



Building Integrated Capacity in Autism and Mental Health

Mental Health Provider Survey

Provincial Report

Submitted to: Children's Mental Health Ontario, September 2021

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Acknowledgements: We would like to acknowledge and thank the mental health service providers who completed this survey, providing the data necessary to inform training initiatives and identify mental health support needs for children and youth with neurodevelopmental conditions.

The online survey included several questionnaires by Maddox et al. (2019) that were adapted for this study with permission. For example, measures were adapted by substituting the word “adult” to “child and/or adolescent,” the inclusion of ADHD versions of questions, and referring to psychotherapy rather than specifically cognitive behavioural therapy (CBT). We thank Dr. Brenna Maddox for permission to use aspects of her survey.

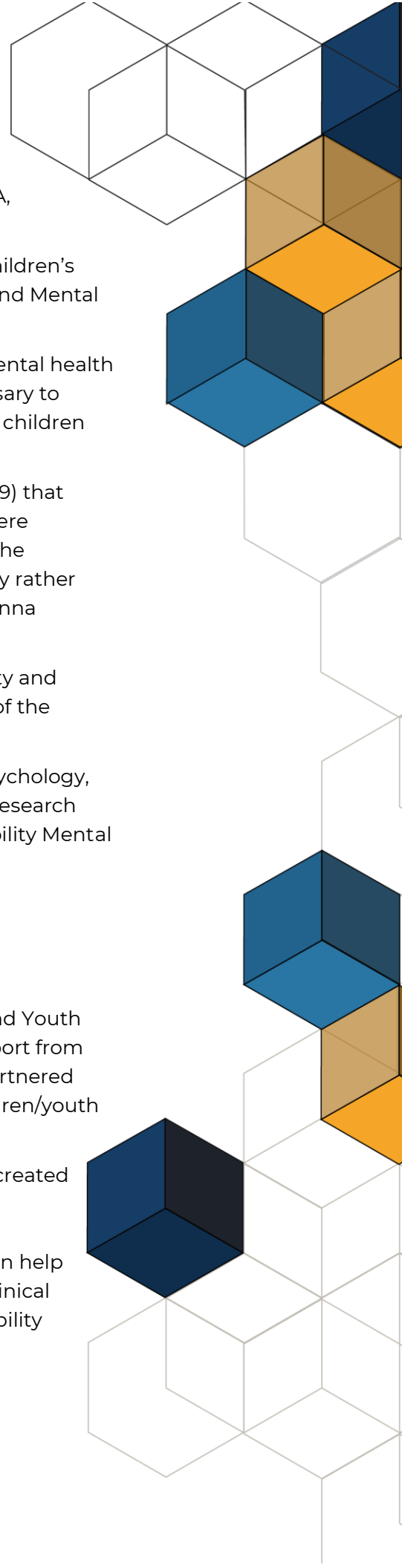
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About the Survey

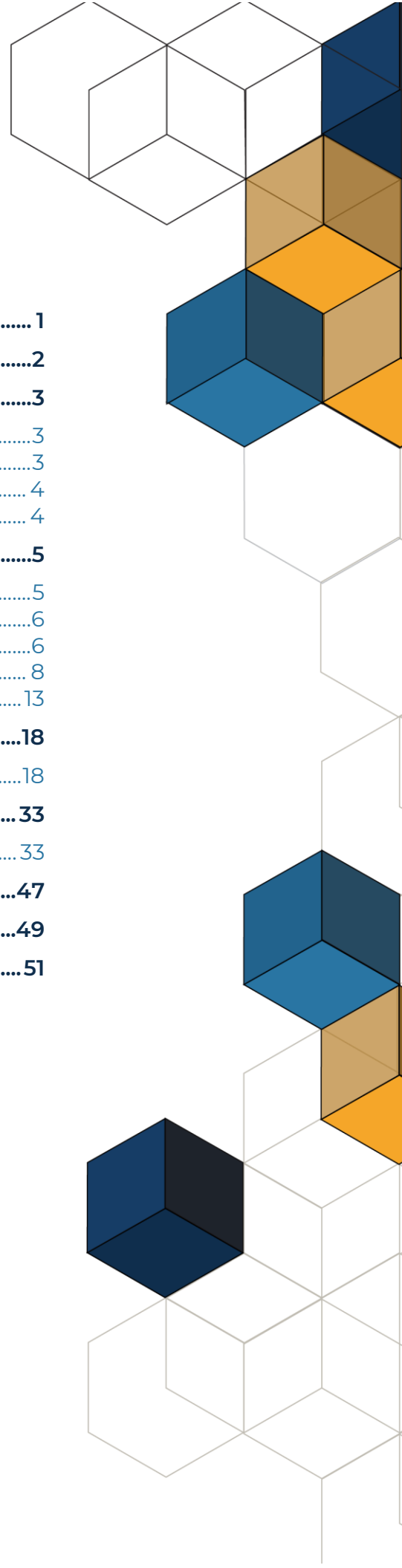
Working with Dr. Jonathan Weiss from the LaMarsh Centre for Child and Youth Research (York University), Children's Mental Health Ontario (with support from the Ontario Centre of Excellence for Child and Youth Mental Health) partnered to build our sector's capacity to provide mental health services for children/youth with autism and with attention-deficit/hyperactivity disorder.

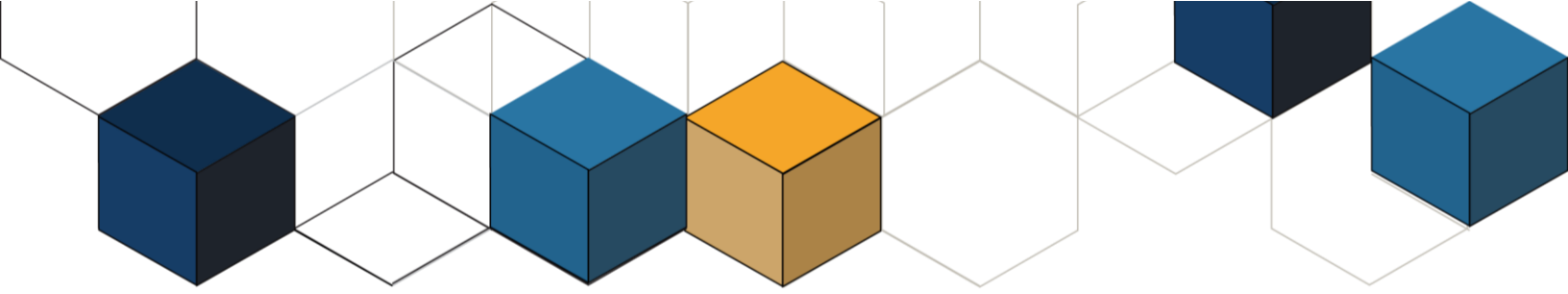
In working with the Youth Services Bureau Lead Agency, Dr. Weiss co-created a survey tool which assesses mental health providers' knowledge, skills, perceptions, and training needs, as they relate to autism, attention-deficit/hyperactivity disorder (ADHD), and mental health. The results can help to identify the training needs of our mental health sector and inform clinical training. These findings can also inform policies to improve the accessibility and delivery of evidence-based psychotherapy for clients with neurodevelopmental conditions.



Contents

OVERVIEW.....	1
FOREWORD	2
EXECUTIVE SUMMARY.....	3
Introduction.....	3
Objective	3
Methodology	4
Conclusion	4
RESEARCH REPORT	5
Background	5
Objectives.....	6
Methodology	6
Participants	8
Measures.....	13
PUBLIC PROVIDER RESULTS.....	18
Common Mental Health Problems.....	18
PRIVATE PROVIDER RESULTS	33
Common Mental Health Problems.....	33
DISCUSSION	47
REFERENCE LIST.....	49
COMPENDIUM OF TABLES AND FIGURES.....	51





Overview

Objective of Survey: To assess and understand mental health provider attitudes, knowledge, confidence and training needs while delivering psychotherapy to child and adolescent clients with autism and with attention-deficit/hyperactivity disorder (ADHD).

- Children and adolescents with autism are far more likely to experience co-occurring mental health issues, including anxiety, depression, and externalizing behavioural challenges (Arim et al., 2015; Strang et al., 2012), compared to youth without autism.
- Despite evidence that many of the same interventions that have been developed for individuals without autism may be beneficial for those with autism, clients with autism are far more likely to struggle accessing evidence-based psychosocial interventions to address these issues.
- Child and youth mental health service providers across the province completed an online survey tool and shared their experiences delivering psychotherapy to clients with autism, and to clients with ADHD, and in some questions, to clients in general.
- Key Findings indicated that:
 - Many respondents report having knowledge about autism and about ADHD, however feel they have less knowledge about mental health care for clients with autism. They are less likely to provide interventions, like CBT and family therapy, to clients with autism compared to those with ADHD.
 - Respondents note providing very similar kinds of adaptations to the way they deliver psychotherapy to clients with autism and ADHD, and consider their adaptations to be similarly helpful in both groups.
 - Respondents feel less confident in addressing mental health problems in clients with autism compared to those with ADHD. They feel just as confident in addressing mental health problems in clients with ADHD compared to their typical clients.
 - Respondents feel less pressure to provide mental health treatments to clients with autism, and as a group, have less intention to treat those with autism compared to those with ADHD. While still generally positive, respondents have less positive attitudes about providing mental health care to clients with autism compared to those with ADHD.
 - Mental health providers strongly support receiving more specific training on mental health care adaptations, conceptualization and treatment planning related to delivering psychotherapy to clients with autism.

Foreword

From Kim Moran, CEO of Children's Mental Health Ontario

Across Ontario, we know that mental health providers, agencies, and organizations all work hard to meet the needs of children, youth and families in a meaningful and comprehensive way. At Children's Mental Health Ontario, we are grateful for the unwavering dedication of service providers that ensures the health and well-being of many.

Even so, we know that there are certain families across the province that continue to struggle to receive timely and equitable access to mental health care and service. In particular, we are referring to children and youth who not only have mental health needs, but also have other co-morbidities, such as autism, fetal alcohol spectrum disorders (FASD) and ADHD, to name a few.

Gaps in mental health service provision for children and youth with autism in particular have often been attributed to a lack of clinician/provider training and knowledge. The Ontario Autism Program Advisory Panel Report (2019) has highlighted the importance of building capacity in this sector through advanced comprehensive training programs for mental health providers, specifically for those working with children and youth with autism. This is especially important given the high prevalence of these co-occurring needs (approximately 70%). The data also suggests that these needs are increasing in acuity, as we observe higher rates of hospitalizations and psychiatric visits compared to those with mental health needs alone.

In recognition of these gaps, and with the support of the Ministry of Children, Community and Social Services, we are endeavouring to build integrated capacity in autism and mental health, starting with a survey to assess and understand the knowledge and training needs required to meet the unique needs of children with co-occurring mental health and autism. We are so pleased to have the opportunity to work with Dr. Jonathan Weiss and the wonderful team at York University to better understand the training needs of mental health providers, which is further described in this report. We are happy to share these results at a provincial and regional level, which will allow us to work together to better meet the needs of children, youth and families in a comprehensive, but also targeted way.

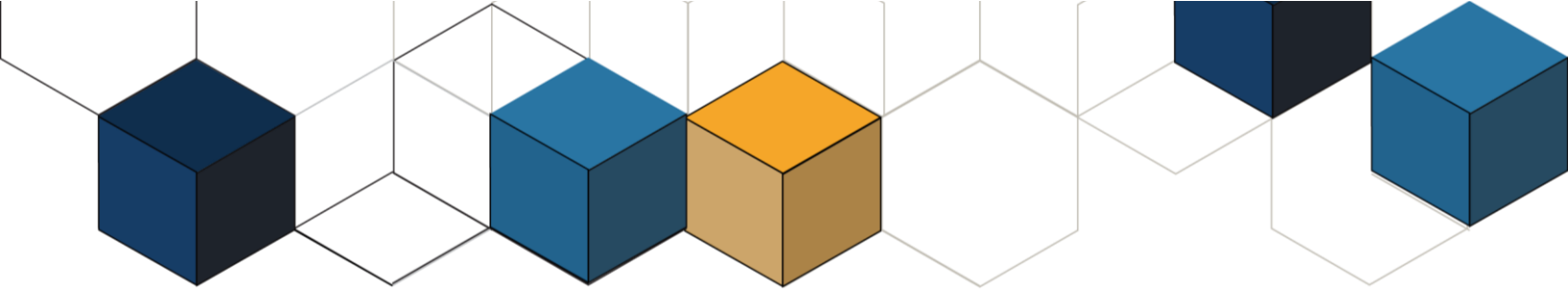
With these results, we will also continue working with our sector partners and leaders to develop critical and foundational training opportunities that will start to move the needle on our sector's capacity to work with kids who have co-occurring needs. We hope that this work will lead to continued and shared learning opportunities that will support providers across the province to deliver mental health services to all kids, regardless of their co-morbidity or complexity.

We are very grateful for the enthusiasm and support that we have received in launching this important work and look forward to working with you!

Sincerely,



Kim Moran



Executive Summary

Introduction

Children and adolescents with autism¹ who also have mental health problems (defined further below) often struggle to get the mental health care they need. There are many potential reasons for this. We wanted to understand more about the experiences and needs of mental health providers who may provide psychotherapy to clients with autism. Mental health service providers across Ontario completed an online survey about their experiences and opinions on delivering psychotherapy for clients with autism, attention-deficit/hyperactivity disorder (ADHD), and in some questions, to clients in general. While the focus was to understand more about the context of autism, we included ADHD as a second chronic neurodevelopmental condition because it can also impact therapeutic interactions and mental health care. We chose ADHD to understand whether any reported concerns were specific to autism or were potentially attributable to neurodevelopmental disabilities, more broadly.

Objective

This study aimed to **understand mental health service providers' training, experience, attitudes, and knowledge** related to working with clients with mental health problems who also have autism or ADHD. This was assessed by measuring:

- Confidence
- Certainty to Treat
- General Knowledge
- Attitudes
- Normative Pressures
- Self-efficacy
- Intentions
- Mental Health Problems & Severity
- Treatment Approaches
- Adaptations to Current Practice
- Agency Established Criteria & Barriers
- Training Needs

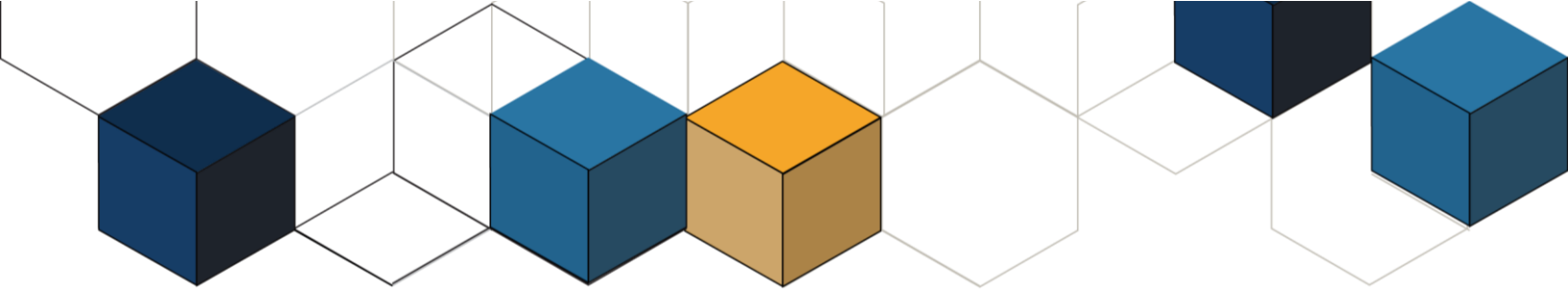
¹ Traditionally, writings about autism have used **person-first language** (e.g., “people with autism”) rather than **identity-first language** (e.g., “Autistic person”). Person-first language was believed to be appropriate to emphasize the individuality of each person beyond any specific label. At the same time, advocates and authors have highlighted the issues with this approach for the autistic community, where identity-first language is meant to recognize and affirm ownership of an identity as an autistic person, embracing it as a source of pride. Autism is seen as an inseparable part of who autistic people are. Within Ontario, the majority of children's mental health agencies continue to use person-first language, and as a result, we use this language in this report. We do so fully recognizing that autism or ADHD are not negative labels and are to be respected as a reflection of a person's unique neurodiversity.

Methodology

Data was collected from 611 publicly funded service providers across 66 agencies in Ontario, Canada, who provide psychotherapy to children and youth. Participants were 20 to 75 years of age ($M = 40$, $SD = 10$; 84% women). Most participants were employed full-time (92%) and had a post-secondary education, such as a bachelor's degree (32%) or a master's degree (37%). Professions included social workers (45%), child and youth workers (21%), registered psychotherapists (19%), clinical psychologists (4%), social service workers (2%), registered nurses (2%), and other professional designations (7%). Data was also collected from 41 private practitioners, which were comprised mostly of social workers (81%), followed by registered psychotherapists (7%), and social service workers (5%).

Conclusion

- This survey was an important step in collecting province-wide information on provider knowledge, skills and training needs. To our knowledge, this survey is the first of its kind (in terms of reach and scope) to assess these attributes in a Canadian context and children's mental health care contexts.
- Mental health service providers reported potential barriers or challenges to treatment delivery for clients with mental health problems who also have autism.
- Training initiatives addressing mental health providers' knowledge, attitudes, and confidence around supporting clients with autism are needed. This may improve their intention to treat clients with autism and improve access to effective mental health care.
- The results from this survey can immediately be used by government and policymakers to establish curriculum and training initiatives for mental health providers; this includes foundational training, as well as more advanced training opportunities and resources.
- The majority of respondents expressed interest in attending future autism and ADHD training initiatives at their mental health agency, especially those focused on best practices that are evidence-based, ways of adapting mental health treatments for clients with autism or ADHD, ways of better communicating with clients, ways to build therapeutic rapport, and how to find resources for these clients. Ongoing assessment and monitoring can illustrate how skills, knowledge and attitudes change over time and following completion of training opportunities.
- This work can help us move towards building integrated capacity in autism and mental health care, including in the provision of evidence-based supports.



Research Report

Background

It is well known that children and adolescents with autism experience high rates of mental health problems, such as anxiety, depression, and externalizing behavioural issues (Simonoff et al., 2008). Between 50%-70% meet criteria for at least one co-occurring psychiatric disorder (Simonoff et al., 2008). Though evidence-based psychotherapy that addresses mental health problems in youth without autism has been shown to be effective for youth with autism (e.g., cognitive behavioural therapy [CBT]; Weston et al., 2016), these clients are less likely to receive evidence-based interventions (Brookman-Frazee et al., 2012a). Clinicians often report concerns about treating youth with neurodevelopmental conditions more broadly, and not only with respect to autism (Brookman-Frazee et al., 2012b). There is considerable evidence that therapists' decisions to provide care are impacted by their knowledge, attitudes, and beliefs, though much of this research has focused on adult clients (Maddox et al., 2019), and none has been done specifically within the context of children's mental health in Canada.

The current survey is the first, in the broader Ontario context, to collect information on service providers' training, experience, and opinions in treating mental health problems in clients with autism and clients with ADHD using psychotherapeutic means. While the focus was to understand treatment in the context of autism, we included ADHD as a second chronic neurodevelopmental condition because it can also impact therapeutic interactions and mental health care. We chose ADHD to understand whether any reported concerns were specific to autism or were attributable to neurodevelopmental disability, more broadly.

Traditionally, writings about autism have used **person-first language** (e.g., "people with autism") rather than **identity-first language** (e.g., "Autistic person"). Person-first language was believed to be appropriate to emphasize the individuality of each person beyond any specific label. At the same time, advocates and authors have highlighted the issues with this approach for the autistic community, where identity-first language is meant to recognize and affirm ownership of an identity as an autistic person, embracing it as a source of pride. Autism is seen as an inseparable part of who autistic people are. Within Ontario, the majority of children's mental health agencies continue to use person-first language, and as a result, we use this language in this report. We do so fully recognizing that autism or ADHD are not negative labels and are to be respected as a reflection of a person's unique neurodiversity.

Objectives

This project aimed to understand mental health care service providers' confidence, attitudes, knowledge, intentions, and experience in treating mental health problems in clients with autism and clients with ADHD.

Methodology

Survey Development

Dr. Jonathan Weiss (York University) co-produced an online survey with Monica Armstrong (Director of Mental Health Services for Youth Services Bureau of Ottawa) and Cathy Lonergan (Children & Youth Mental Health Lead Agency/System Planner). The aim was to measure factors that could influence mental health providers' delivery of psychotherapy that is used to address mental health problems in clients with autism or ADHD. The survey was originally designed for mental health providers who worked at children's mental health agencies in the Ottawa area. The survey was first piloted with a team of mental health providers and leaders from the Ottawa area prior to data collection. The survey included definitions of psychotherapy and mental health problems to establish a shared understanding of the terms within the context of the project and to avoid different interpretations:

- **Psychotherapy** was defined by the Regulated Health Professions Act (1991) as: *"Treating, by means of psychotherapy technique, delivered through a therapeutic relationship, an individual's serious disorder of thought, cognition, mood, emotional regulation, perception or memory that may seriously impair the individual's judgement, insight, behaviour, communication or social functioning."* And by the Psychotherapy Act (2007) as: *"the assessment and treatment of cognitive, emotional or behavioural disturbances by psychotherapeutic means, delivered through a therapeutic relationship based primarily on verbal or non-verbal communication. Psychotherapy can take many forms, including cognitive behaviour therapy, counselling, psychodynamic therapy, play therapy, family systems therapy, parent management training, as examples"*. Interventions such as Applied Behavioural Analysis or Intensive Behavioural Intervention were not considered psychotherapy.
- **Mental Health Problems** were defined as *'difficulties or disorders of thought, cognition, mood, and emotion regulation, that impair an individual's functioning,'* as noted in the *Regulated Health Professions Act* (1991). Examples were provided, such as when referring to symptoms of *anxiety disorder, bipolar disorder, challenging behaviours (e.g., aggression, irritability), oppositionality, conduct disorders, depression, eating disorders, gender dysphoria, obsessive-compulsive and related disorders, psychosis, post-traumatic stress disorders, or substance use*. Respondents were asked not to consider neurodevelopmental disabilities (e.g., autism, ADHD, learning disabilities, intellectual disability) as mental health problems.

Survey questions about autism and ADHD were counterbalanced across participants, meaning that some respondents were first asked about these variables in relation to ADHD, while others were first asked about autism. All participants provided informed consent before completing the survey. This survey was approved by the York University Human Participants Review ('Ethics') Sub-Committee. French and English versions of the survey were available.

Note: The term 'mental health service providers' is meant to broadly include various mental health professionals that participated in this survey, such as social workers, psychotherapists, and psychologists, to name a few. Throughout the report, other interchangeable terms are included, such as 'therapists' or 'clinicians.'

Survey Dissemination

Public service providers

Service provider agencies recruited mental health provider participants over email. Agency staff were asked by their leads (i.e., Executive Directors or Clinical Leaders) to share an anonymous survey link with their frontline staff who provide psychotherapy to children and adolescents with mental health problems.

Data collection for this cohort occurred at four time points, including most recently when the survey was launched province wide. First, it was collected in December 2019, from core service providers in the Ottawa area that were affiliated with the Youth Services Bureau of Ottawa Lead Agency. Second, data was collected in June-July 2020 from Woodview Mental Health and Autism Services (Burlington and Hamilton). It was then collected in August-September 2020 from Kinark Child and Family Services (Durham, Halton, Northumberland, Peel, Peterborough, Simcoe, and York). Finally, CMHO launched the survey in April-May 2021 to member agencies across the province. Following an explanation of the survey, CMHO received expressions of interest from 57 member agencies from across the province (not including those who already completed the survey). Ultimately, 66 agencies had some mental health providers who completed the survey. Each agency decided on its own process for informing staff about the survey.

Private providers

In July 2021, CMHO circulated the survey to 3 Ontario professional colleges (College of Registered Psychotherapists of Ontario, College of Psychologists of Ontario, Ontario College of Social Workers and Social Service Workers) and 4 Ontario professional associations (Ontario Association of Mental Health Professionals, Ontario Association of Social Workers, Ontario Psychiatric Association, Ontario Psychological Association), asking that they circulate an invitation to participate to private mental health service providers.

Eligible private providers were identified as those individuals who: (i) work with children / adolescents with mental health needs at least part-time in a private practice; and (ii) had not already completed the survey through a publicly funded mental health agency.

Timing of Survey

Survey recruitment occurred during the COVID-19 pandemic and as such, some agencies declined to participate due to not wanting to add to provider workloads during the pandemic. In turn, the timing of the survey may have negatively impacted the overall response rate. Nonetheless, it is important to note that many agencies expressed interest in the subject matter, even if they were unable to participate in this survey initiative.

Participants

Public Provider Sample:

Survey respondents included 611 mental health care service providers, in which 83% identified as women, 12.5% as men, and 1.6% as agender, gender fluid, non-binary, trans male or trans female, while 2.6% preferred not to disclose. Respondents were between the ages of 20 and 75 years ($M = 40.2$ years, $SD = 10.9$). Most survey participants identified as White (79%), were employed full-time (92%) and had a post-secondary education (93%), such as a bachelor's degree (32%) or a master's degree (37%).

To complete the survey, participants needed to have provided psychotherapy to clients at one of the participating agencies. Participants included direct service providers (80%), supervisors/coordinators (11%), and some who noted being both direct service providers and supervisors/coordinators (8%). The surveys were completed by social workers (45%), child and youth workers (21%), registered psychotherapists (19%), clinical psychologists (4%), social service workers (2%), registered nurses (2%), or those with other professional designations (7%).

As shown in **Figure 1a**, 28% of respondents were from the Central region*, 18% from the West region*, 14% from the North region, 29% from the East region, 6% from the Toronto region, and 5% from an *Unknown* region.

For information on agencies and service areas, please refer to **Table 1** and **Table 2**.

* A small number of agencies spanned regions, and it is not possible to determine if respondents were in this region or one of the others. As such, they are listed in *Unknown*, and the number in this region may be an underestimate of the number of respondents in this region.

Table 1. List of Publicly Funded Agencies by Ontario Region²

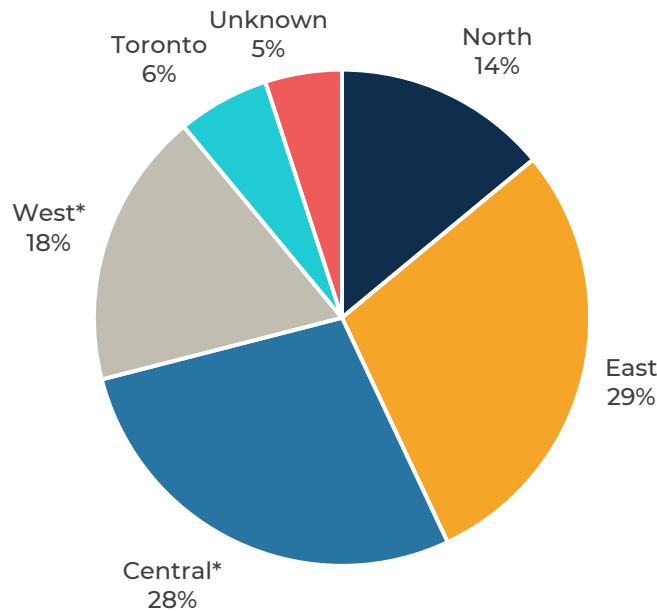
Region	Mental Health Agency		
Central	<ul style="list-style-type: none"> Associated Youth Services of Peel Boys and Girls Clubs of Kawartha Lakes Carizon Family and Community Services Chimo Youth and Family Services CMHA Waterloo Wellington (WW) 	<ul style="list-style-type: none"> Dufferin Child and Family Services EveryMind Mental Health Services Kinark Child and Family Services New Path Youth and Family Services Point in Time Centre for Children, Youth and Parents 	<ul style="list-style-type: none"> Reach Out Centre for Kids (ROCK) York Hills Centre for Children, Youth and Families Other
East	<ul style="list-style-type: none"> Centre Psychosocial Children's Mental Health of Leeds & Grenville Children's Mental Health Services Cornwall Community Hospital Crossroad's Children's Mental Health Centre Frontenac Youth Services Kinark Child and Family Services Le CAP 	<ul style="list-style-type: none"> Maison Fraternité Maltby Centre Open Doors for Lanark Children and Youth Peterborough Youth Services Roberts/Smart Centre Royal Ottawa Health Care Group The Phoenix Centre for Children and Families 	<ul style="list-style-type: none"> Valoris pour enfants et adultes de Prescott-Russell Youth Services Bureau of Ottawa Youville Centre Children's Hospital of Eastern Ontario Somerset West Community Health Centre
North	<ul style="list-style-type: none"> Algoma Family Services Children's Centre Thunder Bay Compass 	<ul style="list-style-type: none"> Dilico Anishinabek Family Care FIREFLY Hands The Family Help Network 	<ul style="list-style-type: none"> North Eastern Ontario Family & Children's Services (NEOFACS) Simcoe Muskoka Family Connexions
West	<ul style="list-style-type: none"> Banyan Community Services Chatham Kent Children's Services Children First in Essex County Craigwood Youth Services Haldimand-Norfolk REACH Hotel-Dieu Grace Healthcare-Regional Children's Centre Huron Perth Centre for Children and Youth 	<ul style="list-style-type: none"> Keystone Child, Youth & Family Services Lutherwood Lynwood Charlton Centre Maryvale Adolescent & Family Services Pathstone Mental Health St. Clair Child & Youth Services Vanier Children's Mental Wellness 	<ul style="list-style-type: none"> Wellkin Child & Youth Mental Wellness Woodview Mental Health and Autism Services Youth Services of Lambton County Incorporated Other
Toronto	<ul style="list-style-type: none"> Central Toronto Youth Services Jewish Family and Child Service Kerry's Place Autism Services Lumenus Community Services 	<ul style="list-style-type: none"> Strides Toronto The Hospital for Sick Children Turning Point Youth Services Yorktown Family Services 	

²Ontario Regional Boundaries Based on The Ministry of Children, Community and Social Services - <http://www.children.gov.on.ca/htdocs/english/about/regionaloffices.aspx>

Note: Kinark Child and Family Services spans two regions, Central and East, and is listed accordingly in Table 1.

Figure 1a: Percentage of Respondents by Region in Ontario

Total Survey Respondents = 611
Public Provider Breakdown by Region



All survey respondents reported treating mental health problems in children or adolescents in some capacity. Participants indicated that their primary theoretical orientation when treating clients was cognitive-behavioural (41%), eclectic (34%), behavioural (12%), or other (e.g., collaborative problem solving, attachment-based therapy; 11%). Most of the sample reported treating at least one client with autism (90%) and one client with ADHD (98%) in the past. In fact, on average, respondents indicated that 19% ($SD = 19.5\%$, Median = 15%) of their caseload involved clients with autism and 47% ($SD = 24.9\%$, Median = 50%) involved clients with ADHD. Furthermore, many respondents noted knowing someone with autism (60%) and with ADHD (88%) outside of their work. However, the majority of respondents reported *very rare* or *occasional* contact with individuals with autism (85%), and nearly half of the respondents reported *very rare* or *occasional* contact with individuals with ADHD (48%).

Table 2. Total Number of Survey Respondents in Each Service Area (*n* = 611)³

Service Areas	Total Number of Respondents
North Region	
Algoma	14
Greater Sudbury/Manitoulin/Sudbury	9
Kenora/Rainy River	13
Nipissing/Parry Sound/Muskoka	20
Thunder Bay	11
Timiskaming/Cochrane (including James Bay Coast)	21
East Region	
Durham	21
Frontenac/Lennox and Addington	2
Haliburton/Kawartha Lakes/Peterborough ⁴	17(13)
Hastings/Prince Edward/Northumberland	20
Lanark/Leeds and Grenville	20
Ottawa	66
Prescott and Russell	6
Renfrew	16
Stormont, Dundas and Glengarry	6
Central Region	
Dufferin/Wellington	18
Halton	26
Peel	42
Simcoe	26
York	23
Waterloo ⁵	6(6)
Toronto Region	
City of Toronto	39
West Region	
Brantford-Brant	0
Chatham-Kent	1
Elgin/Oxford	1
Essex	23
Grey/Bruce	1
Haldimand-Norfolk	14
Hamilton	4
Huron/Perth	19
Lambton	13
Middlesex	24
Niagara	1
Unknown*	49

³ Ontario Service Area Boundaries Based on The Ministry of Children, Community and Social Services

⁴ 13 providers noted being in the Haliburton/Kawartha Lakes/Peterborough service area but in the Central region. We noted them in parentheses, but they factor into the Central region analyses.

⁵ 6 providers noted being in the Waterloo service area, but in the West region. We noted them in parentheses here, but they factor into the West region total analyses.

* A small number of providers noted that they spanned more than one service area. As such, these respondents are listed in the 'Unknown' category.

Private Provider Sample:

To complete the survey as a private service provider, respondents had to be treating mental health problems in children or adolescents in a private practice. Survey respondents included 41 mental health providers, of which 68% identified as women, 25% as men, 5% as non-binary or transgender, while 2% chose not to respond. They were between the ages of 26 and 79 years ($M = 44.11$ years, $SD = 13.35$). Sixty-five percent of participants identified as White, and almost all reported a post-secondary education (98%), such as a bachelor's degree (10%) or a master's degree (78%). A little over half of the respondents reported working full-time in private practice (56%). Sixty-three percent of respondents reported working in only one private practice or setting. Many respondents reported being a sole practitioner (42%), while some were a practitioner alongside other mental health clinicians (30%) or within the context of an interdisciplinary team (25%). Three respondents indicated that they also work part-time with one of the publicly funded agencies noted above. Participants were primarily direct service providers (83%), although some reported being both direct service providers and supervisors/coordinators (12%). The surveys were completed primarily by social workers (81%), followed by registered psychotherapists (7%), social service workers (5%), child and youth workers (2%), or those with other professional designations (5%).

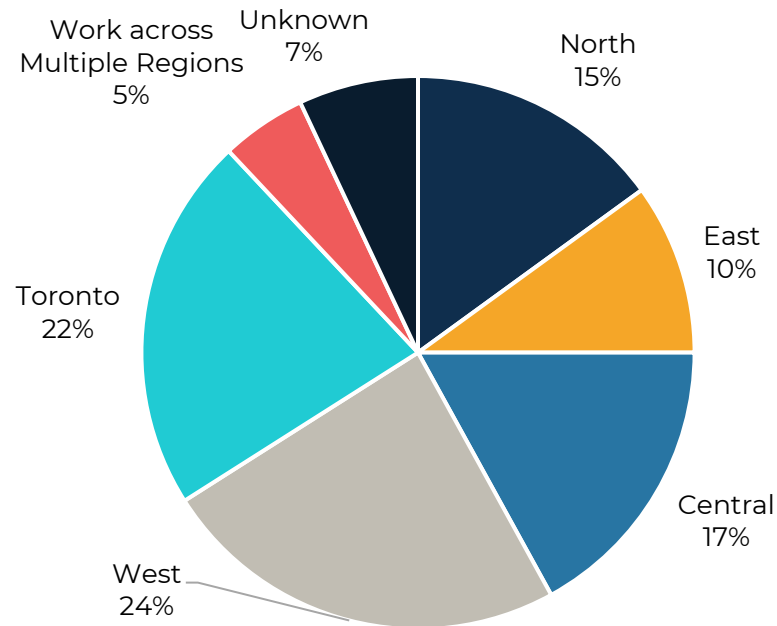
As shown in **Figure 1b**, 17% of respondents worked in the Central region, 24% in the West region, 15% in the North region, 10% in the East region, and 22% in the Toronto region. An additional 5% noted working across multiple regions, and 7% were *Unknown region**.

Participants indicated that their primary theoretical orientation when treating clients was eclectic (39%), cognitive-behavioural (31%), behavioural (2%), or other (e.g., attachment-based therapy, trauma-informed approach; 27%). Most of the sample reported treating at least one client with autism (76%) and one client with ADHD (95%) in the past. On average, respondents indicated that 19% ($SD = 26.2\%$, Median = 10%) of their caseload involved clients with autism; however, the median was only 10%, meaning that half of the sample noted that less than 10% of their client base had autism. In contrast, on average, respondents noted that 38% of their clients had ADHD ($SD = 23.8\%$, Median = 40%). Further, approximately 59% of respondents noted knowing someone with autism, and 85% knew someone with ADHD, outside of their work. The majority reported *very rare* or *occasional* contact with individuals with autism (65%), and just over a quarter of the respondents reported *very rare* or *occasional* contact with individuals with ADHD (28%).

*2 missing responses; 1 private provider respondent listed their region as *Other*. Therefore, it is not possible to determine the region, and these three survey respondents were identified under *the Unknown region*.

Figure 1b: Percentage of Respondents by Region in Ontario

Total Survey Respondents = 41
Private Provider Breakdown by Region



Measures

Online survey questionnaires were used to capture information on the following domains⁶:

1. Confidence
2. Certainty to Treat
3. General Knowledge
4. Attitudes
5. Normative Pressures
6. Self-Efficacy
7. Intentions
8. Mental Health Problems & Treatment Approaches
9. Mental Health Severity
10. Adaptations to Current Practice
11. Agency Established Criteria & Barriers
12. Training Needs

⁶The online survey included several questionnaires by Maddox et al. (2019), adapted for this study. For example, measures were adapted by substituting the word “adult” to “child and/or adolescent”, the inclusion of ADHD versions of questions, and referring to psychotherapy rather than specifically CBT. We thank Dr. Brenna Maddox for permission to use aspects of her survey.

1. Confidence

Therapist confidence was measured by a single question: *“How confident are you that you can treat this person effectively?”* (Maddox et al., 2019) for clients with autism, ADHD, and children in general, using a 5-point Likert scale (1 = not at all confident; 5 = extremely confident).

Therapist Confidence in Providing Psychotherapy Activities. Participants also completed the Therapist Confidence Scale (TCS-Autism; Cooper et al., 2018). The TCS-Autism is a 14-item measure that asks therapists to rate how confident they are in enacting therapeutic activities common across many kinds of psychosocial interventions (e.g., developing empathy, communication, assessment, therapy ending). Responses were indicated using a 5-point Likert scale (1 = not confident; 5 = highly confident). Participants completed the TCS with reference to clients with autism and with ADHD, with higher total scores reflecting greater overall confidence.

2. Certainty to Treat

Therapist certainty to treat clients with autism and with ADHD was measured by asking: *“A lot of different things can get in the way of delivering psychotherapy with clients. If you were to deliver psychotherapy with them, how sure are you that the treatment would be able to be delivered?”* (Maddox et al., 2019). Participants used a 5-point Likert scale (1 = very sure it would not; 5 = very sure it would) to rate how certain they felt about treatment delivery.

3. General Knowledge

The level of therapist treatment knowledge was assessed by asking participants: *“Please rate how knowledgeable you feel about providing mental health care to ...”* for child/adolescent clients with mental health problems in general, and those who present with autism and with ADHD (Maddox et al., 2019). Participants recorded their responses using a 5-point Likert scale (1 = not at all knowledgeable; 5 = extremely knowledgeable).

Self-Rated Knowledge of Specific Mental Health Topics. Participants also completed a self-rated knowledge measure (Brookman et al., 2012b; Maddox et al., 2019). This 6-item measure asked mental health providers providing treatment to rate how knowledgeable they felt on topics related to mental health problems for clients with autism and with ADHD, using a 5-point Likert scale (1 = not at all knowledgeable; 5 = extremely knowledgeable). Topics assessed included core symptomatology, developing treatment plans and identifying progress.

4. Attitudes

Attitudes towards treatment were measured using standard semantic differential scales (Fishbein & Ajzen, 2010) used in prior research by Maddox et al. (2019). Participants rated how favourable or unfavourable they find providing psychotherapy to clients with autism and to clients with ADHD. Participants rated their attitudes using opposite adjective pairs (Good – Bad, Effective – Useless, Pleasant – Unpleasant, Hopeful – Hopeless, and Manageable – Burdensome) and a 10-point slider scale (10 to 0). A total score of the therapist's attitude was computed by averaging across all five items. Higher ratings represented more favourable views.

5. Normative pressures

Clinician *normative pressures (norms)* were measured by asking therapists to report on two different types of norms (Maddox et al., 2019): *descriptive norms* (e.g., beliefs about what others like them do) and *injunctive norms* (e.g., beliefs about attitudes that others hold). Descriptive norms were measured by a single item asking therapists to rate the extent to which they agree with the following statement: *"Most clinicians like me, in my professional situation, would provide psychotherapy to these clients [clients with mental health problems who present with autism or ADHD]."* Participants rated using a 5-point Likert scale (1 = strongly disagree; 5 = strongly agree). Injunctive norms were measured using two items: *"[Continue to think about providing psychotherapy to clients with mental health problems who present with autism or ADHD], how much would [other clinicians or your supervisor/manager] disapprove or approve if they knew you were providing psychotherapy to these clients."* Participants reported using a 5-point Likert scale (1 = strongly disapprove; 5 = strongly approve). An average across *descriptive* and *injunctive* norm items computed a total *norms* score. Higher scores represented greater pressures.

6. Self-efficacy

Self-efficacy was defined by the mental health providers' perceived sense of agency to provide psychotherapy (Maddox et al., 2019). This was measured by presenting the statement: *"I have the skills needed to provide psychotherapy to clients with mental health problems"* for clients with autism, ADHD and children in general. For each client group, participants rated their agreement with the statement using a 5-point Likert scale (1 = strongly disagree; 5 = strongly agree).

7. Intentions

Participants' intentions, or motivations, to provide psychotherapy were measured by asking: *"If it were up to you, how likely is it that you would provide psychotherapy to clients with mental health problems who present with [autism / ADHD]?"* Participants used a 7-point Likert scale (1 = extremely unlikely; 7 = extremely likely) (Maddox et al., 2019).

8. Mental Health Problems and Treatment Approaches

Participants were asked to identify the most common presenting problems (e.g., anxiety, depression, bipolar) of clients with autism and with ADHD in their experience working in a mental health care setting (Maddox et al., 2019). Participants also reported on treatment approaches (e.g., solution-focused therapy, cognitive behavioural therapy, family therapy) they have used and rated how helpful each one was, using a 10-point Likert scale (1 = not at all helpful; 10 = extremely helpful).

9. Mental Health Severity

Mental health providers were asked to report on the percentage of clients with severe/intensive mental health needs among their child/adolescent clients with autism and with ADHD to further understand the spectrum of need within service (e.g., mild, moderate, intensive). Using a slider scale (0% to 100%), participants answered the following item, *“Of the clients with [autism / ADHD] and mental health problems on your typical caseload, what percent of them have severe/intensive mental health needs?”*

10. Adaptations to Current Practice

Participants were asked to identify, from a list of 14 past adaptations for standard evidence-based interventions, adaptations they have implemented during psychotherapy for their clients with autism and with ADHD (Angus et al., 2014; Burke et al., 2017; Cooper et al., 2018). Participants were asked: *“In the past, what adaptations have you made in psychotherapy with child and/or adolescent clients with mental health problems who present with [autism / ADHD]?”* The list included adaptations such as: making abstract concepts more concrete, providing structure and predictability, making use of special interests, and shortening the length of sessions. Participants rated how helpful each adaptation was using a 3-point Likert scale (1 = not at all helpful; 3 = very helpful).

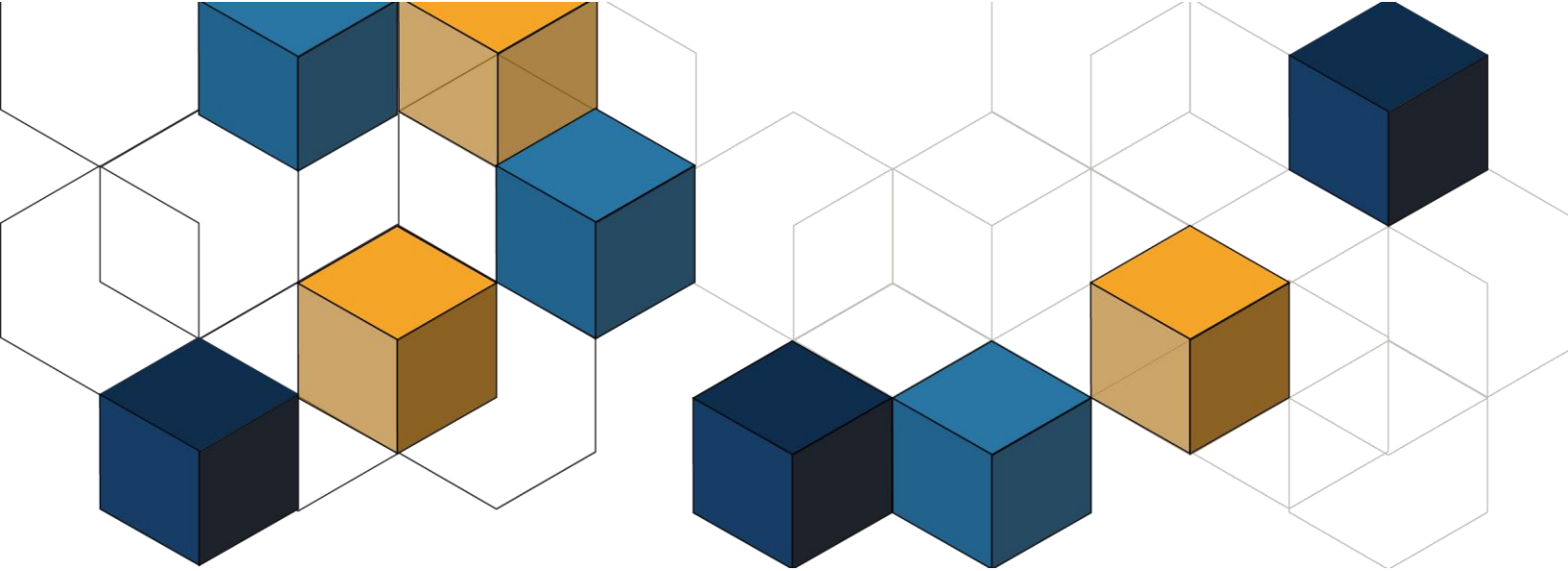
11. Agency Established Criteria and Barriers

Participants were asked to report on the current state of their agency with regards to exclusionary criteria or policies by answering the following item, *“To your knowledge, does your agency have established criteria (e.g., exclusionary criteria, practices, policies) for providing mental health services to children and youth with [autism / ADHD]?”* Participants responded using a Yes/No/Not Sure option.

Participants were also asked to identify potential organizational barriers for children and youth with autism and with ADHD and for their families in accessing services. Through an open textbox format, mental health providers typed in their responses to the following question: *“To your knowledge, what (if any) are the barriers that children and youth with [autism / ADHD] and their families encounter when trying to access your agency’s mental health services? Please describe.”*

12. Training Needs

Participants reported on their experiences and interest in formal training with individuals with autism and shared what they would like to see as part of a training program (Maddox et al., 2019). Participants were also asked about different training and resource needs that could be useful to them, such as conferences on autism, a checklist of community resources and rated the extent to which they agreed that adequate supports, services, tools, or referral resources were available (Zerbo et al., 2015). Participants rated these questions using a 5-point Likert scale (1 = strongly disagree; 5 = strongly agree).

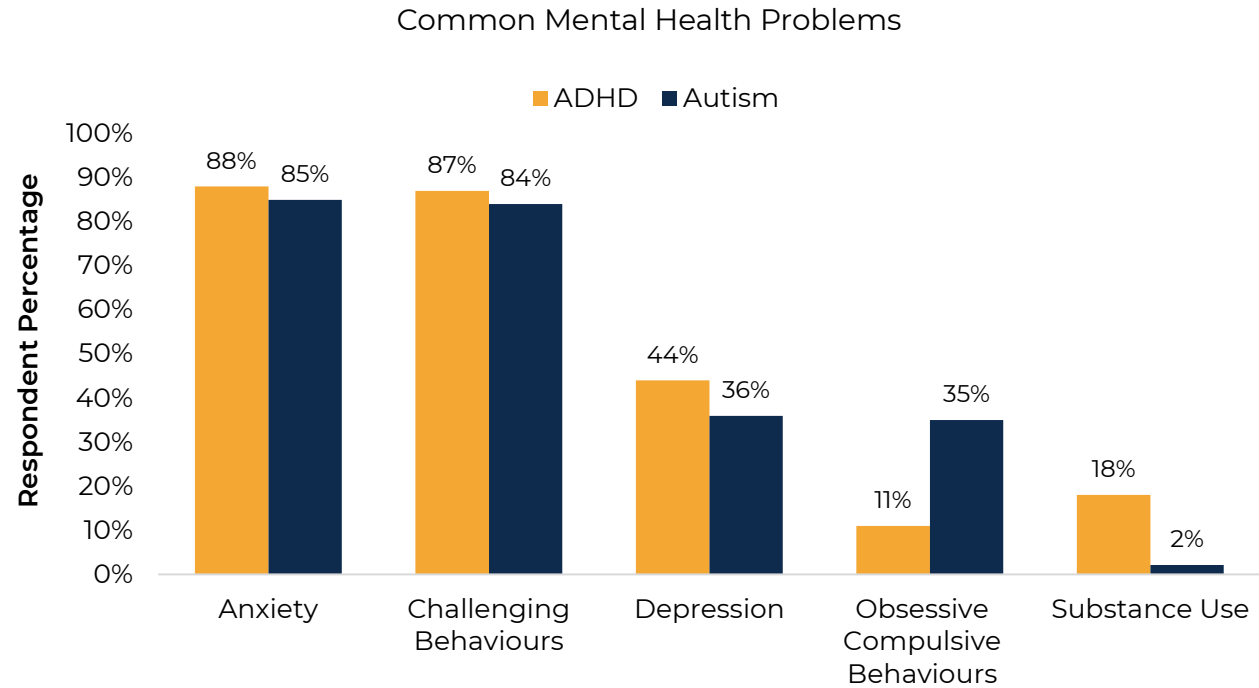


Public Provider Results

Common Mental Health Problems

As shown in **Figure 2**, respondents noted a similar pattern in common presenting problems for both clients with ADHD and clients with autism. The highest rates involved anxiety, followed by challenging behaviours (e.g., aggression, irritability) and depression.

Figure 2: Percentage of Public Providers Reporting Common Presenting Problems for Clients with Autism and with ADHD

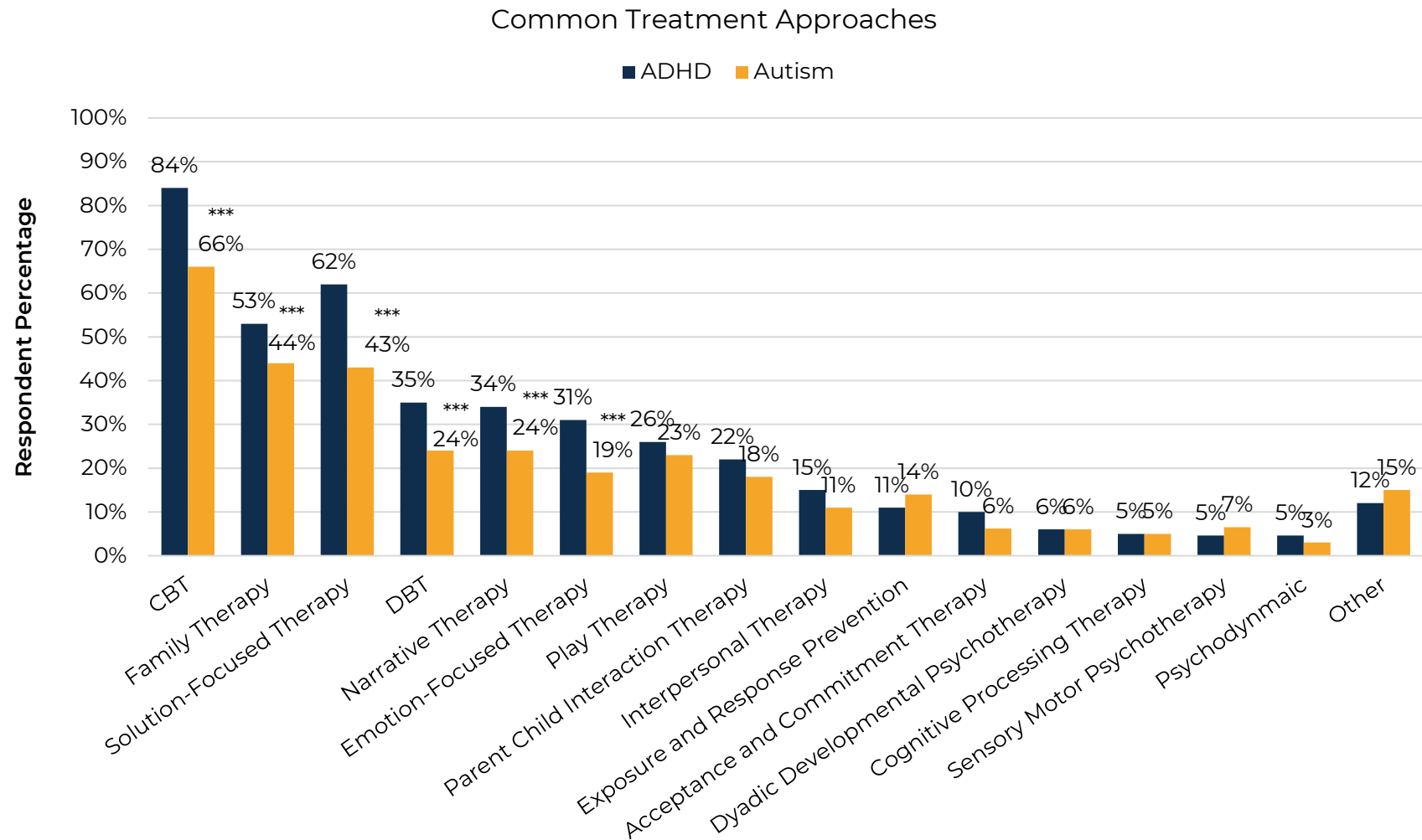


In a follow-up question within the version of the survey distributed through CMHO ($n = 448$), we explored the severity of mental health needs among clients with autism and clients with ADHD. Of therapists who reported that at least 10% of their caseload involved children with autism and with ADHD (*60% of the CMHO sample*), similar severity levels were noted for both groups: 45% ($SD = 28.9$) of clients with autism were rated as having severe/intensive mental health needs, compared to 51% ($SD = 26.2$) of clients with ADHD.

Common Treatment Approaches

Similarly, as shown in **Figure 3**, respondents noted using a broad set of interventions with clients with autism and with ADHD, with the top four being CBT, family therapy, solution-focused therapy and dialectical behaviour therapy (DBT). At the same time, respondents were more likely to note using each of these approaches with clients with ADHD compared to autism. In all cases, respondents who used each approach rated these modalities similarly as effective for clients with autism and with ADHD. Therefore, although providers, as a group, did not tend to use these approaches as much with clients with autism compared to ADHD, when they did use them, they felt that they were as helpful.

Figure 3: Percentage of Public Providers Endorsing the Use of Common Interventions for Clients with Autism and with ADHD

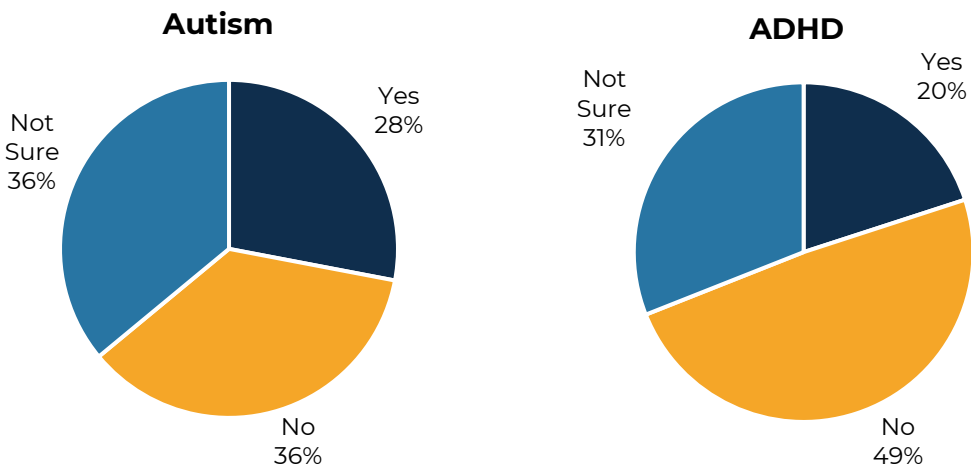


*** p < .001

For a subset of the sample ($n = 448$; administered in April-May 2021 time point), we asked the follow-up question below to further understand treatment policies. As shown in **Figure 4**, approximately 36% of respondents were not sure if their agency had established criteria (e.g., exclusionary criteria, practices, policies) for providing mental health services to children with autism and 31% were not sure regarding ADHD. Of those who were sure, 71% noted that there were no policies with regards to ADHD, and 56% noted no policies regarding autism.

Figure 4: Public Mental Health Organization Criteria for Children and Youth with Autism or ADHD

“To your knowledge, does your agency have established criteria for providing mental health services to children and youth with”



Adaptations to Current Practice

Respondents used similar kinds of adaptations to the therapy they provide to clients with autism and with ADHD. As shown in **Table 3**, common adaptations included *providing structure and predictability (e.g., routines, transition activities)*, *making use of special interests during therapy*, and *making abstract concepts more concrete*. Some slight differences between the two groups related to *capitalizing on strengths (e.g., intelligence and acquisition of new information)*, *shorter session lengths*, *providing opportunities for generalization and ongoing practice*, and *minimizing executive functioning difficulties*. For the most part, adaptations were rated as *very helpful* for both groups.

Table 3. Percentage of Public Providers Reporting Adaptations During Psychotherapy for Clients with Autism and with ADHD (*n* = 608)

In the past, what adaptations have you made in psychotherapy with....	Clients with ADHD (%)	Clients with Autism (%)
Provide structure and predictability (e.g., routines, transition activities)	88	82
Make use of special interests (e.g., include individual interests as part of therapy)	78	78
Make abstract concepts more concrete	68	74
Support with processing verbal information (e.g., simplifying language)	74	70
Capitalize on strengths (e.g., intelligence and acquisition of new information)	81	63
Minimize sensory distraction (e.g., adjusting lights and sounds)	61	57
Involving family members in sessions	73	68
Length of sessions: Shorter	82	63
Length of sessions: Longer	7	8
Environment (e.g., sensory area, relaxation area: mats or bean bag chair, visual aids)	54	54
Provide detailed information	41	42
Provide opportunities for generalization and ongoing practice	44	35
Reduce anxiety with distancing techniques	28	30
Minimize executive functioning difficulties	33	22
Other	5	4
None	1	1

Note. 3 missing responses

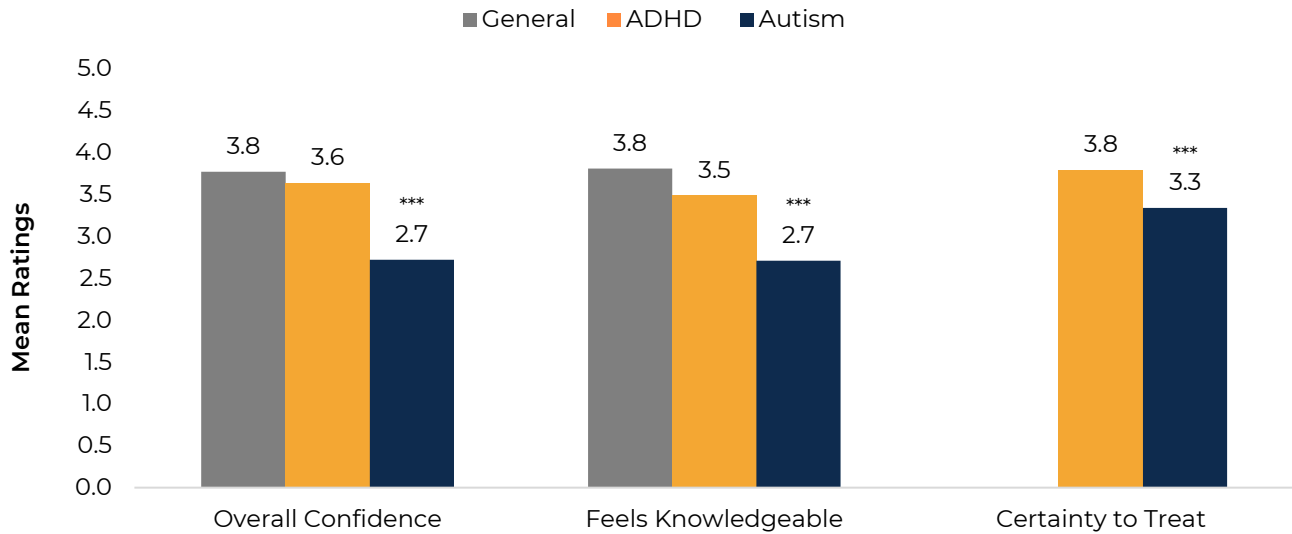
Confidence, Knowledge and Certainty to Treat

Despite these treatment similarities, there were notable differences in how respondents felt about providing therapy to clients with autism. As shown in **Figure 5**, participants reported feeling significantly less confident and less knowledgeable about providing psychotherapy to clients with autism compared to clients with ADHD and compared to clients with mental health problems in general. There were no differences in confidence and knowledge between clients in general or those with ADHD. Participants also reported feeling less certain about treating clients with autism with psychotherapy, compared to clients with ADHD⁷. As shown in **Figure 6**, only 3% of respondents felt *Not at All* or *Slightly* confident in providing psychotherapy to clients in general, compared to 9% for clients with ADHD and 38% for clients with autism. Patterns of knowledge and certainty to treat were similarly discrepant regarding clients with autism.

⁷ We did not ask the certainty question about children in general.

Figure 5: Public Providers' Average Ratings of Confidence, Knowledge and Certainty to Treat

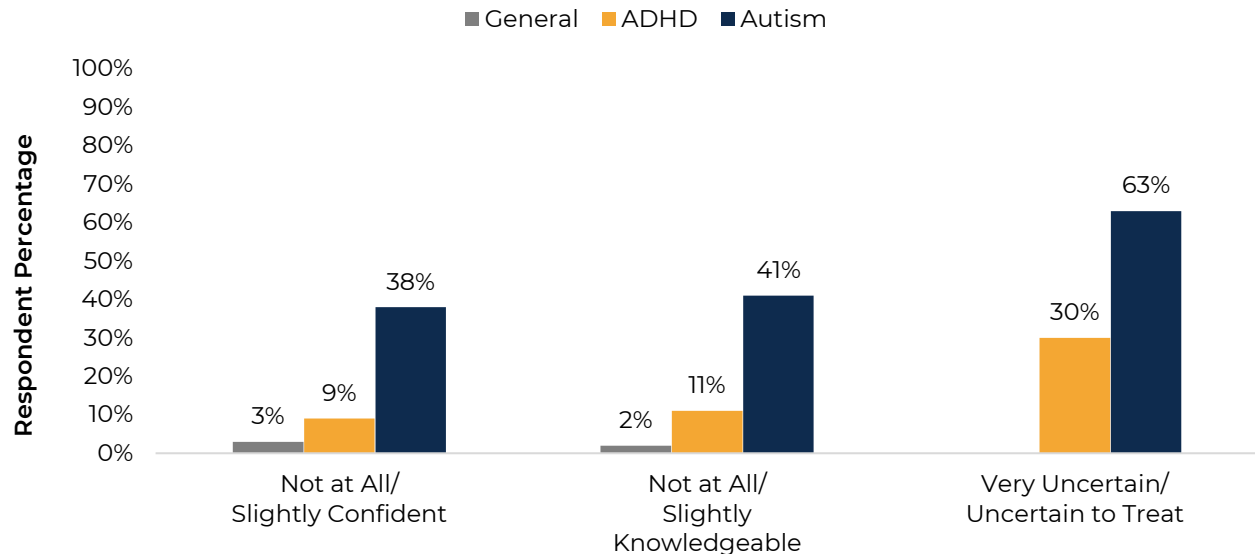
Overall Confidence, Knowledge and Certainty to Treat



*** $p < .001$

Figure 6: Percentage of Public Providers Reporting Low Confidence, Knowledge and Certainty to Treat Clients with Autism Compared to Clients with ADHD

Comparisons of Clinician Confidence, Knowledge and Certainty to Treat



Deeper Dive into Public Therapist Confidence

As shown in **Table 4**, within the context of mental health care, respondents reported less confidence in delivering different psychotherapy components for clients with autism compared to those with ADHD. These components include communicating with clients, identifying effective treatment approaches, developing therapeutic rapport, understanding special issues, and effectively ending intervention. At the same time, it is important to note that this scale was out of 5, and an average score of 4 would therefore reflect: “*I feel confident*,” indicating that in many respects, mental health providers had confidence in reference to both groups of clients.



Therapists reported feeling less confident in psychotherapeutic processes for children with autism compared to those with ADHD.

Table 4. Specific Differences in Public Provider Confidence when Providing Therapy to Clients with Autism and with ADHD

Items – TCS-Autism	M (SD)	
	Clients with ADHD	Clients with Autism
Listen carefully to concerns presented by ***	4.4 (0.64)	4.2 (0.83)
Be empathetic towards ***	4.5 (0.61)	4.4 (0.73)
Understand special issues related to having and their impact on a client's life ***	4.3 (0.71)	3.8 (0.97)
Communicate with ***	4.3 (0.70)	3.7 (0.92)
Develop a therapeutic relationship with ***	4.4 (0.68)	3.8 (0.95)
Gather information from ... so that their difficulties can be better understood ***	4.3 (0.69)	3.7 (0.90)
Use assessments in a way that ... will understand ***	3.9 (0.90)	3.1 (1.12)
Explain results of an assessment process to ***	3.9 (0.92)	3.1 (1.12)
Use knowledge about mental health issues in formulating the problems of ***	4.0 (0.83)	3.4 (1.02)
Help ...to identify issues that need to be considered in sessions ***	4.0 (0.80)	3.2 (1.02)
Use knowledge of mental health interventions to work effectively with ***	3.9 (0.82)	3.1 (1.01)
Identify therapeutic approaches that will be effective for ***	3.9 (0.86)	2.9 (1.07)
Work with caregivers and other important people in the lives of ***	4.1 (0.76)	3.6 (1.05)
End intervention with ... in an effective manner ***	4.0 (0.84)	3.1 (1.11)
Average ***	4.1 (0.63)	3.5 (0.79)

Note. M = Mean; SD = Standard Deviation; TCS – Autism = Therapist Confidence Scale – Adapted for Autism; Scale 1 to 5; *** $p < .001$.

A Deeper Dive into Public Mental Health Provider Knowledge of Psychotherapy Practice

As shown in **Tables 5** and **6**, participants reported considerable knowledge about both ADHD and autism, but even here, they reported significantly greater knowledge about ADHD. The greatest gaps in autism knowledge occurred in providing psychotherapy, planning and delivering treatments, and identifying progress for clients with autism. Conversely, the strongest areas of expertise involved identifying core symptoms, co-occurring problems, and the impact of autism or ADHD on client behaviour.

Table 5. Public Providers' Self-Rated Knowledge for Treating Clients with ADHD (*n* = 611)

Variable	ADHD Knowledgeable (%)			
	Not at All	Slightly	Moderately	Very / Extremely
Providing Psychotherapy	2	9	36	53
Core Symptoms	0	5	22	72
Co-occurring Problems	2	8	30	61
Impacts of ADHD on Behaviour	0	5	20	74
Treatment Planning	2	9	28	61
Delivering Treatment	1	10	27	62
Identifying Progress	1	9	24	67

Table 6. Public Providers' Self-Rated Knowledge for Treating Clients with Autism (*n* = 611)

Variable	Autism Knowledgeable (%)			
	Not at All	Slightly	Moderately	Very / Extremely
Providing Psychotherapy	8	32	42	17
Core Symptoms	2	21	38	39
Co-occurring Problems	6	24	38	32
Impacts of Autism on Behaviour	3	17	40	41
Treatment Planning	13	28	38	21
Delivering Treatment	12	30	39	21
Identifying Progress	11	25	38	25

Colour Scale

More %
Respondents

Less %
Respondents



Intention, Attitudes, Normative Pressures and Self-Efficacy

As shown in **Figures 7a** and **7b**, mental health providers' intentions to provide psychotherapy to clients with autism had a very different profile compared to those with ADHD. Specifically, the vast majority (71%) of therapists noted that they were *quite* or *extremely likely* to provide psychotherapy to clients with ADHD if it were up to them, while only 36% endorsed a similar level of likelihood when asked about clients with autism. In contrast, only 14% and 29% reported that they would be *unlikely* to provide psychotherapy to clients with ADHD and clients with autism, respectively.

Figure 7a: Public Providers' Intentions to Provide Psychotherapy to Clients with ADHD

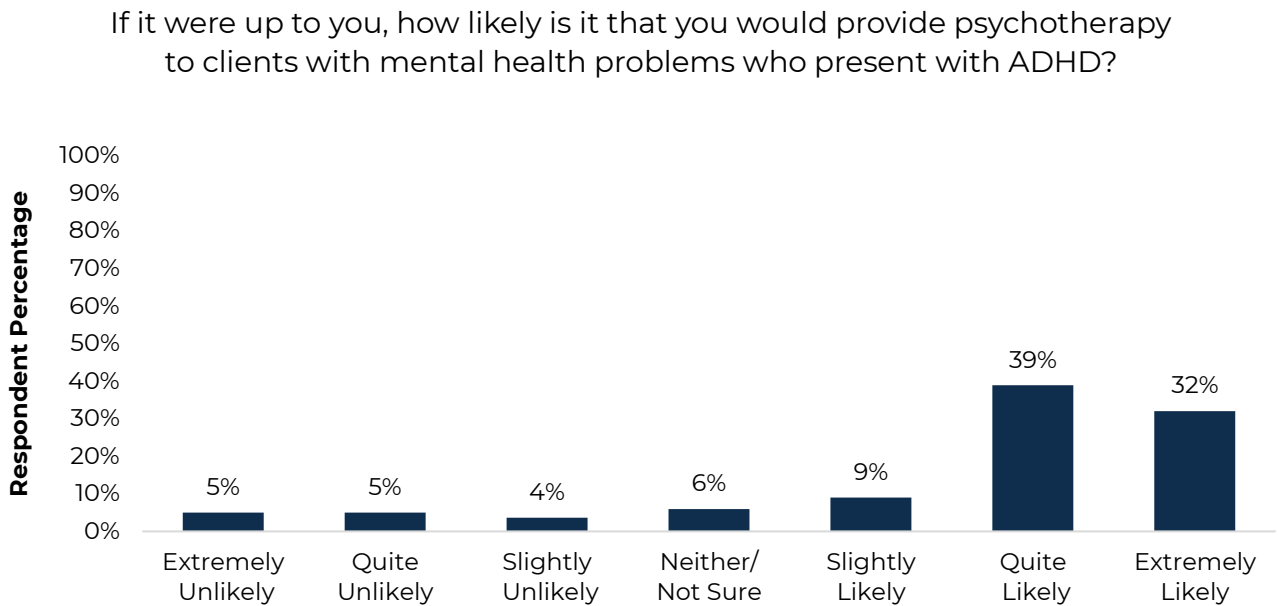
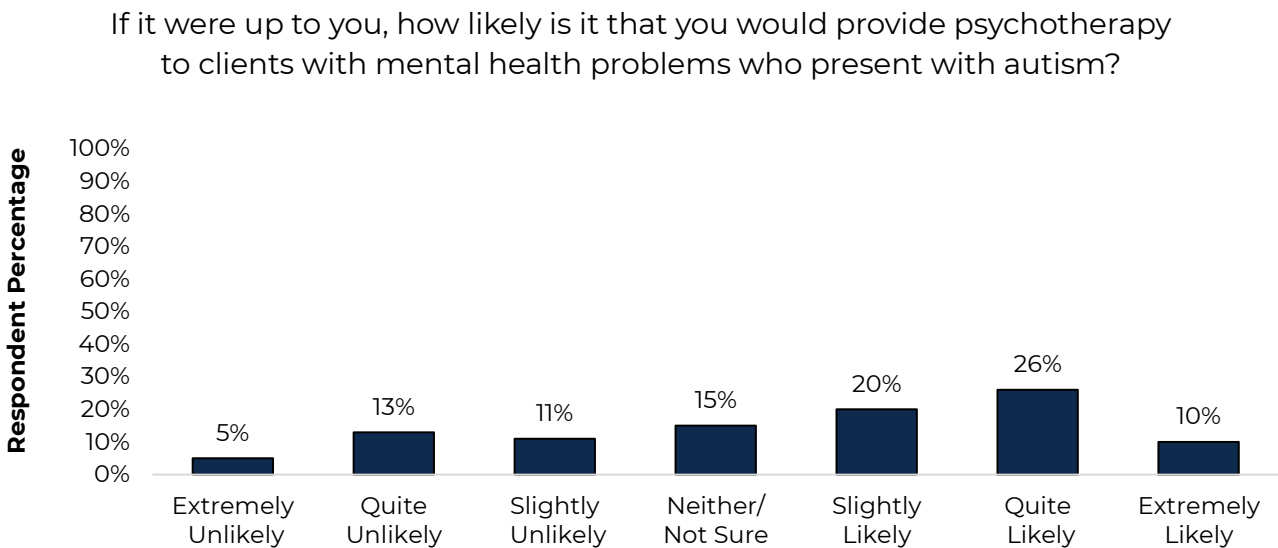


Figure 7b: Public Providers' Intentions to Provide Psychotherapy to Clients with Autism



As shown in **Table 7**, service providers had less favourable attitudes, weaker intentions, lower normative pressures (e.g., beliefs about attitudes that others hold, beliefs about what others like them do) and less self-efficacy in delivering psychotherapy to clients with autism compared to clients with ADHD.

Table 7. Descriptive Statistics for Public Providers' Intentions, Attitudes, Normative Pressures and Self-Efficacy in Delivering Psychotherapy for Clients with Autism and with ADHD

Variable	Clients with ADHD <i>M (SD)</i> Median	Clients with Autism <i>M (SD)</i> Median
Attitudes ***	6.5 (1.89) 6.6	7.8 (1.64) 8.0
Injunctive Norms ***	3.7 (0.77) 4.0	4.3 (0.80) 4.0
Descriptive Norms ***	3.3 (0.94) 3.0	4.2 (0.91) 4.0
Intention ***	4.5 (1.73) 5.0	5.6 (1.68) 6.0
Self-Efficacy ***	3.8 (0.83) 4.0	3.1 (1.00) 3.0

Note. *M* = Mean; *SD* = Standard Deviation; Attitudes Scale 0 to 10; Injunctive and Descriptive Norms Scale 1 to 5; Intention Scale 1 to 7; Self-Efficacy Scale 1 to 5; *** $p < .001$.

Mental Health Agency Barriers

The OAP Advisory Panel Report (2019) indicated that there are additional challenges in accessing mental health services that are not entirely related to the provider's level of knowledge or confidence. Thus, we sought to understand whether there are organization-related policies and/or practices that might delay service receipt or create barriers to accessing services.

- In their clinical practice, only:
 - 27% of public service providers agreed that they have adequate tools/referral resources/practice models to accommodate clients with autism.
 - 32% of public service providers agreed that their clients with autism have adequate support to effectively partner with them.
 - 29% of public service providers agreed that caregivers of their clients with autism have sufficient services and support to effectively partner with them in their practice.

A subset of the sample ($n = 448$; administered in April-May 2021 time point) was asked about the barriers that clients with autism and with ADHD and their families may encounter when trying to access mental health services.

Barriers frequently identified for Families with Clients with Autism

- “Long waiting lists.”
- “Lack of trained and capable and confident clinicians.”
- “Unfortunately, there is some kind of mandate that does not allow all clients presenting with autism to access services...”
- “Developmental and Mental Health sectors seem to operate separately...”
- “...no autism-specific service and lack of community resources.”
- “...Parents knowing how to access our services.”
- “Lack of training for mental health staff around dual diagnosis, particularly autism & mental health.”
- “They [clients] need to have moderate to severe mental health challenges to qualify...”
- “...not enough funding to provide quick access to services.”

The majority of service providers (72%) reported at least one perceived barrier within their organization for families of clients with autism accessing mental health services. For example, one therapist emphasized the need for clinician training around autism for when families access services:

“Services available are not always sufficient or a good fit for the needs of the youth/child. Yet, since there are often no other services available, so we have to try to accommodate the family's needs as best possible.”

More than half of the service providers (54%) reported at least one barrier to accessing services for families and clients with ADHD.

“Sometimes families have to go through many services to actually find a clinician who is able to develop a treatment plan or refer to other professionals who can create a proper treatment plan with the family.”

Barriers frequently identified for Families with Children/Youth with ADHD

- “Wait time for services is a big concern.”
- “Lack of staff knowledge and confidence (no training) on the interventions and therapeutic approaches to use with children with ADHD.”
- “Lack of funding, lack of training and clinical knowledge, lack of resources and supports.”
- “Complexity of system navigation.”
- “Not enough staff are trained to serve the needs of these families.”
- “Likely a lack of understanding of ADHD and the need for psychoeducation.”
- “Finding the right services – being bounced around....”
- “Staff that assume these disorders exclude the client from being able to benefit from therapy.”

Training Needs

Approximately half of public providers stated that they received formal training on working with clients with autism (50%) and with ADHD (56%). Of those who received training, just under half of the sample reported completing 9-40 hours of previous training for clients with autism (42%) and clients with ADHD (46%).

Most respondents (83%) noted that they would be *very likely* to attend an autism and ADHD training session if one was provided. As shown in **Figure 8**, for clients with autism, many respondents requested training in communication strategies (89%) and accommodations to practice (89%), a network of other practitioners to consult with (63%), and information on community resources (66%). In addition, approximately half of the sample indicated that they would want to learn more about autism (46%), psychotropic medication (40%), interdisciplinary resources (53%) and access to Interdisciplinary Communities of Practice/Joint Care Teams (49%). See **Table 8** for additional clinician training ideas.



**50% Clinicians reported
receiving some type
of past formal
training in autism.**



**83% Very Likely to
attend autism and
ADHD training sessions.**

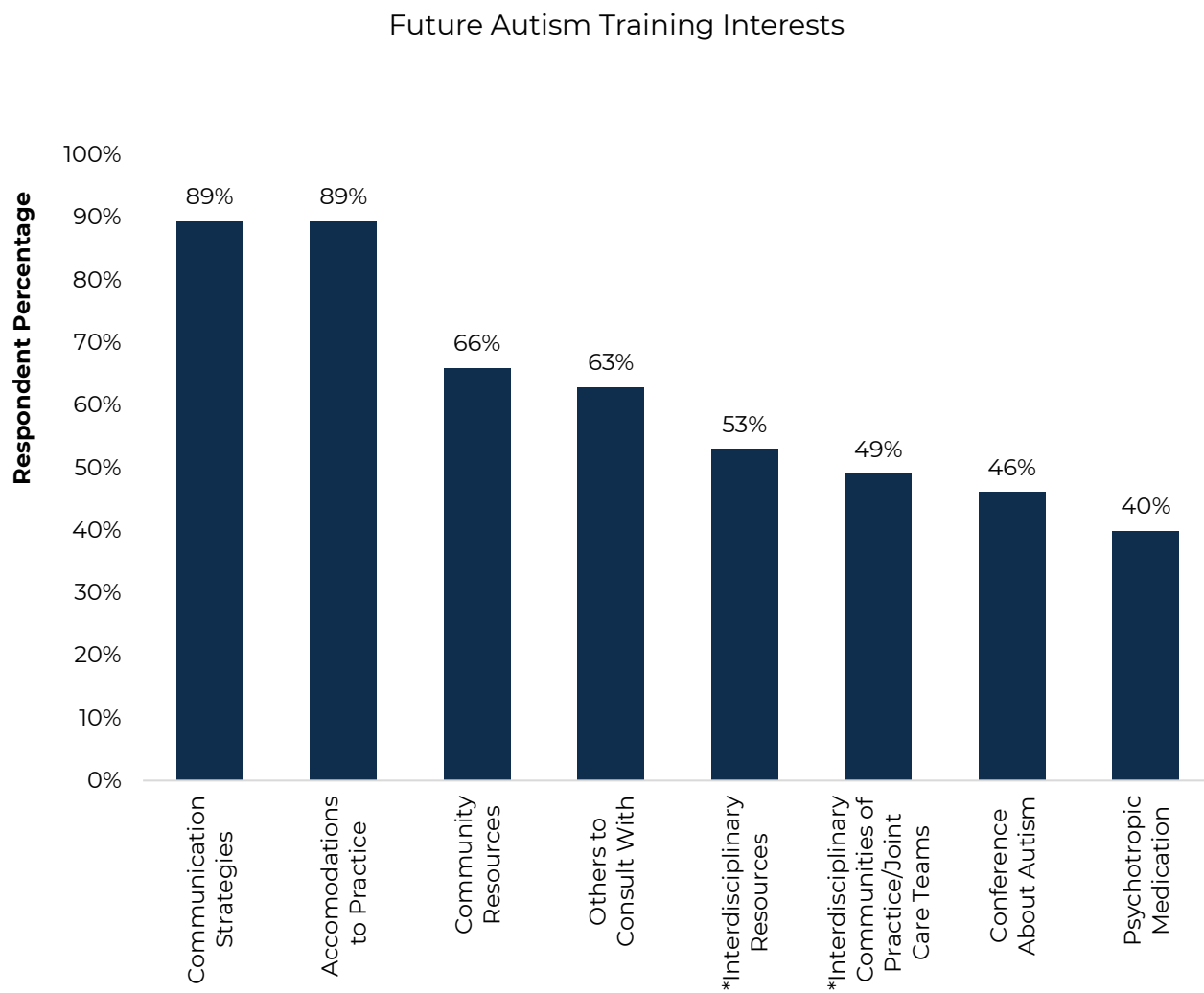
"I would love to be more knowledgeable on how to support youth with autism and concurrent mental health diagnoses. In my experience, these youth are unable to access mental health supports due to autism diagnosis, and I think any training to give clinicians more education and tools to use would be helpful in a training...best practices to support youth and their families."

"...current practices that are evidenced based and adaptations of such practice. Sharing practical tools for both session planning/meetings and developing interventions e.g., what seems to work best in terms of session structure and how interventions can be tailored to increase successful outcomes..."

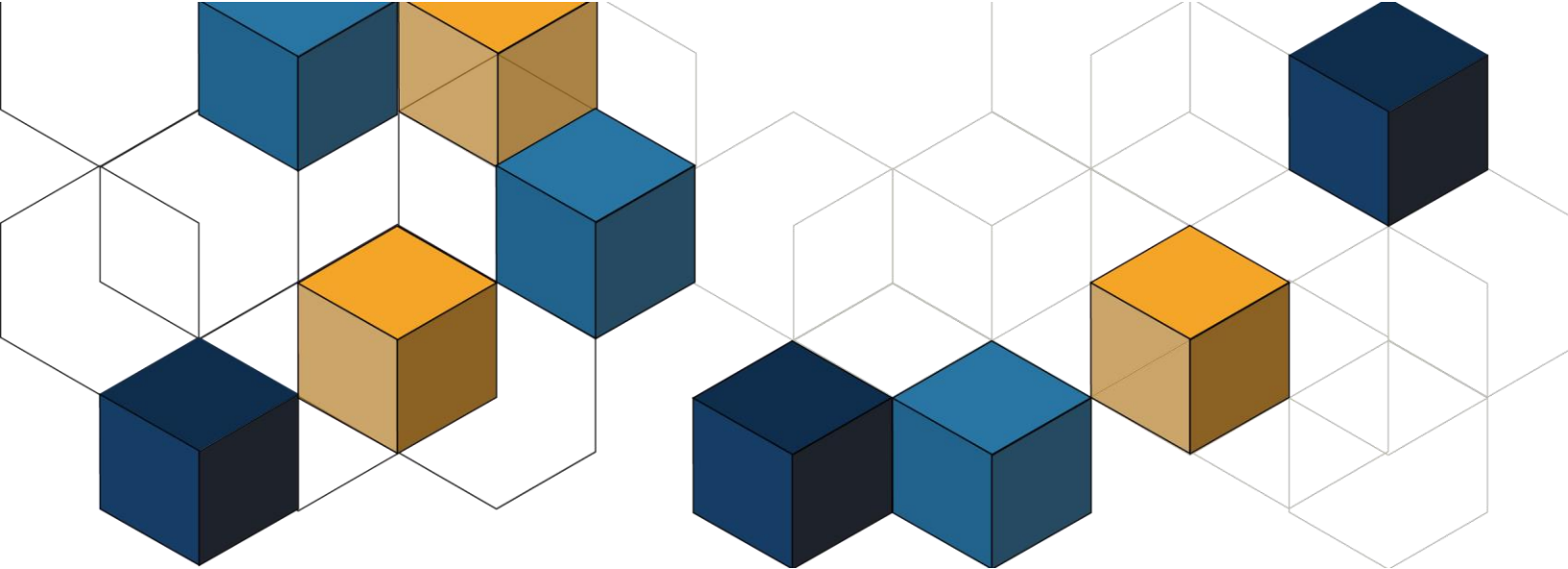
Table 8. Public Providers' Ideas for ADHD and Autism Training

Training Ideas	
Working with Clients with ADHD	Working with Clients with Autism
<ul style="list-style-type: none"> • "More training on family inclusion and effective interventions" • "...a highlight on various medications commonly used and side-effects, and treatment techniques to utilize when clients opt not to take medications..." • "Background in understanding the symptoms of ADHD and how they can affect mental health... how to alter strategies so that they can be more effective for clients...community resources..." • "...how to modify evidence-based treatments to more successfully support clients presenting with ADHD" 	<ul style="list-style-type: none"> • "...adaptations to therapeutic modalities..." • "How autism impacts presentation of mental health problems..." • "Best practice for working with a client with autism..." • "Training to increase therapeutic rapport." • "Strategies for engaging these clients into therapy..." • "How to modify evidence-based modalities to better support clients presenting with autism..." • "How to support not only kids with autism, but also parents and schools." • "Psychoeducation on autism symptoms, treatment, psychotherapy..."

Figure 8: Percentage of Public Providers Reporting an Interest in Future Autism Training



*Note. * These two training response options were only provided to a subset of the sample during April-May 2021 collection (n = 448). All other training interest options were provided to the full sample (n = 611)*

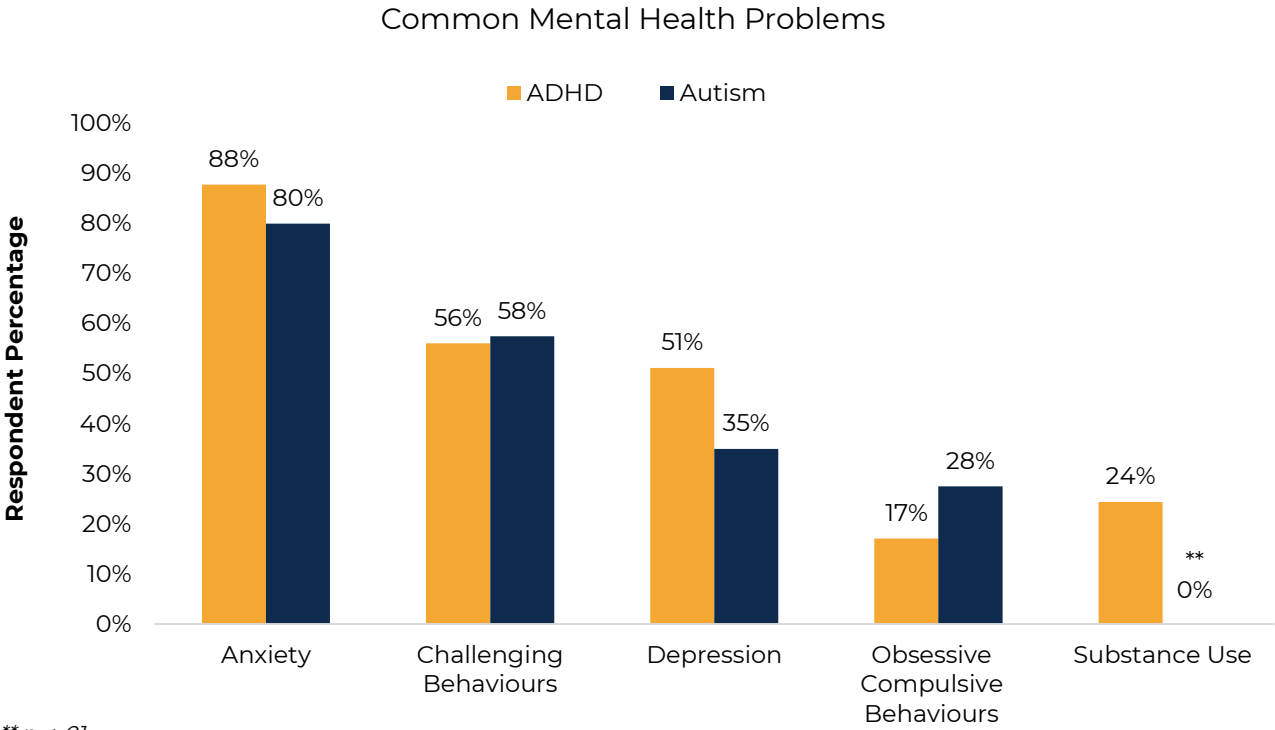


Private Provider Results

Common Mental Health Problems

As shown in **Figure 9**, respondents noted a similar pattern for the most common presenting problems for both clients with ADHD and autism. The highest rates involved anxiety, followed by challenging behaviours (e.g., aggression, irritability) and depression. Private survey respondents reported higher problems related to substance use among clients with ADHD.

Figure 9: Percentage of Private Providers Reporting Common Presenting Problems for Clients with Autism and with ADHD



** $p < .01$

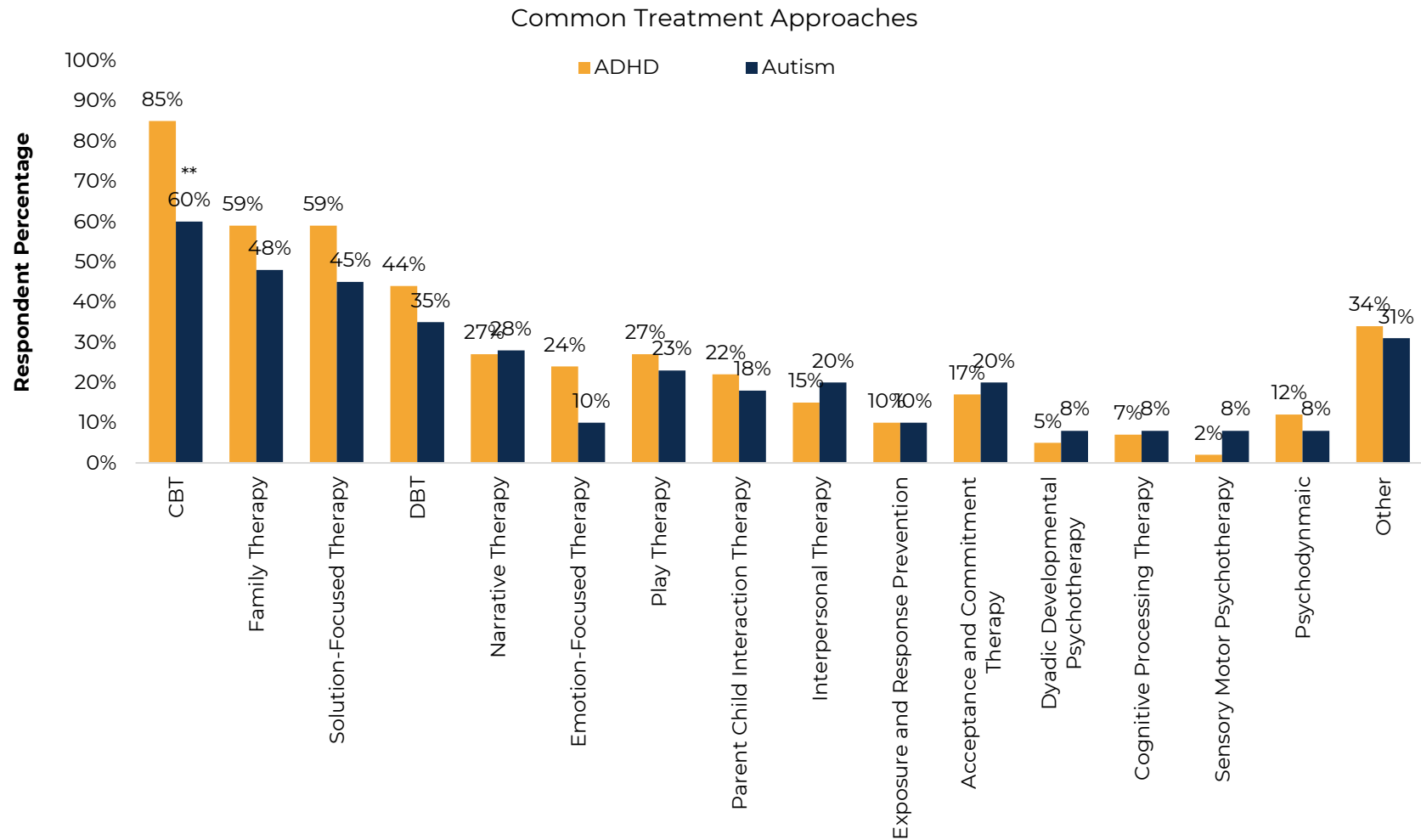
Private mental health providers were asked about the severity of mental health needs among clients with autism and clients with ADHD. Of the clinicians who reported that at least 10% of their caseload involved clients with autism and with ADHD (46% of the private sample), similar severity levels were noted for both groups: 57% (SD = 33.6) of clients with autism were rated as having severe/intensive mental health needs, compared to 50% (SD = 30.5) of clients with ADHD.

Common Treatment Approaches

As shown in **Figure 10**, respondents employed a broad set of interventions for clients with autism and with ADHD, with the top four being the same as those identified by public providers. Private providers reported employing CBT significantly more often with their clients with ADHD compared to their clients with autism, and many other group differences were trending in the same direction. In most cases, respondents who used each approach rated these modalities as similarly effective for clients with autism and with ADHD.

As shown in **Figure 11**, approximately 18% of respondents were not sure if their agency had established criteria (e.g., exclusionary criteria, practices, policies) for treating clients with autism, and 15% were not sure regarding ADHD. Of those who were sure, 85% noted that there were no policies with regards to ADHD, and 84% noted no policies regarding autism.

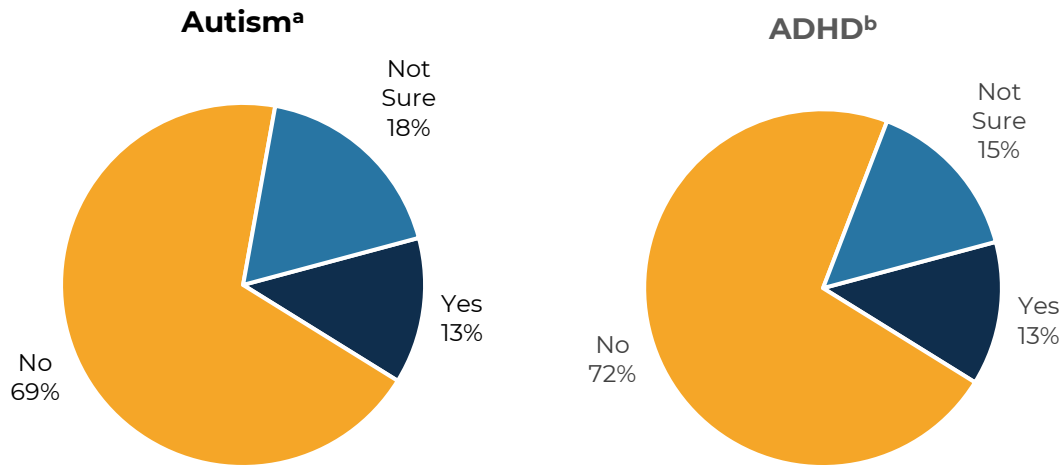
Figure 10: Percentage of Private Providers Endorsing the Use of Common Interventions for Clients with Autism and with ADHD



** p < .01

Figure 11: Private Mental Health Organization Criteria for Clients with Autism or ADHD

“To your knowledge, does your agency have established criteria for providing mental health services to children and youth with”



Note. ^a 2 missing responses; ^b 1 missing response

Adaptations to Current Practice

Respondents noted using adaptations to the therapy they provide to clients with autism and with ADHD. As shown in **Table 9**, common adaptations included *making abstract concepts more concrete and minimizing sensory distractions (e.g., adjusting lights and sounds)*. For the most part, adaptations were rated as *very helpful* for both groups. Of interest, however, there were a number of cases where clinicians endorsed using more adaptations with their clients with ADHD compared to their clients with autism, such as *providing structure and predictability, capitalizing on strengths, making sessions shorter, and changing the environment*. There were also some adaptations used more often with clients with autism, including *reducing anxiety with distancing techniques and making sessions longer*.

Table 9. Percentage of Private Providers Reporting Adaptations During Psychotherapy for Clients with Autism and with ADHD (n = 41)

In the past, what adaptations have you made in psychotherapy with....	Clients with ADHD (%)	Clients with Autism (%)
Provide structure and predictability (e.g., routines, transition activities)	85	68
Make use of special interests (e.g., include individual interests as part of therapy)	78	65
Make abstract concepts more concrete	63	63
Support with processing verbal information (e.g., simplifying language)	59	58
Capitalize on strengths (e.g., intelligence and acquisition of new information)	78	68
Minimize sensory distraction (e.g., adjusting lights and sounds)	68	60
Involving family members in sessions	73	60
Length of sessions: Shorter	78	55
Length of sessions: Longer	7	15
Environment (e.g., sensory area, relaxation area: mats or bean bag chair, visual aids)	56	45
Provide detailed information	42	38
Provide opportunities for generalization and ongoing practice	39	33
Reduce anxiety with distancing techniques	24	48
Minimize executive functioning difficulties	39	33
Other	15	15
None	0	8

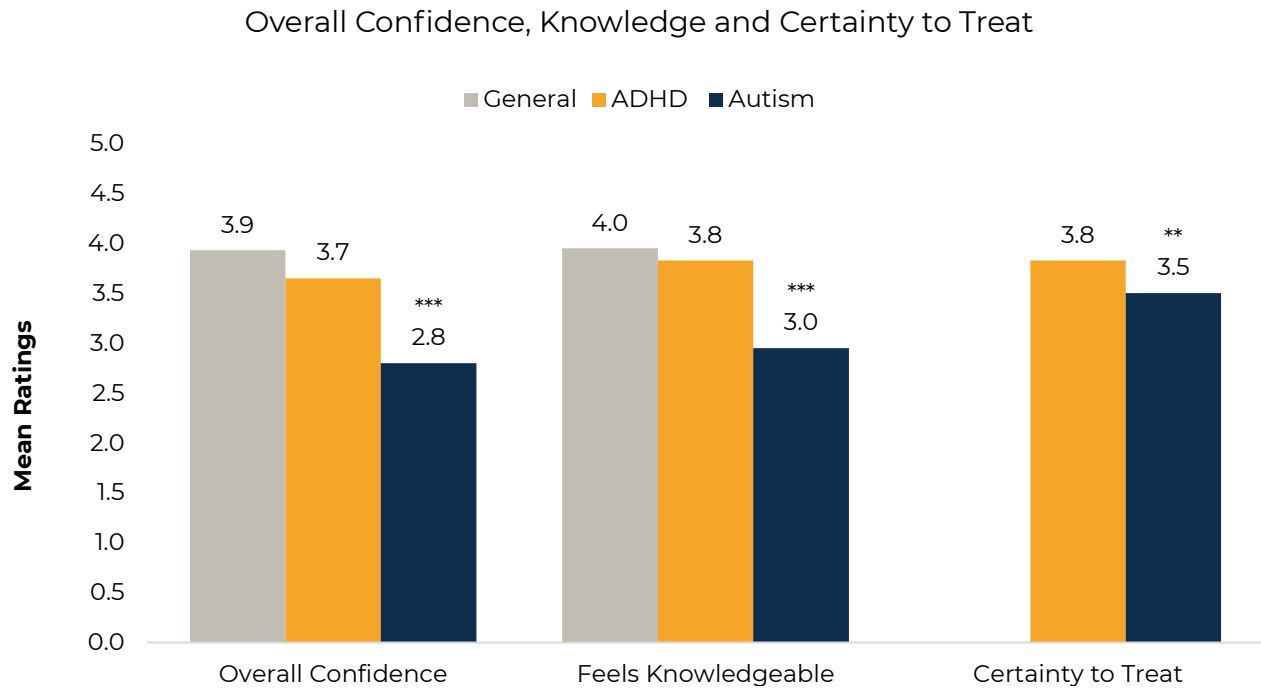
Note. 1 missing response

Confidence, Knowledge and Certainty to Treat

As shown in **Figure 12**, as with the public provider respondents, private providers reported feeling less confident and knowledgeable about providing psychotherapy to clients with autism compared to with ADHD, and to clients with mental health problems in general. Participants also reported feeling less certain about treating clients with autism with psychotherapy, compared to clients with ADHD⁸. As shown in **Figure 13**, only 5% of respondents felt *Not at All* or *Slightly* confident in providing psychotherapy to clients in general, compared to 7% for clients with ADHD and 35% for clients with autism.

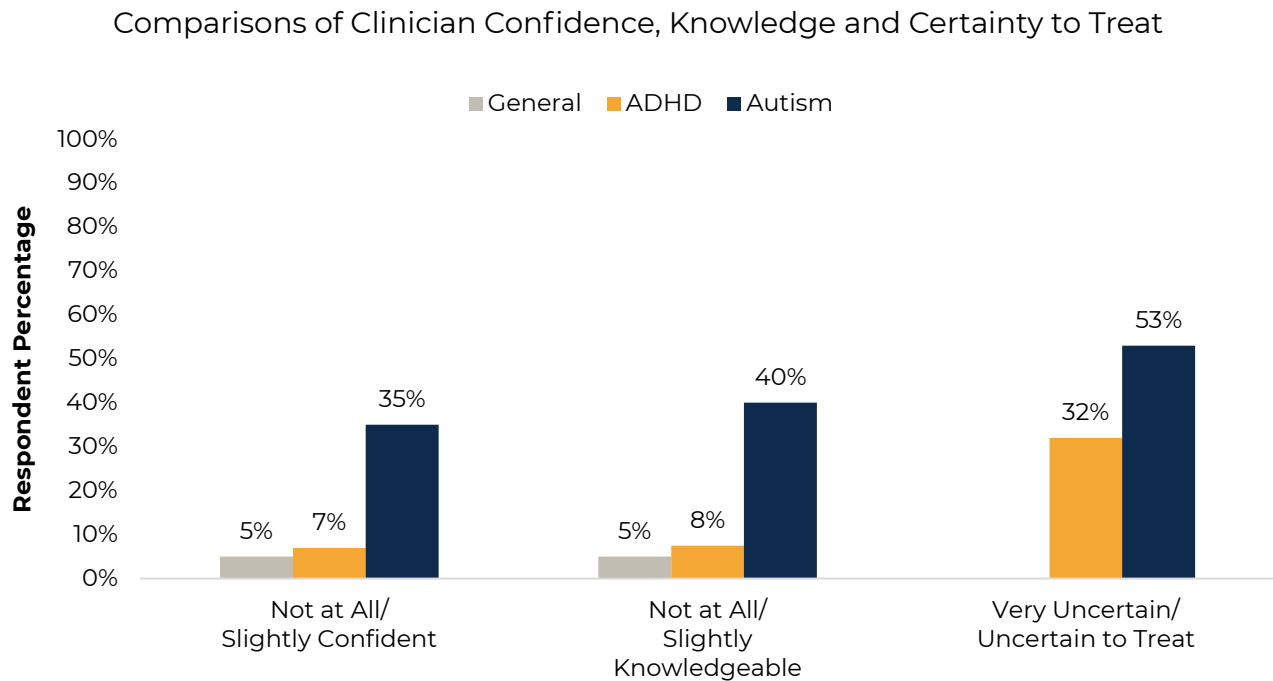
⁸ We did not ask the certainty question about children in general.

Figure 12: Private Providers' Average Ratings of Confidence, Knowledge and Certainty to Treat



** p < .01; *** p < .001

Figure 13: Percentage of Private Providers Reporting Low Confidence, Knowledge and Certainty to Treat Clients with Autism Compared to Clients with ADHD



Deeper Dive into Private Therapist Confidence

As with public providers, private respondents reported less confidence in delivering different psychotherapy components for clients with autism compared to those with ADHD. However, on average, they were still confident in delivering these components to both groups, as shown in **Table 10**.

Therapists reported feeling less confident in psychotherapeutic processes for children with autism compared to those with ADHD.

Table 10. Specific Differences in Private Provider Confidence when Providing Therapy to Clients with Autism and with ADHD

Items – TCS-Autism	M (SD)	
	Clients with ADHD	Clients with Autism
Listen carefully to concerns presented by	4.5 (0.55)	4.3 (0.73)
Be empathetic towards	4.7 (0.52)	4.5 (0.60)
Understand special issues related to having and their impact on a client's life *	4.3 (0.90)	3.8 (1.20)
Communicate with**	4.4 (0.70)	3.8 (0.93)
Develop a therapeutic relationship with **	4.5 (0.67)	3.7 (1.13)
Gather information from ... so that their difficulties can be better understood **	4.4 (0.70)	3.8 (1.13)
Use assessments in a way that ... will understand **	4.1 (0.94)	3.3 (1.28)
Explain results of an assessment process to **	4.0 (0.96)	3.3 (1.30)
Use knowledge about mental health issues in formulating the problems of ***	4.3 (0.68)	3.4 (1.28)
Help ...to identify issues that need to be considered in sessions **	4.2 (0.68)	3.5 (1.20)
Use knowledge of mental health interventions to work effectively with **	4.1 (0.88)	3.4 (1.25)
Identify therapeutic approaches that will be effective for ***	4.0 (0.92)	3.1 (1.25)
Work with caregivers and other important people in the lives of *	4.2 (0.96)	3.7 (1.34)
End intervention with ... in an effective manner **	4.0 (0.91)	3.4 (1.19)
Average ***	4.2 (0.60)	3.6 (0.96)

*Note. 1 missing response; M = Mean; SD = Standard Deviation; TCS – Autism = Therapist Confidence Scale – Adapted for Autism; Scale 1 to 5; * $p < .05$; ** $p < .01$; *** $p < .001$.*

A Deeper Dive into Private Mental Health Provider Knowledge of Psychotherapy Practice

As shown in **Tables 11** and **12**, private providers reported greater knowledge about ADHD compared to autism. The greatest gaps in autism knowledge occurred in providing psychotherapy, developing a treatment plan, delivering a treatment plan, and identifying progress towards treatment goals for clients. Conversely, the strongest area of expertise involved identifying core autism symptoms.

Table 11. Private Providers' Self-Rated Knowledge for Treating Clients with ADHD (*n* = 41)

Variable	ADHD Knowledgeable (%)			
	Not at All	Slightly	Moderately	Very / Extremely
Providing Psychotherapy*	2	5	17	73
Core Symptoms	2	5	15	78
Co-occurring Problems	2	7	27	64
Impacts of ADHD on Behaviour	2	5	17	76
Treatment Planning	2	2	25	71
Delivering Treatment	2	3	22	73
Identifying Progress	2	5	17	76

Note: *1 missing response



Table 12. Private Providers' Self-Rated Knowledge for Treating Clients with Autism (*n* = 41)

Variable	Autism Knowledgeable (%)			
	Not at All	Slightly	Moderately	Very / Extremely
Providing Psychotherapy*	12	27	27	32
Core Symptoms*	2.4	20	34	42
Co-occurring Problems*	7	22	32	37
Impacts of Autism on Behaviour*	2	27	32	37
Treatment Planning*	17	27	22	32
Delivering Treatment*	12	27	29	29
Identifying Progress*	15	22	29	32

Intention, Attitudes, Normative Pressures and Self-Efficacy

As shown in **Figures 14a** and **14b**, private mental health providers' intentions to provide psychotherapy to clients with autism had a very different profile compared to those with ADHD. More specifically, 76% of therapists noted that they were *quite* or *extremely likely* to provide psychotherapy to clients with ADHD if it were up to them, while 51% endorsed a similar likelihood when asked about clients with autism. In contrast, only 14% and 37% reported that they would be *unlikely* to provide psychotherapy to clients with ADHD and clients with autism, respectively.

Figure 14a: Private Providers' Intentions to Provide Psychotherapy to Clients with ADHD

If it were up to you, how likely is it that you would provide psychotherapy to clients with mental health problems who present with ADHD?

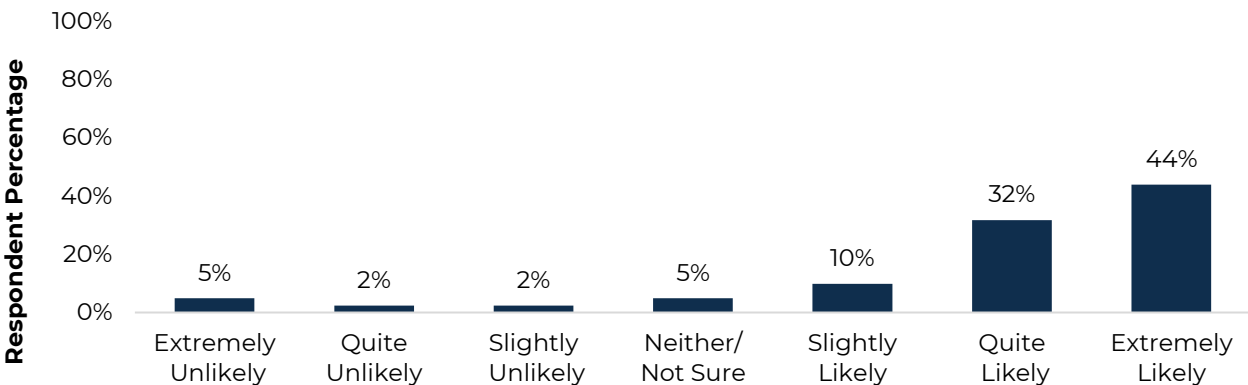
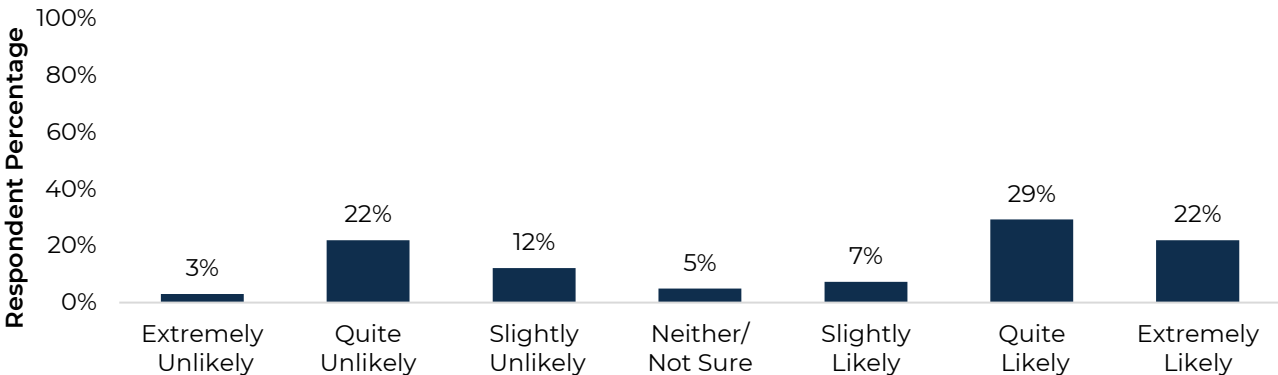


Figure 14b: Private Providers' Intentions to Provide Psychotherapy to Clients with Autism

If it were up to you, how likely is it that you would provide psychotherapy to clients with mental health problems who present with autism?



As shown in **Table 13**, private service providers responses were similar to public provider responses, in terms of having less favourable attitudes, weaker intentions, lower normative pressures and less self-efficacy in delivering psychotherapy to clients with autism compared to clients with ADHD.

Table 13. Descriptive Statistics for Private Providers' Intentions, Attitudes, Normative Pressures and Self-Efficacy in Delivering Psychotherapy to Clients with Autism and with ADHD

Variable	Clients with ADHD <i>M (SD)</i> Median	Clients with Autism <i>M (SD)</i> Median
Attitudes **	8.4 (1.49) 8.6	7.2 (2.09) 8.0
Injunctive Norms ***	4.4 (0.76) 5.0	3.9 (0.82) 4.0
Descriptive Norms ***	4.0 (0.84) 4.0	3.0 (1.19) 3.0
Intention **	5.8 (1.61) 6.0	4.7 (2.02) 6.0
Self-Efficacy **	4.1 (0.97) 4.0	3.3 (1.28) 3.5

Note. *M* = Mean; *SD* = Standard Deviation; Attitudes Scale 0 to 10; Injunctive and Descriptive Norms Scale 1 to 5; Intention Scale 1 to 7; Self-Efficacy Scale 1 to 5; ** $p < .01$; *** $p < .001$.

Mental Health Agency Barriers

- In their clinical practice, only:
 - 22% of private providers *agreed* to having adequate tools/referral resources/practice models to accommodate clients with autism.
 - 37% of private providers *agreed* that their clients with autism had adequate support to effectively partner with them.
 - 20% of private providers *agreed* that caregivers of their clients with autism had sufficient services and support to effectively partner with them in their practice.

Example Barriers for Families with Children/Youth with Autism

- “...Mental health providers do not feel/are not equipped to manage this population and limited training is available.”
- “...wait lists and fees.”
- “Lack of qualified therapists.”
- “Staff do not have training and education to support children and youth ...”
- “... the consideration of cost and it not being covered by any autism funding programs.”
- “Not many of us are familiar with autism. The office isn’t set up to be very sensory friendly ... nor are we set up to accommodate people who have different communication styles aside from verbal expression.”

Over half of the private service providers (63%) reported at least one perceived barrier within their organization for families of clients with autism and for families of clients with ADHD accessing mental health services.

“No counsellors to my knowledge have training for working with autism, when possible, we refer to autism organizations, but they may not have addiction training.”

“Skills and ability of the available clinician. Clinicians decide who they see and if somebody with that scope of practice is not available – it is a barrier.”

Example Barriers for Families with Children/Youth with ADHD

- “Wait times for my service.”
- “I have not received formal training to date....”
- “Not having extended health benefits, not affording the fees.”
- “Lack of diagnosis, wait list, lack of specialization in this area.”
- “...short-term, long wait lists, private therapy is expensive, not consistent, clinical staff not trained.”
- “...not enough focus on supporting families and using adapted or creative approaches to improve the therapeutic alliance (e.g., use of well-timed humour, having fidget toys in [the] office, being able to stand during sessions, listening to their favourite music in [the] background, etc.).”

Training Needs

Just over half of private providers noted receiving formal training on working with clients with autism (59%) or with ADHD (61%). Of those who received training, a little over a quarter of the sample reported completing 9-40 hours of previous training for clients with autism (29%). In comparison, 48% of the sample reported completing 9-40 hours of previous formal training for clients with ADHD.

Most respondents (81%) noted that they would be *very likely* to attend an autism and ADHD training session if one was provided. As shown in **Figure 15**, for clients with autism, many respondents requested training needs surrounding accommodations to practice (83%), communication strategies (78%), a network of other practitioners to consult with (65%), information on community (60%) and interdisciplinary resources (58%), as well as access to an Interdisciplinary Community of Practice/Joint Care Teams (53%). **Table 14** provides some examples of additional clinician training ideas.



59% Clinicians reported receiving some type of past formal training in autism.



81% Very Likely to attend autism and ADHD training sessions.

“Specific and concrete strategies on how ‘therapy’ with a client with autism may look like ...revisions/adjustments that are required to increase its effectiveness and help clients remember the content of sessions.”

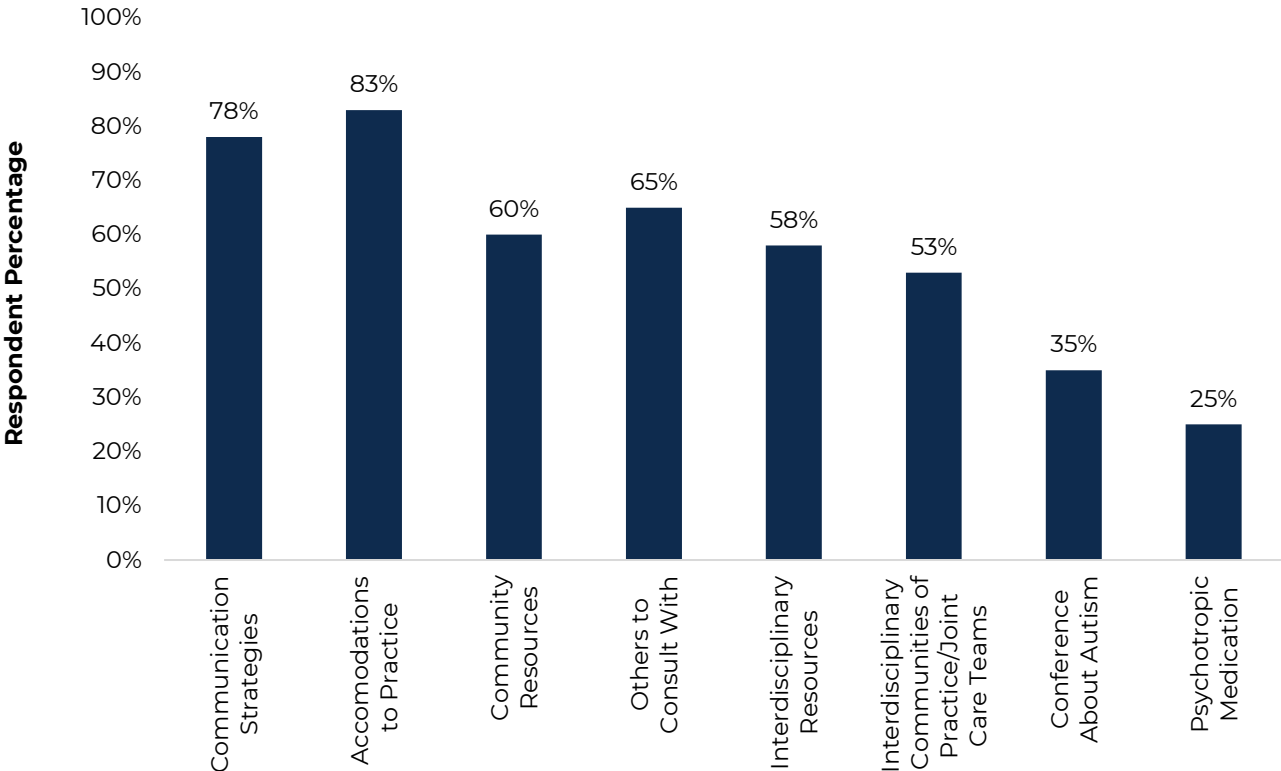
“A focus on neurodiversity and self-acceptance; training that is focused on efforts to dismantle stigma, ableism and barriers to inclusion; empowering young people with ADHD ...”

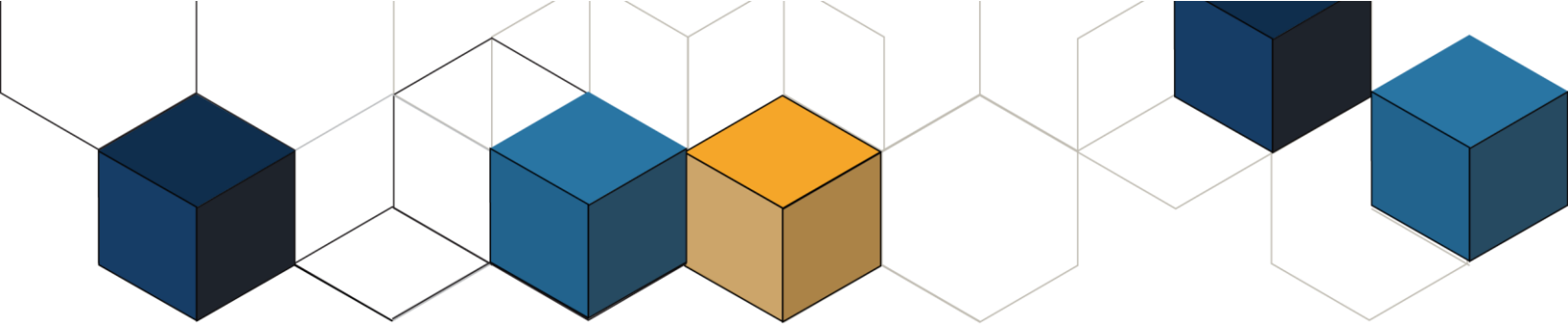
Table 14. Private Providers' Ideas for ADHD and Autism Training

Training Ideas	
Working with Clients with ADHD	Working with Clients with Autism
<ul style="list-style-type: none">• “Information about ADHD and how it impacts the brain. Ways to modify psychotherapy to make it most effective for children with their neuro-type”• “Addressing issues of comorbidity and thinking in terms of transdiagnostic treatments”• “How to adapt therapies (e.g., CBT) to meet client's needs and/or identify modalities best fit for clients with ADHD...”• “Guidance around practices to help distinguish symptoms of ADHD vs. symptoms of co-existing mental health issues...”• “How to partner with parents and caregivers to develop a supportive environment for the child/youth...”	<ul style="list-style-type: none">• “How to best assess client needs and identify progress, considerations for room and session length and materials used, modalities best suited....”• “Understanding neurodiversity, using creative techniques to enter the world of kids with autism....”• “How to modify practices to suit children with this neuro-type, basic understanding of autism...”• “Much more emphasis on how family support & therapy can greatly improve the mental health/behaviour of children/adolescents”• “...evidence-based therapeutic approaches...for family”

Figure 15: Percentage of Private Providers Reporting an Interest in Future Autism Training

Future Autism Training Interests





Discussion

This survey explored factors influencing the delivery of psychotherapy for children/adolescents with neurodevelopmental conditions, specifically autism or ADHD, among public providers at agencies affiliated with Children's Mental Health Ontario, and among private providers. The patterns of results are generally similar for both public and private settings. Most mental health providers had some experience providing mental health therapy to clients with autism or with ADHD and currently had some of these clients on their caseload. Approximately 45-55% of cases were rated as having severe/intensive mental health needs across autism and ADHD.

Results suggest some potential barriers or challenges to treatment delivery for clients with autism who are seeking mental health support. As a group, mental health providers were less confident, felt less normative pressure, felt that they had less knowledge, and believed they would be less effective when providing services to clients with autism compared to those with ADHD, who may also require adaptations to psychotherapeutic practice. These differences emerged despite the fact that both groups of clients were noted to have equally high mental health needs and similar presenting problems. Notably, if it were up to them, mental health providers indicated that they would be less likely to provide psychotherapy to clients with autism compared to clients with ADHD. Past research gauging therapists' intentions to treat adults with autism who have anxiety or depression using CBT suggests that most therapists do not have strong intentions to start this evidence-based practice with adults with autism either (Maddox et al., 2019). In the current public provider context, 14% of respondents noted that they would be *unlikely* to provide psychotherapy to clients with ADHD, while 29% reported a similar likelihood for those with autism. Private providers were similar in their intentions, with only 14% being *unlikely* to provide psychotherapy to clients with ADHD, compared to 37% for those with autism.

As expected, many respondents endorsed delivering evidence-based approaches to mental health care to clients with autism and with ADHD, and many identified helpful adaptations to their approach. These adaptations have been described elsewhere within the context of therapy for adults with autism (Cooper et al., 2018). It is remarkable that similar amounts of adaptations, and the same kinds of adaptations, were noted to have been employed for clients with autism and for those with ADHD, at least with respect to public provider responses. This speaks to therapists' flexibility in psychotherapy delivery and that adaptations may be transdiagnostic in nature. It may be that being more capable of adapting for children with autism makes it easier to tailor interventions for children with other neurodevelopmental conditions, or vice versa (i.e., a rising tide lifts all boats). In many respects, private providers endorsed using more adaptations with clients with ADHD than

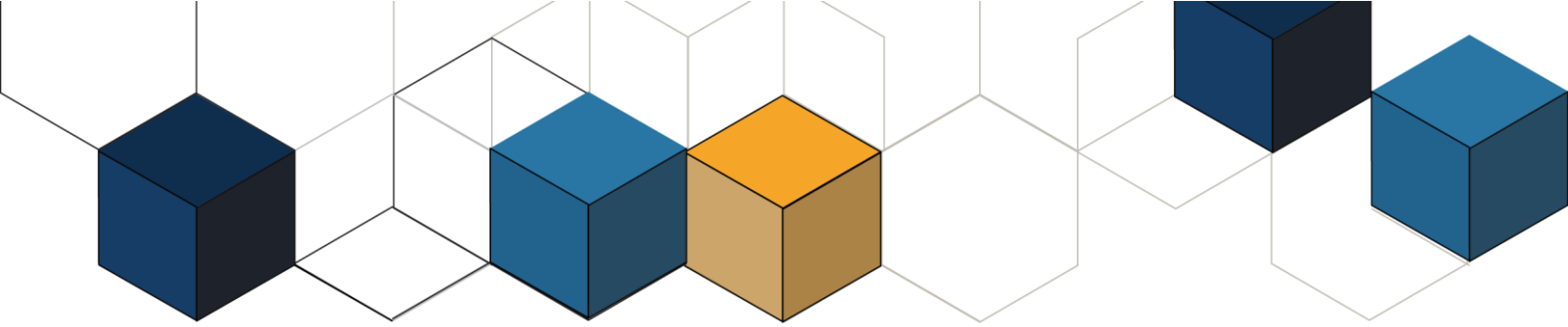
with clients with autism, suggesting that there is still room for learning about adaptations that are used for one client group that may work for another.

Training initiatives addressing therapists' knowledge and attitudes towards autism may improve mental health providers' intentions to treat and facilitate access to effective mental health care for clients with autism, more broadly. In past research, clinicians' attitudes were also found to significantly predict their intentions to deliver CBT, with more favourable attitudes predicting stronger intentions (Maddox et al., 2019). The majority of respondents expressed interest in attending future autism and ADHD training initiatives. Therapist-reported training topics for both clients with autism and clients with ADHD included, but were not limited to, best practices or evidence-based interventions for treating clients with neurodevelopmental conditions, evidence-informed modifications or adaptations, helpful strategies on how to effectively communicate or build rapport with clients and their families, information on how autism or ADHD can impact mental health problems, and training on how to best engage caregivers or family members during the therapeutic process.

Despite the interest and enthusiasm for training, this survey also revealed that there may be agency-related policies or practices that can contribute to the exclusion and/or delayed access to mental health services for clients with autism and mental health needs. This was further emphasized through qualitative responses from respondents, where some have encountered families that have been turned away from services or referred elsewhere. Therefore, in tandem with training initiatives, agency practices and policies need to be further explored and considered to optimize the success of any sector capacity-building initiatives.

There are a number of limitations to these results that can be highlighted. The private provider sample was small and included mostly respondents from one profession, making it difficult to generalize to the broader range of private practice mental health providers that provide care to children in the community. Further, the survey was entirely self-report and results reflect subjective appraisals at a single point in time. It is also important to note that this work focused on the provision of psychotherapy, which does not include all interventions that are important for supporting child and adolescent mental health (e.g., initiatives provided via population health, occupational or school initiatives, or psychopharmacology).

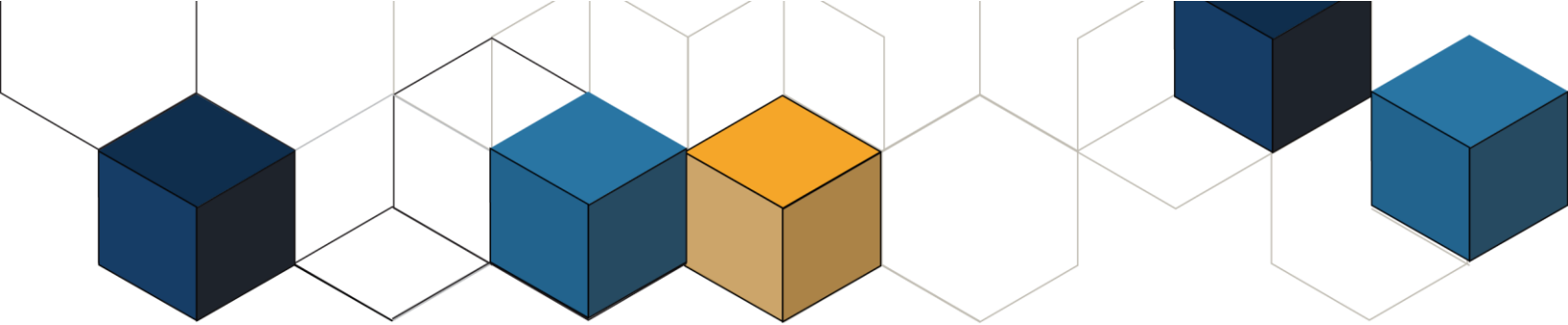
This survey is an important first step in improving mental health care for children and adolescents with neurodevelopmental conditions, such as autism or ADHD, who have co-occurring mental health problems. The survey appears to be a useful way to gauge service provider variables and effectively inform and track capacity-building efforts at child and adolescent mental health agencies across Ontario. Future projects can expand on this work by distributing this online tool on therapist confidence, attitudes, knowledge, and motivation to treat clients with autism or ADHD following agency-wide clinician training and educational programs.



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Compendium of Tables and Figures

Figures and Tables	Public Provider	Private Provider
Common Mental Health Problems	Figure 2	Figure 9
Common Treatment Approaches	Figure 3	Figure 10
Organization Criteria for Clients with Autism or ADHD	Figure 4	Figure 11
Adaptations During Psychotherapy for Clients with Autism and with ADHD	Table 3	Table 9
Average Ratings of Confidence, Knowledge and Certainty to Treat	Figure 5	Figure 12
Providers Reporting Low Confidence, Knowledge and Certainty to Treat Clients with Autism Compared to Clients with ADHD	Figure 6	Figure 13
Confidence when Providing Therapy to Clients with Autism and with ADHD	Table 4	Table 10
Self-Rated Knowledge for Treating Clients with ADHD	Table 5	Table 11
Self-Rated Knowledge for Treating Clients with Autism	Table 6	Table 12
Intentions to Provide Psychotherapy to Clients with ADHD	Figure 7a	Figure 14a
Intentions to Provide Psychotherapy to Clients with Autism	Figure 7b	Figure 14b
Intentions, Attitudes, Normative Pressures and Self-Efficacy in Delivering Psychotherapy	Table 7	Table 13
Ideas for ADHD and Autism Training	Table 8	Table 14
Percentage of Providers Reporting an Interest in Future Autism Training	Figure 8	Figure 15

