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Supporting the Transition into Employment: A Study of Canadian Young Adults Living with Disabilities

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Abstract
Objective To examine the job accommodation and benefit needs of young adults with disabilities as they transition into employment, and their perceived barriers to meeting support needs. *Methods* An online survey was conducted of 155 Canadian young adults with disabilities (mean age = 25.8 years). Respondents were either employed or seeking employment, and were asked about their need for health benefits, and soft (e.g., flexible scheduling) and hard accommodations (e.g., ergonomic interventions), and perceived accommodation barriers. Disability characteristics (e.g., disability type), demographic details and work context information were collected. Multivariable logistic analyses were conducted to examine the factors associated with a greater need for health benefits and hard and soft accommodations. *Result* Participants reported having a physical (79%), psychological (79%) or cognitive/learning disability (77%); 68% had > 1 disability. Over half (55%) were employed. Health benefits and soft accommodations were most needed by participants. Also, an average of six perceived accommodation barriers were indicated; difficulty with disability disclosure was most frequently reported. More perceived accommodation barriers were associated with a greater need for health benefits (OR 1.17, 95% CI 1.04–1.31) and soft accommodations (OR 1.13, 95% CI 1.01–1.27). A psychological disability was a associated with a greater need for health benefits (OR 2.91, 95% CI 1.09–7.43) and soft accommodations (OR 3.83, 95% CI 1.41–10.42). *Discussion* Employers can support the employment of young adults with disabilities through provision of extended health benefits and soft accommodations. Addressing accommodation barriers could minimize unmet workplace need, and improve employment outcomes for young adults with disabilities as they begin their career and across the life course.

Keywords Disability · Young adult · Accommodation · Work · School-to-work transition · Health benefits

Introduction

For young adults, a disability can impact the transition into the labour market and shape work and health outcomes across the life course. Through the provision of job accommodations and benefits, workplaces play an important role in meeting specialized employment needs of people with disabilities and enhancing the working lives of their employees. To date, little research has examined the specific job accommodations and benefits required by young adults living with different disabilities as they enter the workforce. It is also unclear to what extent young adults with disabilities perceive barriers to accessing accommodations and benefits as they start their careers. This study offers insights for the development and tailoring of organizational policies and practices that foster early success as a young adult with a disability transitions from school to work.

Young adulthood, a period spanning 18–35 years, represents a critical transitional life phase where a person tends to establish themselves within the labour market and may report occupational changes (e.g., employment in multiple part-time or entry level jobs) that contribute to the attainment of full-time/full-year work [1, 2]. Research indicates that increasing numbers of young adults with disabilities,

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such as those living with psychological (e.g., depression), learning (e.g., dyslexia), physical (e.g., spinal cord injury) or sensory impairments (e.g., hearing loss), report participation in post-secondary education [3]. However, as they transition from school-to-work, young adults with disabilities may report challenges finding and sustaining employment [3, 4]. Statistics Canada reports that 43.5% of young adults with disabilities participate in the labour force compared to 61.3% of their peers without a disability [5]. Young adults with disabilities who are employed also report being denied a promotion, earning less income or being given fewer job responsibilities [4, 6]. Early challenges with employment participation have the potential to extend across the working life course and contribute to subsequent unemployment, underemployment and productivity loss [7].

The World Health Organization's biopsychosocial model of disability posits that employment participation restrictions stem from the interaction between the characteristics of a person, their health impairment and the physical, psychological and social work context [8]. Through the lens of the biopsychosocial model, job accommodations and benefits represent modifiable characteristics of the work context that can mitigate limitations faced by people with disabilities in employment engagement [8, 9]. At the population-level, it is estimated that 42.3% of employed Canadians with disabilities require a job accommodation or benefit to sustain employment [10]. Only a small number of studies have examined the specific job accommodations and benefits required by people living with disabilities. Those that exist describe a need for formal accommodations (e.g., modified hours), health benefits (e.g., extended drug coverage) or informal modifications (e.g., rearranging work tasks) that can prevent and manage work limitations [9, 11]. Other research has compared the need for hard (i.e., those that require physical adjustments to the work environment) and soft (i.e., those that require non-physical adaptions to working arrangements) categories of accommodations [12, 13]. These studies indicate that people living with a disability have a greater need for soft accommodations (20%) when compared to hard accommodations (16%) [13]. Little research has examined the specific job accommodations and benefits needed by young adults with disabilities who have a less established employment history or who are more likely to report working in non-standard employment (e.g., part-time work or short-term contracts) where formal accommodations tend to be less available [6, 14]. It is also unclear if the types of accommodations and benefits needed by young adults differ according to the disability they report.

In Canada, as in most industrialized countries, employers have a duty to offer reasonable job accommodations for people with disabilities [15]. At the same time, employers often lack knowledge regarding their rights and responsibilities, which poses a barrier to the provision of accommodations and benefits [16]. People with disabilities indicate a number of additional perceived barriers to accessing required job accommodations and benefits including physical (e.g., characteristics of the workplace and workspace) or social workplace characteristics (e.g., manager and co-worker attitudes) [9, 11, 16] and difficulties with the decision to disclose a disability [14, 17, 18]. Barriers to accessing job accommodations and benefits may be particularly salient for young adults who leave more structured educational environments to workplaces that are described as being less supportive [19]. Few studies, to our knowledge, have examined the perceived barriers to accessing the job accommodations and benefits for young adults with disabilities and identified the strategies workplaces can utilize to promote early employment participation.

Our study emerges from a body of research which indicates that stable and productive employment is a fundamental social determinant of health [20, 21]. Job precarity and difficulties finding and sustaining paid work are associated with health and social inequities [20, 21]. Related to difficulties in the labour market, studies indicate that Canadians living with disabilities are more likely to report living under the poverty line (14.4%) when compared to their peers without a disability (9.7%) [5], and are more likely to report food insecurity and decreased access to safe housing, support networks, and social and health services [20]. Policies and programs that enhance labour market engagement can be an important lever to promote social inclusion of people with disabilities and benefit health and quality of life.

Our study examines the role of job accommodations and benefits in supporting the needs of young adults living with disabilities as they transition from school to work. Specific study objectives are to: (1) Describe the specific job accommodation and benefit needs of young adults with disabilities, and compare whether there is a greater preference for hard accommodations, soft accommodations or health benefits; (2) Examine the barriers to accessing job accommodations and benefits and their association with accommodation and benefit need; and (3) Examine the relationship between the type of disability a young person reports and the need for accommodations and health benefits.

Methods

We conducted an online survey of Canadian young adults living with a disability on job accommodation and benefit needs during the school-to-work transition. To be eligible, participants had to be between ages 18–35 years, report a chronic disabling health condition that limited their daily activities [22], and be fluent in English. Participants could be enrolled in school, participating in paid work or not employed but looking for paid work. To capture the

experiences of the school-to-work transition, participants not currently enrolled in school had to be within 5 years of completing their formal education.

Young adults with disabilities are a hard to reach population [23]. Accordingly, we conducted purposive sampling using membership lists maintained by a national organization for students with disabilities and four different university disability service offices in Ontario and British Columbia, Canada who offered assistance with recruitment. All individuals in the membership lists had previously consented to being contacted for research projects. Over a span of 3 months, three email invitations were sent via membership lists to potential study participants. Email invitations provided a summary of the study objectives, included instructions on how to complete the questionnaire, and provided a link to additional study details (e.g., research ethics and consent information). Participants who accessed the link could also begin the survey. Given the purposive nature of our sampling strategy, response rates could not be ascertained with accuracy. All participants were entered into a draw to win a tablet computer. To protect confidentiality, participants were allocated a unique identification number, and any contact information was stored separately from survey responses. All study procedures were reviewed by the McMaster University Research Ethics Board (MREB#2016-122).

Measures

Items and measures included in the survey were selected based on their feasibility and evidence of precision, validity and reliability in samples of people with disabilities. In cases where no existing measures were available, new items were developed.

Outcome Measure

Perceived Need for Job Accommodation and Benefits Items examining perceived need for job accommodations and benefits were developed for this study. Items were based on a recent literature review of workplace supports for people with disabilities [11]. Eight items asked about the need for soft accommodations (e.g., scheduling adaptations, job task modification, workplace social support); six items asked about the need for hard accommodations (e.g., workspace accessibility, assistive technology, adapted transportation); and two items asked about the need for health benefits (e.g., extended health coverage and employee assistance plans). Responses were scored on a five-point Likert-type scale (1 = not at all needed; 5 = a great deal of need) and a mean score was produced for soft accommodations, hard accommodations, and health benefits need. Scores were dichotomized utilizing the median value. Those with a mean score above the median value were categorized as having greater need.

Independent Variables

Perceived Accommodation Barriers Nine items were developed for this study based on previous literature. Participants were asked about the extent to which workplace conditions could create challenges to accessing job accommodations or health benefits, including cost of accommodation, difficulties with disclosure, employer attitudes towards accommodation or lack of enforcement of duty to accommodate legislation (1 = not at all; 5 = a great deal). Scores were dichotomized by those who did report a perceived accommodation barrier and those who did not [9, 11]. Accommodation barriers were summed to produce a score out of nine.

Demographic Information on age, gender, educational attainment, marital status, use of disability policy support and current vocational status (e.g., employed, student or employed and student) was collected.

Disability Using an item designed for population-level surveys, participants were asked about their disability type (i.e., pain, mobility, learning, mental/psychological, dexterity, hearing, seeing, developmental, or flexibility) [22]. Participants could select having more than one disability (1 = yes; 0 = no). To attain statistical power, pain, mobility, dexterity and flexibility were collapsed into a physical disability category; hearing and seeing disability were collapsed into a sensory disability category; and learning and memory disability were collapsed into a category. Participants were also asked about the extent to which disability affected daily activities (1 = not at all; 5 = always) [22] and self-rated health (1 = poor health; 5 = excellent health).

Workplace Activity Limitations The eight-item version of the Work Limitations Questionnaire (WLQ) was utilized to assess job performance and productivity related to a disability [24]. Limitations were examined in five dimensions including time management, physical demands, mental/interpersonal demands, and output. Item response occurred on a five-point ordinal response scale (1 = difficult all of the time; 5 = difficult none of the time). An additional category of response exists for "does not apply to my job" with a corresponding percentage [0 = none of the time (0%); 4 = all of the time (100%)]. A total score ranging from 0.4 to 28.0 is produced with a higher score reflecting fewer overall limitations [24]. A modified version of the WLQ was created for non-employed student participants who were asked to think about their educational activities as work.

Work Characteristics Among those employed, work characteristics including hours worked/week and job sector (e.g., business/administration, health/science/teaching, sales/service, and trades and transportation sectors) were collected. Information on the standard (i.e., full-time permanent employment) versus non-standard employment was also collected (i.e., employed part-time and/or on short-term contract).

Analyses

Descriptive statistics (i.e., frequencies, means, and interquartile ranges) were used to build a profile of respondents and to examine distributions of study variables. Bivariate analyses (i.e., analyses of variance and Chi square tests) were conducted to examine the relationship between perceived accommodation barriers, demographic, disability and work context factors, and the greater need for hard and soft job accommodations and health benefits. As mentioned earlier, we classified greater accommodation and benefit need as those reporting mean need above the median value. Next, three separate multivariable logistic regression models were designed to examine the association between perceived accommodation barriers and the likelihood of reporting a greater need for hard and soft accommodations and health benefits. Utilizing a stepwise procedure, demographic, disability, and work context factors that were related to greater need for soft and hard accommodations and health benefits at the bivariate level were retained in the models with a threshold of $p < .20$. Analyses were carried out using SAS 9.3 [25].

Results

One hundred and fifty-five participants were recruited for the study with a mean age of 25.8 (SD = 5.1) (Table 1). Participants were mostly female (76%) and few were married/living as if married (15%). 80% were enrolled in school at the time of the survey and over half were employed (55%). Close to 41% indicated being enrolled in school and employed. Out of those employed, most indicated being in a non-standard employment contract (i.e., part-time and/or short-term contract) (80%). Over three quarters of participants reported a physical (79%), psychological (79%) or learning/memory disability (77%). A small number reported a sensory disability (10%). Of note, 68% reported having more than one disability. Close to half of participants (46%) indicated that their disability often resulted in daily activity limitations with a mean WLQ score of 12.9 (SD = 6) [24].

The job accommodation and health benefit requirements reported by participants are summarized in Fig. 1. Most needed were health benefits (mean need = 3.2, SD = 1.1, median = 2.5, 95% CI 3.0–3.6) including extended health coverage (e.g., extended medical service and pharmaceutical coverage) and employee assistance plans (e.g., short-term counseling). Soft accommodations were the second most needed category (mean need = 2.8, SD = 0.9, median = 2.2, 95% CI 2.7–3.0). Participants reported that scheduling modifications, self-management support, workplace social support and informal modifications to job tasks were among the most needed soft accommodations. In comparison, hard job accommodations were reported as being less needed (mean need = 2.2, SD = 0.6, median = 1.5, 95% CI 2.1–2.3).

Over half of participants described a mean of 5.8 (SD = 3.2) perceived barriers to accessing job accommodations and health benefits. Problems with the disclosure of their disability (77%), perceived cost of accommodation (74%), potential inability to accommodate job duties (68%), and negative attitudes towards people with disabilities within the workplace (65%) were the most frequently reported perceived accommodation barriers (Fig. 2).

Bivariate analyses were conducted to examine the relationship between disability type, accommodation barriers, and the greater need for job accommodations and benefits (Table 2). A psychological disability was associated with a greater need for soft accommodations ($p < .001$) and health benefits ($p < .01$). Having a learning/memory disability was associated with a greater need for soft accommodations ($p < .001$). Those reporting a physical and sensory disability were more likely to report a greater need for hard accommodations ($p < .05$). Bivariate analyses also highlighted a relationship between more perceived accommodation barriers and the greater need for soft accommodations ($p < .05$) and health benefits ($p < .01$).

Findings from multivariable logistic models examining the factors associated with a greater need for soft and hard job accommodations and health benefits are summarized on Table 3. All independent variables included in the models satisfied model building criteria. Given the small number of cases, sensory disability-type was dropped as a variable from the final models. Results indicated that more perceived accommodation barriers were associated with a greater need for health benefits (OR 1.17, 95% CI 1.04–1.31) and soft accommodation (OR 1.13, 95% CI 1.01–1.27). A psychological disability were associated with a greater need for health benefits (OR 2.91, 95% CI 1.09–7.43) and soft accommodations (OR 3.83, 95% CI 1.41–10.42). More work limitations were associated with a greater need for soft accommodations (OR 0.93, 95% CI 0.86–0.99).

Discussion

Challenges finding and sustaining employment reported by young adults with disabilities have significant implications for health and quality of life across the life course.

Table 1 Sample description of demographic, health and disability, employment and job accommodation and benefits

	N (%)/mean ± SD
Demographic	
Age (years)	25.8 ± 5.1
Gender (female)	118 (76.1)
Married/living as if married	19 (14.6)
Enrolled/completed post-secondary school	154 (99.4)
Recipient of disability policy support[a]	116 (74.8)
Current vocational status[b]	
Employed	85 (54.8)
Student	124 (80.0)
Student and employed	63 (40.7)
Work characteristics (n = 85)	
Full-time employment (> 37.5 h/week)	48 (56.5)
Permanent employment contract	28 (33.0)
Non-standard employment contract[c]	66 (77.6)
Job sector employed	
Business/administration	23 (27.1)
Health/science/teaching	33 (38.8)
Sales/service	24 (28.2)
Trades/transportation	3 (3.5)
Health and disability	
Self-reported disability[d]	
Psychological	122 (78.7)
Learning/memory	119 (76.8)
Physical[e]	123 (79.3)
Sensory[f]	16 (10.3)
> 1 self-reported disability	106 (68.4)
Daily activity limitations	
Never	2 (1.3)
Rarely	6 (3.9)
Sometimes	57 (36.8)
Often	71 (45.8)
Always	19 (12.3)
Work limitations (WLQ range 0.4–28.0)	12.9 ± 5.9
Self-rated health	
Poor	18 (13.9)
Fair	43 (33.1)
Good	40 (30.8)
Very good	21 (16.2)
Excellent	8 (6.2)
Accommodation and benefits	
Perceived need for soft job accommodations (range 1–5)	2.8 ± 0.9
Perceived need for hard job accommodations (range 1–5)	2.2 ± 0.6
Perceived need for health benefits (range 1–5)	3.4 ± 1.1
Mean number of perceived barriers to accessing job accommodations and benefits (range 0–9)	5.8 ± 3.2

WLQ work limitations questionnaire higher score equates to fewer limitations

[a]Includes federal, provincial and private income support, health and disability benefits

[b]Participants could be in more than one employment status category

[c]Non-standard employment includes those who report part-time or contract work

[d]Participants could report more than one disability

[e]Physical disability includes pain, mobility, flexibility and dexterity disability

Table 1 (continued) [f]Sensory disability includes hearing and seeing impairments

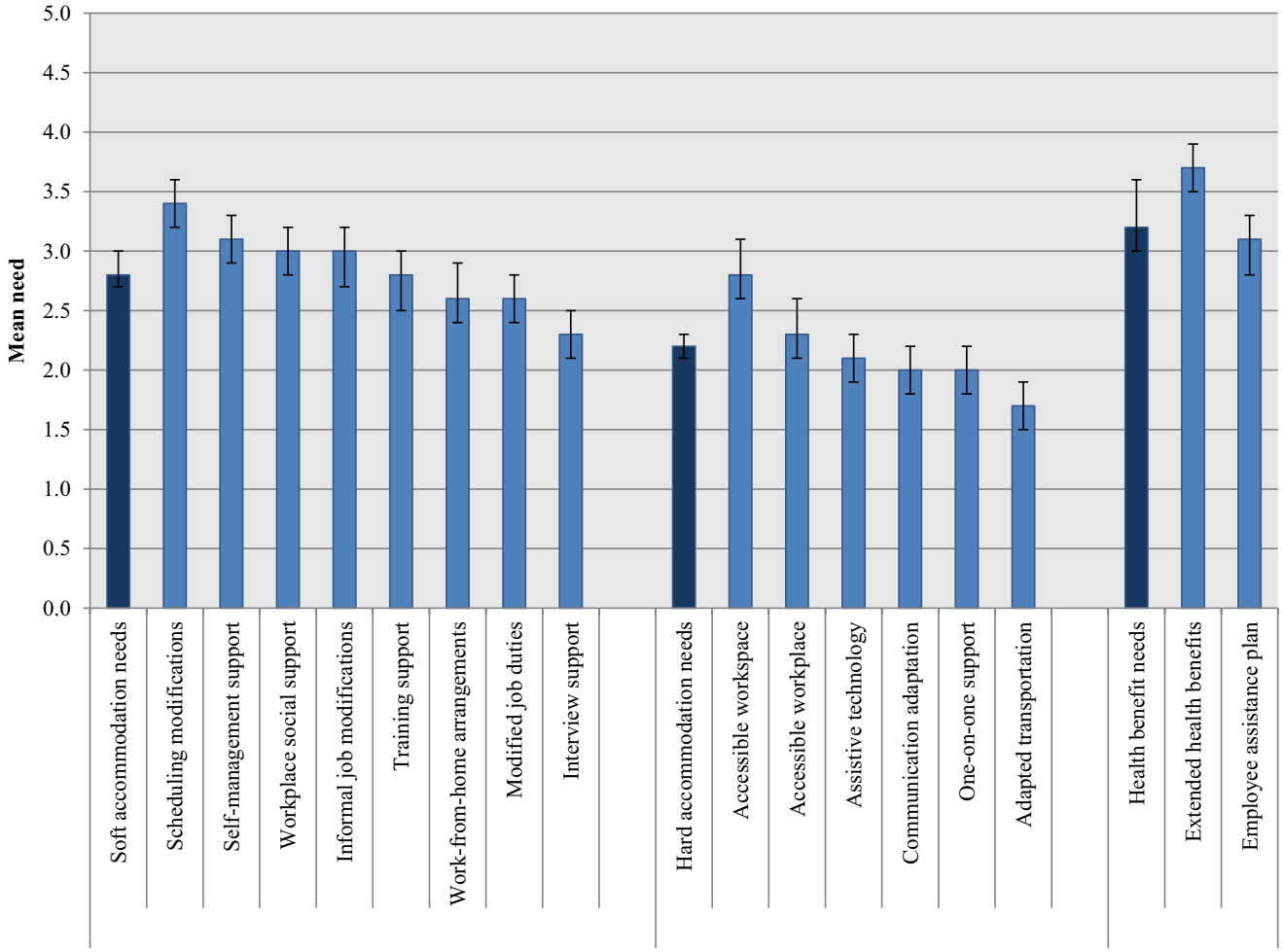

Fig. 1 Mean soft and hard accommodations and health benefits needed by young adult participants

Aligning with the WHO's biopsychosocial model of disability, workplaces play a critical role in shaping working lives and supporting employment needs. Our study focused on a sample of young adults with disabilities who were mostly enrolled in school and likely preparing to completely enter full-time employment. Findings showed that health benefits and soft accommodations were most needed by our sample. Also, a range of perceived accommodation barriers were reported that may relate to unmet need for accommodations and benefits within the workplace. Findings are relevant for the development and tailoring of workplace accommodation policies and practices that meet the needs of young adults living with disabilities and encourage employment engagement and minimize perceived barriers.

Not surprisingly, extended health benefits were most needed by participants. Extended health benefits provide greater access to diverse health services including prescription medication coverage, rehabilitation, assistive devices (e.g., orthotics), and mental health treatment (e.g., counseling) that are essential for young adults with disabilities to manage health and minimize activity limitations [19, 26]. For young adults, the greater need for health benefits could also stem from being more likely to begin their career in non-standard employment contracts where health benefits are less likely to be provided [27], coupled with exclusion from parental-provided private health coverage (typically occurring after 21 years of age). The provision of health benefits as a potential strategy for labour market integration has been emphasized in research conducted by Canadian policy scholars. These studies indicate that the requirement for extended health services and drug coverage can result in people with disabilities exiting the labour market to meet eligibility requirements for government-provided drug coverage [16, 28, 29]. Follow-up longitudinal studies are

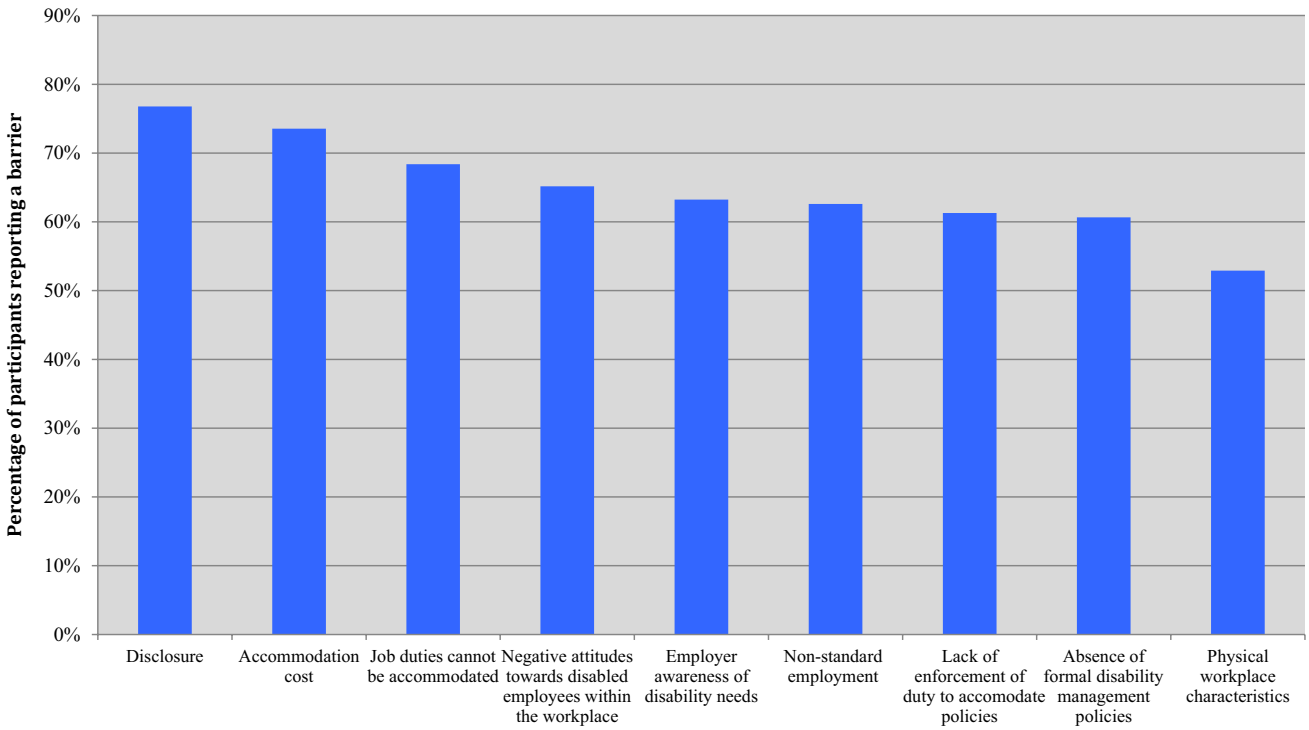

Fig. 2 Perceived barriers reported by participants to accessing job accommodations and health benefits

required to examine the association between unmet health benefit needs and short- and longer-term experiences in the labour market.

Young adult participants also reported a greater need for soft accommodations when compared to hard accommodations. The most needed soft accommodations included modified scheduling, assistance with self-management, workplace social support and informal modifications to job tasks. Findings align with previous research that have also found a preference for soft accommodations among adults with disabilities [13]. These previous studies indicate that soft accommodations are of low cost to employers, and can be adapted to meet the needs of different disability types [30]. It is important to note that the provision of soft accommodations can be challenging in certain work contexts that have more rigidity such as the manufacturing or sales and service job sectors, which are often destinations for young adults transitioning from school to work [27]. Additional research is required within different organizational contexts to identify opportunities to meet the soft accommodation needs of young adults living with disabilities.

While research highlights the impact of psychological disability on the workforce [31], there is an absence of information on the specific strategies that employers can use to meet the support needs of young workers reporting psychological disability [32]. Of significance, close to 80% of participants in our study reported a psychological disability. At the multivariable level, those reporting a psychological disability were significantly more likely to report a greater need for health benefits and soft accommodations. By addressing mental health care needs and providing soft accommodations, workplaces can promote employment engagement among young adults reporting psychological disabilities. Research is needed to expand on findings and better understand the experience of transitioning from school to work with a psychological disability as a way of informing accommodation practices.

Notably, multiple perceived barriers to accessing job accommodations and benefits were reported by young adult participants. Difficulties with the decision to disclose the details of a disability were most frequently reported by over three-quarters of the participants. Our findings align with recent research that also indicates that young adults with disabilities report uncertainties regarding the decision to talk about their disability within the workplace out of fear of discrimination (e.g., losing their job, being denied a promotion or exclusion from training opportunities) [18]. The apprehension to talk about one's disability may pose challenges to requesting formal and informal supports [18]. Results from our study indicated that more perceived accommodation barriers were significantly related to a greater need for health benefits and soft accommodations. Although cross-sectional, it may be that participants indicating more perceived accommodation barriers also have

Table 2 Bivariate association between self-reported disability type and the greater need for soft and hard accommodations and health benefits

	Soft accommodation need[a,b]		X^2/F	P	Hard accommodation need[a,c]		X^2/F	P	Health benefit[a,d]		X^2/F	P
	Lesser need	Greater need			Lesser need	Greater need			Lesser need	Greater need		
	N (%)/M ± SD	N (%)/M ± SD			N (%)	N (%)			N (%)	N (%)		
Total sample	73 (47.1)	82 (52.9)			68 (43.9)	87 (56.1)			73 (47.1)	82 (52.9)		
Self-reported disability												
Psychological	48 (39.3)	74 (60.7)	13.8	< .001	57 (46.7)	65 (53.3)	1.9	0.17	50 (41.0)	72 (59.0)	8.6	< .01
Learning/memory	57 (42.2)	78 (57.8)	10.0	< .001	38 (43.2)	50 (56.8)	0.04	.68	43 (48.9)	45 (51.1)	0.26	.61
Physical	29 (46.0)	34 (54.0)	0.04	.83	21 (33.3)	42 (66.7)	4.8	< .05	28 (18.1)	35 (22.6)	0.30	.58
Sensory	10 (66.7)	5 (3.2)	2.6	.11	3 (20.0)	12 (80.0)	3.8	< .05	9 (60.0)	6 (40.0)	1.1	.29
Mean number of perceived barriers to accessing job accommodations and benefits	5.2 ± 3.3	6.3 ± 3.0	5.0	< .05	5.6 ± 3.1	6.0 ± 3.3	0.50	.49	5.1 ± 3.5	6.5 ± 2.8	8.3	< .01

[a]Greater accommodation or benefit need refers to those reporting perceived need higher than the median value; All Chi-squares and ANOVA analyses have a degrees of freedom = 1

[b]Median soft accommodation need = 2.2, range 1–5

[c]Median hard accommodation need = 1.5, range 1–5

[d]Median health benefits need = 2.5, range 1–5

more challenges in accessing supports within the workplace and have greater unmet need. To address gaps related to accommodation and benefit utilization within the workplace, employers and vocational rehabilitation professionals could design strategies that address perceived barriers. For example, strategies within the workplace that enhance communication channels between young employees with disabilities and their supervisors could minimize perceived accommodation barriers related to disability disclosure. Moving forward, studies are required to better understand perceived barriers among young adults with a disability and examine whether they persist as a person transitions further into their career.

Our study was one of the first to survey Canadian young adults living with disabilities to better understand accommodations and benefits needed. There are several limitations that require acknowledgement. First, our study is cross-sectional and causal relationships cannot be ascertained. Longitudinal research will be beneficial to complement findings and better understand the extent to which job accommodation and benefit needs and perceived accommodation barriers change across the working life course and impact employment outcomes. Given that young adults with disabilities are a challenging population to recruit for surveys, we conducted a purposive sampling strategy. As a result, survey response rates could not be ascertained with accuracy and findings may have limited generalizability. Additional research of a larger representative sample of male and female young adults living with a greater range of acquired and congenital disability types, and reflecting various phases of the transition into the labour market would be valuable to better understand the role of accommodations and benefits in supporting employment. Lastly, we focus on job accommodations and benefits reported as needed. Follow-up studies examining the availability and utilization of job accommodations and benefits at the early career phase would be beneficial.

Workplaces play an important role in promoting early and sustained employment participation of young adults with disabilities. Through the provision of extended health benefits and soft accommodations, employers can meet the needs of young adults with disabilities, especially those reporting a psychological disability. Additionally, policies and programs that address perceived accommodation barriers for young adults with disabilities can potentially help minimize unmet accommodation and benefit need. Overall, our study provides a foundation for future research that aims at better understanding the strategies to support young adults with disabilities within the workplace and ensure a successful transition from school to work.

Table 3 Multivariable logistic regression models examining the relationship between demographic and disability characteristics, perceived accommodation barriers, and the need for greater soft and hard accommodations and health benefits

	Greater soft accommodation need[a,b]		Greater hard accommodation need[a,c]		Greater health benefit need[a,d]	
	OR	95% CI	OR	95% CI	OR	95% CI
Gender[e]	0.62	0.26–1.51	**0.41**	**0.17–0.99**	1.58	0.68–3.69
Employed	2.05	0.65–6.47	0.73	0.25–2.11	0.42	0.14–1.25
Student	0.59	0.27–1.28	0.97	0.45–2.07	0.50	0.22–1.10
Work limitations (WLQ)[f]	**0.93**	**0.86–0.99**	1.04	0.97–1.1	0.99	0.92–1.06
Self-rated disability type						
Psychological disability	**3.83**	**1.41–10.42**	0.64	0.25–1.62	**2.91**	**1.09–7.43**
Cognitive and learning disability	1.10	0.52–2.24	1.07	0.54–2.14	0.70	0.34–1.46
Physical disability	1.10	0.51–2.20	1.70	0.84–3.42	1.28	0.62–2.65
Perceived barriers to accessing job accommodations and benefits	**1.13**	**1.01–1.27**	1.04	0.97–1.12	**1.17**	**1.04–1.31**

Bold value indicates statistical significance at $p < 0.05$

OR odds ratio, *CI* confidence interval

[a]Greater accommodation or benefit need refers to those reporting perceived need higher than the median value

[b]Median soft accommodation need = 2.2, range 1–5

[c]Median hard accommodation need = 1.5, range 1–5

[d]Median health benefits need = 2.5, range 1–5

[e]Gender reference is male

[f]Higher WLQ score equates to fewer limitations attributed to a disability

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Author Contributions AJ conceived of the study, led the development of the study design, analysis procedure and manuscript preparation; JB coordinated participant recruitment and participated in the design and interpretation of the data; AF participated in the development of the study design and data analysis procedures and contributed to manuscript development; FS participated in the design of the study and participant recruitment procedures; CB participated in the design and coordination of the study and helped to draft the manuscript. All authors read and approved the final manuscript.

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Compliance with Ethical Standards

Conflict of interest AF is both a collaborator in the Centre for Research on Work Disability Policy and a private consultant who provides statistical support for community based organizations. AF did not receive financial compensation for her involvement. FS is the Director of the National Educational Association of Disabled Students (NEADS). NEADS is a non-governmental organization that supports access to education and employment for post-secondary students and graduates with disabilities. Neither FS nor his organization received any financial compensation for their involvement in the study.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent Informed consent was obtained from all individual participants included in the study.

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