# Est. | YORK 1841 | ST JOHN | UNIVERSITY

## Ames, Megan, Coombs, Courtney,

Duerksen, Kari, Vincent, Jonathan ORCID: https://orcid.org/0000-0001-6278-4670 and McMorris, Carly (2021) Canadian Mapping of Postsecondary Supports for Autistic Students. Research in Autism Spectrum Disorders, 90 (101899).

Downloaded from: http://ray.yorksj.ac.uk/id/eprint/5799/

The version presented here may differ from the published version or version of record. If you intend to cite from the work you are advised to consult the publisher's version: https://www.sciencedirect.com/science/article/pii/S1750946721001744

Research at York St John (RaY) is an institutional repository. It supports the principles of open access by making the research outputs of the University available in digital form. Copyright of the items stored in RaY reside with the authors and/or other copyright owners. Users may access full text items free of charge, and may download a copy for private study or non-commercial research. For further reuse terms, see licence terms governing individual outputs. Institutional Repository Policy Statement



Research at the University of York St John For more information please contact RaY at <u>ray@yorksj.ac.uk</u> Canadian Mapping of Postsecondary Supports for Autistic Students

Abstract Word Count: 225 Manuscript Word Count: 2488 Number of Tables: 2 Number of Figures: 1

**Language Statement:** There are several preferred ways of describing autism, each with their own rationale (Kenny et al., 2016). Given there is no single, universally accepted way of describing autism, we attempt to acknowledge a variety of preferences throughout this article by using identity-first (autistic student) and person-first (student with autism) language.

#### Abstract

**Background.** Many autistic students have a variety of strengths and the desire to succeed in postsecondary education. Nonetheless, most autistic students report not receiving adequate support in postsecondary education to ensure their success. Students also report difficulty in navigating complex institutional systems. We conducted an environmental scan of autism-specific supports (e.g., website information, transition programs, peer mentoring) available to autistic students within Canada's publicly-funded postsecondary institutions. We also examined distribution of autism-specific supports across institutional type (i.e., university, junior college, technical/vocational) and geographic region.

**Method.** A Boolean search strategy was used to collect data from institutional websites. **Results.** Of the 258 publicly-funded postsecondary institutions in Canada, only 15 institutions (6%) had at least one support. Of the 15 institutions identified, the most common autism-specific support included information on the institution's website (67%), followed by transition to university support (47%), social group(s) (33%), peer mentoring (27%), specialist tutoring and support with daily living (20%), transition to employment support (13%), and student-led societies and autistic student advocate (7%). In general, universities and institutions in Central Canada (i.e., Ontario, British Columbia) had a disproportionate number of supports.

**Conclusions.** There are promising advances with respect to autism-specific supports in postsecondary institutions across Canada. We recommend further research to better understand how students access these supports and more comprehensive evaluations of such supports, specifically informed by collaborations with autistic students.

Keywords: autism, postsecondary, university, college, support(s), environmental scan

#### **Canadian Mapping of Supports for Autistic Postsecondary Students**

Estimates suggest almost half (44%) of transition-aged autistic adults enroll in some form of postsecondary studies following high school (Newman et al., 2011). Autistic students have a variety of strengths and a desire to succeed in postsecondary education (e.g., Anderson et al., 2017; Scott & Sedgewick, 2021); yet, these students also report unique support needs in social interaction, communication, executive functioning, and academics (e.g., Jansen et al., 2018; Jones et al., 2013). Autistic students are also at-risk for a range of negative outcomes, including experiencing social isolation and other mental health issues, feeling under-supported, and ultimately drop-out (Cage & Howes, 2020; Jackson et al., 2018). Consistent with this, 39% of autistic students graduate postsecondary within eight years, compared to 60% of enrolled nonautistic students graduating in six years (Newman et al., 2011).

In Canada, prevalence of autism was estimated to be approximately 1 in 66 children and youth (ages 5-17 years) in 2015 (Public Health Agency of Canada, 2018) and an estimated 50,000 autistic youth become adults each year (Bizier et al., 2015). Yet, 50% of autistic emerging adults report feeling disconnected from employment or education opportunities in the first two years following high school (Statistics Canada, Bizier et al., 2015). Data from the United States (US) suggest autistic students are pursuing postsecondary education avenues including 32% at 2-year or community colleges, 21% at vocational, technical, or business schools, and, 17% at 4-year colleges/universities (Newman et al., 2011). White and colleague (2011) also estimated that 0.7-1.9% of US college students would qualify for a diagnosis of and autism. Unfortunately, important equivalent data on the prevalence of autistic students across the Canadian postsecondary education system are lacking. Alcorn MacKay (2010) found that from 2009-201, 1400 autistic students from Ontario graduated with a diploma from high school and

**Commented [CM1]:** Do you mean meet criteria for?

400 autistic students were estimated to be in Ontario's postsecondary system. To add, in a study of 480 Ontarian autistic adults, Stoddard (2013) reported 5% of respondents had taken some postsecondary education courses and 29% had completed a degree. While these initial statistics are helpful in shedding light on the problem in Canada, this research was conducted over a decade ago. Thus, given the increase in prevalence in the last 10 years, we would assume that there are substantial more Canadian autistic students pursuing postsecondary education.

Most autistic students report not receiving adequate support in postsecondary education (Anderson et al., 2018; Gurbuz et al., 2019; Sarrett, 2018). Students with neurodevelopmental concerns also face various barriers to accessing support, including being unaware that their experience qualifies them for receiving support, not knowing how to access support, or not knowing about the types of support available (Cage & Howes, 2020; Giamos et al., 2017; Hartrey et al., 2017; Lindsay, et al., 2018). Autistic students have recommended that postsecondary institutions simplify complex and difficult-to-navigate support systems to ensure that students are able to receive the help they need (Scott & Sedgewick, 2021). Though there are ongoing barriers to accessing support, in recent years more and more postsecondary programs that support autistic students have been created, implemented, and evaluated. These programs tend to include support for social skill development, self-advocacy, learning supports, functional or residential supports, emotional support, and vocational training (e.g., [blinded]; Nachman, 2020; Widman & Lopez-Reyna, 2020). While preliminary evaluations of these programs report positive outcomes for autistic students in social skills, academic performance, and sense of belonging ([blinded]), there are few programs that have been evaluated in the existing literature, with recent reviews describing only seven (Nachman, 2020) and nine ([blinded]) programs. Despite past reviews demonstrating these programs as promising, few studies have

systematically and comprehensively identified which programs are available to autistic postsecondary students.

There is some evidence that programming for autistic students is on the rise; Barnhill (2014) reported 28 programs in the US and more recently researchers reported 55 programs within 4-year colleges (Viezel et al., 2020). Further, environmental scans show that many programs exist beyond what is currently reported in the academic literature. Two recent environmental scans have been conducted in the United States (Nachman et al., 2021; Viezel et al., 2020) and the United Kingdom (Vincent et al., 2021) identifying available programming and supports for autistic students within a geographic region. This approach allows for a comprehensive analysis of naturalistic data, and may provide a more accurate assessment of the amount and types of support available. US programs tend to make use of academic coaching or peer mentoring and provide social skills intervention and vocational support (Viezel et al., 2020), while support for transitioning to university and specialized tutoring were the most commonly identified supports in the UK (Vincent et al., 2021). Overall, there seems to be gaps in program availability for autistic individuals by geographic region and by institution type, with 4-year institutions have more programming available than 2-year institutions (Nachman et al., 2021; Viezel et al., 2020).

The current study expands existing knowledge by conducting an environmental scan of supports for autistic students within Canada's postsecondary institutions. Specifically, we addressed three research questions:

1) What autism-specific supports are currently available to autistic students at Canadian postsecondary institutions, based on publicly available information?

2) Are there differences in distributions of autism-specific supports across postsecondary institution type (i.e., university versus college versus technical/vocational)?3) How are autism-specific supports distributed regionally across Canada?

Given the existing literature from the US and UK, findings from the current review will facilitate comparisons across countries to determine relative available supports for autistic students internationally. The results of this study will also highlight potential gaps in services within Canada, as well as information about the forms of support available for autistic students.

## Method

Consistent with existing environmental scans on autism-specific supports (Nachman et al., 2021; Vincent et al., 2021), an instrumental case study approach was adopted whereby institutional websites were mined. The purpose of this search strategy was to emulate the process prospective autistic students or their caregivers might employ when researching postsecondary institutions. As per the aforementioned research questions, this study quantified, compared, geographically mapped, and described a wide range of information on supports currently available for autistic students at publicly-funded postsecondary institutions in Canada.

Publicly-funded institutions (N = 319) were identified using the Government of Canada's *Master List of Designated Educational Institutions* (Government of Canada, 2015) and categorized by type of institution (i.e., university, technical and vocational, and junior college/CÉGEP<sup>1</sup>), province, and region. After accounting for institutions with multiple campuses and removing high schools (n = 2) and duplicates (n = 1), a total of 258 publicly-funded

<sup>&</sup>lt;sup>1</sup>CÉGEP is a publicly-funded college specific to the province of Québec's educational system. These schools are classified within "Junior college" by the Government of Canada.

institutions were generated (91 university, 90 technical and vocational, and 77 junior colleges/CÉGEP<sup>1</sup>, respectively).

Consistent with previous environmental scans (e.g., Vincent et al., 2021), a Boolean search strategy (Johnson & Kumar Gupta, 2012) was used to collect the data. Between March and June 2021, the following was entered into the search bar of the Google web browser for each of the publicly-funded postsecondary institutions: Site:[Institutions web address] "Autism" OR "Aspergers" OR "ASD" OR "ASC" OR "Support" OR "Provision." Given that Canada is a bilingual country, we used the following terms for French-Canadian institutions: Site: [Institutions web address]"Autisme" OR "troubles du spectre autistique" OR "TSA" OR "Asperger" OR "syndrome d'asperger" OR "SA" OR "aide" OR "soutien." Some terms and acronyms that are used from the European dialect of French, such as "SA" and "syndrome d'asperges" were also included to ensure that the search incorporated any terms that might have been used by different institutions. The first five pages of results were checked for information on supports for students attending the institution. Any evidence of autism-specific supports that were identified were then recorded in an excel spreadsheet and reviewed for the following inclusion criteria: 1) evidence of a specific section of the website for students with autism; 2) evidence of transition to university support; 3) evidence of transition to employment support; 4) evidence of peer mentoring; 5) evidence of specialist tutoring; 6) evidence of social groups for students with autism; 7) evidence of self-advocacy or student-led societies; 8) evidence of support for acquisition of or support with daily living skills; and/or, 9) autistic student advocate (Vincent et al., 2021). Institutions with at least one identified autism-specific support was included in subsequent analyses.

The second author and a research assistant conducted the preliminary searches and then cross-referenced one another. A bilingual research assistant conducted the preliminary searches of the Québec, French-speaking institutions (e.g., CÉGEP); an additional bilingual graduate student conducted the cross-referencing of these institutions. When discrepancies were apparent, the first author resolved disputes.

#### Results

Of the 258 Canadian publicly-funded postsecondary institutions identified, only 15 (6%) had autism-specific supports that met inclusion criteria (see Table 1). Institutions had an average of 2.40 (SD = 2.06) support, ranging from 1 to 7. Most institutions (n = 9; 60%) provided only one support, although 20% (n = 3) offered up to five. The most common support included providing information within a section of the institution's website (n = 10), followed by transition to university support (n = 7), social group(s) (n = 5), peer mentoring (n = 4), specialist tutoring and support with daily living (n = 3, respectively), transition to employment support (n = 2), and, finally, student-led societies and autistic student advocate (n = 1, respectively). Table 2 provides information on the number of supports by institution type and Canadian region. Figure 1 also provides geographical distribution and description of "hot-spots" (i.e., locations where more than one support is centrally located) across Canada. Single-sample binomial exact tests<sup>2</sup> identified supports to be disproportionately represented in universities (n = 11, p = 0.003) and less represented in junior colleges (n = 1, p = 0.176). Although initial analyses showed no differences across Canadian geographic regions, sensitivity

<sup>&</sup>lt;sup>2</sup>Given the unique inclusion of a large number of CÉGEP schools classified as Junior Colleges and in the Central region, sensitivity analyses excluding Québec institutions (n = 86) were completed (see Supplemental Table 1).

analyses showed supports to be disproportionately represented in Central Canada (n = 8, p = 0.046; see Figure 1).

#### Discussion

The purpose of the study was to identify and describe autism-specific supports available across publicly-funded Canadian postsecondary institutions to examine potential differences in the distribution of supports across institution type and region. We only identified 15 (6%) out of 258 institutions with searchable autism-specific supports, with the most common being information on the institution's website. In general, supports were disproportionately represented at universities and institutions in Central Canada (i.e., the number of supports were higher than expected given the number of universities and institutions in Central Canada, respectively). We discuss results in relation to each of the research questions below in further detail.

Our results identified only a small portion (6%) of Canadian publicly-funded postsecondary institutions currently offering autism-specific supports, similar to results from the US whereby only 3% of public institutions had at least one identified support (Nachman et al., 2021). However, this is still low in comparison to the UK sample (Vincent et al., 2021) whereby 37% (n = 44) of institutions had at least one outlined support (i.e., information on their website). To our knowledge, this is the first Canadian environmental scan and thus we cannot comment on historical trends, although speculate the number of supports to have increased in the past 10 years with recognition of increased enrollment of autistic students (Alcorn Mackay, 2010; Nachman et al., 2021). There was variability in the number of supports provided, with nine out of the identified 15 institutions offering one type of support and three offering five. It is encouraging that a third (n = 5) of the identified institutions offered three or more supports given the heterogenous needs of autistic students. The diverse offerings can provide autistic students

with the ability to pick-and-choose which supports may be most effective on an individualized basis (Barnhill, 2014).

Consistent with results from the UK (Vincent et al., 2021), the most common support was having a dedicated section of the website for autistic students. Information contained within these sections typically included descriptions of services that may be useful for autistic students and faculty/staff. Transition to university supports were next most commonly identified, followed by social groups, specialist tutoring, and peer mentorship. Research suggests transition to university programs help ease autistic students' concerns about the transition and increase their optimism related to attending postsecondary studies (Lei et al., 2020). However, continuity of these supports into the postsecondary setting is imperative to student success. For example, a qualitative analysis of 14 autistic individuals who dropped out of postsecondary studies in the UK identified a lack of proactive support (i.e., knowing who or what could have helped) as one of the key themes in students' narratives (Cage & Howe, 2020). Further, some researchers have shown increased mental health needs of autistic postsecondary students compared to their nonautistic peers (Jackson et al., 2018; [blinded]). Programs such as peer mentoring or student advocates that help connect students to additional internal or external supports (e.g., counselling) may play an integral role in supporting autistic students navigate institutional systems. Social groups and peer mentorship programs may also increase a sense of belonging and decrease social isolation ([blinded]). The least commonly identified supports were related to transition to employment and advocacy, which is concerning given high rates of unemployment among autistic individuals (Scott et al., 2019) and notable challenges in self-advocacy among autistic students within postsecondary contexts (Cox et al., 2017). Further, research emphasizes the need for individualized and continuity of supports to promote success (Barnhill, 2014). Understanding

the rationale for institutions' selection of certain types of supports versus others (e.g., policy and funding priorities) could shed further light on the autism support landscape across Canadian institutions.

Consistent with US results (Nachman et al., 2021), supports were disproportionately represented at Canadian universities (i.e., comparable to 4-year, research-intensive institutions globally). Nachman and colleagues (2021) noted a number of hypotheses as to why 2-year (i.e., junior college/CÉGEP and technical and vocational) institutions may be less likely to offer autism-specific supports such as broad missions and limited resources, as well as colleges being housed in local communities. University settings may also have the necessary infrastructure, funding support, their mission and visions may strongly embrace equity, diversity, and inclusion mandates, and employ faculty and staff with the necessary knowledge and expertise to develop, provide, and advocate for autism-specific services. Better understanding of what supports facilitate institutions to raise awareness for and invest in supporting their autistic student body, compared to others, is needed.

Finally, our environmental scan highlighted supports were disproportionately represented within Central Canada, which may reflect that this region supports over half (61%) of the country's population (Statistics Canada, 2021). Overall, prevalence rates of autism in Canada are 15.2 per 1,000 and varies across province; however, not all provinces are included in these estimates making it difficult to comment on the relative differences in prevalence across provinces surveilled here (Public Health Agency of Canada, 2018). "Hot spots," defined as locations where more than one identified support was centralized, were located in larger cities in Ontario and British Columbia, suggesting that autistic students located outside of these provinces and/or in mid-sized cities, rural, remote, or northern communities would have a difficult time

accessing these supports and have to move away from potentially already established support networks.

## Limitations

All data in this study were acquired via institutional websites. As such, we are unable to assume that we located all autism-specific supports through our search strategy. Given the limited number of identified institutions (n = 15), some degree of caution is warranted in interpreting the results.

## Conclusions and Implications

We identified only a small proportion of Canadian postsecondary institutions who provide autism-specific supports. Given the various risk factors for autistic students, these are likely to have a positive impact on improving outcomes, including retention, improved mental health, and academic success (Anderson et al., 2017; [blinded]; [blinded]; Nachman et al., 2021). However, we also acknowledge, alongside other researchers (e.g., Cox et al., 2020), that just because supports exist, does not mean that they are accessible or helpful to autistic students. As such, we recommend further research to better understand how students access these and more comprehensive evaluations of such supports, specifically informed by collaborations with autistic students. Perhaps though, our primary conclusion is a call to action. Of note, we are lacking up-to-date data on the prevalence and context of autism within the Canadian postsecondary education system. Without this essential data, it is challenging to adequately capture the extent to which supports are needed for Canadian autistic students. Further, with increasing numbers of autistic individuals entering higher education and relatively low levels of support reported across Canada, there is an imperative, at both national and institutional levels, to enact policy, increase investment, and ensure that postsecondary education is a learning

environment in which every autistic person can thrive and succeed.

**Acknowledgements:** The authors would like to thank [blinded], [blinded], [blinded], and [blinded] of the University [blinded] for their contributions to the project.

**Funding:** This study is supported by University [blinded] start-up funding to the first author and a [blinded] Campus Mental Health Strategy Research grant to the first and last authors.

Conflict of Interest: The authors do not have any known conflict of interest(s) to declare.

Data Statement: The data for this study is available by reasonable request to the first author.

**Author Contributions:** XX contributed to the conceptualization, validations, formal analysis, and writing and revision of the manuscript, supervision, and funding acquisition for the study. XX contributed to the data curation, methodology, analysis, and writing and revision of the manuscript for the study. XX contributed to the writing and revising of the manuscript. XX contributed to the conceptualization, methodology, and writing and revising of the manuscript for the study. XX contributed to the conceptualization, methodology, writing and revising of the manuscript for the study. XX contributed to the conceptualization, methodology, writing and revising of the manuscript for the study. AX contributed to the conceptualization, methodology, writing and revising of the manuscript, and funding acquisition for the study.

#### References

Alcorn MacKay, S. (2010). Identifying trends and supports for students with autism spectrum

disorder transitioning into postsecondary. Toronto: Higher Education Quality Council of

Ontario.

Anderson, A. H., Stephenson, J., & Carter, M. (2017). A systematic literature review of the

experiences and supports of students with autism spectrum disorder in post-secondary

education. Research in Autism Spectrum Disorders, 39, 33-53. doi:

10.1016/j.rasd.2017.04.002

- Barnhill, G. P. (2014). Supporting students with Asperger syndrome on college campuses. Focus on Autism and Other Developmental Disabilities, 31(1), 3–15. https://doi.org/10.1177/1088357614523121
- Bizier, C., Fawcett, G., Gilbert, S., & Marshall, C. (2015). Developmental disabilities among Canadians aged 15 years and older, 2012. Statistics Canada Catalogue no. 89-654-X2015003
- Cage, E., & Howes, J. (2020). Dropping out and moving on: A qualitative study of autistic people's experiences of university. *Autism*, 24(7), 1664-1675.
- Cox, B. E., Nachman, B. R., Thompson, K., Dawson, S., Edelstein, J. A., & Breeden, C. (2020).
  An exploration of actionable insights regarding college students with autism: A review of the literature. *The Review of Higher Education*, 43(4), 935–966.
  https://doi.org/10.1353/rhe.2020.0026
- Cox, B.E., Thompson, K., Anderson, A., Mintz, A., Locks, T., Morgan, L., ... Wolz, A. (2017).
   College experiences for students with autism spectrum disorder: Personal identity, public disclosure, and institutional support. *Journal of College Student Development*, 58(1), 71-87. doi:10.1353/csd.2017.0004.

[blinded]

Giamos, D., Lee, A. Y. S., Suleiman, A., Stuart, H., & Chen, S. P. (2017). Understanding campus culture and student coping strategies for mental health issues in five canadian colleges and cniversities. *Canadian Journal of Higher Education*, 47(3), 136–151. https://doi.org/10.7202/1043242ar

- Government of Canada. (2015). List of Designated Educational Institutions. Accessed March-June, 2021. https://www.canada.ca/en/employment-socialdevelopment/programs/designated-schools.html#shr-pg0
- Gurbuz, E., Hanley, M., & Riby, D. M. (2019). University students with autism: The social and academic experiences of university in the UK. *Journal of autism and developmental disorders*, 49(2), 617-631.
- Hartrey, L., Denieffe, S., & Wells, J. S. G. (2017). A systematic review of barriers and supports to the participation of students with mental health difficulties in higher education. *Mental Health and Prevention*, 6(March), 26–43. https://doi.org/10.1016/j.mhp.2017.03.002
- Jackson, S. L. J., Hart, L., Brown, J. T., & Volkmar, F. R. (2018). Brief report: Self-reported academic, social, and mental health experiences of post-secondary students with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 48(3), 643-650. doi: 10.1007/s10803-017-3315-x.
- Jansen, D., Emmers, E., Petry, K., Mattys, L., Noens, I., & Baeyens, D. (2018). Functioning and participation of young adults with ASD in higher education according to the ICF framework. *Journal of Further and Higher Education*, 42(2), 259-275.
- Johnson, F., & Kumar Gupta, S. (2012). Web content mining techniques: A survey. International Journal of Computer Applications, 47(11), 44-50. https://doi.org/10.5120/7236-0266
- Jones, R. S., Huws, J. C., & Beck, G. (2013). 'I'm not the only person out there:' Insider and outsider understandings of autism. *International Journal of Developmental Disabilities*, 59(2), 134-144.

- Kenny, L., Hattersley, C., Molins, B., Buckley, C., Povey, C., & Pellicano, E. (2016). Which terms should be used to describe autism? Perspectives from the UK autism community. *Autism*, 20(4), 442-62. doi: 10.1177/1362361315588200.
- Lei, J., Calley, S., Brosnan, M., Ashwin, C., & Russell, A. (2020). Evaluation of a transition to university programme for students with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 50, 2397-2411. https://doi.org/10.1007/s10803-018-3776-6
- Lindsay, S., Cagliostro, E., & Carafa, G. (2018). A systematic review of barriers and facilitators of disability disclosure and accommodations for youth in post-secondary education. *International Journal of Disability, Development and Education*, 65(5), 526–556.
  https://doi.org/10.1080/1034912X.2018.1430352

[blinded]

- Nachman, B. R., McDermott, C. T., & Cox, B. E. (2021). Brief report: Autism-specific college support programs: Differences across geography and institutional type. *Journal of Autism* and Developmental Disorders, https://doi.org/10.1007/s10803-021-04958-1
- Nachman, B. R. (2020). Enhancing transition programming for college students with autism: A systematic literature review. *Journal of Postsecondary Education and Disability*, 33(1), 81– 95. https://eric.ed.gov/?id=EJ1273654.
- Newman, L., Wagner, M., Knokey, A. M., Marder, C., Nagle, K., ... & Wei, X. (2011). The post high-school outcomes of young adults with disabilities up to 8 years after high school: A report from the National Longitudinal Transition Study-2 (NLTS2). *National Center for Special Education Research*. <u>https://eric.ed.gov/?id=ED524044</u>. Accessed October 16, 2020.

- Public Health Agency of Canada. (2018). Autism Spectrum Disorders Among Children and Youth in Canada: A Report of the National Autism Spectrum Disorder Surveillance System. Public Health Agency of Canada. Accessed July, 2021, https://www.canada.ca/en/public-health/services/publications/diseases-conditions/autismspectrum-disorder-children-youth-canada-2018.html
- Sarrett, J. C. (2018). Autism and accommodations in higher education: Insights from the autism community. *Journal of Autism and Developmental Disorders*, 48(3), 679-693.
- Scott, M., Milbourn, B., Falkmer, M., et al. (2019). Factors impacting employment for people with autism spectrum disorder: A scoping review. *Autism*, 23(4), 869–901.
- Scott, M., & Sedgewick, F. (2021). Corrigendum to "I have more control over my life:' A qualitative exploration of challenges, opportunities, and support needs among autistic university students." *Autism & Developmental Language Impairments*, 6, 239694152110286. https://doi.org/10.1177/23969415211028689
- Scott, M., Milbourn, B., Falkmer, M., et al. (2019). Factors impacting employment for people with autism spectrum disorder: A scoping review. *Autism*, 23(4), 869–901.
- Statistics Canada. Table 17-10-0009-01 Population estimates, quarterly. doi:

## https://doi.org/10.25318/1710000901-eng

- Stoddart, K. M. (2013). *Diversity in Ontario's Youth and Adults with Autism Spectrum Disorders: Complex needs in Unprepared Systems*. Toronto: The Redpath Centre.
- White, S. W., Ollendick, T. H., & Bray, B. C. (2011). College students on the autism spectrum: Prevalence and associated problems. *Autism*, *15*(6), 683-701.

- Widman, C. J., & Lopez-Reyna, N. A. (2020). Supports for postsecondary students with autism spectrum disorder: A systematic review. *Journal of Autism and Developmental Disorders, 50*, 3166-3178. Doi: 10.1007/s10803-020-04409-3
- Vincent, J., Rowe, H., & Johnson, J. (2021). Parity of participation for autistic students: Mapping provision across UK higher education institutions. *Research in Education*, 003452372098112. https://doi.org/10.1177/0034523720981123
- Viezel, K. D., Williams, E., & Dotson, W. H. (2020). College-based support programs for students with autism. *Focus on Autism and Other Developmental Disabilities*, 35(4), 234–245. https://doi.org/10.1177/1088357620954369

Institution	City, Province	Type of Institution	Type of Support	Number of Supports
Atlantic				
Mount Allison University	Sackville, New Brunswick	University	Section of website	1
Saint Mary's University	Halifax, Nova Scotia	University	Transition to university support Transition to employment support Peer mentoring	3
Central				
Brock University	St. Catherines, Ontario	University	Section of website	1
Carleton University	Ottawa, Ontario	University	Section of website	1
Queen's University	Kingston, Ontario	University	Transition to university support	1
University of Ontario Institute of Technology	Oshawa, Ontario	University	Section of website Transition to university support Peer mentoring Social group(s) Support with daily living skills	5
York University	Toronto, Ontario	University	Section of website Transition to university support Peer mentoring Specialist tutoring Social group(s) Support with daily living skills Autistic student advocate	7
Université Laval	Québec City, Québec	University	Specialist tutoring	1

Table 1. Descriptions of available autism-specific supports across Canada.

Algonquin College of Arts	Ottawa, Ontario	Technical and VocationalSection of website Transition to university support		2
Humber College Institute of Technology & Advanced Learning	Etobicoke, Ontario	Technical and Vocational	Section of website Transition to university support Peer mentoring Social group(s) Student-led societies	5
Loyalist College of Applied Arts	Belleville, Ontario	Technical and Vocational	Section of website	1
Prairie University of Calgary	Calgary, Alberta	University	Social group(s)	1
Norquest College	Edmonton, Alberta	Junior College/ CÉGEP	Transition to employment support	1
West Coast				
Simon Fraser University	Vancouver, British Columbia	University	Section of website Transition to university support Specialist tutoring Social group(s) Support with daily living skills	5
University of Fraser Valley	Abbotsford, British Columbia	University	Section of website	1

		Number of Institutions with Supports (N = 15)		Total Number of Institutions (N = 258)		Institutions with
	with S					Supports (within
	(N =					type or region)
	n	%	n	%		
Institution type						
University	11	73.33%	91	35.37%	0.003	4.26%
Junior College/ CÉGEP	1	6.77%	77	29.84%	0.036	0.39%
Technical and Vocational	3	20.00%	90	34.88%	0.175	1.16%
Region						
Atlantic	2	13.33%	34	13.17%	0.606	0.78%
Central	9	60.00%	141	54.65%	0.441	3.49%
Prairie	2	13.33%	56	21.71%	0.337	0.78%
West Coast	2	13.33%	25	9.69%	0.434	0.78%
North	0	0.00%	2	0.78%	0.889	0.00%
Total	15		258			5.81%

Table 2. Distribution of autism-specific supports across institution type and region.

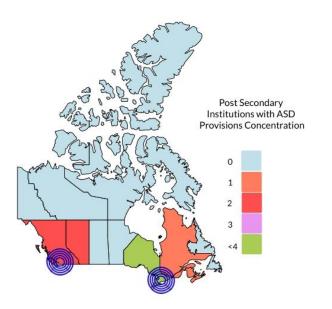


Figure 1. Geographical distribution of autism-specific supports available at Canadian post-

secondary institutions with focus on two key "hot spots."