### **Insights on Canadian Society**

## Persons with disabilities and employment

by Martin Turcotte

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- 0s value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
- p preliminary
- r revised
- x suppressed to meet the confidentiality requirements of the Statistics Act
- use with caution
- F too unreliable to be published
- significantly different from reference category (p < 0.05)</li>

#### by Martin Turcotte

#### Overview of the study

This article provides information on the labour market participation of Canadians 25 to 64 years of age with a physical or mental disability related to seeing, hearing, mobility, flexibility, dexterity, pain, learning, development, psychological/mental disorders or memory. The factors associated with the employment participation of persons with disabilities are discussed, along with their job characteristics.

- In 2011, the employment rate of Canadians aged 25 to 64 with disabilities was 49%, compared with 79% for Canadians without a disability.
- The employment rate among persons aged 25 to 64 with a mild disability was 68%, compared with 54% of those with a moderate disability, 42% of persons with a severe disability and 26% among those with a very severe disability.
- The difference in employment rates between persons with disabilities and those without a disability was lower among university graduates. This difference was non-significant in the case of university graduates who had a mild or moderate disability.
- Approximately I in 2 university graduates, with or without a disability, held a professional occupation. However, graduates with a disability were less likely to hold a management position and earned less than those without a disability, especially among men.
- Among Canadians with a disability, 12% reported having been refused a job in the previous five years as a result of their condition. The percentage was 33% among 25- to 34-year-olds with a severe or very severe disability.

#### Introduction

In Canada, hundreds of thousands of individuals are limited in their daily activities because of a physical or mental disability, but participate actively in the labour market and often hold jobs that match their qualifications. Despite numerous positive stories and experiences, persons with disabilities remain less likely than others to be employed, both in Canada<sup>1</sup> and other parts of the world.<sup>2</sup>

It is true that some persons have a disability so severe that they cannot hold a job or work in a company. However, many others who would like to have paid employment are unable to reach that goal for reasons unrelated to their condition, such as workplaces that are physically inaccessible or discriminatory hiring practices. As a result, such individuals can become unemployed or give up looking for work.

Such a situation is problematic both for persons with disabilities, and more generally for society and the economy. Individuals without a job may be deprived of the benefits of labour market participation, a key component of social integration.<sup>3</sup> In addition, society is deprived of their talent and their contribution to the economy, a situation that may represent a large opportunity cost in the context of rising retirements.<sup>4</sup>

To deal with this issue, the various levels of government have implemented numerous programs and policies enabling access to employment and postsecondary education so as to foster the labour force participation of persons with disabilities and break down the social and physical barriers they face.<sup>5</sup>

This study begins by looking at factors associated with a lower employment participation among persons with disabilities. A particular attention is given to the severity of the disability and level of education, which can significantly affect employment.

Secondly, this article examines the characteristics of the jobs held by persons with disabilities, in comparison with jobs held by persons without a disability—occupation, industry, hours and weeks of work, and employment income. Particular attention is paid to persons with disabilities who hold a university degree.

This article uses data from the 2012 Canadian Survey on Disability (CSD) (see Data sources, methods and definitions). Given that the study examines the relationship between educational attainment and employment, the focus is on those aged 25 to 64, who have typically completed their studies.

Some additional statistics are shown, however, to shed light on the working and schooling activities of youth aged 15 to 24 with disabilities. These statistics include information on youth with disabilities who are neither studying nor employed (see Youth with disabilities and employment).

### Lower employment rate for persons with disabilities

In 2012, just over 2.1 million people aged 25 to 64, or 11% of the population in this age group, reported being limited in their daily activities because of a mental or physical disability-conditions related to seeing, hearing, mobility, flexibility, dexterity, pain, learning, development, mental/psychological disorder or memory.6 Because the CSD was conducted on the basis of a sample of respondents from the National Household Survey (NHS), employment issues can be examined on the basis of employment data collected by the NHS in May 2011.

First, in 2011, the unemployment rate of persons aged 25 to 64 with disabilities was 11%, compared with 6% for people who did not report having a disability. The participation rate—the percentage of the

population employed or seeking employment—was 55% for persons with disabilities, compared with 84% for persons without a disability.

The rates of unemployment and participation, however, may not be the most effective to illustrate the difficulties experienced by persons with disabilities, who are more likely to be discouraged from looking for work.<sup>7</sup> In other words, it is not because persons with disabilities are not part of the labour force that they do not want to work.<sup>8</sup>

A more appropriate measure is the employment rate—defined as the number of employed people as a percentage of the total population. In 2011, this rate was 49% among individuals aged 25 to 64 who reported having a disability that limited their activity, compared with 79% among those who did not report having a disability.

Table 1
Selected characteristics of persons aged 25 to 64 with a severe or very severe disability, a mild or moderate disability, or without a disability, 2011

	No disability	Mild or moderate disability	Severe or very severe disability
		percentage dis	tribution
Total	100.0	100.0	100.0
Men	50.2	47.5	45.5
Women	49.8	52.5	54.5
Age group			
25 to 34	26.4	14.2	8.0
35 to 44	25.2	17.9	15.8
45 to 54	27.8	28.0	35.6
55 to 64	20.6	39.9	40.6
Level of education			
Less than a high school diploma	11.3	18.9	22.1
High school diploma	30.8	34.0	35.9
Trades certificat or college diploma	31.0	29.6	33.3
University degree	27.0	17.6	8.8

Source: Statistics Canada, Canadian Survey on Disability, 2012.

However, persons with disabilities represent a diverse group-some have multiple disabilities that greatly limit all their daily activities, while others have only one disability that has less of an impact on their activities. To account for this diversity, a severity score has been developed for the survey, by taking the number of disability types, the intensity of the difficulties and the frequency of activity limitations into account.

Employment varied widely depending on the level of severity. Specifically, the employment rate among individuals aged 25 to 64 with a mild disability was 68%, compared with 54% among those with a moderate disability, 42% among those with a severe disability and 26% among those with a very severe disability.

Expressed as a distribution of the 968,000 employed Canadians who had a disability, 44% had a mild disability, 22% had a moderate disability, 20% had a severe disability, and 14% had a very severe disability.

#### Persons with disabilities are older and less-educated on average

Persons with disabilities are older than those without a disability. In 2011, more than 40% of persons with disabilities were aged 55 to 64, compared with 21% of their counterparts without a disability (Table 1). These age differences may affect employment rates, since the rates go down significantly after the age of 55.9

Furthermore, persons with disabilities are less-educated. another factor that can be related to lack of employment. For example, 9% of persons with a severe or very severe disability held a university degree, compared with 27% of those without a disability. Lastly, persons with disabilities were more often women, for whom the employment rate is also lower.

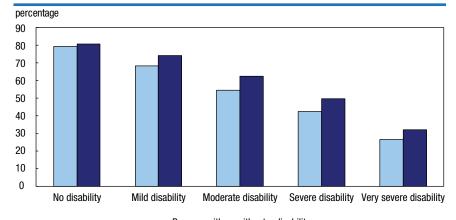
To what extent are such differences accounting for the differences in employment rates? To answer that question, the employment rate was adjusted to account for differences related to age, sex, education and other factors (such as living arrangements, Aboriginal self-identification and province of residence). Taking all these factors into account somewhat reduced the employment rate differences, but did not eliminate them completely (Chart I).

For example, if persons with a mild disability had had characteristics similar to the average for each factor taken into account in the model, their employment rate would have been 74% instead of 68%. Nevertheless, the rate was still lower than that of people without a disability, that is, approximately 80%.

#### **Employment rates similar** between university graduates with a mild disability and those without a disability

A higher level of education is associated with a higher employment rate. This was true for both individuals without and with disabilities, regardless of the severity of the disability. More particularly, the differences between persons with disabilities and those without a disability were significantly smaller among those who had a higher level of education.

Chart 1 Employment rate of persons with or without a disability, unadjusted and adjusted, 2011



Persons with or without a disability

Unadjusted

Ajusted for age, sex, education and other factors¹

Source: Statistics Canada, Canadian Survey on Disability, 2012.

<sup>1.</sup> Results were obtained from a logistic regression that included the following factors: severity of disability, sex, age group, level of education, Aboriginal self-identification, province of residence and living arrangements.

Among university graduates, the employment rate of those with a moderate disability (adjusted for age differences) was 77%, compared with 78% among those with a mild disability and 83% among those without a disability (Chart 2). The difference between university graduates with a mild or moderate disability and those without a disability was not significant.<sup>10</sup>

Conversely, the lack of a high school diploma may represent more of a barrier among those with disabilities. Among people who had not completed high school, 33% of those with a moderate disability were employed, compared with 50% of those with a mild disability and 65% of those without a disability. Lastly, 20% of individuals in this group who had a severe or very severe disability were employed.

## More severe disabilities are associated with lower employment rates

As shown above, the more severe the disability, the lower the employment rate. This key finding still held true when only persons with disabilities were taken together in a multivariate model accounting for other variables that affect employment (such as level of education, age or province of residence).

Hence, among persons with a mild disability, the employment probability was more than two times higher than those who had a very severe disability (predicted probabilities of 66% and 30%, Table 2).

Another significant factor was level of education. For example, model results indicate that the predicted probability of employment was 45% for those with a high school diploma, and 62% among those with a university degree.

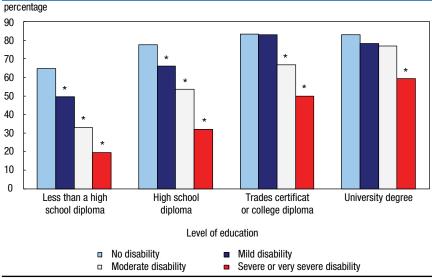
Even when severity and other factors were taken into account, employment outcomes were less positive for those whose disability was mental or psychological (developmental or learning disorder; memory problem; or emotional, psychological or mental health condition). Among these, the predicted probability of employment was 10 points lower than those whose disability did not qualify as mental or psychological (predicted probabilities of 43% and 53%, respectively).

Lastly, the onset of a disability—or whether it happened more or less early in life—was not associated with the probability of employment once the other factors were taken into account (including severity).<sup>11</sup>

Another important factor of labour market integration is not only the capacity to obtain a job, but also to retain it. Since employment data was also collected in 2012, it is possible to examine the proportion of employed individuals with disabilities (in 2011) who were no longer in employment a year later (in 2012), either because they quit their job, or were laid-off. This probability also varied across various socio-demographic characteristics.

According to the results of a second multivariate model (with the same explanatory factors), severity remained a determining factor. Among those who were employed in 2011, a person with a very severe disability was 2.5 times more likely

Chart 2
Employment rate adjusted for age, by education level and by severity of disability, 2011



 $<sup>^{\</sup>star}$  significantly different from reference category (no disability) (p < 0.05) **Source:** Statistics Canada, Canadian Survey on Disability, 2012.

than a person with a mild disability to be out of employment in the following year (probabilities of 22% and 9%, respectively). However, factors such as having a mental or psychological disability and age at the onset of disability were not related to an increased probability to see a change in employment status.

As well, disabled workers who did not have a high school diploma had a greater probability of losing or leaving their job between 2011 and 2012 (predicted probability of 21%, nearly double that of all other education groups).

## Persons with disabilities more highly concentrated in sales occupations

Persons with disabilities are less likely to be employed, but may also differ from non-disabled individuals in their employment profile. Because of gender differences in this regard, comparisons are done separately for men and women. All of the following results have been adjusted for differences in age structure between the groups.

Among men, 16% of those with a mild or moderate disability were in the industrial, construction or equipment operation trades—a proportion similar to those without a disability (Table 3). In each group, transportation and construction workers and labourers also made up about 10% of the workforce.

Other occupational groups displayed larger differences, such as personal service and customer information service occupations. More precisely, employed men with a severe or

Table 2 Employment and change in employment status, persons with disabilities aged 25 to 64, 2011 and 2012

Workers in 2011 no

	Probability of being employed in 2011	Workers in 2011 no longer employed in 2012
	p	redicted probability <sup>1</sup>
Severity of disability		
Mild (ref.)	66.1	8.6
Moderate	54.0*	12.3
Severe	42.8*	16.5*
Very severe	29.5*	21.8*
Person with a mental or psychological disability <sup>2</sup>		
No (ref.)	53.0	11.3
Yes	43.4*	14.1
Age at onset of disability	40.7	0.0
Under 25 (ref.)	48.7	9.9
25 or over Sex	48.9	13.1
	52.6	11.3
Men (ref.) Women	52.6 45.5*	13.2
Age group	45.5	13.2
25 to 34 (ref.)	54.2	18.0
35 to 44	55.6	11.7
45 to 54	58.6	8.4*
55 to 64	37.1*	15.9
Level of education	07.11	10.0
Less than a high school diploma (ref.)	29.4	20.6
High school diploma	45.4*	10.8*
Trades certificat or college diploma	59.5*	12.4*
University degree	62.4*	10.2*
Aboriginal self-identification		
No (ref.)	49.5	12.2
Yes	36.3*	12.1
Living arrangements		
Couple (ref.)	52.8	11.8
Lone parent	48.0	16.1
Adult child	33.5*	19.0
Not in a census family	43.8*	10.9
Province		
Newfoundland and Labrador	41.4	34.8*
Prince Edward Island	53.7	16.6*
Nova Scotia	47.7	14.5*
New Brunswick	42.0	22.5*
Quebec	41.1	16.2*
Ontario (ref.)	46.3	8.6
Manitoba	63.8*	14.5*
Saskatchewan	62.3*	14.6*
Alberta	62.5*	13.3*
British Columbia Territories	50.7 61.8	15.1* 12.1
I CHILLUI ICO	01.0	12.1

 $<sup>^{\</sup>star}$  significantly different from the reference category (ref.) (p < 0.05)

Source: Statistics Canada, Canadian Survey on Disability, 2012.

<sup>1.</sup> The predicted probabilities were calculated using the results of a logistic regression model. Predicted probabilities are calculated with all other factors kept constant at their average value for the given population.

<sup>2.</sup> This includes developmental or learning disorders, memory problems, or an emotional, psychological or mental health condition.

Table 3
Employment profile of persons aged 25 to 64, by presence and severity of disability, adjusted for age, 2011

	Men		Women			
	No disability (ref.)	Mild or moderate disability	Severe or very severe disability	No disability (ref.)	Mild or moderate disability	Severe or very severe disability
				percentage		
Occupation						
Management	15.7	11.8*	10.1 <sup>E</sup>	10.1	7.4*	9.9 <sup>E</sup>
Professional	17.4	14.0*	11.5 <sup>E</sup>	23.5	19.3*	16.3*
Technical and paraprofessional	9.6	10.9	7.5 <sup>E</sup>	11.5	14.5	10.1
Administration and administrative support	6.7	7.6 <sup>E</sup>	7.1 <sup>E</sup>	21.5	21.3	22.7
Sales	6.6	6.6	13.5 <sup>E</sup>	9.2	9.0	11.3
Personal and customer information services	8.3	13.6*	19.9 <sup>E</sup>	19.4	24.0*	25.7*
Industrial, construction and equipment operation trades	15.6	16.0	12.1 <sup>E</sup>	0.4	F	F
Workers and labourers in transport and construction	11.0	10.1	9.2 <sup>E</sup>	1.0	F	F
Natural resources, agriculture and related production	2.4	1.8 <sup>E</sup>	2.4 <sup>E</sup>	0.6	0.6 <sup>E</sup>	F
Manufacturing and utilities	6.8	7.6 <sup>E</sup>	6.6 <sup>E</sup>	2.9	2.1 <sup>E</sup>	F
Industry						
Goods sector						
Agriculture and natural resources	5.0	3.9*	2.8 <sup>E</sup>	1.9	1.3 <sup>E</sup>	F
Utilities and construction	11.9	9.9	10.0 <sup>E</sup>	1.8	F	F
Manufacturing	15.0	13.8	9.6 <sup>E</sup>	5.4	4.5 <sup>E</sup>	5.9 <sup>E</sup>
Service sector						
Wholesale trade	5.9	5.5 <sup>E</sup>	F	3.1	3.6 <sup>E</sup>	1.7 <sup>E*</sup>
Retail trade	8.9	12.4*	14.2*	10.8	11.2	15.4*
Transportation and warehousing	7.2	8.4 <sup>E</sup>	8.7 <sup>E</sup>	2.6	3.8 <sup>E</sup>	F
Finance, insurance, real estate and rental	5.8	2.4*	3.3 <sup>E</sup>	7.3	5.4*	6.3 <sup>E</sup>
Professional, Scientific and technical	12.4	13.3	9.7 <sup>E</sup>	11.2	11.4	8.6 <sup>E</sup>
Educational services	5.3	6.2 <sup>E</sup>	F	11.7	12.6	8.0 <sup>E*</sup>
Health care and social assistance	4.0	6.0 <sup>E</sup>	F	21.7	21.6	20.1
Arts, entertainement and recreation	4.0	3.9 <sup>E</sup>	5.3 <sup>E</sup>	4.0	3.9 <sup>E</sup>	5.7 <sup>E</sup>
Accommodation and food services	3.2	5.2 <sup>E</sup>	11.8 <sup>E</sup>	5.3	6.0 <sup>E</sup>	10.4 <sup>E*</sup>
Other services	4.1	3.2 <sup>E</sup>	4.0 <sup>E</sup>	5.2	4.4 <sup>E</sup>	4.4 <sup>E</sup>
Public administration	7.4	6.0	9.8 <sup>E</sup>	7.8	7.9	7.8 <sup>E</sup>
Work activity in 2011						
Part-time, part-year	4.0	10.2 <sup>E*</sup>	9.2 <sup>E*</sup>	10.5	13.9*	16.3*
Part-time, full-year	2.5	4.5 <sup>E*</sup>	12.5 <sup>E</sup>		9.5	12.1
Full-time, part-year	22.9	24.0	27.5	21.5	22.7	26.0
Full-time, full-year	70.6	61.3*	50.8*	58.4	53.9	45.7*
Average employment income <sup>1</sup> (\$)	67,599	56,624*	49,242*	49,565	45,448*	42,688*

 $<sup>^{\</sup>star}$  significantly different from reference category (ref.) (p < 0.05)

Note: Persons employed during the 2011 National Household Survey (NHS) reference week.

 $\textbf{Source:} \ \textbf{Statistics Canada}, \ \textbf{Canadian Survey on Disability}, \ \textbf{2012}.$ 

very severe disability were at least two times more likely than their counterparts without a disability to be in one of these occupations (20% vs. 8%). This occupational group includes cleaners, chefs or cooks, and customer service representatives. Employed men with a severe or very severe disability were also more concentrated in sales occupations (14%, compared with 7% of men without a disability).

These differences reflect, in part, the lower level of education of men with disabilities. These men, regardless of the severity of their disability, were less likely than men without a disability to hold management or professional occupations.

<sup>&</sup>lt;sup>E</sup> use with caution

F too unreliable to be published

<sup>1.</sup> Full-year, full-time workers with positive employment income.

As for industry, employed men with a severe or very severe disability were more concentrated in retail trade (14%, compared with 9% for those without a disability), but less concentrated in wholesale trade, manufacturing, finance, insurance, real estate or rental industries.

Women with disabilities were also less likely to be employed in management and professional occupations, and more likely to be employed in personal service and customer information service occupations. However, as was the case for men, women with disabilities are less likely to hold a university degree. The distribution of employed women with and without a disability was more similar in the other occupational categories.

Women in general are not distributed the same way as men within the various industries they are less likely than men to be in the goods sector, such as utilities and construction, as well as manufacturing. Nevertheless, women with a severe or very severe disability were concentrated in the same industries as their male counterparts-retail trade, and accommodation and food services. For example, in 2011, 10% of employed women with a severe or very severe disability were working in accommodation and food services, compared with 5% of women without a disability.

Lastly, differences in work activity could also be seen between people with and without a disability. Among both men and women, workers with a severe or very severe disability were less likely to have been employed full-time all year than other men and women. Among male workers with a severe or very severe disability, 13% had worked part-time all year, compared with less than 5% of those with a mild disability and less than 3% of those without a disability. It is not possible, however, to determine whether persons with disabilities are more likely to work part-time by choice.

As for the employment income of people who worked full-time all year, men with disabilities had an average income that was lower than that of men without a disability (\$49,200 for those with a severe or very severe disability, \$56,600 for those with a mild or moderate disability, and \$67,600 for those without a disability). These differences can be attributed in part to differences both in level of education and in occupation.<sup>12</sup>

# University graduates with disabilities and those without a disability had similar occupations

According to the results above, the employment rates of university graduates with a mild or moderate disability were close to the employment rates of university graduates without a disability. However, are they in the same types of occupations as their colleagues without a disability? Because of small sample sizes, it was not possible to distinguish university graduates with

a severe or very severe disability from those with a mild or moderate disability in the following analysis. The results, however, have been adjusted for differences in age structure.

There were a number of similarities between university graduates with and without a disability (Table 4). First, the proportion of university graduates with disabilities in professional occupations—or occupations usually requiring a university education—was virtually the same as that of university graduates without a disability (about 49% among men and 54% among women).

What primarily distinguished university graduates with disabilities, from an occupational skill perspective, was that men with disabilities were less likely to hold management positions (12%, compared with 20% of male university graduates without a disability). Among women, there was no significant difference in this regard.

University graduates with and without a disability also had similar results with respect to work activity in 2011. Among both men and women, most university graduates worked full-time all year, regardless of whether they had a disability or not.

More noticeable differences were found with respect to employment income. In particular, there was a relatively large difference in employment income among men—\$69,200 on average for

Table 4

Employment profile of men and women aged 25 to 64 with a university degree, by presence and severity of disability, adjusted for age, 2011

	Men		Wome	n
	No disability (ref.)	Disability	No disability (ref.)	Disability
		po	ercentage	
Job skill level				
Management	19.7	11.6 <sup>E*</sup>	11.9	11.2 <sup>E</sup>
Skill level A – Occupations that usually require a university education	48.5	48.5	54.4	54.1
Skill level B – Occupations that usually require a college education or an apprenticeship program	19.5	22.1 <sup>E</sup>	19.4	21.2
Skill level C – Occupations that usually require a high school education or job-specific training	10.0	13.3 <sup>E</sup>	12.0	10.8 <sup>E</sup>
Skill level D – Occupations for which on-the-job training is usually given	2.4	F	2.3	F
Work activity in 2011				
Part-time, part-year	4.5	4.4 <sup>E</sup>	10.3	13.9 <sup>E</sup>
Part-time, full-year	2.6	F	8.0	8.8 <sup>E</sup>
Full-time, part-year	22.1	15.6 <sup>E*</sup>	21.4	20.5
Full-time, full-year	70.7	73.3	60.3	56.8
Average employment income¹ (\$)	92,681	69,197*	68,041	64,503*

 $<sup>^{\</sup>star}$  significantly different from reference category (ref.) (p < 0.05)

Note: Persons employed during the 2011 National Household Survey (NHS) reference week.

Source: Statistics Canada, Canadian Survey on Disability, 2012.

male university graduates with disabilities, compared with \$92,700 among those without a disability. Among women, the difference in employment income was smaller, but still significant.

Although beyond the scope of this analysis, a number of factors may explain these differences. Examples include possible differences in occupation types and fields of study, years of experience in the labour market, productivity, or discriminatory attitudes. The CSD collected data on the respondents' perceptions of discriminatory attitudes they may have encountered, which are discussed in the following section.

### Perceptions of employment discrimination

Some employers may hesitate to hire persons with disabilities for various reasons, including a lack of knowledge about disability and accommodation issues, cost-related apprehensions, and legal obligations. Studies have also shown that numerous persons with disabilities perceived discriminatory attitudes from employers at the time of hiring or during employment. 14

A minority of persons with disabilities stated that they had been refused a job because of their condition (12%) over the last five years (Table 5). However, these perceptions varied by age, sex and severity of the disability.

Men with disabilities were slightly more likely to perceive employment discrimination than women (14% and 11%, respectively). If they were without a job, the difference increased significantly (22%, compared with 12% of women in the same situation).

Youth aged 25 to 34 with disabilities were also more likely to have perceived discrimination, as were those with a severe or very severe disability. Hence, 33% of persons aged 25 to 34 with a severe or very severe disability believed that they had been refused a job because of their condition. This compared with 16% of those aged 45 to 54 and 13% of those aged 55 to 64.

E use with caution

F too unreliable to be published

<sup>1.</sup> Full-time full-year workers with positive employment income.

Table 5
Perceptions of employment discrimination, persons with disabilities, 2012

In the last five years, do you believe that you have been refused a job because of your condition?

	Total	Men	Women
		percentage	
Total, employment situation	12.0	13.7	10.5
Employed (ref.)	10.0	10.5	9.6
Without a job	16.5*	21.9*	12.4
Mild or moderate disability			
25 to 34 (ref.)	13.0	19.0	7.8
35 to 44	11.3	11.6	11.1
45 to 54	7.0 <sup>E*</sup>	8.8E*	5.3
55 to 64	4.4 <sup>E*</sup>	4.8 <sup>E*</sup>	F
Severe or very severe disability			
25 to 34 (ref.)	32.6	37.1	29.0
35 to 44	23.1	27.3	20.7
45 to 54	16.3*	16.5 <sup>E*</sup>	16.1 <sup>E*</sup>
55 to 64	13.1 <sup>€*</sup>	16.4 <sup>E*</sup>	8.9 <sup>E*</sup>
Severe or very severe, without a job			
25 to 34 (ref.)	43.6	61.9	33.3 <sup>E</sup>
35 to 44	24.6 <sup>E*</sup>	30.5 <sup>E*</sup>	21.0 <sup>E</sup>
45 to 54	15.9 <sup>E*</sup>	22.3 <sup>E*</sup>	12.4 <sup>E*</sup>
55 to 64	16.6 <sup>E*</sup>	22.5 <sup>E*</sup>	11.0 <sup>E*</sup>

<sup>\*</sup> significantly different from the reference category (ref.) (p < 0.05)

**Note:** Only persons who were employed at least once in the last five years are included in this analysis.

Source: Statistics Canada, Canadian Survey on Disability, 2012.

Among young men aged 25 to 34 who were without a job and had a severe or very severe disability, these proportions were significantly higher—nearly two-thirds of them (62%) believed that they had been refused a job in the last five years because of their condition. This was two times higher than the same result among women with the same characteristics (33%). It is important to recall that these results are based on perceptions from survey respondents.

#### Conclusion

Like earlier studies on the same topic, this study illustrate that persons with disabilities are less likely to be employed, this time on the basis of the most recent data available. However, this study also presented additional findings that shed a new light on the labour force participation of persons with disabilities, who are a target group for a number of policies that relate to employment access and labour force participation.

First, persons with disabilities were less likely than persons without a disability to be employed, even after accounting for the fact that they are generally older and proportionally less likely to have completed a university degree.

Secondly, education significantly reduces the differences between persons with a mild or moderate disability and those without a disability. Among university graduates, persons with a mild or moderate disability had employment rates that were virtually the same as those of university graduates without a disability.

Even though there were a number of differences between persons with and without a disability in terms of employment characteristics (occupation, industry and hours), these differences were smaller among university graduates. Nevertheless, some differences existed between university graduates with and without a disability, most notably in terms of employment income (especially among men). Finally, the issue of employment discrimination was on the minds of a number of persons with disabilities, as 12% of them said that they had been refused a job because of their condition in the five years preceding the survey.

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<sup>&</sup>lt;sup>E</sup> use with caution

F too unreliable to be published

#### Data sources, methods and definitions

#### **Data sources**

This article is based on data from the 2012 Canadian Survey on Disability (CSD). The CSD is a survey of Canadian adults whose daily activities are limited because of a long-term condition or health-related problem.

The CSD is based on a social model of disabilities rather than a medical model. The social model is based on the premise that disability is the result of the interaction between a person's functional limitations and barriers in the environment, such as social and physical barriers, that make it harder to function on a daily basis. Thus, disability is a social disadvantage that an unsupportive environment imposes on an individual's impairment<sup>1</sup>.

#### **Methods**

The 2012 CSD was based on a sample of persons who reported an activity limitation on the 2011 National Household Survey (NHS) and who were aged 15 and over on the date of the NHS (May 10, 2011). The CSD makes it possible to validate the disability status and identify the type(s) of disability.

This study examined persons with disabilities who were aged 25 to 64 in 2011 (10,506 CSD respondents, representing 2,142,500 Canadians). These persons were compared with a sample of 69,176 respondents without a disability in the same age group, which represented 16,582,000 Canadians. In this article, most of the information, including the information on employment status, occupation, level of education and age, were collected as per the 2011 NHS.

Information on the final disability status (including severity) and information on experiences of discrimination were collected as per the 2012 CSD. The information collected in 2012 about disabilities could therefore be different from the situation that prevailed at the time of the collection of employment information (in 2011).

#### **Definitions**

#### Disability

To determine whether a person has a disability, disability screening questions (DSQ) were used in the CSD. The DSQ measure the type and severity of disabilities of Canadian adults by asking about how often respondents' daily activities are limited by long-term physical or mental conditions, health problems and task-based difficulties. Screening questions in the DSQ evaluate the presence and severity of I0 distinct types of disabilities related to a health problem or condition that has lasted or is expected to last for six months or more. Screening questions emphasize consistency of measurement across disability types. The questions address the following disability types: I. Seeing 2. Hearing 3. Mobility 4. Flexibility 5. Dexterity 6. Pain 7. Learning 8. Developmental 9. Mental/psychological 10. Memory.

For each of the 10 disability types, the DSQ always have at least one question on the associated level of difficulty (no difficulty, some difficulty, a lot of difficulty, cannot do) and one question on the frequency of the limitation of activities (never, rarely, sometimes, often, always). For a disability to be assigned to a particular type, the limitation frequency must be 'sometimes,' 'often' or 'always,' or 'rarely' combined with a difficulty level of 'a lot' or 'cannot do.'

#### Severity

A severity score was calculated for each person with a disability. A person's overall severity score is derived from the scores for the 10 disability types. The score is obtained by adding the severity scores for each type of severity together and dividing the sum by 10. By definition, the overall score is also a number between 0 and 1. Consequently, the more types of disability a person has, the higher his or her score will be. The score also increases with the level of difficulty associated with the disability and the frequency of the limitation of activities.

Four severity classes were established based on the overall severity score—mild, moderate, severe and very severe. In the population of 25- to 64-year-olds, 31% had a mild disability, 19%, a moderate disability, 23%, a severe disability and 27%, a very severe disability.

<sup>1.</sup> See MacKenzie et al. (2009).

#### Youth with disabilities and employment

Many young adults and the vast majority of 15- to 19-year-olds attend school or study full-time, regardless of whether they have a disability. While some have a job during the school year or in summer, others prefer to focus on their full-time studies. Thus, in this population, it is important to examine employment status together with school participation.

Among 15- to 19-year-olds, approximately 6 in 7 youth had attended school at one time or another in 2010/2011 (Table A.I). This proportion was about the same for youth aged 15 to 19 with a mild or moderate disability as for those without a disability (approximately 85%).

Table A.1
School attendance and employment experience of young persons aged 15 to 24, by severity of disability, 2011

	Attended school between September 2010 and May 2011	Worked in 2010 or 2011	Did not attend school between September 2010 and May 2011 and did not work in 2010 or 2011 <sup>1</sup>
		percentage	
15 to 19			
No disability (ref.)	85	57	5
Mild or moderate disability	85	44*	8 <sup>E*</sup>
Severe or very severe disability	74	35*	12 <sup>E*</sup>
20 to 24			
No disability (ref.)	54	87	5
Mild or moderate disability	46*	73*	17 <sup>E*</sup>
Severe or very severe disability	31 <sup>E*</sup>	48*	34 <sup>E*</sup>

 $<sup>^{\</sup>star}$  significantly different from the reference category (ref.) (p < 0.05)

Source: Statistics Canada, Canadian Survey on Disability, 2012.

Differences in employment participation between youth with and without a disability were larger than differences in school attendance. Among youth aged 15 to 19, 35% of those with a severe or very severe disability had been employed at one time or another between January 2010 and May 2011, compared with 44% of those with a mild or moderate disability and 57% of those without a disability. Among 20- to 24-year-olds, 48% of those with a severe or very severe disability had been employed at one time or another, compared with 73% of those with a mild or moderate disability and 87% of those without a disability.

Various circumstances may result in youth aged 15 to 24 attending school or being employed during the school year. Such circumstances are not necessarily related to discrimination or social exclusion, as they can also be the result of personal preferences. Therefore, from a participation and social integration perspective, another important measure is the proportion of youth who were neither enrolled nor employed during the year.<sup>1</sup>

About 5% of youth aged 15 to 19 without a disability were in that situation. The proportion was higher among those with disabilities, but it was still a minority was neither enrolled nor employed (8% of those with a mild or moderate disability and 12% of those with a severe or very severe disability). These results can be explained by the relatively strong school attendance of youth aged 15 to 19, regardless of whether they had a disability and whether the disability was more or less severe.

However, the picture was different for 20- to 24-year-olds, for whom lower school attendance does not necessarily translate into a greater labour force participation. In this age group, 5% of youth without a disability had been neither enrolled nor employed from 2010 to May 2011. By comparison, that was the case for 17% of those with a mild or moderate disability and 34% of those with a severe or very severe disability.

<sup>&</sup>lt;sup>E</sup> use with caution

<sup>1.</sup> Including persons who have never been employed.

<sup>1.</sup> See Marshall (2012) for additional information on youth who are neither enrolled nor employed.

#### **Notes**

- See Statistics Canada (2008) and Brown and Emery (2010).
- 2. See Jones (2008) and Holland et al. (2011).
- 3. For example, see Dooley et al. (1996).
- 4. See Government du Canada (2012).
- 5. See Government du Canada (2010).
- 6. Previous data have illustrated the difficulties they encounter in the labour market. See Statistics Canada (2008).
- 7. In the CSD, persons with disabilities who were not in the labour force were asked whether certain barriers were discouraging them from seeking employment. Slightly more than I in 5 people said that past attempts to find work had failed.
- 8. An American study based data from the 2006 U.S. General Social Survey showed, for example, that among those with disabilities who did not have a job, 80% wanted to be employed. See Ali et al. (2011).

- 9. In 2011, for example, 59% of all individuals aged 55 to 64 were employed, compared with 80% of those aged 45 to 54.
- 10. A disability starting later in life had no effect on educational attainment. For example, persons with disabilities aged 25 to 64 whose disability started before the age of 25 were as likely to be university graduates as those whose disability started later in life (13% to 14%).
- II. The other factors associated with employment for persons with disabilities were sex, age group (lower level of employment among 55- to 64-year-olds), Aboriginal self-identification, living arrangements and province of residence.
- 12. While 9% of persons with a severe or very severe disability had a university degree, this was the case for 18% of those with a moderate or mild disability and 27% of those without a disability.
- 13. See Kaye et al. (2011).
- 14. See Cook (2006) and Wilson-Kovacs et al. (2008).

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