### Reports on Disability and Accessibility in Canada

## Time use among persons with disabilities in Canada

by Christina Kevins, Robin Pianosi and Susan Wallace

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### Time use among persons with disabilities in Canada

by Christina Kevins, Robin Pianosi and Susan Wallace

### Overview of the study

This study uses the 2015 General Social Survey on Time Use to examine the time spent on various activities by persons with and without disabilities aged 15 and over in Canada. The paper focuses on five types of activities: personal activities, paid and unpaid work, transportation, socializing or communicating, and leisure activities. It examines the time spent on these activities by sex and by age group. Finally, this study also provides comparisons of stress levels and perceptions of time among persons with and without disabilities.

- In 2015, persons with disabilities spent more time on average on personal activities, such as sleep and personal care than persons without disabilities (11.1 vs. 10.7 hours a day).
- Persons with disabilities were less likely than persons without disabilities to participate in paid work
  activities on a typical day (33.8% vs. 45.3%). Among those who participated in paid work activities,
  persons with disabilities also spent less time on these activities (7.6 hours a day) than persons without
  disabilities did (7.8 hours).
- Persons with disabilities were more likely than persons without disabilities to engage in unpaid work
  activities on a typical day (86.1% vs. 83.5%). Among those who engaged in unpaid work activities,
  persons with disabilities also spent more time on these activities (3.6 hours a day) than persons without
  disabilities did (3.5 hours).
- Persons with disabilities (77.6%) were less likely to engage in transportation to and from an activity, compared with persons without disabilities (83.1%).
- Men and women with disabilities spent their time in different ways, mirroring trends seen in the general population. For example, women with disabilities spent more time on unpaid work activities and less time on paid work and leisure activities than men with disabilities.
- Age was also a factor that affected time use among persons with disabilities. Among those who
  engaged in socializing or communicating, older persons with disabilities spent less time on these
  activities than younger persons with disabilities.
- Persons with disabilities were almost twice as likely as persons without disabilities to report that most
  days are quite a bit or extremely stressful (23.4% vs. 11.9%). Among those who reported experiencing
  at least a bit of stress on most days, persons with disabilities were more than ten times as likely as
  persons without disabilities to report that their main source of stress was related to their health (13.8%
  vs. 1.1%).

#### Introduction

According to the 2017 Canadian Survey on Disability, 22% of the Canadian population aged 15 years and over – or about 6.2 million individuals – had one or more disabilities. Examining how persons with disabilities in Canada spend their time is one way of identifying barriers to inclusion and equity faced by this population. For example, similar time use studies have highlighted discrepancies between men and women in terms of time spent on paid and unpaid work activities as a potential barrier to women's participation in leisure activities<sup>1</sup>, which is a key aspect to maintaining overall well-being and supporting good mental health.

Previous studies analyzing disability and time use have shown that persons with disabilities spend less time on paid work activities and more time on leisure activities than persons without disabilities.<sup>2</sup> However, this research has also shown that the kind of leisure activities that persons with disabilities engage in are typically more passive, unstructured and socially isolated than the types of leisure activities that persons without disabilities tend to participate in.<sup>3</sup>

This article uses data from the 2015 General Social Survey (GSS) on Time Use to examine how persons with disabilities spend their days. The first part of this paper includes an analysis of time use among persons with and without disabilities, disaggregated by sex<sup>4</sup> and age groups. The second section of the paper adds to the existing research by examining differences in levels of stress and perceptions of time among persons with and without disabilities.

# Persons with disabilities spend more time on sleep and personal care activities than persons without disabilities

Personal activities—including sleeping, personal care, and eating or drinking—are required to maintain overall health and well-being. Previous research has shown that persons with disabilities require more time for personal activities, and that this extra time required can be a barrier to inclusion and equity for persons with disabilities.<sup>5</sup>

In 2015, persons with disabilities were more than twice as likely as persons without disabilities to participate in medical care activities, such as health professional visits and self-administered medical care, on a given day (9.7% vs. 3.9%). However, persons with disabilities were less likely than those without disabilities to engage in other kinds of personal care activities—including personal hygiene, praying, spiritual activities, meditating, and sexual activities (79.6% vs. 82.4%). Furthermore, persons with disabilities spent more time on average on personal activities than persons without disabilities (11.1 vs. 10.7 hours). This difference was driven by more time spent on sleeping and personal care activities among persons with disabilities (Table 1).

Table 1
Participation rate and time spent on personal activities, persons with and without disabilities aged 15 and over, 2015

	Participat	Participation rate		Average time spent (participants)	
	Persons without disabilities (ref.)	Persons with disabilities	Persons without disabilities (ref.)	Persons with disabilities	
	perc	ent	hou	rs	
Personal activities	100.0	100.0	10.7	11.1*	
Sleeping	99.9	99.9	8.6	8.9*	
Personal care	83.0	81.5	1.0	1.1*	
Medical care	3.9	9.7*	1.4	1.2	
Other personal care	82.4	79.6*	0.9	1.0*	
Eating or drinking	85.4	84.2	1.5	1.5	

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

Moyser and Burlock (2018); Arriagada (2018).

<sup>2.</sup> Shandra (2018); Wilson et al. (2017); Anand and Ben-Shalom (2014); Pagán (2013).

<sup>3.</sup> O'Flaherty et al. (2022); Shandra (2021).

<sup>4.</sup> In 2015, the GSS only collected information on sex of respondent (male or female). The next Time Use cycle of the GSS is currently in collection, and it includes a question about gender identity, in addition to sex at birth.

Anand and Ben-Shalom (2014).

When personal activities were examined by sex and by age group, there were no differences in the participation rates for persons with and without disabilities. However, women with disabilities spent more time on personal activities than women without disabilities (11.2 vs 11.0 hours) and men with disabilities spent more time on these activities than men without disabilities (10.8 vs. 10.5 hours). Similarly, among those aged 25 years and older, persons with disabilities spent more time on sleep and personal care activities than persons without disabilities, regardless of the age bracket. This indicates that disability may play a greater role in time spent on personal activities than either sex or age.

# Persons with disabilities are less likely to perform paid work and more likely to perform unpaid work than persons without disabilities

Previous research has shown that persons with disabilities are less likely than persons without disabilities to be employed. Furthermore, among those who are employed, persons with disabilities are more likely to be employed part-time. Time use data from 2015 supports these findings, as 33.8% of persons with disabilities participated in paid work activities on a given day, compared to 45.3% of persons without disabilities. Paid work activities include paid work, looking for work, other income-generating activities, paid training and selling of goods or services. Among those who participated in paid work activities, persons with disabilities also spent less time on these activities than persons without disabilities (7.6 vs. 7.8 hours).

In addition, when paid work was examined by sex, the overall participation trends among persons with and without disabilities persisted. That is, men and women with disabilities were less likely than men and women without disabilities to engage in paid work (Table 2). However, among men and women, time spent on paid work did not differ by disability status. Similarly, when analyzed by age group, persons with disabilities were less likely than persons without disabilities in the same age ranges to perform paid work (Table 2). However, among those who engaged in paid work, there were no statistically significant differences in the amount of time spent on paid work.

Furthermore, among persons with disabilities, participation in paid work followed trends seen for the general population, as men participated at a higher rate and spent more time engaged in paid work than women.<sup>7</sup> Nearly four out of ten men with disabilities (38.4%) performed paid work on a given day, compared with three out of ten (30.2%) women with disabilities. Among those who engaged in paid work, men with disabilities spent more time on these activities than women with disabilities (7.9 vs. 7.3 hours).

Table 2
Participation rate and time spent on paid and unpaid work activities, persons with and without disabilities aged 15 and over, by demographic characteristics, 2015

	Paid work activities		Unpaid work activities	
	Persons without disabilities (ref.)	Persons with disabilities	Persons without disabilities (ref.)	Persons with disabilities
Participation rate		perc	ent	
Total	45.3	33.8*	83.5	86.1 *
Sex				
Men	49.8	38.4*	78.7	82.0*
Women	40.4+	30.2*+	88.7+	89.3+
Age group				
15 to 24 years	36.1	27.3*	61.6	68.2
25 to 44 years	59.1	49.3*	86.5	85.0
45 to 64 years	53.3	41.2*	88.2	89.2
65 years and older	11.0	6.6*	90.7	91.8
Average time spent (participants)		hou	ırs	
Total	7.8	7.6*	3.5	3.6*
Sex				
Men	8.1	7.9	3.0	3.1
Women	7.4+	7.3 +	4.0 +	4.0 +

<sup>6.</sup> Morris et al (2018); Turcotte (2014).

Moyser and Burlock (2018); Arriagada (2018).

Table 2
Participation rate and time spent on paid and unpaid work activities, persons with and without disabilities aged 15 and over, by demographic characteristics, 2015

	Paid work a	Paid work activities		activities
	Persons without disabilities (ref.)	Persons with disabilities	Persons without disabilities (ref.)	Persons with disabilities
Participation rate		hou	irs	
Age group				
15 to 24 years	7.2	7.0	2.0	2.2
25 to 44 years	8.0	7.8	3.7	3.7
45 to 64 years	8.1	7.8	3.6	3.8*
65 years and older	6.2	6.4	3.9	3.9

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

Source: Statistics Canada, General Social Survey, 2015.

While there have been many studies examining paid work and persons with disabilities, less is known regarding participation in and time spent on unpaid work activities for this population. Time use data shows that in 2015, persons with disabilities were more likely than those without disabilities to participate in unpaid work activities on a given day (86.1% vs. 83.5%). Unpaid work activities include performing household chores or maintenance, caring for children or other adults, and shopping for goods or services. Among those who participated in unpaid work activities, persons with disabilities also spent more time on average on these activities than persons without disabilities (3.6 vs. 3.5 hours).

When unpaid work activities were examined by sex, men with disabilities were more likely than men without disabilities to engage in unpaid work activities (82.0% vs. 78.7%), however, there were no statistically significant differences in the amount of time spent on these activities among men with and without disabilities. On the other hand, women with and without disabilities participated in unpaid work activities at similar rates (89.3% and 88.7%, respectively) and there were no significant differences between women with and without disabilities in terms of the amount of time spent on these activities (Table 2).

When analyzed by age group, persons with and without disabilities engaged in unpaid work activities at similar rates across all age groups. However, among those aged 45 to 64 years, persons with disabilities spent more time than persons without disabilities performing unpaid work (3.8 vs. 3.6 hours).

Among persons with disabilities, participation in unpaid work activities followed trends seen for the general population, as women participated at a higher rate and spent more time engaged in unpaid work activities than men.<sup>8</sup> Specifically, almost nine out of ten women with disabilities (89.3%) performed unpaid work on a given day, compared with just over eight out of ten (82.0%) men with disabilities. Among those who engaged in unpaid work activities, women with disabilities also spent more time on these activities than men with disabilities (4.0 vs. 3.1 hours).

# Persons with disabilities are less likely to participate in transportation activities than those without disabilities

Previous research has shown that persons with disabilities experience barriers related to transportation<sup>9</sup>, and they may require specialized transportation services.<sup>10</sup> Time use data from 2015 supports these findings, as persons with disabilities (77.6%) had lower rates of participation in transportation to and from an activity, compared with persons without disabilities (83.1%).

When looking at different types of transportation, persons with disabilities had lower rates of participation in both private vehicle transport (as a driver or a passenger) (66.1%) and active transport, that is, walking or bicycling (11.9%) than their counterparts without disabilities (71.8% and 13.5%, respectively). There was no statistically significant difference in the participation rate for public transport<sup>11</sup> between persons with and without disabilities. Furthermore, among those who participated in transportation activities, the amount of time spent on these activities did not differ for persons with and without disabilities (Table 3).

<sup>+</sup> significantly different from the estimate for men with the same disability status (p < 0.05)

<sup>8.</sup> Moyser and Burlock (2018); Arriagada (2018).

<sup>9.</sup> McDiarmid (2021).

<sup>10.</sup> Choi (2021).

<sup>11.</sup> Public transport includes bus, street cars, metro, airplane, taxi, limousine service, boat, ferry.

Table 3
Participation rate and time spent on transportation to and from activities, persons with and without disabilities aged 15 and over, 2015

	Participation rate		Average time spent (participants)		
	Persons without disabilities (ref.)	Persons with disabilities	Persons without disabilities (ref.)	Persons with disabilities	
	perce	percent		hours	
Transport to or from activity	83.1	77.6*	1.5	1.5	
Private vehicle	71.8	66.1*	1.4	1.4	
Active transport	13.5	11.9*	0.7	0.7	
Public transport	9.7	8.9	1.6	1.6	
Other	0.8 <sup>E</sup>	0.9 <sup>E</sup>	1.5	1.4 <sup>E</sup>	

E use with caution

Source: Statistics Canada, General Social Survey, 2015.

In addition, when transportation activities were examined by sex and by age groups, the results reflected the overall findings among persons with and without disabilities. That is, regardless of sex or age, persons with disabilities were less likely than persons without disabilities to engage in transportation activities, but among those who did participate in these activities, the amount of time spent did not differ by disability status. Differences in the participation rates between persons with and without disabilities for transportation activities may point to inequitable access to certain kinds of transportation for persons with disabilities.

# Persons with disabilities are more likely to spend time socializing or communicating than persons without disabilities

Persons with disabilities (39.7%) were more likely than those without disabilities (37.5%) to spend time socializing or communicating, either in person or using any type of technology. However, the amount of time spent on these activities did not vary by disability status.

In addition, women with disabilities were more likely than men with disabilities to participate in socializing or communicating (42.2% vs. 36.5%), which mirrors previous findings for the overall population.<sup>13</sup> In contrast, when examined among women and men, there was no significant difference in the participation rates for socializing or communicating by disability status. This indicates that differences in the overall participation rates among persons with and without disabilities are likely driven by sex rather than disability status.

Table 4
Participation rate and time spent on socializing or communicating, persons with and without disabilities aged 15 and over, by demographic characteristics, 2015

	Participati Participati	Participation rate		Average time spent (participants)	
	Persons without disabilities (ref.)	Persons with disabilities	Persons without disabilities (ref.)	Persons with disabilities	
	perce	nt	hour	S	
Total	37.5	39.7 *	2.3	2.3	
Sex					
Men	34.2	36.5	2.5	2.4	
Women	41.0+	42.2+	2.2+	2.3	
Age group					
15 to 24 years	38.1	39.8	2.5	2.5	
25 to 44 years	34.5	39.0 *	2.4	2.6	
45 to 64 years	38.0	40.0	2.2	2.3	
65 years and older	42.0	39.9	2.4	2.1 *	

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

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

 $<sup>+\</sup>mbox{ significantly different from the estimate for men with the same disability status (p <math display="inline"><0.05)$ 

<sup>12.</sup> Examples of technology given in the 2015 GSS included phone, email, social media, or Skype.

<sup>13.</sup> Moyser and Burlock (2018); Arriagada (2018).

Furthermore, when examined by age group, persons with and without disabilities were equally likely to participate in socializing or communicating, with the exception of those aged 25 to 44 years. Among this age group, persons with disabilities were more likely to participate in socializing or communicating than those without disabilities (39.0% vs. 34.5%). Among those who participated in these activities, the average amount of time spent on them did not differ by disability status within most age groups. However, among those aged 65 years and older, persons with disabilities spent less time socializing or communicating than persons without disabilities (2.1 vs. 2.4 hours).

While the participation rate for socializing or communicating was similar across age groups among persons with disabilities, the average amount of time spent on these activities appears to decrease with age. This was not the case for persons without disabilities, who spent a similar amount of time socializing or communicating regardless of their age. However, among persons without disabilities, those aged 25 to 44 years and 45 to 64 years were less likely to engage in these activities than those aged 65 years and older (Table 4).

# Persons with disabilities are less likely to engage in sports, exercise or outdoor activities than persons without disabilities

In addition to the activities presented above, it is also important to examine different types of leisure activities, as they may play a role in health, well-being and equitable participation in society. For example, some activities can help maintain physical and social capabilities and promote health, while others are less beneficial as they are more sedentary and can be more socially isolating.

For the purposes of this paper, leisure activities have been broken down into the following four categories: sports, exercise or outdoor activities; entertainment or cultural events; active leisure activities; and passive leisure activities (see the Data sources, methods and definitions section for a detailed list of variables that make up each of these categories).

Overall, persons with and without disabilities were equally likely to participate in leisure activities, however, they engaged in different types of leisure activities. Specifically, persons with disabilities were less likely than those without disabilities to participate in sports, exercise or outdoor activities (15.0% vs. 21.2%), but they were more likely to participate in active leisure activities—including arts and hobbies, writing, and use of technology for recreation (43.5% vs. 41.1%). Persons with and without disabilities were equally likely to engage in entertainment or cultural events and passive leisure activities—including reading, watching television or videos, and listening to music or radio.

Among those who participated in leisure activities, persons with disabilities spent more time on them overall than persons without disabilities (4.9 vs. 4.3 hours). This difference is driven by the fact that persons with disabilities spent more time than persons without disabilities on active and passive leisure activities (2.7 vs. 2.4 hours and 3.7 vs. 3.1 hours, respectively).

Table 5
Participation rate and time spent on leisure activities, persons with and without disabilities aged 15 and over, by sex, 2015

	Both sexes		Mei	Men		Women	
	Persons without disabilities (ref.)	Persons with disabilities	Persons without disabilities (ref.)	Persons with disabilities	Persons without disabilities (ref.)	Persons with disabilities	
Participation rate			perce	ent			
Leisure activities	87.4	87.1	88.2	86.8	86.6	87.4	
Sports, exercise or outdoor activities	21.2	15.0*	22.4	17.3*	19.9+	13.3*+	
Entertainment or cultural events	3.2	3.5	2.9	3.0	3.5	4.0	
Active leisure activities	41.1	43.5*	41.6	44.7	40.6	42.5	
Passive leisure activities	73.9	74.6	74.3	72.8	73.5	76.0	
Average time spent (participants)			hou	rs			
Leisure activities	4.3	4.9*	4.6	5.4*	4.0 +	4.5*+	
Sports, exercise or outdoor activities	1.8	1.7	2.0	1.9	1.5+	1.4 +	
Entertainment or cultural events	2.8	2.6	2.9	2.7	2.6	2.5	
Active leisure activities	2.4	2.7*	2.7	3.0*	2.1+	2.4*+	
Passive leisure activities	3.1	3.7*	3.2	4.0*	3.0+	3.4*+	

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

<sup>+</sup> significantly different from the estimate for men with the same disability status (p < 0.05)

Among persons with disabilities, women were less likely than men to participate in sports, exercise or outdoor activities (13.3% vs. 17.3%). Women with disabilities also spent significantly less time than men with disabilities on leisure activities overall (4.5 vs. 5.4 hours). This difference mirrors the results for persons without disabilities, but the gap among men and women with disabilities is even greater. Women with disabilities also spent less time than their male counterparts on sports, exercise or outdoor activities (1.4 vs. 1.9 hours), active leisure activities (2.4 vs. 3.0 hours) and passive leisure activities (3.4 vs. 4.0 hours).

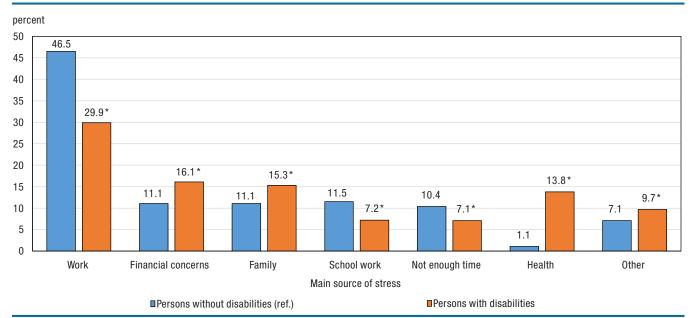
For the most part, differences in the participation rates and time spent on leisure activities among persons with and without disabilities persisted across age groups. However, there was no statistically significant difference in the participation rate in active leisure activities among persons with and without disabilities, except for those aged 25 to 44 years (40.3% vs. 36%). Furthermore, persons with disabilities spent more time on leisure activities than persons without disabilities among those aged 25 to 44 years (3.9 vs. 3.3 hours) and those aged 45 to 64 years (4.6 vs. 4.1 hours). However, among those aged 15 to 24 years and those aged 65 years and older, persons with and without disabilities spent a similar amount of time on leisure activities.

# Persons with disabilities are almost twice as likely as persons without disabilities to experience high levels of stress

In addition to examining participation in and time spent on selected activities, the 2015 GSS asked a series of questions about stress and perceptions of time. Persons with disabilities were almost twice as likely as persons without disabilities to report that most days are quite a bit or extremely stressful (23.4% vs. 11.9%). Furthermore, while men and women without disabilities were similarly likely to report high levels of stress (11.4% and 12.4%), women with disabilities (24.8%) were more likely than men with disabilities (21.7%) to report the same.

These differences in levels of stress highlight inequities between persons with and without disabilities, as stress has long been shown to have a negative impact on health, including long-term impacts on physical and mental health.<sup>14</sup> More recent evidence collected during the COVID-19 pandemic showed that high levels of stress can have a significant impact on mental health.<sup>15</sup> The higher levels of stress experienced by persons with disabilities could have long-term consequences for their health and well-being.

Chart 1
Main source of stress, persons with and without disabilities aged 15 and over, 2015



<sup>\*</sup> significantly different from reference category (p < 0.05) **Source:** Statistics Canada, General Social Survey, 2015.

<sup>14.</sup> Shields (2004).

<sup>15.</sup> Yang, Dorrance and Aitken (2020); Guerrero and Barnes (2022).

Among those who reported experiencing at least a bit of stress on most days, the main source of stress also differed significantly for those with and without disabilities. For example, persons with disabilities were more likely than persons without disabilities to report that their main source of stress was related to financial concerns (16.1% vs. 11.1%), family (15.3% vs. 11.1%) and health (13.8% vs. 1.1%). In contrast, persons with disabilities were less likely than those without disabilities to report that their main source of stress was due to not having enough time, work and school work (Chart 1).

Among persons with disabilities, men were more likely than women to report that their main source of stress was related to work (34.3% vs. 26.8%) or health (15.9% vs. 12.3%). In contrast, women with disabilities were twice as likely as men to report that family was their main source of stress (19.6% vs. 9.1%). The main source of stress differed significantly across age groups, with youth aged 15 to 24 years more likely to report school work as their primary source of stress, and those aged 25 to 64 more likely to report work and financial concerns as their primary source of stress. However, this was the case for both persons with and without disabilities, and the overall differences among persons with and without disabilities persisted across age groups.

### Two out of five persons with disabilities feel trapped in their daily routine

Persons with disabilities were more likely than those without disabilities to report that, at the end of the day, they often feel that they have not accomplished what they had set out to do (51.8% vs. 36.5%). Persons with disabilities were also more likely than those without disabilities to report feeling: stress when they do not have enough time (59.9% vs. 49.7%), trapped in their daily routine (42.5% vs. 28.9%), constantly under stress (45.1% vs. 29.4%), that they do not spend enough time with family or friends (40.5% vs. 32.3%), that they have no time for fun (34.4% vs. 22.7%) and that they would like more time alone (25.9% vs. 20.2%).

These differences in perceptions of time among persons with and without disabilities persisted when analyzed by sex and by age group. Additionally, women were generally more likely than men to report negative perceptions of time, regardless of disability status. However, there were some notable exceptions to these patterns. For example, among persons with disabilities, women were more likely than men to report feeling that they have no time for fun (36.0% vs. 32.3%), whereas there was no significant difference in the likelihood of men and women without disabilities feeling that they have no time for fun. (Table 6).

Table 6
Perceptions of time, persons with and without disabilities aged 15 and over, by sex, 2015

. , , ,			, , ,				
	Both sexes		Mei	Men		Women	
	Persons without disabilities (ref.)	Persons with disabilities	Persons without disabilities (ref.)	Persons with disabilities	Persons without disabilities (ref.)	Persons with disabilities	
Perceptions of time			perce	ent			
Plans to slow down	16.1	22.2*	15.0	19.5*	17.4+	24.3*+	
Workaholic	25.8	26.6	28.0	26.9	23.4+	26.3*	
Tends to cut back on sleep	46.0	46.4	46.7	45.6	45.2	46.9	
Not accomplishing what you set out to do	36.5	51.8*	34.4	48.9*	38.8+	54.0*+	
Not spending enough time with family or friends	32.3	40.5*	33.6	40.2*	30.9+	40.7*	
Constantly under stress	29.4	45.1*	27.8	41.0*	31.0+	48.4*+	
Trapped in daily routine	28.9	42.5*	29.0	41.5*	28.9	43.4*	
No time for fun	22.7	34.4*	22.0	32.3*	23.5	36.0*+	
Stress when there is not enough time	49.7	59.9*	46.2	54.9*	53.4+	63.8*+	
Would like more time alone	20.2	25.9*	17.1	22.6*	23.6+	28.6*+	

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

<sup>+</sup> significantly different from the estimate for men with the same disability status (p < 0.05)

#### Conclusion

In Canada, over one fifth of the population aged 15 years and older has one or more disabilities. Understanding this unique population and the challenges some may face in their daily lives has important implications on all facets of society, including informing government policy, employment and education support services, and disability-based outreach programs within the community. Examining the patterns and factors associated with time use can shed light on some of the barriers experienced by persons with disabilities in Canada.

This paper shows that persons with and without disabilities spend their time in different ways. For example, persons with disabilities are more likely than persons without disabilities to participate in unpaid work activities, socializing or communicating, and active leisure activities, such as arts and hobbies on a given day. In contrast, persons with disabilities are less likely than those without disabilities to engage in transportation to or from an activity, paid work activities, and sports, exercise or outdoor activities.

The findings also highlight differences in the amount of time spent on certain activities by persons with and without disabilities. In particular, among those who participated in personal activities, unpaid work activities, and active and passive leisure activities, persons with disabilities spent more time on these activities on average than persons without disabilities. Conversely, among those who participated in paid work activities, persons with disabilities spent less time on these activities than persons without disabilities.

The findings also show that men and women with disabilities spend their time in different ways, mirroring trends seen in the general population. For example, men with disabilities had a higher participation rate in paid work activities than women with disabilities. And among persons with disabilities who participated in paid work activities, men spent more time on these activities than women. Conversely, women with disabilities had a higher participation rate in and spent more time on unpaid work activities than men with disabilities.

Finally, this study also shows that persons with and without disabilities experience time differently, as persons with disabilities are more likely than persons without disabilities to experience high levels of stress and to have negative perceptions of time. Further research with the forthcoming GSS Time Use cycle will seek to better understand how disability, sex, age and other sociodemographic factors influence time use and perceptions of time.

### Data sources, methods and definitions

#### **Data sources**

The General Social Survey (GSS) on Time Use is a cross-sectional survey whose target population consists of non-institutionalized persons aged 15 and over living in the 10 provinces. While the GSS is collected every year on different themes, time use is generally measured every five years. This study examines data from Cycle 29 (2015).

A 24-hour diary was used to retrospectively collect all the activities a respondent did on a designated day starting at 4:00 a.m. and ending at 4:00 a.m. the next day. All activities lasting at least 10 minutes were recorded. For each activity, additional information was also gathered to provide a better picture of how long the activity lasted, where it happened, and who was present during the activity. For the purposes of this paper, only primary (or main) activities are included in the analyses. Data constraints meant it was necessary to combine activities for the analysis, and therefore this study focuses on larger categories of activities.

Persons with disabilities were identified from their responses to the <u>short version</u> of the Disability Screening Questions (DSQ), which was included in the 2015 GSS. For more information on the development and content of the different versions of the DSQ, please see <u>A New Survey Measure of Disability: the Disability Screening Questions (DSQ) (statcan.gc.ca).</u>

#### **Definitions**

**Reference day and average:** During data collection for the General Social Survey on Time Use, the sample was uniformly distributed across the year in order to get time use diaries for each day of the week and for all months of the year. The average day concept reflects the average participation rate and time allocated to the different activities for all days of the week across the year for a given population.

**Participation rates:** Participation rates can be described as the proportion of persons who reported having done an activity on an average day.

Activity codes in the General Social Survey on Time Use 2015				
Category	Activities included			
	1) Sleeping			
	Sleeping, napping, resting, relaxing, sick in bed			
	2) Personal care			
	Medical care			
	▶ Health professional visit, consultation			
Sleep and personal activities	<ul> <li>Self-administered medical care (taking blood pressure, sugar level, medication, treatment)</li> </ul>			
	Other personal care			
	<ul><li>Personal hygiene, praying, spiritual activities, meditating, sexual activities</li></ul>			
	3) Eating or drinking			
	Meals, snacks, drinks			
	Break or lunch			
	Paid work			
	Looking for work			
Paid work activities	Other income-generating activities			
	Paid training			
	Selling of goods or services			
	Schooling full time/part time - on site			
Studying or learning	Schooling full time/part time - online			
Studying or learning	Homework or studying			
	Self-development or leisure and special interest classes			
	1) Private vehicle			
	Includes driver or passenger			
	2) Active transport			
	Includes walking or bicycle			
Transport to or from activity	3) Public transport			
	<ul> <li>Includes bus, street cars, metro, airplane, taxi, limousine service, boat, or ferry</li> </ul>			
	4) Other transport			
	Includes all other forms of transportation			

Category	Activities included
	1) Household chores or maintenance
	Meal preparation
	▶ Preparing meals, lunch and snacks
	► Preserving foods (baking, freezing, sealing and packing foods)
	Interior cleaning or maintenance
	► Indoor house cleaning, dishwashing and tidying up
	► Laundry, ironing, folding, sewing and shining shoes
	Exterior cleaning or maintenance
	► Taking out garbage, recycling, composting and unpacking goods
	► Repairing, painting and renovating
	<ul> <li>Outdoor maintenance (car repair, ground maintenance, snow removal and grass cutting)</li> </ul>
	Other household chores
	► Organizing, planning and paying bills
	<ul> <li>Unpacking groceries, packing and unpacking luggage for travel and/or boxes for a move</li> </ul>
	<ul> <li>Planting (picking), maintaining, cleaning garden and caring for houseplants</li> </ul>
	► Pet care (feeding, walking, grooming, playing)
	2) Caring for others
Unpaid work activities	Care of household children under 18 years
onpaid work activities	<ul> <li>Personal care, getting ready for school, supervising or helping with homework, reading, playing, reprimanding, educational, emotional help</li> </ul>
	<ul> <li>Accompanying to or from school, bus stop, sports, activities, parent school meetings or appointments</li> </ul>
	Care of household adults
	► Washing, dressing, care giving, financial management
	► Accompanying to or from appointments, shopping
	Care for others outside the home
	<ul> <li>Caring for a child from another household (supervision, feeding, talking, accompanying)</li> </ul>
	► Caring for an adult from another household
	<ul> <li>Preparing meals, cleaning, care giving, financial and household management, indoor or outdoor maintenance</li> </ul>
	► Accompanying to or from appointments, shopping
	<ul> <li>Helping relatives, friends, neighbours, acquaintances (excluding care giving)</li> </ul>
	3) Shopping for goods or services
	Shopping for or buying goods (gasoline, groceries, clothing, car)
	<ul> <li>Shopping for services (legal services, financial services, vehicle maintenance)</li> </ul>
	Researching for goods or services

Category	Activities included
Conjelining	Socializing and communicating in person
Socializing or communicating	<ul> <li>Socializing and communicating using any type of technology (phone, email, social media, Skype)</li> </ul>
	Organizational activities
	Voluntary work
Civic, religious and organizational activities	Religious activities
organizational activities	Civic participation (voting, jury duty)
	Coaching and administering sports
	1) Sports, exercise or outdoor activities
	Exercising
	Organized recreational sports
	Competitive sports (indoor or outdoor)
	<ul> <li>Outdoor sports (non-competitive: skiing, skating, swimming, tennis, football, baseball)</li> </ul>
	Outdoor activities (fishing, hunting)
	2) Entertainment or cultural events
	<ul> <li>Attending cinema, exhibitions, library, concerts, theatre, entertainment events</li> </ul>
	Attending sporting events
Sports, events, leisure,	Visiting museums, art galleries, heritage sites, zoos, observatories
hobbies or downtime	3) Active leisure
	<ul> <li>Arts and hobbies (drawing, painting, crafting, playing an instrument, dancing, collecting, knitting, photography, board and card games, gambling)</li> </ul>
	Leisure activities (walking, pleasure driving, birdwatching)
	Writing (letters, cards, books, poems)
	<ul> <li>Use of technology (general computer use, video games, Internet, art or music production)</li> </ul>
	4) Passive leisure
	Reading (online or paper version books, periodicals, newspaper, letters)
	Watching television or videos
	Listening to music or radio
Other or unknown activity	Other activity (waiting time, free time, insomnia, thinking, smoking)
Other or unknown activity	Uncodable / Unknown activity

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