history and development of the Intensive Early Intervention program is detailed in the affidavit of Barbara Cooper, sworn February 13, 2004.

As is often the case, it soon became apparent that available resources, both human and financial, were inadequate to meet the needs of the many children who might benefit from the program. To be eligible, the child must be under the age of six years. Once a child attains the age of six years, he or she is no longer eligible for IBI (though a child who begins IBI after the age of five will generally be entitled to a full year of IBI before being required to leave the program). [4] When a child applies for the program, that child must then wait to be assessed as to eligibility. Once found to be eligible for IBI, the child must then join another "wait list" until a space in the program becomes available.

The current capacity of the program, that is, the total number of children who will be receiving IBI at any given time, is just over 500. Of these children, the majority (just over 400) receive IBI services through one of nine regional programs and just over 100 receive IBI services through a private provider, for whom direct funding is supplied by the government. The most recent reliable figures (provided by Ms. Cooper's affidavit) reveal that as of August, 2003 a total of 1,739 children had completed the assessment process since the IEIP became operational and 71 children were in the assessment process at that time. A further 901 children were waiting to be assessed for determination of their eligibility for the IEIP. A further 107 children already assessed as eligible were waiting for IBI services to

begin, otherwise expressed, for a vacancy in the program. [5] I would note as well that as of August, 2003 1,140 children had been discharged from the IEIP. These included 79 children who had been assessed as eligible but were discharged from the waiting list when they turned six years of age. These children never received IBI services.

Four hundred and eighty-two children were discharged from the assessment "wait list" when they turned six years of age. Thirty-one children who were receiving IBI services were discharged from the program when it was learned they had been "improperly admitted" over the age of six years. Finally, 548 children who were receiving IBI services were discharged from the program when they turned six years of age. Province wide, as of September, 2003, over 1,000 children were waiting for assessment or had been assessed as eligible and were on the "wait list" for IBI services. As well, in September, 2003, 1,140 children over the age of six had been discharged from the program."

. . .

"[13] [...] I would emphasize at this point that I have deep sympathy for Andrew and his family. At a personal level, my instinctive response to their request is to say of course the province should provide such funding. Indeed, they should have done so years ago. That instinctive response, however, is not an appropriate judicial approach to the issue. Given that Andrew has never benefited from IBI therapy, I cannot conclude on the evidence before me that the plaintiffs have satisfied this onus of demonstrating the probability of irreparable harm. I repeat for emphasis that a denial of the plaintiffs' request will not result in a termination or interruption of services that Andrew has been receiving in the past (as in the cases cited above). Were he to have received those services in the past and were the mandatory order sought necessary to ensure continuation of those services, I would have come to the same decision as my learned colleagues in the above noted cases."

"[14] There was significant evidence put before the court of other services that Andrew has been receiving and will receive as part of educational funding for children with special needs. Without wishing to comment on or prejudge the ultimate issues in this action, while those services may be of great assistance to Andrew, on the evidence available to me on this motion, those services are not as effective as IBI therapy for autistic children. It may well be that judges at trial or on appeal will not see such services as a reasonable or appropriate alternative to IBI therapy for children suffering from autism. In sum, given what I trust will be a brief few months until the determination of the principal issue, the right of all autistic children to ABA funding from the province, I am not persuaded that Andrew will suffer irreparable harm by the denial of interlocutory relief in the interim."

Title of Case	A.L. v. Ontario, 2003 CanLII 2436 (ON SC)
Citation	Lowrey (Litigation Guardian of) v. Ontario
	64 O.R. (3d)222 [2003]OJ No. 1197
Note up	Cited by 9 documents
Database	CanLII
Search terms	Note up of M.E. v. Ontario, 2004 CanLII 17757 (ONSC)
Accessed	December 5, 2017
Link:	http://canlii.ca/t/1hl4n
Relevance	Lack of services – Impact on Client and Others
Summary	The plaintiff, an autistic child, received partial provincial funding for IBI therapy from the age of four, from the Ontario Ministry of Community, Family and Children's Service. However this ABA therapy was denied to the plaintiff when he reached age 6, consistent with eligibility requirements for the provincially funded therapy. The plaintiffs parents wrote to their local MPP well before their child's sixth birthday and did not receive a response prior to the time at which the program ceased. At age 6, his parents began personally funding the treatment but sought relief from the court to avoid selling the family homestead to continue paying for the treatment. The parents challenge Ontario's decision to limit IBI services to children under the age of 6 as discriminatory under the <i>Charter of Rights and Freedoms</i> and contrary to the United Nations Convention on the Rights of the Child. In this motion, the parents sought interim relief (prior to trial of the <i>Charter</i> issues) requiring the province to cover the treatment of the IBI therapy.
	The court granted an interim order requiring Ontario to continue paying for the services on the basis that the plaintiff child would suffer irreparable harm if the order was not granted. The judge required funding on the evidence that there is a public benefit in ensuring that the child continue with the prescribed IBI treatment (which began 16 months prior to the trial) to the point that it is hoped that he should be able to attend a "regular" school. It was argued, and the court accepted, that the child was entering a critical phase of the IBI therapy, anticipated to last 12-18 months, aimed at integrating him into a "regular" school, without which the child would undoubtedly regress and lose any chance of maintaining the skill sets he has learned and mastered in the last year and a half." [Paragraph 5].
	The court noted that it was asked to make its decision pending the Supreme Court of Canada's decision in the appeal of <i>Auton v. BC</i> , and pending the decision of the Ontario Superior Court in <i>Wynberg</i> and <i>Deskin</i> , (both cases were scheduled for the trial at the time of this decision and decided together in one decision by Justice Kiteley). Accordingly the court ordered funding to continue until the outcome of the decisions in <i>Wynberg</i> and <i>Deskin</i> or the completion of therapy set by the child's instructor-therapist and psychologist, or further order of this court.

Title of Case	Hewko v. B.C.
Citation	Hewko v. B.C., 2006 BCSC 1638 (CanLII)
Note up	Cited by 7 documents
Database	CanLII
Search terms	"applied behavioural analysis"
Accessed	November 27, 2017
Link:	http://canlii.ca/t/1pxq9
Relevance	Lack of services - Impact on Client and Others; Oversight of ABA
	Practitioners
Summary	In this case, a claim for negligence was lodged against the school district for failing to provide an autistic child with ABA/IBI. The court found that the claim for negligence could not be sustained. However, the court ruled that the school district failed to discharge its statutory duty to meaningfully consult the parents of an autistic student about his education placement and program because the board did not provide reasonable accommodation. The court ordered the school district to meet and implement its duties regarding consultation.
	The court stated: "[369] Reasonable accommodation is an integral part of the duty to consult. Reasonable accommodation in this case involves providing the best available teaching staff for Darren Hewko in the school. In Darren's case, as in that of all children, special needs or not, the best teaching staff are persons who <u>can</u> demonstrate instructional control of him. Any consultation with Darren's parents must include an accommodation of his home-based program —at least until instructional control is gained and maintained of him in the school setting.
	[370]While the court is in no position to know what constitutes fulfillment of the District's duty to consult and accommodate the Hewkos, I find what does not. The duty to consult and accommodate is not fulfilled by assigning Darren Hewko to a resource room (or classroom) with teaching staff who have limited experience using ABA-IBI methodology for teaching and are allowed by the school to "visit" and "observe" Darren's home program for two weeks for an hour a day.
	[371] I find that the school board failed to discharge its consultation obligation by failing "to ensure that [the plaintiffs'] representations were seriously considered and, wherever reasonably possible, demonstrably integrated into the proposed plan of action". Most importantly, the District through its proposals and by failing to seriously accommodate the Hewkos home-based program, failed to demonstrate it could produce instructional control of Darren."

Title of Case	R. v. Naccarto (2004, Ontario Superior Court of Justice)
Citation	R. v. Naccarato, 2004 CanLII 6328 (ON SC)
Note up	Cited by 1 case
Database	CanLII
Search Terms	Cited in Hewko
Accessed	December 6, 2017
Link	http://canlii.ca/t/1hn2f
Relevance	Lack of Services - Impact on Client and Others
Summary	The court stated:
	"[15] Dr. Walton-Allen's [Eric's psychologist] staff had attended to observe Eric in his classroom environment and felt that the way the school board staff was dealing with Eric was not consistent with the IBI therapy Eric was receiving in Dr. Walton-Allen's program. School board staff is not trained to deliver IBI therapy and it was felt that the 2 days a week at the school was detrimental to Eric's IBI program. Dr. Walton-Allen believed that it was important that Eric continue IBI therapy until certain goals were achieved and these achievements were cemented. Dr. Walton-Allen therefore offered to allow Eric to increase his attendance at her IBI program
	[19] In her affidavit Dr. Walton-Allen expressed the opinion that Eric's IBI therapy needs to be continued to allow him to make certain additional gains in his behaviour and to cement those gains. Absent continued IBI therapy much of the gains achieved at significant human and financial cost will likely be lost. Once additional gains are achieved and cemented she believes that Eric will be able to integrate the school environment in programs such as the CASA program and benefit and profit to his potential from the learning environment created by the school board.
	[20] As I have set out earlier, these gains are not expected to lead to a full recovery by Eric, but rather to assist him in reaching a certain level of independence and autonomy over the longer term, in other words, reaching what is achievable for him.
	[21] Dr. Walton-Allen did not provide a direct answer as to the length of time Eric would require continued IBI therapy in order to achieve his potential. The only evidence before me is the evidence of Eric's father to the effect that in July 2003 he understood from Dr. Walton-Allen that 2 more years of IBI therapy was necessary.
	[22] Eric's parents and Dr. Walton-Allen agree that Eric's IBI therapy should only continue for a limited time and that Eric must make the transition from a full-time IBI program to the school system into a program such as the CASA program where no IBI program exists. The only issue is

whether this transition had to be done, as the Attorney General submits, immediately upon reaching the age of 6 or whether it should, in Eric's case, be done at some later point after Eric has received further IBI therapy. The only expert evidence before me which specifically addresses Eric's particular situation is that of Dr. Walton-Allen which is set out above.

. . .

[40]... I agree with the submission by plaintiff's counsel that it is reasonable to infer from the testimony of Dr. Walton-Allen and the research filed that the progress Eric would not achieve and the regression he would suffer as a result of being removed from IBI therapy now cannot be made up. As I have stated, there has been no conclusive research in this regard, but the research that does exist clearly suggests that children respond best when therapy is begun at a young age, such as was done with Eric, and that the therapy becomes less effective as the child grows older. A break in the therapy for Eric and a delay in the further delivery of such therapy is not, therefore, likely to be made up and the harm that Eric would suffer is irreparable."

. .

[62] The present case is factually distinct from those other cases. It is not a case where the granting of the interim injunction will amount to a suspension rather than an exemption such as the court found in the *Clough v. Ontario*, (supra), nor will it open the door to relief being sought by a whole new class of claimants such as in the case of *Thomas v. Ontario* (supra).

Similarly it is not a case where there have been substantial delays such as in *Wynberg*, it is not a case where the failure to provide further IBI therapy will lead the autistic child to aggression like the *Juravsky* case nor is it a case where the evidence clearly establishes that the window of opportunity for therapy for the plaintiff will close in the next year or so like the *Lowrey* case. Rather this is a unique case which, while factually different from those cases cited by the plaintiff, warrants the exercise of the court's discretion to grant interim relief. (See *Lowrey (Litigation Guardian of) v. Ontario*, [2003] O.J. 2009 at para.13). For all the above reasons the balance of convenience is tipped in favour of the plaintiff.

- [63] In conclusion I am satisfied that there is a serious issue to be tried, Eric will suffer irreparable harm if the interim injunction is not granted and the balance of convenience favours the granting of the injunction. The continuation of funding of Eric's IBI therapy will not, in my view, open the floodgates nor will it offend the objectives of the IEIP but rather will serve to ensure that the gains achieved through the IBI therapy provided to date will be solidified and that Eric will be reasonably prepared for the transition into the school system.
- [64] An order for an interim mandatory injunction requiring the Minister to continue to fund Eric's IBI therapy through the IEIP will therefore issue.

[65] Given the insufficiency of the evidence as to how much longer Eric requires continued IBI therapy, the interim mandatory injunction shall
remain in effect until the earlier of the decision by Madam Justice Kiteley in
the Wynberg case, the trial of the present action, January 31, 2005, or further
order of this court.

Title of Case	M.E. v. Ontario
Citation	M.E. v. Ontario, 2004 CanLII 17757 (ONSC)
Note up	Cited by 4 documents
Database	CanLII
Search terms	"applied behavioural analysis"
Accessed	November 27, 2017
Link:	http://canlii.ca/t/1h1kr
Relevance	Lack of services – impact on Client and Others
Summary	The court stated: "[5] The Plaintiff is seeking to have the Respondent ordered by this Court to fund and provide IBI services while he is in school even though he is well over the age of six which was the cut-off date set by the Respondent when the IBI Program was instituted in 1999. [13] It is accepted by all Counsel that the Plaintiff made significant gains in his development while receiving IBI therapy. [14] When the Ontario Government decided to terminate M.E.'s treatment after a year, M.E.'s mother and father decided that they would have to bring their own resources to continue providing IBI treatment which has been done. [23] It is common knowledge that the constitutionality issue relating to the IBI treatment ceasing at the age of six is already before this Court under the style, Wynberg et al. v. Her Majesty the Queen in Right of Ontario, and Deskin et al. v. Her Majesty the Queen in Right of Ontario. This case is being tried by Justice Kiteley and hopefully will be determined by the end of 2004. This factor alone will cause me some concern if I chose to grant the Plaintiff the interlocutory relief sought. An open-ended Order, in my view, raises some legitimate concerns that I will consider in these Reasons. [49] In my judgment, if the IBI treatment does not continue, M.E. will suffer certain delays in his development, which will adversely affect him and the community he is in. In my view, it is very much in the public interest for M.E.'s IBI treatment to continue as I propose to order. I dismiss, as of no value to me, the suggestion that there is no need for a Court Order mandating treatment to be made as M.E.'s parents have the financial resources to continue IBI treatments privately until the decision of Justice Kiteley in the future.

	•••
	[52] Accordingly, the cost of IBI treatments for M.E., until the release of
	the decision in Wynberg/Deskin, will be paid for by the Respondent.

Title of Case	Kohn v. Ontario (Ontario Superior Court, 2004)
Citation	Kohn v. Ontario (Attorney General), 2004 CanLII 32475 (ON SC)
Note up	Cited by 0 documents
Database	CanLII
Search Terms	Note up of Naccarato
Accessed	December 6, 2017
Link	http://canlii.ca/t/1hzcg
Relevance	Oversight of Practitioners
Summary	On this motion for interim relief heard in October of 2004 regarding the continuation of funding for ABA/IBI therapy for an autistic child, the court ordered continued funding until the earlier of the release of the decision in <i>Wynberg</i> , this trial (<i>Kohn</i>) or June 1, 2005. The court so ordered on the basis that irreparable harm would occur to the child if funding were not continued on an interim basis. The court stated: "I am of the view that, on the evidence, Sam will suffer irreparable harm prior to trial if the relief is not granted. The evidence of his continuing advancement under IBI, his continuing need for full time IBI, and the risk of regression, is all uncontradicted. For Sam, the continuation of IBI is imperative."

Title of Case	Clough (Litigation Guardian of) v. Ontario
Citation	Clough (Litigation Guardian of) v. Ontario, 2003 CarswellOnt 2329, [2003]
	O.J. No. 1074
Note up	Cited by 0 documents
Database	CanLII
Search terms	"applied behavioural analysis"
Accessed	November 27, 2017
Link:	[WESTLAW LINK NOT PUBLIC]
Relevance	Lack of services – Impact on Client and Others
Summary	The Applicants sought interim relief in the form of funding to continue IBI/ABA for their child on the basis that unless they receive further funding, they risk the intervention of the state through Children's Aid to provide for the needs of their children, a result they do not wish to see take place. The court declined to issue the order on the grounds that it did not find sufficient evidence to make a finding of irreparable harm if the funding was not granted on an interim basis. (Note, the applicants were relying on the trial and appeal level decisions in <i>Auton</i> , which required funding of ABA, but which was revered by the Supreme Court of Canada in 2004). The court stated: "27 On this issue the Applicant parents urge that given their limited and desperate financial resources, there is substantial risk that they will not be able to care for their children with the risk that the government will have to take over their care. 30 While I have considerable sympathy for the position of the Applicant parents. I am not satisfied on the meterial before me that in the short time.
	parents. I am not satisfied on the material before me that in the short time before review for next year, the failure to provide additional funding beyond that currently available under the various programs to which they have access would produce irreparable harm to the Applicants."

Title of Case	Sparkes v. Newfoundland & Labrador (Ministry of Health & Community
	Services)
Citation	Sparkes v. Newfoundland & Labrador (Ministry of Health & Community
	Services),
	2002 CarswellNfld 404, 45 C.H.R.R. D/225
Note up	Cited by 0 documents
Database	WestLaw
Search terms	"applied behavioural analysis"
Accessed	November 27, 2017
Link:	[WESTLAW LINK NOT PUBLIC]
Relevance	Lack of services – Impact on Client and Others
Summary	The court stated: "108 Nevertheless, in considering this position, the Board cannot ignore the Respondent's argument that Brandon Sparkes' case is different from <i>Auton</i> and <i>Cameron</i> in that he was ultimately provided with the applied behavioral analysis treatment; albeit after a one year delay. Therefore, this Board must decide whether the delay in the provision of treatment constitutes discrimination. More specifically, did the delay in treatment constitute a failure to make a reasonable accommodation to Brandon Sparkes or was it discriminatory, if at all, for other reasons? 173 In conclusion, the [Newfoundland and Labrador Board of Inquiry] finds that Brandon Sparkes was discriminated against by the delay in treatment resulting from waitlisting. Similarly, the Board finds that the waitlisting of autistic children who qualify for the program is discriminatory in general. 174 The act of discrimination is not justified and the Respondent did not satisfy the onus of establishing an undue hardship. The Board orders as follows: (i) The Respondent is to stop the contravention complained of; and (ii) The Respondent is to refrain in future from committing the same or a similar contravention. 175 As stated, (i) and (ii) above can only be satisfied by the Respondent adequately funding the autism program with a determination to eliminating the waitlist for these children." Note that this decision followed the decision of the B.C. Court of Appeal in <i>Auton</i> , which required the province to fund the provision of IBI/ABA therapy to children with autism and which was later reversed by the Supreme Court of Canada.

Title of Case	Garrido, Rivera and Crawford v. Dudek (Secretary, Florida Agency for Health Care Administration)
Citation	Garrido v. Dudek 731 F.3d 1152 (2013) (U.S. Court of Appeals)
	Case 1:11-cv-20684-JAL 11/05/13
Note up	This was case successfully appealed, in part. See end of this table at "Appeal".
Database	Google
Search Terms	Adults and applied behavioural analysis
Accessed	December 4, 2017
Link	 https://www.gpo.gov/fdsys/pkg/USCOURTS-flsd-1_11-cv- 20684/pdf/USCOURTS-flsd-1_11-cv-20684-0.pdf https://www.leagle.com/decision/infco20130920071
Relevance	Lack of Services – Impact on Client and Others
Summary	The U.S. district court found that the Florida rule that described Medicaid coverage of behavioural health services unfairly excluded coverage of community behavioural health services (including ABA) for individuals with ASD, autism and PDD and provided no exceptions for individuals under age 21. The court ordered that "the plaintiff children with autism, and all individuals under age 21 with autism or ASD be given ABA under the Rule, if prescribed by a physician or other licensed practitioner". The court stated: "12. ABA is prescribed in order to provide children with ASD with the maximum reduction of their disability. 13. ABA is prescribed in order to restore children with ASD to their best possible functional levels. 15. There is a devastating difference in outcomes for ASD patients with Medicaid (who do not receive ABA coverage) compared to those covered by commercial insurance who do receive ABA. 16. ABA is necessary to correct or ameliorate the condition of Autism Spectrum Disorder. 17. ABA is "medically necessary" and is not "experimental" as defined under Florida administrative law and federal law. See FLA. ADMIN. CODE r. 59G-1.010(166)(a)(3); FLA. ADMIN. CODE ANN. r. 59G-1.010(84)(a)(3); Rush v. Parham, 625 F.2d 1150, 1154-58 (5th Cir. 1980); Moore v. Reese, 637 F.3d 1220, 1248 n. 48 (11th Cir. 2011).
	19. ABA is indisputably considered by the medical community to be the

	standard means of treatment for children with ASD.
	20. ABA is indisputably considered proven and effective by the medical community.
	21. There is a plethora of medical and scientific literature including peer-reviewed meta-analyses, studies, and articles conclusively showing that ABA is a proven and effective treatment to prevent disability and restore developmental skills to children with autism and ASD.
	24. Defendant's determination that ABA is experimental was not reasonable.
	25. It is unreasonable to solely consider large-scale randomized controlled trials when evaluating ABA's efficacy because these trials are not appropriate or feasible for the vast majority of ABA research involving children with ASD, and it is unethical to have a control group, i.e., a group of children not getting ABA therapy.
	36. ABA is the type of behavioral health service that is medically necessary to treat ASD. 4
	37. ABA is the standard behavioral treatment for ASD."
*Appeal	On appeal, the U.S. Court of Appeals (11 th Circuit) [no.12-13785; D.C.Docket No. 1:11-cv-20684-JAL] narrowed the broad injunction to remove the part of the injunction requiring Florida to provide ABA to all individuals under age 21 diagnosed with ASD or autism, if ABA was prescribed by a physician, and to indicate that the injunction does not eliminate Florida's ability to make individual necessity determinations.
	The appeal is available at https://cases.justia.com/federal/appellate-courts/ca11/12-13785/12-13785-2013-09-20.pdf?ts=1411126193

Title of Case	Ermini v. Vittori, (F. 3d) W.L. 3056360 (2d Cir 2014)
Citation	USA Court of Appeals (2 nd Circuit)
Note up	Cited by 3 cases for propositions other than ABA therapy
Database	Google
Search Terms	As cited in <i>M.S. v. S.L.</i> (2015, BCSC)
Accessed	December 6, 2017
Link	https://www.incadat.com/en/case/1273?summlanguage=es
Relevance	Lack of Services – Impact on Client and Others
Summary	In this case, the parents were Italian citizens who moved to New York so their autistic son could receive ABA therapy for 2-3 years. The father returned to Italy after an incident of domestic violence (that resulted in a criminal charge) and argued that the children should be returned to Italy, where they were habitually resident.
	The court refused to return the children because the father was found to have been abusive to their mother and because the court concluded that: "Italy had very few AVA board certified practitionersif the child was returned to Italy and not provided promptly with an analogous program, he would face a severe loss of the skills that he had successfully developed since beginning his program – including his ability to develop cognitive, linguistic, social, and emotional skillsany hope for the child to lead an independent and productive life depended on his continued participation in an ABA program".[cited in <i>M.S. v. S.L.</i> at paragraph 71].
	The appeals court further concluded that (at paras 33 and 34 as cited in para 72 of <i>M.S. v. S.L.</i> (BCSC, 2015):
	"First, the district court's findings established there was a "probability that the harm [w]ould materialize." Indeed, the district court credited testimony that does not speak in terms of probability but instead of near certainty: "if [Daniele] leaves the Stony Point CABAS program even temporarily, he will face a significant regression in his skills and without such an intensive, structured program, [Daniele] will not develop the cognitive, language, social, emotional and independent living skills that he is likely to acquire through such a program."
	Second, the court's finding that Daniele would lose the ability to develop cognitive, emotional and relational skills, and potentially lead an independent life, if removed from his current therapy and repatriated, establishes harm of a "severe" magnitude manifestly sufficient to satisfy the exception The harm, in fact, is of such a severity that it

threatens to strike to the very core of the child's development individually and of his ability to participate as a member of society."	
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Title of Case	Zavadsky v. Ontario Human Rights Tribunal of Ontario, 2009
Citation	Zavadsky v. Ontario (Education), 2009 HRTO 756 (CanLII)
Note up	Cited by 1 document
Database	CanLII
Search Terms	Note up of Sagharian v. Ontario
Accessed	Nov 24, 2017
Link	http://canlii.ca/t/23tdc
Relevance	Lack of Services – Impact on Client and Others
Summary	The applicant argued that the minister of education failed to provide or fund a comprehensive educational program appropriate for the needs of his son, who was diagnosed with autism spectrum disorder, and that the range of programs available to his son was not adequate to accommodate his son's needs because it did not include intensive intervention. The tribunal found that the failure of school boards to provide IBI does not amount to discrimination on the basis of disability under the Ontario Human Rights Code, consistent with <i>Wynberg</i> . The tribunal noted that the applicant cannot get around <i>Wynberg</i> by arguing that a non-specific form of intervention could be delivered by the school boards.

Title of Case	Blais v. Ontario (Education)
Citation	Blais v. Ontario (Education), 2009 HRTO 656 (CanLII)
Note up	Cited by 12 documents
Database	CanLII
Search Terms	"Applied behavioural analysis" noting up Wynberg v. Ontario (OCA, 2006)
Accessed	Nov 24, 2017
Link	http://canlii.ca/t/231k8
	Terminology ABA vs. IBI
Summary	"ABA is described in the trial judgment of Wynberg (at paragraph 87) as follows: "It is a structured, systemic procedure derived from behaviourally based principles of learning and applied through operant conditioning, including the use of discrete trial training, to improve social behaviour. Further, ABA involves careful observation, data collection and assessment and is provide by specially trained staff." "IBI is a therapeutic/educational program that uses ABA techniques to improve children's social behaviour and communication skills. Although not identical, IBI and ABA, are closely linked, and the acronyms are often used interchangeably." [paragraph 13 and 14]."
	The applicants sought funding for an ABA/IBI program for their daughter, who was diagnosed with a severe form of autism. They did not receive it and had to withdraw her from the public school system. They complained to the Human Rights Tribunal of Ontario (HRTO). The HRTO dismissed their application, saying their claim was, at its core, the same claim made by <i>Wynberg</i> , which was unsuccessful. Their related claim to Ontario's special education tribunal was also unsuccessful.

Oversight of ABA Providers

Title of Case	Wynberg v. Ontario (2005, Ontario Superior Court)
Citation	Wynberg v. Ontario, 2005 CanLII 8749 (ON SC)
	*trial level decision of Justice Kiteley.
Note up	Cited by 18 documents
Database	CanLII
Search Terms	"applied behavioural analysis"
Accessed	December 6, 2017
Link	http://canlii.ca/t/1k1vr
Relevance	Oversight of ABA Providers
Summary	The Ontario Superior Court stated at paragraphs 442 and 443:
	"It is the case that ABA/IBI has its roots in psychology. The child's program is designed and supervised by a psychologist but is carried out by persons trained in behavioural techniques. Other than an insignificant consideration in 1999 and in December, 2002, there is no evidence that the Minister of Education ever directed those charged with developing policy within the Ministry to analyze the nature of the ABA/IBI as offered through the IEIP to determine whether: • It was treatment or education; • Regardless of the label of treatment or education, ABA/IBI performed the function of allowing children with autism to access education; • It could be delivered to children with autism in a partnership of a psychologist, teacher and educational assistant; • The role of the psychologist was analogous to the role of the physician who prescribed medications and treatments which the Ministry approved and mandated in PPM81, to which
	 reference will be made below; or That psychologists employed by boards could design and supervise the programs.
	In their pre-qualification studies, teachers learn basic behavioural techniques. There is no evidence that consideration was given to enhancing the basic knowledge and creating a partnership between the psychologist who designs the program and the teacher and educational assistant and special resource teacher who might deliver the program. The factors of design and supervision by a psychologist, combined with the absence of an analytical approach to the categorization of ABA/IBI, both in the context of

the Ministry's ostensible hands off approach to telling the school boards what programs and services are to be delivered, have led to the virtual exclusion of ABA/IBI in schools in Ontario."
The appeal court decision (2006, CanLIi 22919 at http://canlii.ca/t/1nwd notes at paragraph 32 that instructor therapists, supervising therapists and supervising psychologists were necessary to deliver the IEI program. The court stated "However, despite significant efforts to train instructor therapists and supervising therapists, and to identify supervising psychologists, capacity to deliver the service continued to fall short." [paragraph 32]

Title of Case	Auton v. B.C. (2004, Supreme Court of Canada)			
Citation	*Supreme Court of Canada decision: Auton (Guardian ad litem of) v. British Columbia (Attorney General), [2004] 3 S.C.R. 657, 2004 SCC 78 *trial level decision: 2000 BCSC 1142 (CanLII) with supplementary reasons in Auton v. A.G.B.C., 2001 BCSC 220 (CanLII)			
Note up	Cited by 17 documents			
Database	CanLII			
Search Terms	"applied behavioural therapy"			
Accessed	December 6, 2017			
Link	http://canlii.ca/t/1flzn			
Relevance	Oversight of ABA Practitioners			
Summary	"[36]At the time of trial, the Province had not named providers of ABA/IBI therapy as "health care practitioners", whose services could be funded under the plan. [37] It followed that the Medical Services Commission, charged with administration of the MPA, had no power to order funding for ABA/IBI therapy. The Commission, as an administrative body, had no authority to enlarge the class of "health care practitioners". That could be done only by the government. Since the government had not designated ABA/IBI therapists as "health care practitioners", the Commission was not permitted to list their services for funding. This is how things stood at the time of trial. British Columbia's law governing non-core benefits did not provide the benefit that the petitioners were seeking." [paragraphs 36 and 37][46]There can be no administrative duty to distribute non-existent benefits equally. Had the legislature designated ABA/IBI therapists (or a broader group of			

therapists which included them) as "health care practitioners" under the <u>MPA</u> at the time of trial, this would have amounted to a legislated benefit, which the Commission would be charged with implementing. The Commission would then have been obliged to implement that benefit in a non-discriminatory fashion. However, this is not the case. Here, the legislature had not legislated funding for the benefit in question, and the Commission had no power to deal with it."

In the court's supplementary reasons to its prior trial level decision (*Auton v. A.G.B.C.* 2001 BCSC 220 (CANLII) the court noted that at trial, the B.C. government legal counsel advised as follows: "The Government recognizes the shortage of therapists with Early IBI expertise and seeks to import professionals from other jurisdictions to train BC personnel". [paragraph 22]

In the supplementary reasons, the court also stated:

"[20] Prior to July 26, 2000, when the reasons for judgment in *Auton*#2 were delivered, the Government was in the course of designing and implementing a pilot project directed toward delivering services to autistic children. Following that judgment, representatives from the Ministries of Health, Education, and Children and Families and the Attorney General formed an inter-Ministerial committee to develop a proposal for an effective treatment programme for autistic children under six years of age. The Government converted the pilot project to a programme that includes Early IBI for autistic children between the ages of two and six.

This programme, the Provincial Centre for Autism and Related Disorders ("P-CARD"), is said to include the following elements:

- Inter-Ministerial collaboration
- Building expertise within B.C.
- Enhancement of current capacity
- Supplementing existing early intervention services
- Links to academia, and
- Broad based advisory component
- [21] Counsel for the Crown says the Government is moving swiftly, and in good faith, to implement an effective programme that complies with the judgment in *Auton #2*.
- [22] The Government proposes that P-CARD will deliver province-wide services that will include Early IBI based upon "empirically derived best practices" for autistic children. Counsel described in detail the steps that the Government has taken to implement P-CARD and the elements of that programme. It is proposed that P-CARD will provide direct services, including Early IBI, for a minimum of 20 hours per week to at least 100

children with autism between January and April 2001 and to another 100 children by late 2001 or January 2002.
It contemplates providing Early IBI treatment to all autistic children under six years of age, who have been diagnosed and assessed by a multi-disciplinary team, in 2003. The Government recognizes the shortage of therapists with Early IBI expertise and seeks to import professionals from other jurisdictions to train BC personnel. The Government is also taking steps to reduce the waiting lists for assessment and diagnosis at Sunny Hill and Queen Alexandra Hospitals."

mt v a c					
Title of Case	M.L. v. S.L. 2015 BCSC 1446 (CanLII)				
	Also cited as Silos v. Tibbo Lenoski				
Citation	M.S. v. S.L., 2015 BCSC 1446 (CanLII)				
Note up	**Note this is the trial court decision of <i>Solis v. Tibbo Lenoski</i> **				
Database	CanLII				
Search Terms	"applied behavioural analysis"				
Accessed	December 6, 2017				
Link	http://canlii.ca/t/gkpxx				
Relevance	Oversight of ABA Practitioners				
Summary	In the trial level decision the court stated: "ABA therapy is the best treatment for an autistic child because one-on-one behavioural intervention is more likely to enable an autistic child to overcome his or her particular deficits than other forms of treatment or therapy. Thus, in the long term, ABA therapy provides an autistic child with his or her best opportunity to function fully as an adult" [paragraph 60ii].				
	The court accepted evidence from Ms. K, a Board Certified Behaviour Analyst ("BCBA") with an M.Ed. in Special Education and a concentration in ASD and developmental disabilitiesShe providedevidence regarding appropriate training and certification for therapists and analysts working with children with ASD" [paragraph 25]. The trial judge accepted as a fact the following:				
	"iv. RED appears to be the best of the available facilities in Colima.				
	It provides treatment for autistic children and the coordinator, Ms. Rodriguez Virgen, has specific training in the treatment of autism. However, her credentials are not equivalent to those of the therapists and analysts in British Columbia. In particular, the training hours are significantly less than the amount called for by the applicable guidelines in British Columbia for BCBAs. Further, the intervention				

[paragraph 60]

Title of Case	Stolman v. St. Clair, 2014 BCSC 2118 (CanLII)			
Citation	Stolman v. St. Clair, 2014 BCSC 2118 (CanLII)			
Note up	Cited by 0 documents			
Database	CanLII			
Search Terms	"applied behavioural analysis"			
Accessed	November 25, 2017			
Link	http://canlii.ca/t/gf7t2			
Relevance	Oversight of ABA Practitioners			
Summary	In this case evidence was led that the Surrey District school board requires that ABA providers need 1000 hours of experience working with autistic children. The court found that there was not sufficient evidence to conclude that the therapists in the Langley school district were not as qualified as those in the Surrey school district. In this case a father wanted his child with ASD to attend school near the father's home in the Langley school district. However, the child's mother wanted the child to attend school in Surrey School District where the child's home, extracurricular activities, schools and therapists are located. These therapists included the child's behavior consultant, his speech therapist and his special needs social worker. The judge found that it was in the child's best interests to be enrolled in school close to his home and usual daily activities in Surrey.			

Title of Case	Hewko v. B.C.				
Citation	Hewko v. B.C., 2006 BCSC 1638 (CanLII)				
Note up	Cited by 7 documents				
Database	CanLII				
Search terms	"applied behavioural analysis"				
Accessed	November 27, 2017				
Link:	http://canlii.ca/t/1pxq9				
Relevance	Lack of services - Impact on Client and Others; Oversight of ABA				
	Practitioners				
Summary	The court reviewed the availability of trained individuals to provide IBI. The				
	court stated: "It is worth noting that this case is significantly different from				

- the Ontario case in that, in fact, British Columbia purports to provide resources and funding for ABA to be made available in schools and has been funding early intervention without age restriction for those with a diagnosis of autism.
- [328] Similar to the Ontario factual situation however, the infrastructure has not kept pace with the policy objectives and thus children eligible for ABA-IBI therapy in schools do not in fact, reliably receive it...
- [330] What is key here and is illuminated by the facts of this case is that the <u>School Act</u> and the <u>s. 11</u> appeal process reserve ultimate decision making about what and how a child learns to "education experts" and ultimately the School Board who in turn rely on certified teachers and consultants. This case arises because many if not most children with autism require (in order to access an education in the public system) specialized teaching programs. The evidence is overwhelming that <u>all</u> effective teaching programs for children with autism are based on some form of ABA methodology.
- [331] British Columbia has acknowledged the need for ABA and ABA-IBI programming for children with autism. However, training, and certification programs for teachers and teaching assistants in the area of ABA and ABA-IBI programming is still in its infancy. At the time Darren Hewko began Kindergarten in 2002, there were no specific training programs for ABA-IBI. The first such training program began in the summer of 2003. In 2006 it appears a certification program for consultant therapists has been designed and will be implemented.
- [332] In other words, there is a serious gap in the "expertise" of educators in the area of effective learning systems for children with autism.
- [333] The court heard no evidence that ABA-IBI is not, at this time, the most tested and effective learning system for many children with autism. However, how much ABA-IBI is effective and how exclusive the ABA-IBI programming must be in a school setting is not the subject of any consensus of experts...
- [337] What is required to provide access to an education for Darren Hewko is acknowledged and understood. Strict adherence to an ABA based learning system and the availability of ABA-IBI programming and teaching assistants trained to carry it out. It is clear that there is an infrastructure gap. There are too few teachers or teaching assistants or even certified consultants (for designing learning programs) with sufficient training to either properly evaluate home programs, or to deliver such programming in the school system such that the scheme of the <u>School Act</u> failed this child with autism.
- [338] However, the facts of this case do not even approach the threshold

of discrimination against Darren Hewko on the basis of physical disability or any other criterion. No matter what comparator group one looks at, there is no basis upon which the court can say that in similar circumstances other students attempting access to an education have been treated differently."

Title of Case	Kohn v. Ontario (Ontario Superior Court, 2004)				
Citation	Kohn v. Ontario (Ontario Superior Court, 2004) Kohn v. Ontario (Attorney General), 2004 CanLII 32475 (ON SC)				
Note up	Cited by 0 documents				
Database	CanLII				
Search Terms	Note up of <i>Naccarato</i>				
Accessed	December 6, 2017				
Link	*				
Relevance	Oversight of Practitioners				
Summary	December 6, 2017 http://canlii.ca/t/1hzcg				

Thus, the TDSB does not provide IBI therapy, nor would it permit on-going therapeutic intervention by someone like a Beecroft staff person, within the school setting. This is not to say that the TDSB does not accommodate autistic children. On the contrary, the document outlines the substantial resources and programs on offer by the TDSB. It is also clear from the document that many autistic children enrolled in the TDSB schools continue to receive IBI after their transition into public schools, but they do so outside of school hours. Furthermore, there is ongoing consultation between TDSB special education staff and treatment program (IBI) staff in reference to these students."

"There is no waiting list at Beecroft [the centre at which the child received full time IBI therapy], and there is a serious human resources problem in obtaining and maintaining staffing levels of therapists."

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