

BROWN ECONOMIC CONSULTING INC.

March 2007 Volume Four-Issue 3

www.browneconomic.com

PARTICIPATION AND ACTIVITY LIMITATION SURVEY ("PALS")

By: Cara L. Brown, MA and Sarah Tomlinson, BA (Honours)

In 2001, Statistics Canada conducted a survey that collected information on disabled children and adults within Canada. Those individuals with a disability are classified as individuals whose everyday activities are limited because of a condition or health problem. In previous editions of *The Economics Editor*,¹ we presented results from the Public Use Micro-Data File (PUMF) that captured the raw data and actual responses to the survey from which we determined, using regression analysis, the deficit in wages due to severity and type of disability.

Below, we summarize information published by Statistics Canada from the PALS 2001 survey in terms of the prevalence and incidence of disability, and comparisons of schooling levels, unemployment, non-participation, and median income levels between the disabled and non-disabled, differentiated by gender.

Based on the information gathered in the survey, approximately 12.4% of the Canadian population is classified as having a disability.² The province with the largest population having a disability is Nova Scotia with 17.1% compared with only 8.4% for Quebec. Not surprisingly, the proportion of the population with a disability becomes larger as individuals age. Only 13.3% of individuals aged 0-14 years of age are classified as having a disability compared with 40.5% for those aged 65 and over and 53.3% for those aged 75 and over. More women (13.3%) reported a disability than men (11.5%).

Disability Among Adults³

Among adults aged 15 years and over (with and without disabilities), mobility problems are the type of disability most often reported (10.5% of adults). Women (12.2%) are more likely to have mobility problems than men (8.6%). As well, more than 10% of adults report they have activity limitation related to chronic pain. Again, a larger proportion of women (11.4%) than men (8.8%) report activity limitation due to chronic pain. Among adults, aged 15 years and over who have a disability, 71.7% indicated they suffered from mobility problems while 69.5% of disabled adults indicated chronic pain.

The prevalence of disability increases as a person ages; this is especially true for disabilities related to mobility, agility, hearing, vision and pain. For example, only 2% of adults aged 15 to 24 indicated they had a mobility-related disability compared with 31.5% for those aged 65 and over.

The severity of a disability not only depends on the type of disability but also on the number of disabilities suffered by someone. Only 18.2% of adults with disabilities reported having only one disability whereas 29% reported having three, and 27.7% reported suffering from four or five different ailments.

Cara Brown, M.A., Principal Maureen Mallmes, B.Sc., SEMC Dan Clavelle, M.Ec. Laura Dick, B.A. Sarah Tomlinson, B.A. Shelley Hulbert Heather Ganshorn, MLIS J.C.H. Emery, Ph.D. Frank Strain, Ph.D. Stephen Clark, Ph.D. Emmanuel Yiridoe, Ph.D.

¹ See Cara L. Brown, MA and J.C.H. Emery, Ph.D, 2001 PALS Results: Wage Gaps Due to Disability <u>The Economics Editor</u>, June 2005 vol. 2, issue 6; and Cara L. Brown, MA, Additional Findings from the 2001 PALS, with Comparisons to the 1991 HALS <u>The Economics Editor</u>, July/August 2005 vol. 2, issue 7.

² Note the Canadian total excludes the Yukon, Northwest Territories and Nunavut.

³ Source: Statistics Canada, A Profile of Disability in Canada, 2001 catalogue no. 89-577-XIE (Ottawa: Minister of Industry), 2002.

Based on this information, one-third of adults (34.1%) with disabilities had a mild degree of disability whereas 26.9% experienced a severe disability and 14% reported having a very severe disability. Slightly more men (36.4%) than women (32.2%) reported a mild disability compared with 28.3% of women and 25.1% of men who reported a severe disability. The proportion of men and women who suffered from a very severe disability was relatively the same for both.

Among age groups, 45.1% of adults aged 45 to 64 indicated they have a severe to very severe disability compared with only 39.5% of those aged 65 years and over. This may be because an individual is more likely to experience the highest level of activity and the widest scope of activities during their working years.⁴

Disability Among Working-Age Adults

Among the working age population (with and without disabilities), 7.5% are limited in their activities due to pain or discomfort. 8.3% of working age women and 6.7% of working age men reported pain-related limitations. Of those working age people who have pain-related limitations, 70% experience pain constantly and 30% experience recurrent periods of pain.

Pain related disability increases gradually from age 15 to 64. 2.0% of all 15 to 24 year olds (with and without disabilities) report pain related disability compared with 13.1% for those aged 45 to 64.

Disability Among Persons Aged 65 and Over

Among those aged 65 and over, mobility problems are the most common disability reported. 23.3% of adults aged 65 to 74 and 42.9% of adults aged 75 and over reported having mobility problems. Women aged 65 and over with disabilities (84%) are more likely to report mobility difficulties compared with men aged 65 and over with disabilities (70%).



Figure 1: Level of Education Attained, Males

Source: Statistics Canada, Education, employment and income of adults with and without disabilities - tables, Catalogue no. 89-587-XIE, 2003, Table 1.1 and Table 2.1

¹ The population excludes persons living in institutions, on Indian reserves, and in the Yukon, Northwest Territories and Nunavut

² High school education level includes persons who have attended courses at postsecondary institutions and who may or may not have a high school graduation certificate. Excludes persons with a postsecondary certificate, diploma or degree. Examples of postsecondary institutions include community colleges, institutes of technology, CEGEPs, private trade schools, private business colleges and schools of nursing. College education level includes non-degree-granting institutions such as community colleges, CEGEPs, private business colleges and technical institutes.

⁴ Note a large proportion of elderly persons with severe and very severe disabilities live within an institution and will therefore not be included in the survey.

Education, Employment and Income of Adults With and Without Disabilities

Based on the *Participation and Activity Limitation Survey ("PALS")* from Statistics Canada, we can compare education levels, employment statistics and income levels of those with and without disabilities in Canada.

Figure 1 and Figure 2 compare the highest level of education attained for males and females with and without disabilities.

Figure 2: Level of Education Attained, Females



Source: Statistics Canada, Education, employment and income of adults with and without disabilities - tables, Catalogue no. 89-587-XIE, 2003, Table 1.1 and Table 2.1

¹ The population excludes persons living in institutions, on Indian reserves, and in the Yukon, Northwest Territories and Nunavut

² High school education level includes persons who have attended courses at postsecondary institutions and who may or may not have a high school graduation certificate. Excludes persons with a postsecondary certificate, diploma or degree. Examples of postsecondary institutions include community colleges, institutes of technology, CEGEPs, private trade schools, private business colleges and schools of nursing. College education level includes non-degree-granting institutions such as community colleges, CEGEPs, private business colleges and technical institutes.

Based on Figure 1 and Figure 2, statistics show individuals (both male and female) without a disability are more likely to have higher levels of education. For example, the highest level of education attained for 39% of males and 27% of females *with disabilities* is less than high school, compared with 27% of males and 24% of females *without* a disability. Similarly, only 10% of males and 20% of females with a disability have a university degree compared with 20% of males and 21% of females without a disability.

Figure 3 and Figure 4 (on page 4, following) compare the rate of unemployment and participation rate for males and females with and without disabilities.

Figure 3: Labour Force Statistics, Males



Source: Statistics Canada, Education, employment and income of adults with and without disabilities - tables, Catalogue no. 89-587-XIE, 2003, Tables 3.1 and 4.1

¹ The population excludes persons living in institutions, on Indian reserves, and in the Yukon, Northwest Territories and Nunavut

Figure 4: Labour Force Statistics, Females



Source: Statistics Canada, Education, employment and income of adults with and without disabilities - tables, Catalogue no. 89-587-XIE, 2003, Tables 3.1 and 4.1

¹ The population excludes persons living in institutions, on Indian reserves, and in the Yukon, Northwest Territories and Nunavut

Table 1 below compares the median income level of adults with and without a disability within Canada.

Canada ¹	Men	Women		
Without Disabilities	\$31,133	\$19,504		
With Disabilities	\$21,981	\$12,152		
Newfoundland and Labrador	Men	Women		
Without Disabilities	\$25,112	\$13,049		
With Disabilities	\$13,412	\$8,591		
Prince Edward Island	Men	Women		
Without Disabilities	\$22,862	\$16,494		
With Disabilities	\$18,993	\$10,283		
Nova Scotia	Men	Women		
Without Disabilities	\$27,588	\$16,312		
With Disabilities	\$20,610	\$10,421		
New Brunswick	Men	Women		
Without Disabilities	\$26,812	\$15,750		
With Disabilities	\$15,636	\$10,163		
Quebec	Men	Women		
Without Disabilities	\$29,206	\$18,243		
With Disabilities	\$17,604	\$10,740		
Ontario	Men	Women		
Without Disabilities	\$34,800	\$21,492		
With Disabilities	\$23,435	\$12,337		
Manitoba	Men	Women		
Without Disabilities	\$30,012	\$19,001		
With Disabilities	\$24,525	\$13,547		
Saskatchewan	Men	Women		
Without Disabilities	\$29,909	\$17,695		
With Disabilities	\$22,209	\$15,130		
Alberta	Men	Women		
Without Disabilities	\$33,150	\$18,762		
With Disabilities	\$25,785	\$13,516		
British Columbia	Men	Women		
Without Disabilities	\$32,304	\$19,459		
With Disabilities	\$21,788	\$14,303		
Developed and the Ketter of Change and a strategy of the second		a dealer was a state of a second second second		

Table 1: Median Income of Adults by Province

Source: Statistics Canada, Education, employment and income of adults with and without disabilities - tables, Catalogue no. 89-587-XIE, 2003, Tables 5.1 to 6.11

¹ The population excludes persons living in institutions, on Indian reserves, and in the Yukon, Northwest Territories and Nunavut

As shown in Table 1, in all provinces, the median income for males and females without a disability is higher than for those with a disability. Overall, Canadian men without a disability have a median income level of \$31,133 compared with \$21,981 for Canadian men with a disability: a -30% deficit. Similarly, Canadian women without a disability have a median income level of \$19,504 compared with \$12,152 for women with a disability: a -38% deficit. Regression analysis is needed, however, to determine how much of these gaps is due strictly to disability; and because these are median income levels, these deficits reflect an "average" level of severity ranging from mild to very severe. See *Additional Findings from the 2001 PALS, with Comparisons to the 1991 HALS* The Economics Editor, July/ August 2005 vol. 2, issue 7 for exact wage gaps by severity of disability that have been empirically determined using regression analysis.

UPDATING NON-PECUNIARY AWARDS FOR INFLATION (FEBRUARY 2007, CANADA)

]	Non-Pecuniary Damages - Sample Awards				
Year of Accident/	"Inflationary"	\$10,000	\$25,000	\$50,000	\$75,000	\$100,000
Year of Settlement or Trial	Factors*					
February 2006-February 2007	1.020	\$10,198	\$25,495	\$50,991	\$76,486	\$101,981
Avg. 2005-February 2007	1.024	\$10,244	\$25,609	\$51,218	\$76,826	\$102,435
Avg. 2004-February 2007	1.047	\$10,465	\$26,164	\$52,327	\$78,491	\$104,655
Avg. 2003-February 2007	1.066	\$10,662	\$26,656	\$53,312	\$79,967	\$106,623
Avg. 2002-February 2007	1.096	\$10,955	\$27,388	\$54,776	\$82,164	\$109,552
Avg. 2001-February 2007	1.120	\$11,203	\$28,007	\$56,014	\$84,021	\$112,027
Avg. 2000-February 2007	1.149	\$11,489	\$28,722	\$57,445	\$86,167	\$114,890
Avg. 1999-February 2007	1.180	\$11,801	\$29,502	\$59,005	\$88,507	\$118,009
Avg. 1998-February 2007	1.201	\$12,007	\$30,018	\$60,037	\$90,055	\$120,074
Avg. 1997-February 2007	1.212	\$12,119	\$30,297	\$60,595	\$90,892	\$121,190
Avg. 1996-February 2007	1.231	\$12,314	\$30,784	\$61,568	\$92,351	\$123,135
Avg. 1995-February 2007	1.251	\$12,514	\$31,286	\$62,572	\$93,858	\$125,144
Avg. 1994-February 2007	1.278	\$12,784	\$31,961	\$63,922	\$95,882	\$127,843
Avg. 1993-February 2007	1.281	\$12,809	\$32,024	\$64,047	\$96,071	\$128,094
Avg. 1992-February 2007	1.304	\$13,040	\$32,600	\$65,200	\$97,800	\$130,400
Avg. 1991-February 2007	1.324	\$13,239	\$33,096	\$66,193	\$99,289	\$132,386
Avg. 1990-February 2007	1.398	\$13,976	\$34,941	\$69,882	\$104,823	\$139,764
Avg. 1989-February 2007	1.465	\$14,652	\$36,629	\$73,258	\$109,888	\$146,517
Avg. 1988-February 2007	1.538	\$15,377	\$38,443	\$76,887	\$115,330	\$153,774
Avg. 1987-February 2007	1.600	\$16,000	\$40,000	\$80,000	\$120,000	\$160,000
Avg. 1986-February 2007	1.670	\$16,697	\$41,741	\$83,483	\$125,224	\$166,965
Avg. 1985-February 2007	1.739	\$17,387	\$43,467	\$86,933	\$130,400	\$173,867
Avg. 1984-February 2007	1.809	\$18,086	\$45,215	\$90,430	\$135,645	\$180,860
Avg. 1983-February 2007	1.887	\$18,871	\$47,178	\$94,356	\$141,534	\$188,712
Avg. 1982-February 2007	1.997	\$19,969	\$49,923	\$99,847	\$149,770	\$199,694
Avg. 1981-February 2007	2.214	\$22,139	\$55,348	\$110,696	\$166,044	\$221,392
Avg. 1980-February 2007	2.486	\$24,858	\$62,144	\$124,288	\$186,431	\$248,575
Avg. 1979-February 2007	2.738	\$27,384	\$68,460	\$136,920	\$205,380	\$273,840
Jan. 1978-February 2007	3.122	\$31,223	\$78,057	\$156,114	\$234,172	\$312,229

\$80,000= \$50,000 x 1.600 represents the dollar equivalent in February 2007 of \$50,000 based on inflation increases since 1987. Similarly, \$312,229 (=\$100,000 x 3.122) represents the dollar equivalent in February 2007 of \$100,000 in 1978 based on inflationary increases since 1978. Source: Statistics Canada, Consumer Price Index, monthly CPI release

From Feb. 2006 to	Feb. 2007*	For the month	of Feb. 2007
(rates of infla	tion)		
Canada:	2.0%	Canada:	6.1%
Vancouver:	2.8%	Vancouver:	4.2%
Toronto:	1.5%	Toronto:	6.5%
Edmonton:	3.7%	Edmonton:	3.7%
Calgary:	6.1%	Calgary:	3.1%
Halifax:	2.1%	Halifax:	4.3%
St. John's, NF:	1.4%	St. John's, NF:	7.3%
Saint John, NB:	0.8%	Saint John, NB:	5.6%
Charlottetown:	1.2%	Charlottetown:	10.1%



BROWN ECONOMIC CONSULTING INC.	#216, 5718-1A St Calgary, AB T 403.571.0115	reet South West T2H 0E8 F 403.571-0932	#2200, 1969 Uppe Halifax, NS Toll 1.800.	r Water Street B3J 3R7 301.8801	#406, 1708 Dolp Kelowna, B.C. Toll 1.800.3	hin Avenue V1Y 9S4 01.8801	Email help Web www	@browneconomic.com z.browneconomic.com