

Article

Living with disability series

Life satisfaction of working-age women with disabilities

by Susan Crompton

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- . not available for any reference period
- .. not available for a specific reference period
- ... not applicable
- 0 true zero or a value rounded to zero
- 0^s 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*
- E use with caution
- F too unreliable to be published

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Introduction

Canadian women in their prime adult years lead busy lives: they are raising families, working outside the home, volunteering and often caring for others. However, the proportion of women with disabilities is rising, from 15.7% in 2001 to 17.7% in 2006. If prime working-age women begin to experience activity limitations due to a long-term health problem or condition, the impact on them, their families and the wider community can be far-reaching.

Governments in many countries direct their disability policies toward ensuring the full participation of persons with disabilities in all aspects of society in order to maintain or improve their sense of happiness and well-being.¹ In Canada, the Minister of Human Resources and Skills Development has stated that the federal government's disability policy aims to provide persons with disabilities "with choices that will help them participate and succeed in their communities to improve their overall quality of life."²

Quality of life for persons with disabilities is influenced by many factors that may often interact in subtle ways. These factors can include the type and degree of disability, the ability to accomplish everyday tasks or activities, satisfaction with social

support, presence of a spouse or partner, attitude and coping skills, self-esteem and gender.^{3,4,5,6,7}

This article examines how Canadian women with disabilities aged 25 to 54 describe their level of life satisfaction across three main dimensions: daily activities, quality of relationships with family and friends, and health. Using the 2006 Participation and Activity Limitation Survey (PALS), we identify some of the elements that are associated with a greater sense of well-being. In order to focus on the social dimensions of this issue, we discuss women's satisfaction with their daily activities and the quality of their relationships first. Women's feelings about their health are addressed separately at the end of the article.

About the study population

The study population represents about 700,000 Canadian women aged 25 to 54 with disabilities. Just over 61% had physical-only disabilities—mainly chronic pain, agility or mobility difficulties—and about three-quarters of these women had more than one limitation. Fewer than 3% had a non-physical disability only, primarily a psychological condition or learning disability. About 36% had mixed disabilities, that is, non-physical disability in addition

to a physical disability. (Given their small numbers, women with only non-physical disabilities are included with the mixed disabilities population in the analysis.) On average, women with physical-only disabilities had been living with their limitation for 12.6 years, and those with mixed disabilities for 17.6 years.

Just under 43% of women in the study population described their disability as being severe or very severe. A similar proportion (44%) did not participate in all the leisure activities they would have liked to because of the limitations imposed by their condition. About 18% received help with everyday tasks like doing housework, running errands and preparing meals.

Slightly more than one-half of the study population (53%) was between 45 and 54 years of age, with an average age of 43. Over one-third (35%) lived with a spouse and children, one-quarter (25%) lived with a spouse only, and 15% were lone parents. The remaining 25% had another type of living arrangement, and were living by themselves, with their parent(s) or with other people. Three-quarters (75%) had not completed postsecondary education, and 55% reported household income of less than \$60,000 a year. Just over one-half (51%) had paid jobs outside

What you should know about this study

This article draws on results of the 2006 Participation and Activity Limitation Survey. The study population comprises just over 4,100 respondents representing about 700,000 women with disabilities aged 25 to 54. Respondents were classified as having a disability if they reported that they had difficulties with daily living activities, or that a physical or mental condition or health problem reduced the kind or amount of activities they could do. The answers to the disability questions are self-reported and therefore represent the respondent's perception of her situation. PALS did not collect data from individuals without disabilities and so it is not possible to compare the study population with its non-disabled counterpart.¹

Definitions of terms and concepts

Type and effects of disability: this category includes information about the type of disability, the degree of severity of the disability, whether an individual receives care, and whether a woman with a disability is restricted in her leisure time activities.

Physical disabilities: includes hearing; seeing; mobility; agility; chronic physical conditions, including asthma and allergies, heart condition or disease, kidney disease, cancer, diabetes, epilepsy, cerebral palsy, spina bifida, muscular dystrophy, migraines, arthritis or rheumatism, paralysis of any sort, missing limbs or digits, complex medical care, other not specified.

Non-physical disabilities: includes speech/communication; learning; developmental; emotional/psychological; chronic non-physical conditions, including autism, fetal alcohol syndrome, ADD or ADHD, and Down syndrome.

Mixed disabilities: includes both physical and non-physical disabilities. In the analysis, this category includes the 3% of women with only non-physical disabilities who were too few to be studied separately.

Severity of disability: PALS constructed a scale measuring the overall severity of disability according to the intensity and frequency of the activity limitations reported by respondents. The disability severity scale is divided into four levels: mild, moderate, severe and very severe.

Receiving care: a woman gets help from someone else to prepare meals, do everyday housework, go to appointments, move around the house, and/or help with personal care, child care, or specialized nursing.

Non-participation in leisure activities: due to her condition, a woman does not participate in all the leisure activities she would like to.

Work and life stress: this category measures the effect of employment status and selected causes of stress.

Socio-demographics: this category measures the effect of age, education, household income, and living arrangements.

Social contact: this category measures the effect of a woman's involvement with people outside her household. It includes volunteer work done for organizations, number of close friends she can confide in, and frequency of contact with family and friends.

Life satisfaction indices

Respondents were asked to rate their level of satisfaction with five aspects of life. In order to reduce these questions to a more manageable number, we conducted a factor analysis that identified the questions that were most closely related and could be grouped into three general themes.² Each index uses a scale of 1 to 10, where 1 is "very dissatisfied" and 10 is "very satisfied." The three life satisfaction indices are:

Daily activities: satisfaction with job or with main activity (can include caring for children, looking after the home, going to school, being retired, and so on); satisfaction with the way leisure time is spent.

Relationships: satisfaction with relationship with family; satisfaction with relationship with friends.

Health: satisfaction with health.

The models

We used linear regression models for each satisfaction index, with the index score as the dependent variable (minimum=1, maximum=10). Coefficients were estimated through a weighted regression that used the PALS survey weights, with variance estimation calculated by survey bootstrapping. Coefficients are unstandardized; statistical significance was calculated at $p < 0.05$. (See Definitions of terms and concepts or Table 1 for the complete list of variables in the models.)

What you should know about this study (continued)

1. A 2003 U.S. study concluded that women with disabilities have lower self-esteem and higher social isolation than women without disabilities. (Nosek, M.A., Hughes, R.B., Swedlund, N., Taylor, H.B., and Swank, P. (2003). Self-esteem and women with disabilities. *Social Science and Medicine*. 56: 1737-1747.) A recent Dutch study found that although persons with disabilities had lower results on quality of life measures for perceived physical health, there was little difference between people with and without disabilities

on measures of mental health and happiness. (Van Campen, C. and Iedema, J. (2007). Are persons with physical disabilities who participate in society healthier and happier? Structural equation modelling of objective participation and subjective well-being. *Quality of Life Research*. 16, 4: 635-645).

2. Although the health satisfaction question was related to the two questions included in the daily activities index, it was retained as an independent index because of its importance for women with disabilities.

the home. Most (84%) reported experiencing some stress in their lives, mainly because of their health or their work.

Three dimensions of life satisfaction are rated very differently

When working-age women with disabilities were asked to rate how satisfied they felt with their lives, the results were not unexpected. Half of them (50%) rated satisfaction with their health at 5.0 or more, for an average score of 5.5 out of 10. Almost 6 in 10 (58%) ranked satisfaction with their daily activities at least 6.0, producing an average score of 6.4. They derived the greatest satisfaction from their relationships with family and friends, with 54% giving this dimension of their lives at least 8.0 out of 10, for an average score of 8.2 (Chart 1).

However, these overall averages mask the differences between women with disparate characteristics. For example, women with a severe-to-very-severe degree of disability had a significantly lower life satisfaction average for daily activities than women with mild-to-moderate disability (5.3 versus 7.1). Similarly, women whose condition prevented them from participating in their preferred leisure activities also recorded lower averages (5.6 versus 7.1). And women with mixed disabilities reported less enjoyment of family and friends, with an average rating of 7.6 for

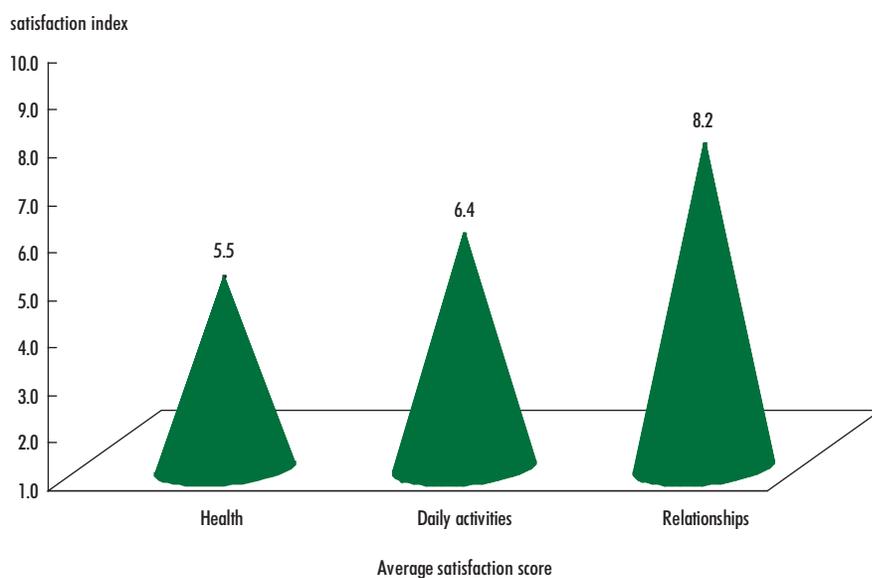
relationship satisfaction, compared with 8.5 for women with physical-only disabilities (Table A.1).

Clearly, some working-age women with disabilities derived less satisfaction from their daily activities and their relationships than others, but what factors may account for these differences? Does a woman have a lower score because she has non-physical disabilities, or because her leisure time activities are limited? And since previous research suggests that life satisfaction is also related to

factors like employment and social support, what role may they play in the well-being of working-age women with disabilities?

To isolate the influence of different factors on the scores for each life satisfaction index, we developed multiple regression models. This allows us to see how individual factors contribute to the variation in women's index scores. In the remainder of this article, only the results of the regression models are reported. (See "What you should know

Chart 1 Women aged 25 to 54 with disabilities derive most satisfaction from their relationships with family and friends



Note: Index range: minimum = 1, maximum = 10.
Source: Statistics Canada, Participation and Activity Limitation Survey, 2006.

about this study” for details on the models.)

The type and effects of disability have the largest impact on satisfaction

Generally speaking, it is not a person’s condition that causes the most difficulty, but the circumstances arising from it. Being able to adapt effectively and learning practical coping skills for dealing with everyday tasks are generally associated with better quality of life.^{8,9,10}

According to the 2006 PALS, satisfaction with daily activities is strongly associated with the type and effects of disability. In fact, these disability characteristics account for about two-thirds of the difference in women’s satisfaction scores on the index for daily activities.¹¹ Women with severe-to-very severe disabilities had a significantly lower satisfaction score (-1.1) than those with a mild-to-moderate degree of severity. Having mixed rather than physical-only disabilities was also negatively associated with satisfaction (-0.6), even when factors including severity were taken into account. Being unable to participate in her preferred leisure activities also reduced a woman’s level of satisfaction with her daily activities (Model 1, Table 1).

When it comes to satisfaction with relationships, type of disability is significantly associated with index scores, but its effect varies depending on the degree of severity.¹² Physical-only disabilities did not change satisfaction scores regardless of severity; however, mixed disabilities were associated with significantly lower scores for both mild-to-moderate and severe-to-very severe degrees of disability (Model 2, Table 1).

Employment and stress have significant impact on satisfaction scores

Because paid employment provides social contact and a daily routine in addition to income, research generally finds a positive association

between work and quality of life.^{13,14} The results for the daily activities index support these earlier findings, with about one-fifth of differences in women’s scores attributable to work and life stressors (Model 1, Table 1).

When a woman with disabilities has paid employment, it significantly improves her score on the index for satisfaction with daily activities. The actual magnitude of the increase, however, depends on the severity of her disability. If they were not working, women with severe-to-very severe disabilities had significantly lower satisfaction scores (-1.1) than those with mild-to-moderate limitations, however, women who were employed had significantly higher scores regardless of their degree of severity.

The positive influence of paid employment is neutralized by the impact of stress. Worrying about issues such as health, work or finances reduced index scores by 0.6 to 1.1 points out of 10, depending on the main source of stress.

Although the workplace may provide social interaction for women with disabilities, employment status was not significantly associated with satisfaction scores on the relationship index. On the other hand, life stressors had a negative effect. When all other variables were held constant, satisfaction with relationships dropped for women who were worried about family, finances or work (Model 2, Table 1).

Socio-demographic factors not important to satisfaction with daily activities¹⁵

Having postsecondary education, higher income and being married are generally associated with better confidence and sense of self-worth, both of which tend to lead to a greater sense of well-being.^{16,17} However, these basic socio-demographic characteristics were not significantly associated with satisfaction scores on the index for daily activities, even after controlling for the influence of other variables (Model 1, Table 1).

In comparison, relationship satisfaction was higher for women living with a spouse and children (+0.3), compared to those not living with a partner or children. Interestingly, living with a spouse only or with children only did not influence women’s index scores.¹⁸

Social contact improves satisfaction with both relationships and daily activities

Having more friends and relatives generally makes people happier, and they are happier still when they have a larger social network.¹⁹ The PALS models show that social contact accounts for over one-fifth of the differences in women’s scores on the relationship index and for about one-tenth on the daily activities index.

All other factors being held constant, women had higher satisfaction scores for daily activities if they had more than two close friends in whom to confide (+0.5); if they visited family or friends frequently (+0.4); and if they did unpaid volunteer work for organizations (+0.3) (Model 1, Table 1).

Satisfaction scores for the relationships index also significantly improved when women had good friends (+0.4) and spent time visiting with friends and family (+0.3). After controlling for other variables, though, volunteer work was not significantly associated with higher scores on the relationship index.

Extent of disability effects primarily associated with health satisfaction

The health satisfaction of working-age women with disabilities is strongly related to the impairment and its effect on everyday life. Compared to women with mild-to-moderate disabilities, those with severe or very severe disabilities rated their health satisfaction significantly lower (-1.1) once all other factors were controlled for. Being unable to participate in her preferred leisure activities

reduced a woman's index score by a similar amount (-1.1). Having mixed disabilities and receiving help with everyday activities also had a negative association. Together, these four factors accounted for about 80% of the differences in women's scores on the health satisfaction index²⁰ (Model 3, Table 1).

Only three other factors in the regression model were significantly associated with health satisfaction.

Anxiety about their health had an important influence, as women who identified health as their main cause of stress had lower scores than women who reported no stress (-1.4). On the other hand, having a paid job produced higher index scores (+0.5) once all other factors had been controlled for. And living with a spouse and children also improved women's health satisfaction scores (+0.3).

Summary

Women with disabilities aged 25 to 54 expressed a very high degree of satisfaction with the quality of their relationships with family and friends. They reported receiving less satisfaction from their daily activities and the least amount from their health status.

The effects of disability have the largest influence on women's sense of well-being. The severity of

Table 1 Regression models for satisfaction scores, women with disabilities aged 25 to 54

	Model 1 Daily activities	Model 2 Relationships	Model 3 Health		Model 1 Daily activities	Model 2 Relationships	Model 3 Health
coefficients				coefficients			
Intercept (constant)	7.30	8.14	6.60	Living arrangement			
Effects of disability				With spouse and children	0.23	0.32*	0.30*
Severity of disability				With spouse only	0.08	-0.05	0.12
Mild to moderate †	..	..	..	With children only	-0.14	0.23	0.16
Severe to very severe	-1.07*	0.06	-1.07*	Other, including alone, with parents †	..	..	..
Type of disability				Postsecondary education			
Physical only †	..	..	..	Yes	-0.06	-0.20	0.00
Mixed	-0.58*	-0.44*	-0.32*	No †	..	..	..
Receive help due to disability				Household income			
Yes	-0.21	-0.08	-0.48*	Under \$60,000 †	..	..	..
No †	..	..	..	\$60,000 to \$89,999	-0.15	-0.12	-0.05
Condition prevents participation in more leisure activities				\$90,000 or more	-0.08	-0.07	-0.07
Yes	-0.82*	-0.16	-1.08*	Social contact			
No †	..	..	..	Volunteer in an organization			
Work and life stressors				Yes	0.33*	0.13	0.15
Works in paid employment				No †	..	..	..
Yes	0.49*	0.07	0.51*	Number of close friends to confide in			
No †	..	..	..	Less than 3 †	..	..	..
Major cause of stress in life				3 or more	0.47*	0.44*	0.26
Little or no stress †	..	..	..	Phone contact with family or friends			
Work	-0.97*	-0.39*	-0.28	Every day	-0.04	0.20	-0.07
Finances	-0.66*	-0.52*	-0.51	Less than every day †	..	..	..
Family	-0.58*	-0.82*	-0.11	Visits with family or friends			
Health	-1.08*	-0.14	-1.43*	At least once a week	0.38*	0.30*	0.31
Other, including school	-0.86*	-0.20	-0.46	Less than once a week †	..	..	..
Socio-demographic characteristics				Interaction effects			
Age group				Mixed disabilities x Severe to very severe	...	-0.55*	...
25 to 34 †	..	..	..	Employed x Severe to very severe	0.85*	...	...
35 to 44	-0.23	-0.07	-0.10				
45 to 54	-0.29	0.15	-0.35				

† reference group

* statistically significant difference from reference group at p < 0.05

Source: Statistics Canada, Participation and Activity Limitation Survey, 2006.

disability and being prevented from participating in leisure activities diminished their satisfaction with daily activities and health; the type of disability was negatively associated with the quality of their relationships.

Stress also reduced life satisfaction. Being worried about their health was an important influence on health and daily activities; problems with family and finances also reduced satisfaction with daily activities and with relationships.

Nevertheless, a number of factors had a positive impact on women's life satisfaction scores. Having paid employment significantly improved women's feelings about their health and daily activities. Living with a spouse and children was also positively associated with higher satisfaction on both the relationship and health indices.

Social contact had a significant influence on the well-being of working-age women with disabilities. Having at least three close friends and visiting frequently with family and friends raised satisfaction with daily activities and relationships, while women who did volunteer work also felt better about their daily activities.



Susan Crompton is a senior analyst with *Canadian Social Trends*, Social and Aboriginal Statistics Division.

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11. The block of variables measuring the effects of disability account for 68% of the differences in scores for the daily activities index (R-squared=0.31). Results of nested regressions (not shown).
12. The effects of the disability block of variables contributed about 50% to the differences observed in women's scores on the relationship index (R-squared=0.16). Results of nested regression (not shown.)
13. Tworok, S., Wirtz, M., Schipper, S., Klewer, J., Bergmann, A. and Kugler, J. (2007). Chronical illness and maternity: life conditions, quality of life and coping in women with multiple sclerosis. *Quality of Life Research*. 16: 1587-1594.
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15. Socio-demographic characteristics account for 10% of differences in relationship scores, and less than 2% of differences in daily activities scores. Results of nested regressions (not shown).
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20. The block of variables comprising the effects of disability accounts for 80% of the differences in scores for the health satisfaction index (R-squared=0.35). Results of nested regressions (not shown.)

Table A.1 Average life satisfaction score for women with disabilities aged 25 to 54, 2006

	Daily activities	Relationships	Health		Daily activities	Relationships	Health
	average score (maximum = 10)				average score (maximum = 10)		
Overall average	6.4	8.2	5.5	Living arrangement			
Effects of disability				With spouse and children	6.6	8.5*	5.8
Severity of disability				With spouse only	6.4	8.2	5.5
Mild to moderate †	7.1	8.5	6.5	With children only	6.1	7.7	5.4
Severe to very severe	5.3*	7.8*	4.1*	Other arrangement, including alone †	6.3	8.0	5.2
Type of disability				Postsecondary education			
Physical only †	6.9	8.5	6.0	Yes	6.5	8.2	5.7
Mixed	5.7*	7.6*	4.8*	No †	6.4	8.2	5.4
Receive help due to disability				Household income			
Yes	6.1	8.1	5.0*	Under \$60,000 †	6.3	8.0	5.4
No †	6.5	8.2	5.6	\$60,000 to \$89,999	6.5	8.4*	5.7
Condition prevents participation in more leisure activities				\$90,000 or more	6.6	8.4	5.7
Yes	5.6*	8.0*	4.4*	Social contact			
No †	7.1	8.4	6.4	Volunteer in an organization			
Work and life stressors				Yes	6.8*	8.4	5.9*
Works in paid employment				No †	6.1	8.1	5.3
Yes	7.0*	8.3	6.2*	Number of close friends to confide in			
No †	5.7	8.0	4.8	Less than 3 †	5.7	7.7	5.0
Major cause of stress in life				3 to 5	6.5*	8.1*	5.6*
Little or no stress †	7.3	8.7	6.3	More than 5	6.9*	8.8*	5.9*
Work	6.8	8.3	6.4	Phone contact with family or friends			
Finances	6.3*	7.8*	5.4*	Every day	6.5	8.4*	5.6
Family	6.8	7.8*	6.1	Less than every day †	6.3	7.9	5.5
Health	5.1*	8.1*	3.7*	Visits with family or friends			
Other, including school	6.3*	8.3	5.6	At least once a week	6.8*	8.4*	5.9*
Socio-demographic characteristics				Less than once a week †	6.0	8.0	5.1
Age group							
25 to 34 years old †	6.9	8.1	6.1				
35 to 44 years old	6.4*	8.1	5.7				
45 to 54 years old	6.3*	8.3	5.3*				

† reference group

* statistically significant difference from reference group at $p < 0.05$

Source: Statistics Canada, Participation and Activity Limitation Survey, 2006.