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INTRODUCTION

For most of us, our job—what we work at—plays a large role in defining our lives. Beside the obvious benefits of receiving a pay cheque, our work gives us a sense of worth and pride.

For people who sustain a spinal cord injury (SCI), working can take on an even greater significance. As an organization dedicated to helping Canadians with SCI regain independence, our 50 years of experience tells us that entering or re-entering the workforce is often the single most important event during the rehabilitation process. Success in this area can determine a person's success in rejoining the community and, ultimately, the quality of his or her life.

It isn't surprising that CPA has, in the 1990s, placed a renewed emphasis on providing educational and vocational counselling, as well as employment placement services, to its members and clients.

In recent years, it's become absolutely necessary to have a clear understanding of how well Canadians with SCI are faring in the area of workforce participation, the barriers they face, and the impact various approaches taken by CPA have had. Furthermore, CPA needed a benchmark from which to measure future success, particularly in light of its current five year strategy aimed at boosting educational and employment placements of its members by 50 per cent.

Surprisingly, no nation-wide study of this type had ever been undertaken. So, in the fall of 1995, CPA secured funding for such a study from Human Resources Development Canada and the Rick Hansen Man In Motion Foundation. With Board approval and funding in place, CPA was able to hire a coordinator to oversee a search of the literature, the design of the SCI Workforce Participation Survey tool, selection of a random sample, design of an interviewer training package, analysis of the data, and writing of a preliminary survey report released in November, 1996.

The preliminary report, titled *Spinal Cord Injury Workforce Participation National Survey*, allowed a first look at survey results—but only from a very broad national perspective. In 1997, with further funding obtained from Human Resources Development Canada, a fresh analysis of data that includes a provincial perspective began. The essence of this new analysis is contained in this, the final report.

In this report, you'll find a multitude of information: from demographics of Canadians with SCI, their educational and employment rates, the types of jobs they are engaged in, their income ranges, their use of and satisfaction with vocational and employment services offered by CPA, and the barriers to employment they experience. Where relevant, this information has been broken down provincially to allow each CPA Division to assess program strengths and weaknesses. Many of the results that you'll read in this report are enlightening, and some are even surprising.

Every attempt has been made to simplify this document and make it an “easy read”. We have tried to emphasize the most important results and express them in the form of uncomplicated, colour graphs. We have cross-tabulated what we believe are important categories—for example, employment rates by mode of mobility tell us clearly that power wheelchair users have much lower employment rates than people who use manual wheelchairs.

Naturally, there's only so much analysis we can do without turning this final report into an encyclopedia. We realize that CPA divisions or other interested parties may be interested in further analyzing results on a regional level. For that reason, we have included as an *Appendix* the entire survey results: every question, with percentage responses for all provinces. Using this information, it will be possible to perform a very detailed investigation into specific responses on a province-by-province basis.

However, it must be remembered that several provinces have contributed very small sample sizes and, as a result, smaller regional analyses must be interpreted with appropriate caution. Furthermore, provincial weightings of sample sizes (described later) affect all levels of analysis. Further calculations performed without attention to weighting may result in slightly inaccurate values.

This report represents a significant amount of work and cooperation on behalf of many individuals and organizations. In addition to the individuals and organizations recognized in the *Acknowledgments*, dozens of staff members of CPA National Office and CPA provincial Divisions pitched in with a great deal of assistance. Responsiveness from divisional management and staff provided the project with the necessary priority status so that the extensive task of conducting survey interviews could be completed. The spirit of cooperation and collaboration so evident throughout the process is that which allows CPA to conduct projects of this magnitude effectively and for the ultimate benefit of its members.

How the Project Developed

Project work began in November 1995 with development of a survey tool. The project task force used similar surveys from the scientific literature and feedback from CPA Divisions to determine questions. The task force finalized the survey tool and printed it in both official languages. It was ready for use by February 1996.

The divisions agreed to carry the major responsibility of interviewing participants. To address concerns of confidentiality and to ensure consistency, an interviewers' training kit was prepared in January 1996 and training was completed by March 1996. During this time, final decisions regarding the nature and size of the sample were made by the project task force.

The initial goal of the SCI Workforce Participation Project was to survey 1,200 Canadians *who had been injured for at least five years*. This decision recognized that people who are newly injured require some time to establish or re-establish themselves in the workforce.

The plan for determining participants was to draw the names of individuals by random sample from the databases of each CPA

Provincial Sample Sizes and Weights: N=966

	Population	Population %	Sample Size	Weight
Nfld.	568,474	2.0%	30	0.64
P.E.I.	129,765	0.5%	8	0.54
NS	899,942	3.1%	40	0.75
NB	723,900	2.5%	31	0.78
PQ	6,895,963	24.0%	221	1.05
ON	10,840,885	37.7%	259	1.40
MB	1,910,942	6.6%	79	0.81
SK	988,928	3.4%	41	0.81
AB	2,545,553	8.8%	134	0.64
BC	3,282,061	11.4%	123	0.90
Nat.	28,786,413	100.0%	966	

Division across Canada. Because of CPA's unique position as the organization which extends rehabilitation counselling services regionally to all Canadians with SCI, it appeared likely that the Divisions would know of all potential survey participants. This turned out to be the case in most provinces except Ontario and Quebec, where Divisions did not have a complete list of known residents with SCI. Lyndhurst Hospital in Ontario and Centre Francois-Charon in Quebec were approached and agreed to generate a supplementary random sample from their respective databases.

In Quebec, potential participants were offered a small cash incentive, so it must be recognized that this segment of participants doesn't exactly meet the criteria for being a random sample.

Recognizing that the SCI population in some provinces might not be large enough to provide a reasonable sample size, adjustments were made for the smaller regions and sample sizes were weighted accordingly. Ultimately, surveys were successfully completed with all 966 participants by July, 1996. Personal interviews were conducted, with face-to-face interviews being the priority whenever possible.

The final weightings for each CPA division were appropriately adjusted to reflect the Canadian population and are shown above.

Here are some notes on presentation of data. First, in graphs of provincial breakdowns, you'll notice that statistics for P.E.I. are not presented. This is because P.E.I. has a sample size of just eight

(weighted to four), and the validity of generalizations based on such a small sample size would be questionable. However, bearing in mind the caution about sample sizes, it is still possible to examine all responses on a provincial basis by referring to the *Appendix*.

Second, you'll also notice that some graphs contain a category titled "DK/R" which is short for the survey response "didn't know or refused to answer". This category is only presented in graphs where we've deemed the number of "DK/R" responses to be significant. For example, in most graphs, the "DK/R" response is

under 2%, and so we didn't think it significant enough to present. But in some graphs, such as those dealing with income, many participants didn't answer, and we've included these responses because we think they're significant.

Finally, note that most of the graphs presented in this report depict results that refer to the entire sample of participants. Certain graphs, however, represent results based on specific subsets or subgroups of the sample, such as those who are currently employed, or those who have ever been employed at any time since injury. Graphs which specifically refer to special groups will be identified by title and by indication of the number of respondents in that particular group (e.g., n=70).

CHAPTER 1: DEMOGRAPHICS

We know there are about 30,000 Canadians living with a spinal cord injury (SCI). But, prior to this survey, we didn't have a clear picture of who these Canadians are—that is, the characteristics they share, their ages, the nature of their injuries, or the aids they use for mobility.

This chapter reveals these basic characteristics for our survey participants. These characteristics are cross-tabulated against education and employment levels in later chapters. For example, in *Chapter 3: Employment*, you can find out about employment levels experienced by people of different age groups or people who use a specific type of mobility aid.

But the information in this chapter is also interesting in itself, as it provides a snapshot of the basic characteristics of Canadians with SCI.

Gender

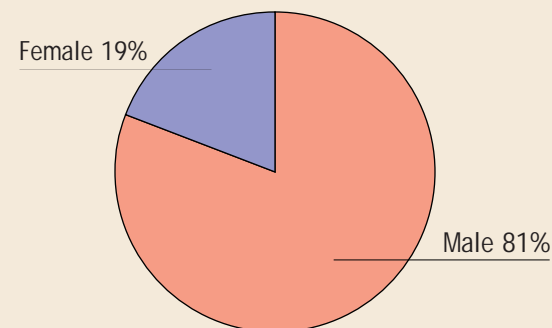
The survey confirmed the findings of many other research efforts: SCI is experienced mostly by men. **Graph 1.1** illustrates that 81% of participants are men and only 19% are women. This is in stark contrast to overall male/female disability rates in Canada, which closely reflect the male/female ratio of all Canadians.

The bottom line appears to be that, in Canada, four times as many men sustain SCI than women. There are some slight differences in this rate between provinces, as shown in the *Appendix (Q1)*, but the combined national rate provides the best general estimate.

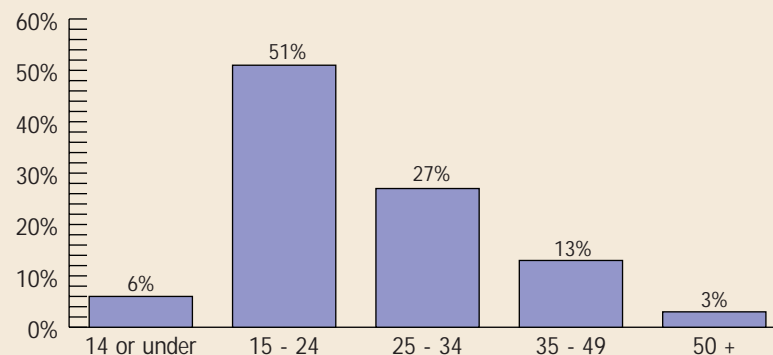
Age When Injury Occurred

The survey confirmed that SCI is mainly experienced by people in their youth. As **Graph 1.2** illustrates, more than half of all participants were injured when they were between 15 and 24 years

Graph 1.1 Gender



Graph 1.2 Age When Injury Occurred



old, and almost 80% were injured when they were between 15 and 34 years old. Combined with the gender information, the survey confirms that young men are particularly at risk of sustaining SCI. This is a clear message for those developing injury prevention programs in Canada.

Slight provincial differences exist but again probably aren't overly significant.

Current Age

The current age of participants (at time of survey) is shown in **Graph 1.3**. Only 3% (n=26) are 15 to 24; 31% (n=301) are 25 to 34; 46% (n=444) are 35 to 49; and 20% (n=195) are age 50 or older.

Remember that only people who have been injured for five years were asked to participate, as it's recognized that employment, if it's going to occur, usually does so only after a period of time needed to adjust after injury. As a result, the majority of participants (77%) are between the ages of 25 and 49.

These are prime employment years for those in the general population, a fact that must be kept in mind when comparing employment rates. More on this in *Chapter 3: Employment*.

Level and Nature of Injury

Participants' level of injury in the spinal cord, as well as their functional abilities, were some of the most important factors to determine in this study. In later chapters, you'll read how these factors relate to education and employment.

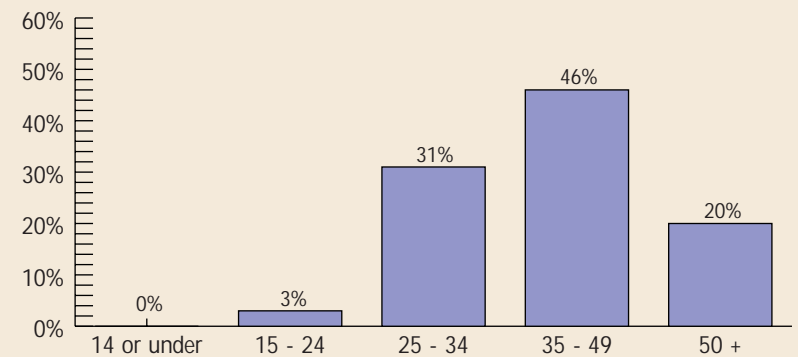
Graph 1.4 shows the level of injury of participants. Generally, we assume injuries to the upper area of the spinal cord (the cervical region) result in quadriplegia, and lower injuries (in the thoracic or lumbar regions) result in paraplegia. As the graph shows, participants are almost evenly split between quadriplegia-type injuries (47.4%) and paraplegia-type injuries (46.7%).

Note that the most common injury appears to be at the C5-C6 level, with T7-T12 being the next most common injury.

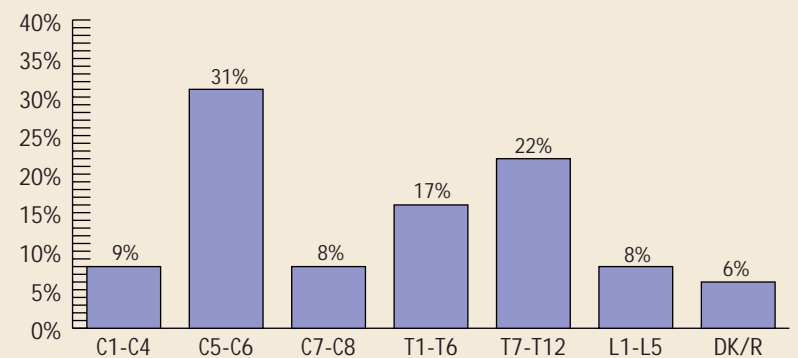
Level of injury is interesting to study. But the outcomes of SCI can't be so easily categorized. For example, it's possible for a person with an incomplete lower cervical injury to have more functional ability than someone with a complete upper thoracic injury. This is made obvious in **Graph 1.5**, which shows what kind of mobility aids are used by participants with various injury levels.

As you can see, each injury level has a most commonly-used mobility aid. For example, power wheelchairs are identified as the most commonly-used mobility aid for people with high cervical injuries. But many people who fall into this category use a manual

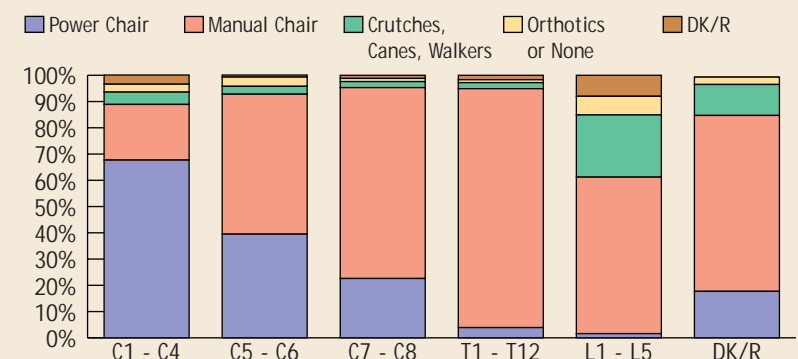
Graph 1.3 Current Age



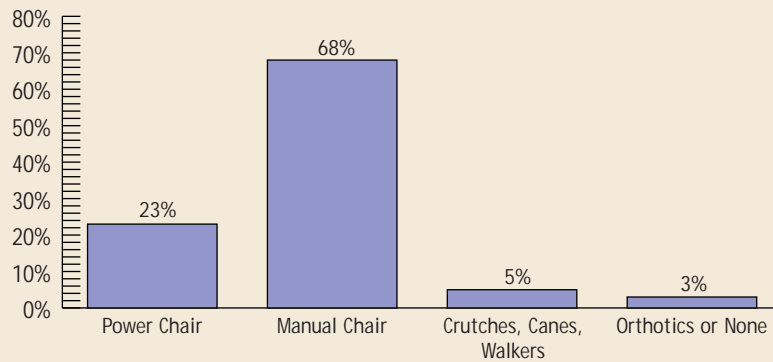
Graph 1.4 Level of Injury



Graph 1.5 Mobility Aid by Level of Injury



Graph 1.6 Mode of Mobility



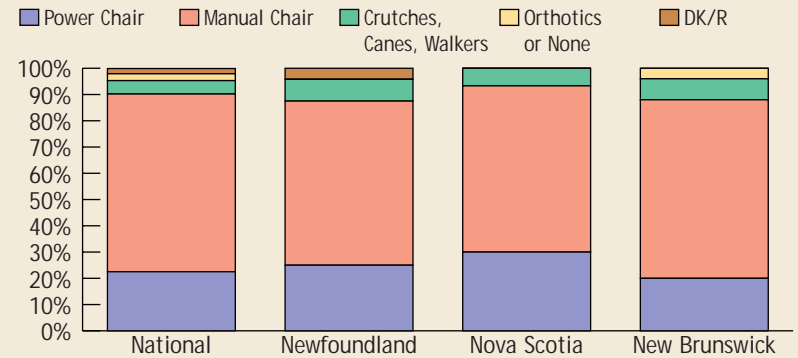
wheelchair, and there's even some who walk with the aid of canes, crutches or walkers.

In general, the lower the level of injury, the less need there is for power wheelchairs and the more reliance there is on manual wheelchairs and other mobility aids. **Graph 1.5** also suggests that, overall, manual wheelchairs are the most frequently used of all mobility aids. This trend is more clearly illustrated in **Graph 1.6**, which shows that the vast majority of participants use a manual wheelchair (n=654 or 68%), while a significant number use a power wheelchair (n=217 or 23%). Only a small number use crutches, canes or walkers (n=50 or 5%), and even fewer are the in the category of "orthotics or none" (n=25 or 3%). These last two categories have been kept distinct, however, because there is a surprising difference in employment rates between the two, as you'll read later in *Chapter 3: Employment*.

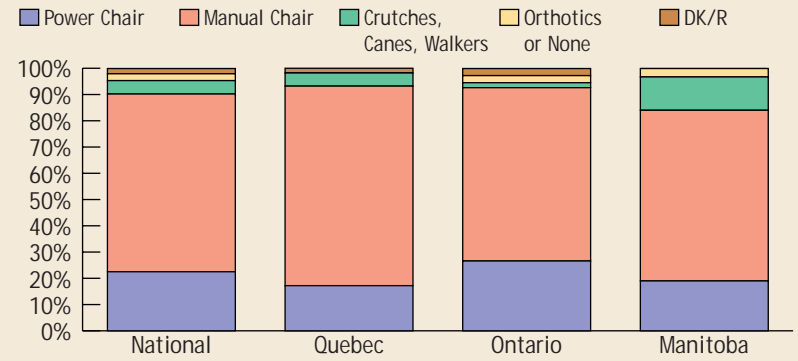
Overall, we believe that it's most useful to study people's level of function as measured by the mobility aid they use, and so this is the variable we will use when assessing employment and related factors such as income. Because we think it's such a telling characteristic, we have provided provincial breakdowns of mode of mobility in **Graphs 1.7, 1.8, and 1.9**.

Inspection of these graphs reveals that, relative to other provinces, Saskatchewan has a smaller proportion of power wheelchair users, Manitoba has a larger proportion of people using

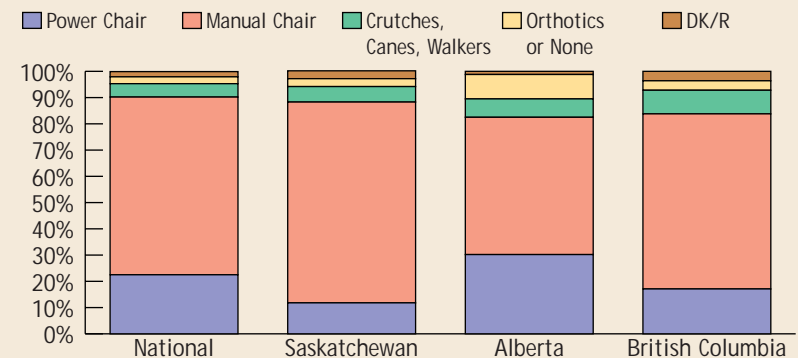
Graph 1.7 Mobility Aid Used (Nat., Nfld, NS, NB)



Graph 1.8 Mobility Aid Used (Nat., PQ, ON, MB)



Graph 1.9 Mobility Aid Used (Nat., SK, AB, BC)



crutches, canes or walkers, and Alberta has a larger proportion of people using orthotics or no mobility aid. However, these minor fluctuations are likely due to chance or sampling, and the overall conclusion that should be drawn is that the similarities across provinces are much greater than any differences.

Place of Residence

Results of the study show that some people feel the need to move to urban centres after sustaining an SCI. About 25% of participants said that SCI was the reason they had moved to a different community. About 73% of participants lived in urban communities before injury; over 86% now currently live in urban communities. Moves to urban communities are probably done to

gain better access to medical and training centres, as well as jobs that are less dependent on physical ability.

Relocation was most common in New Brunswick and Alberta. For more residency information and provincial breakdowns, see the *Appendix (Q7 - 8)*.

Aboriginal or Ethnic/Racial Minority

A small percentage of participants said they are members of visible or racial minorities (9.7%). Even fewer (3.3%) said they were Aboriginal. Those who identify themselves as Aboriginal report significantly lower levels of education and employment. However, the small sample size of 40 participants makes it difficult to draw any clear conclusions.

CHAPTER 2: EDUCATION

One goal of the survey was to provide a profile of the education levels of Canadians with SCI. Many important questions surrounding education came up during design of the survey tool. For example, what were the pre-injury education levels of participants? What are the post-injury education levels, and how had these levels changed?

This chapter provides such a profile. In *Chapter 4: Employment*, these results will be referenced to gain an understanding of how education affects employment. However, as with *Chapter 1: Demographics*, the information is extremely interesting on its own.

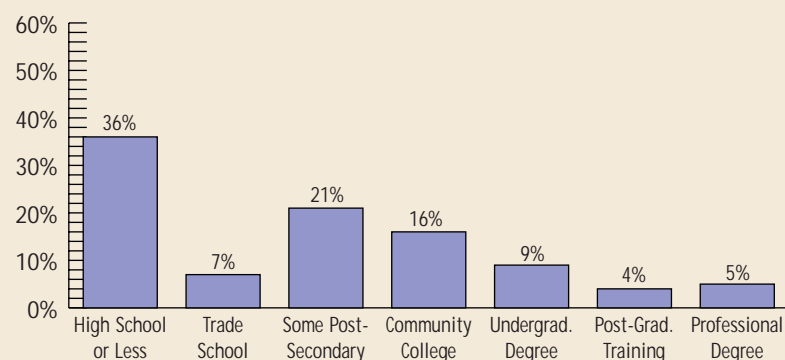
Current Education

What are the current education levels of our participants? **Graph 2.1** shows the percentage of participants who are enrolled in or who have completed a course of studies in the various education categories. While 36% have a high school diploma or less, the majority have education beyond the high school level.

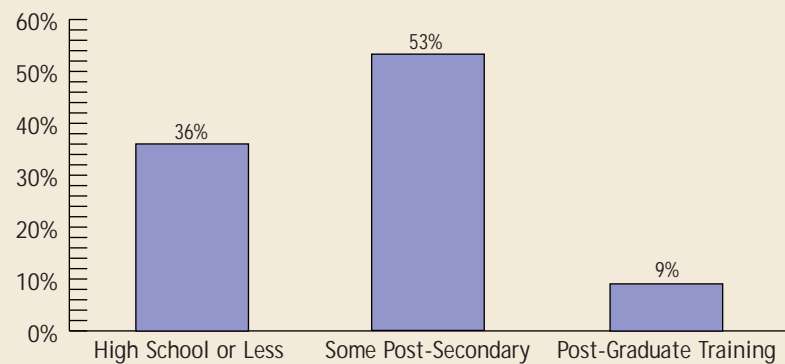
With all these categories, this graph complicates the education picture. For our purposes, we have condensed the categories as shown in **Graph 2.2**. The high school or less category remains the same in this graph (n=349 or 36%), while the various post-secondary forms of education compose one group in this graph (n=515 or 53%), and any type of post-graduate education, including professional degrees, have been condensed into a third category (n=87 or 9%). For the sake of simplicity, we will present education in this format in this and future chapters showing the effect of education on employment and income.

The survey revealed an interesting trend: Canadians with SCI appear to have higher levels of education than the general Canadian population, as shown in **Graph 2.3** (on next page). For example, 52% of the general population have only a high school diploma or less. Our survey showed that just 36% of our participants have only

Graph 2.1 Current Education (Expanded Categories)



Graph 2.2 Current Education (Condensed Categories)



a high school diploma or less, and, correspondingly, much higher levels of post-secondary education (62%).

Note that limitations in Statistics Canada information prevented us from presenting the information in this graph using the third category of post-graduate training. This type of training has been included in the category of at least some post-secondary education for the purposes of this graph only.

These higher levels of education may be due in part to the ages of the respective sample sizes. Going back to demographics, about 77% of our participants are between 25 and 49 years old, an age group that probably should have high education levels. No doubt, the random sample used by StatsCan has more representation by younger and older people, who would be less likely to have higher levels of education.

Another factor that has to be considered is that StatsCan classifies people by the highest level of education achieved. For example, for someone who has graduated high school and is now enrolled in a diploma program, StatsCan places that person in the “high school grad” category, whereas our study places that person in the “certificate or diploma” category. Nevertheless, it’s safe to say that Canadians with SCI have at least comparable levels of education with the general public.

Education Before and After Injury

A great deal of information can be gleaned from **Graph 2.4**, which compares participants’ education levels at the time of injury with their current education levels.

About 65% of participants said their “completed or in process” level of education was high school or less at time of injury, and a low number of participants had achieved higher levels of education. This isn’t a surprise, considering that more than half of participants were under 24 years old when they were injured.

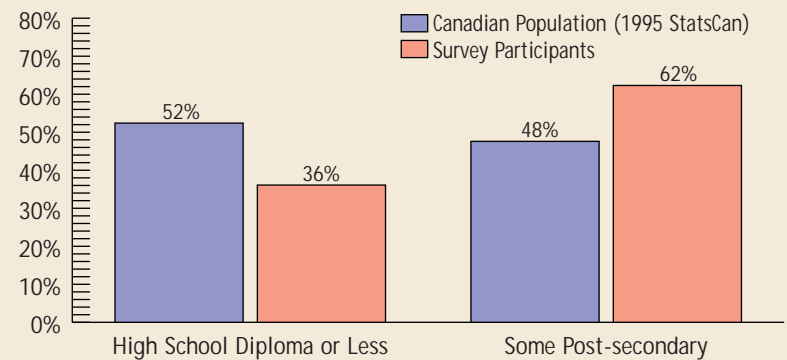
As you can see, education levels increased dramatically after injury. Specifically, about 45% (n=432) of participants increased their education. This also isn’t surprising, given that many were so young at the time of injury.

But the point is important—many people with SCI can and are being retrained after injury. And, as you’ll read in the next chapter, there’s a strong correlation between education and employment.

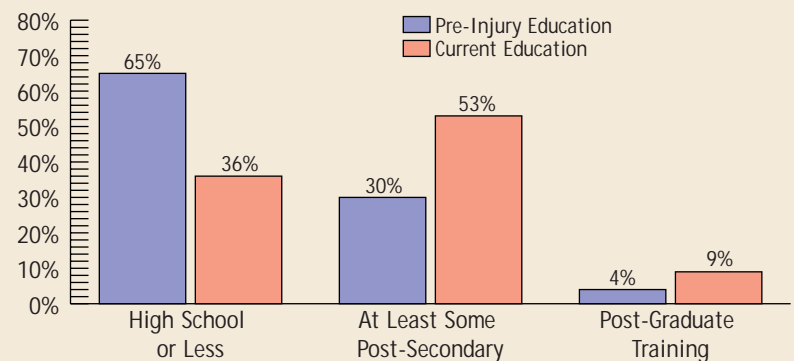
Education/Training at Time of Injury

A final point of interest in the area of education concerns how many people were actually in an educational or training program

Graph 2.3 Comparison of Current Education Levels



Graph 2.4 Education Before and After Injury



at the time they were injured. The survey asks several questions regarding this.

The highlights of the responses follow:

- 267 participants—about 28%—said they were in an educational or training program at the time of injury.
- Of these, almost 93% were 24 years old or younger, and 63% were in high school.
- Furthermore, 74% said they returned to the educational or training program. However, 40% said they had to make a change in focus because of SCI.
- Almost 81% of those who returned to the program successfully completed it.

- Of the 66 participants who didn't return to the program, 84% said that SCI-related factors were the reason.

The inference one can make from all of this is that people can usually successfully return to their educational or training program after injury—and should be strongly encouraged to understand they can succeed.

Motivation to Participate in Education or Training

The state of mind of people with SCI in the period of time after injury may play a role in determining their employment future.

Participants were asked to rate their motivation to participate in training or education after injury on a scale of 1 to 5. Their responses are shown in **Graph 2.5**. About 41% of participants said they were very motivated or extremely motivated. About 22% said they were somewhat motivated, and almost 34% said they were not at all or not very motivated. The average level of motivation of all participants is 3 (somewhat motivated).

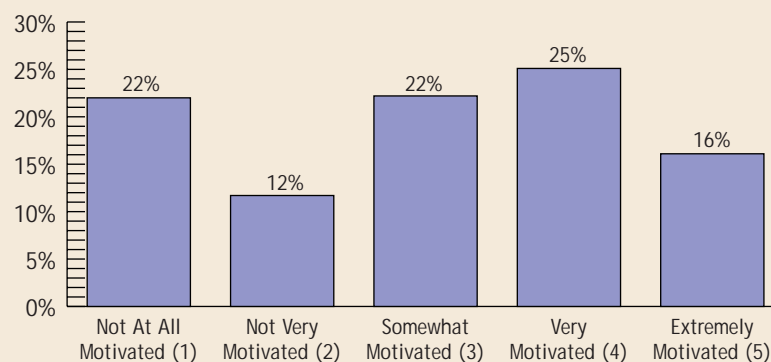
Age at onset of injury appears to affect motivation. In simple terms, the older participants were at the time of injury, the less likely they were to be motivated. Mode of mobility also plays a role—power wheelchair users expressed significantly lower levels of motivation than those who used manual wheelchairs, canes and walkers, orthotics or nothing at all.

Did the levels of motivation actually translate into higher education levels?

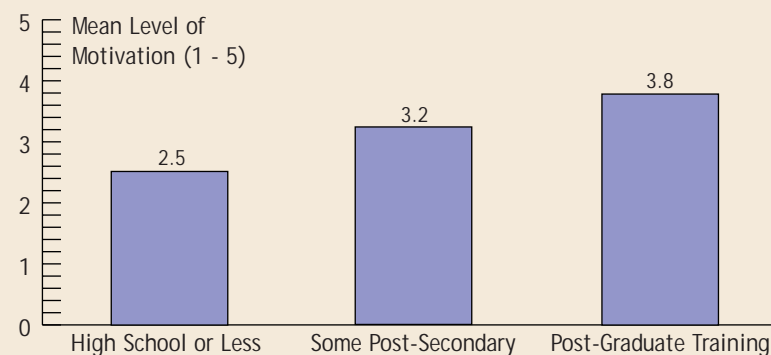
The answer, as shown in **Graph 2.6**, is yes. This graph shows the average level of motivation expressed by participants in each group of current education. For example, of those currently holding post-graduate training, the average level of motivation was 4 out of a possible 5. Compare that to those participants who currently have a high school diploma or less, a group with an average level of motivation of 2.5.

This tells us that those who were motivated to improve their education did so, despite the onset of disability. And, as you'll

Graph 2.5 Motivation for Education & Training



Graph 2.6 Motivation and Current Education



learn in the next chapter, education is probably the largest factor influencing employment.

Motivation is important. These results speak to the importance of providing a wide range of holistic counselling services to people who have been injured—particularly to those who are older than 25 at time of injury and those who use power wheelchairs. The inference that can be drawn is that when people with SCI are given the supports they need to regain independence and understand that their potential remains unlimited, they are much more likely to pursue education and, ultimately, life-long employment.

CHAPTER 3: EMPLOYMENT

How many Canadians with SCI work? What factors help or hinder their participation in the workforce? What can we do to improve participation? This chapter, the largest and most important of this report, attempts to answer these questions. It provides a detailed profile of participants' current employment and how various factors such as nature of injury and level of education affect employment.

We use two categories to describe employment: "employed" and "not employed". "Employed" simply means working. "Not employed" refers to all those who aren't working: both those who are actively seeking work (Statistics Canada refers to this group as "unemployed") and those who aren't seeking work (Statistics Canada refers to this group as "Not in the Labour Market"), such as students or housewives.

As you read this chapter, a disturbing trend will become clear: Canadians with SCI are under-employed—but the problem isn't unemployment by Statistics Canada's definition. Instead, it's that the majority of those not working have never worked since injury (at least five years).

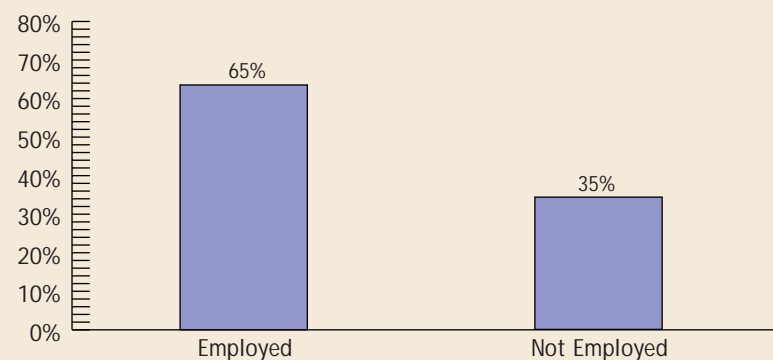
Even more disturbing is that, of those who have never worked since injury, the vast majority have never even sought work. For this reason, we have provided a special profile of these participants in *Chapter 5: Labour Market Exclusion* to supplement the information provided in this chapter.

Note that income is clearly related to employment. But income levels provide a great deal more information than just a verification of employment levels. Because of its stand-alone significance, income is largely addressed in *Chapter 4: Income*.

Pre-Injury Employment Status

Before we look at current employment, it's important to gain an understanding of what our sample's pre-injury workforce status

Graph 3.1 Employment Status Before Injury



was. As shown in **Graph 3.1**, almost 65% (n=626) of participants were employed. The remaining 35% (n=340) were not employed.

Why were so many not working? In the last chapter, we learned that 267 participants were in educational or training programs (many, no doubt, still in high school, given the young age at injury for most participants).

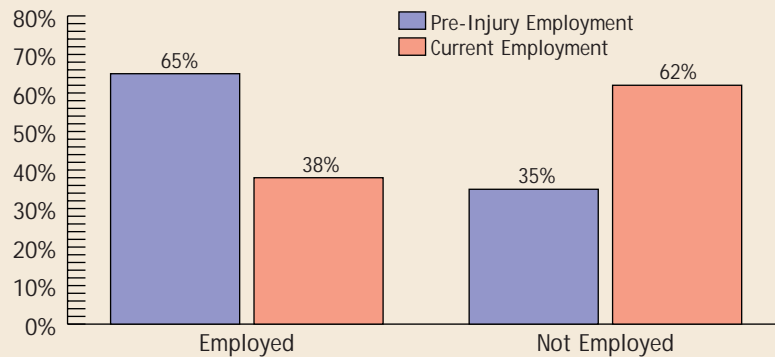
Of those participants who were working, 88% said that they never had trouble finding a job, and 89% said they never had trouble keeping a job.

What all this suggests is that our participants, prior to injury, were a group of young, vibrant Canadians, the vast majority of whom were working or taking part in educational or training programs.

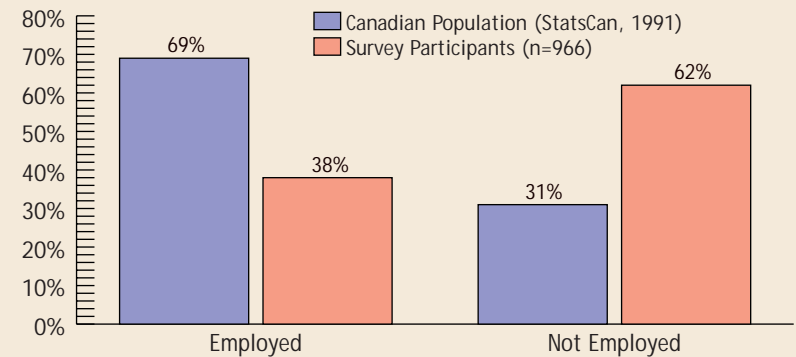
Pre vs. Post Injury Employment Status

When we compare pre-injury employment rates with current post-injury rates, as shown in **Graph 3.2** (next page), an interesting trend becomes crystal clear. After injury, the number of people not employed dramatically increases to 62% (n=596) while the number of people employed dramatically decreases to 38% (n=364).

Graph 3.2 Employment Before and After Injury



Graph 3.3 Comparing Employment to General Population



Comparison to Canadian Employment Rates

How do survey participants compare to the general Canadian population in the area of workforce participation?

As shown in **Graph 3.3**, working age Canadians in 1991 had an employment rate of about 70%, while only about 30% were not employed (remember, this includes both "unemployed" people and those "not in the labour market").

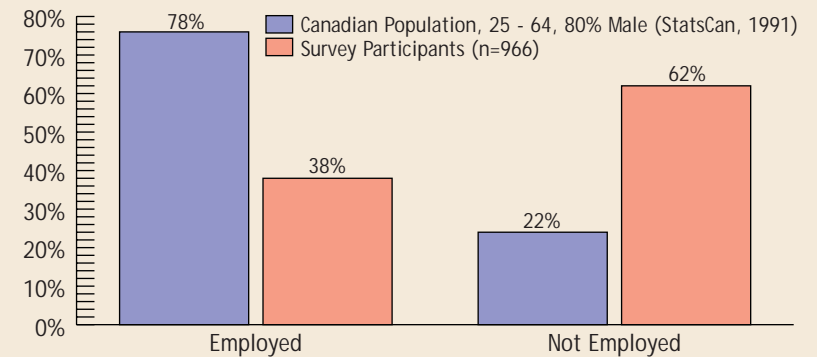
But the comparison isn't as fair as it could be. Keep in mind that our sample is 80% male, and almost 95% of participants are between the ages of 25 and 64—in other words, people in the prime of their working lives. So, in **Graph 3.4**, we've attempted to weight the Canadian population to reflect these numbers. The result is dramatic—employment rates of almost 78% with only about 22% not employed. Compare these to our participants: 38% employed, and 62% not employed.

The bottom line is a confirmation that our participants, and presumably all Canadians with SCI, participate in the workforce in dramatically fewer number than their able-bodied counterparts.

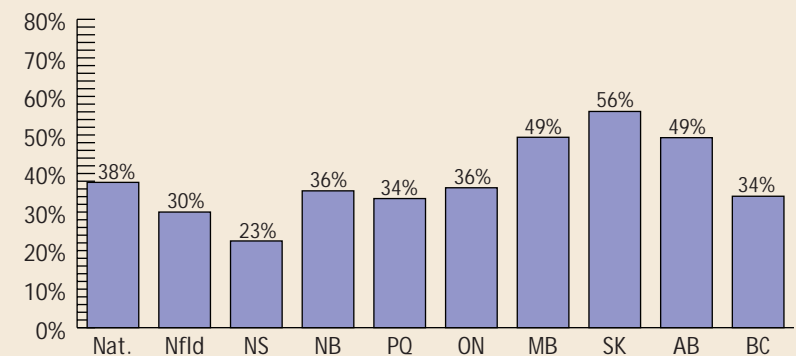
Regional Differences

Low employment levels by people with SCI are consistent across provinces. However, some provinces, particularly western provinces, enjoy higher employment rates than others. **Graph 3.5** compares employment rates from province to province.

Graph 3.4 Comparing Employment to Weighted Population



Graph 3.5 Provincial Employment Levels

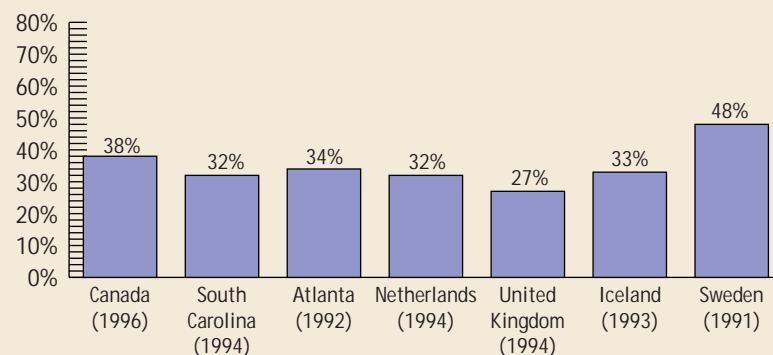


These differences are consistent with provincial trends for all people with disabilities, according to the 1991 Health and Activity Limitation Survey (StatsCan). Possible reasons could include a superior employment services/incentives in various provinces, cultural differences, and regional labour market conditions.

Current Employment in World

Graph 3.6 shows how Canadians with SCI compare to their peers in other countries, using various studies that have been completed. Although Canada's rate compares favourably, it appears that under-employment of people with SCI is a problem around the world.

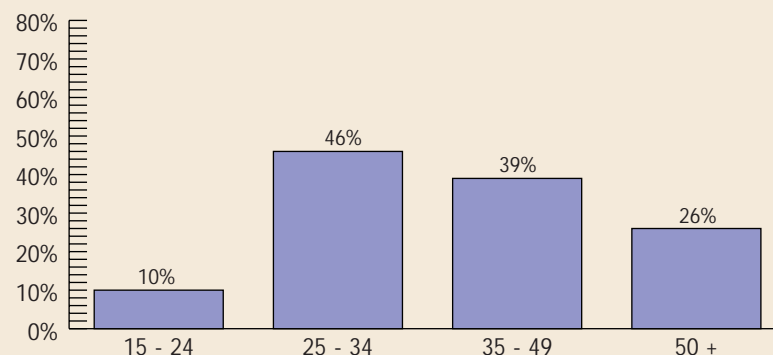
Graph 3.6 SCI Employment Levels Around the World



Current Employment by Age

Graph 3.7 shows the relationship between current age and current employment status. Only 10% of those between 15 and 24 years old are currently employed, but this is no doubt due in large part to the fact that many at this age are involved in education and training. Those between 25 and 34 have the highest employment level, with those between 35 and 49 the next highest. Only 26% of participants aged 50 and over are employed, again suggesting there are many difficulties experienced by those aging with SCI.

Graph 3.7 Current Employment by Age

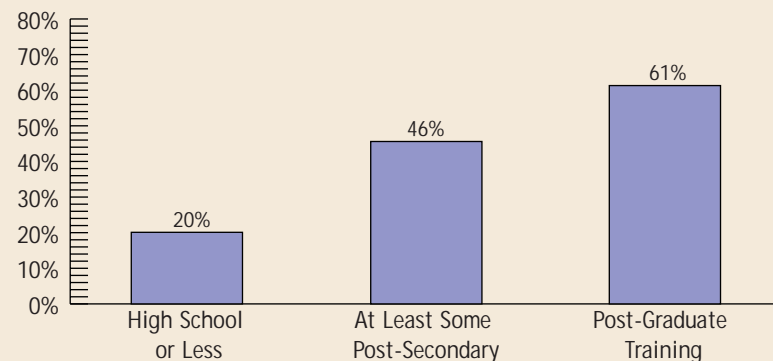


Current Employment by Education Level

Education plays a great role in determining employment levels for all Canadians, but survey results suggest education is even more important for people with SCI. **Graph 3.8** shows employment levels for those in the various education categories.

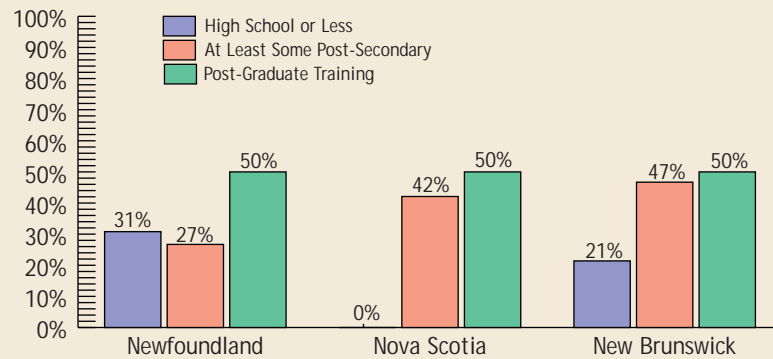
Over 61% of people with post-graduate or professional training are currently employed, and almost 46% of those with any kind of post-secondary training are employed. But of the 349 participants with high school education or less, only 20% are currently employed. As you can see in **Graphs 3.9, 3.10, and 3.11** (next page), this clear trend is consistent across all provinces.

Graph 3.8 Current Employment by Education Level

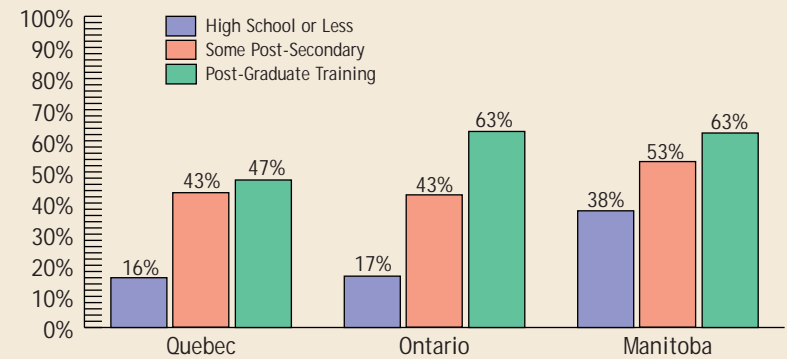


Again, while it is interesting to examine provincial trends, it must be remembered that several provinces have small sample sizes. As a result, provincial data must be interpreted with this in mind.

Graph 3.9 Employment by Education (Nfld., NS, NB)



Graph 3.10 Employment by Education (PQ, ON, MB)



Education Change and Employment

Further evidence of the importance of education to employment can be provided when we look at the employment rates of the 432 participants who have experienced a change in education after injury.

Overall, 59% (n=573) of all survey participants have been employed at some time since injury, regardless of current employment status. This group is referred to as "ever employed".

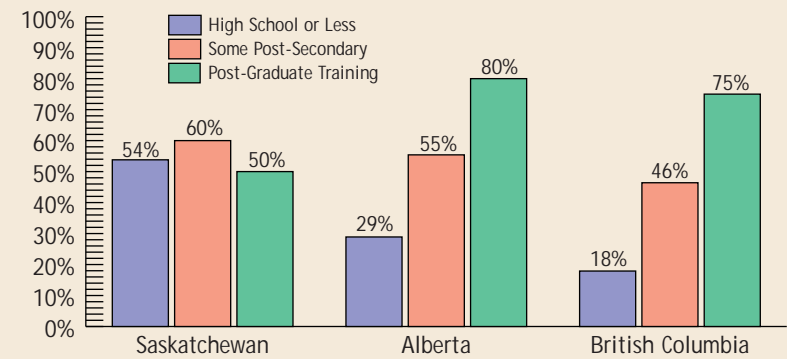
As shown in **Graph 3.12**, 76% of those who experienced a change in education have ever been employed, and 51% are currently employed. Compare these figures to those who haven't increased their education—only 45% have been employed since injury, and just 27% are currently employed. Again, it seems clear that increasing education translates into employment.

Return to Pre-Injury Job vs. Pre-Injury Training

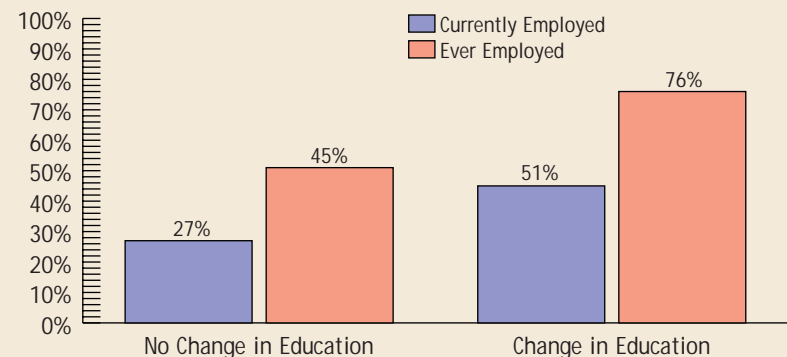
In *Chapter 2: Education*, we showed you that many participants in training before their injury were able to return to their training program and complete it successfully. **Graph 3.13** (next page) compares the success of participants returning to training after injury to those returning to the same job after injury.

About 74% of those in training or educational programs at the time of injury returned to the same course of studies. Less than 18% of those who were employed at the time of injury were able to

Graph 3.11 Employment by Education (SK, AB, BC)



Graph 3.12 Education Change and Employment



return to the same job, with 88% of those who didn't return saying they believe that their injury prevented them from doing so.

It seems it's often very difficult to return to the same job after SCI—but less difficult to return to school. Education and training, therefore, should be emphasized during vocational evaluation.

Current Employment by Status at Time of Injury

Graph 3.14 adds to the information provided in the previous graph by comparing current employment levels of those who were in training at the time of injury to those who were employed at the time of injury. About 47% of those who were in training are currently employed—a full 10% percent higher than those who were employed at the time of injury.

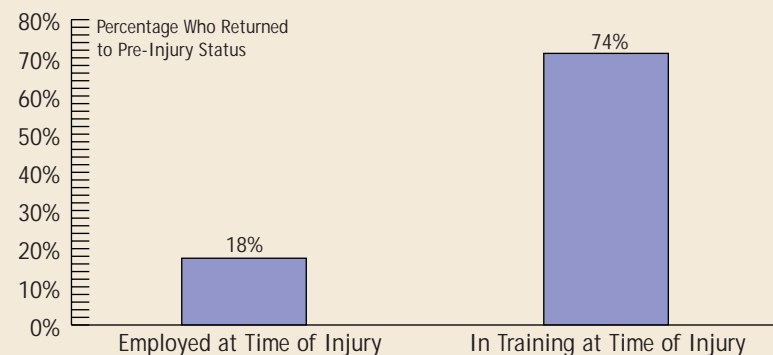
Length of Time Before Return to Employment

Graph 3.15 shows how many years after injury it took for participants to achieve employment. Again, note that this is for participants who have worked at any time since injury, not those currently employed. As you can see, 44% of participants worked within two years of injury, and about 77% who ever returned to work did so within five years. This suggests that many people with SCI are willing and able to seek employment soon after injury. However, there are likely to be individual differences in the optimal time to consider employment, and these must be taken into account during the vocational rehabilitation process.

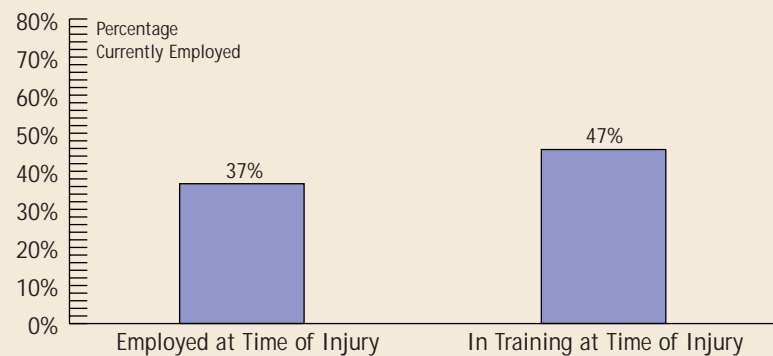
Education level at time of injury plays a significant role in determining how quickly participants were able to move into the workforce, as shown in **Graph 3.16** (next page). This graph compares the highest level of education held at time of injury for those who returned to work within two years and five years. Under 40% of those with high school education or less joined the workforce within two years.

Conversely, those with greater education levels were far more likely to begin working within the first two years. Almost 48% of those with any post-secondary education began working within the first two years, and over 76% of those with post graduate

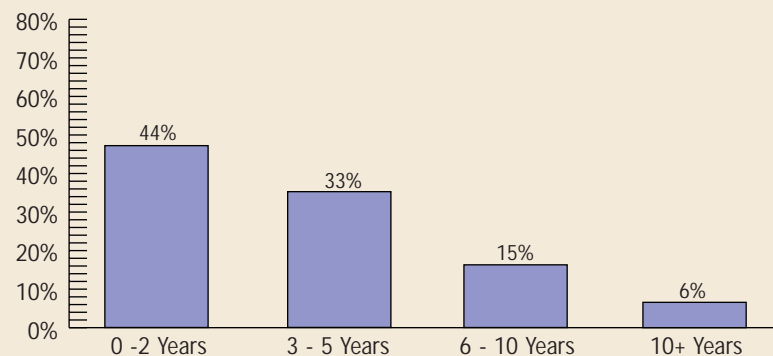
Graph 3.13 Return to Pre-Injury Job vs. Training



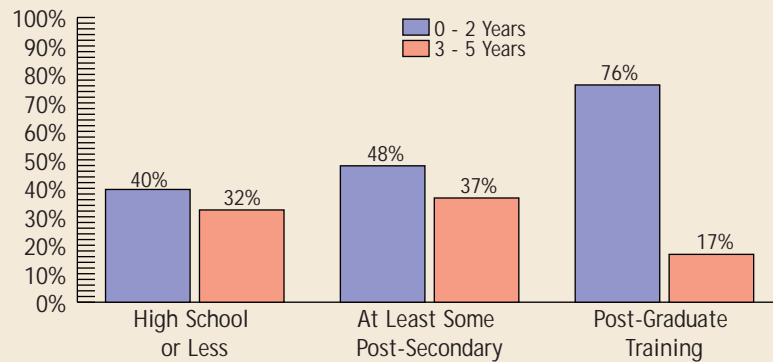
Graph 3.14 Employment by Pre-Injury Status



Graph 3.15 Length of Time Before Employment (n=573)



Graph 3.16 Years Until Employment by Education (n=438)



training at the time of injury began working within the first two years after injury.

Once again, this all points to the strong correlation between post-secondary education and employment for those with SCI.

Current Employment Rates by Time Since Injury

Current employment rates of participants in the various years since injury categories are shown in **Graph 3.17**. Employment rates steadily increase within the first 15 years post-injury, but then level out with the highest employment rates experienced by those who were injured 15 to 20 years ago.

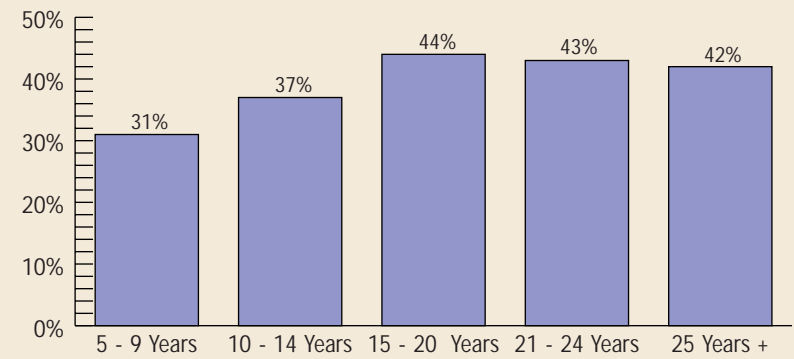
The information in this graph suggests that employment, for some, takes a considerable amount of time to achieve (much of which is probably spent acquiring higher education).

Nature of Employment

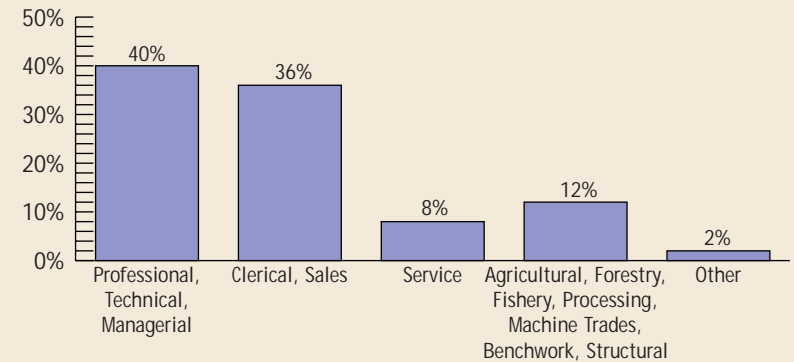
Graph 3.18 shows the job categories for every participant who has ever been employed since injury. A significant number—almost 40%—are in the professional/technical/managerial category. This again confirms the importance of education, as all these jobs require specialized training. Clerical/sales types of jobs were identified next often at almost 36%.

Graph 3.19 shows the same job categories, but for current employment. The professional/technical/managerial category is by

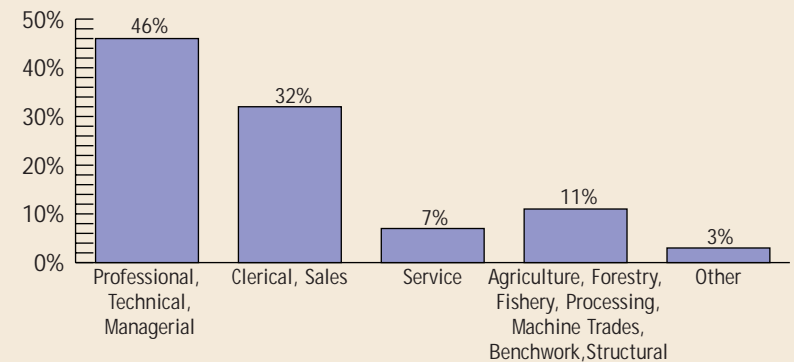
Graph 3.17 Current Employment by Years Since Injury



Graph 3.18 Job Classifications, Ever Employed (n=573)



Graph 3.19 Job Classifications, Current (n=364)



far the most identified category, with clerical/sales running a distant second.

Not surprisingly, few are in the kinds of occupations that require greater physical abilities. Many of those employed have what can be considered “higher level” jobs.

Time Spent at Work

Graph 3.20 compares the employment status—full-time, part-time, or self-employed—of participants working before injury and those currently working.

There is a trend away from full-time employment to part-time and self-employment. This is probably a mirroring of a trend being experienced in the general population. But this also suggests the need for flexible work options for people with SCI.

For example, many CPA members informally report that self-employment is particularly suited to their needs.

With 17% of those currently working reporting being self-employed, entrepreneurship should be presented to clients as a viable option during the vocational rehabilitation process.

Adding on the information presented in the previous graph, **Graph 3.21** shows the actual number of hours currently employed participants reported they work during a week. Well over ¾ say they work more than 33 hours a week.

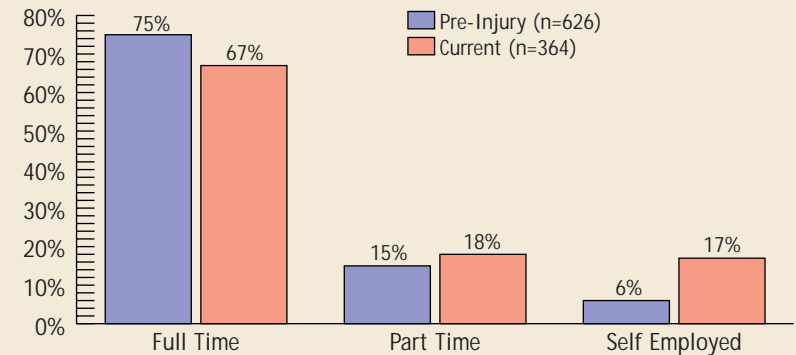
Taken together, these two graphs clearly suggest that people who do work post-injury put a great deal of time into their professions.

Job Satisfaction

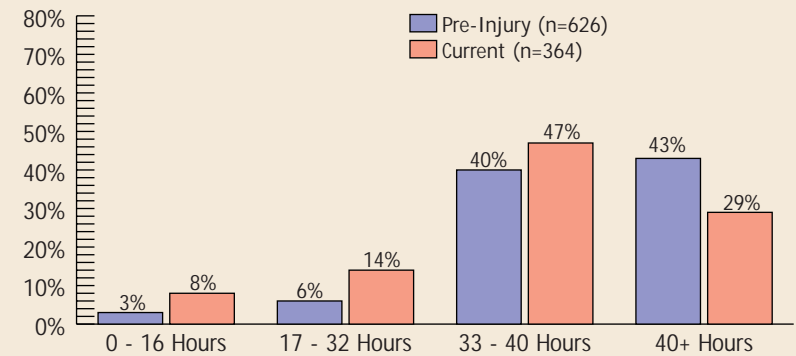
Graph 3.22 shows the job satisfaction level expressed by participants who are currently working. About 68% are very or extremely satisfied with their current job, and a further 26% are somewhat satisfied.

This is a clear indication that those who work post-injury “find their niche” and are realizing the benefits of employment beyond receiving a pay cheque: increased self-worth, sense of contribution and life satisfaction.

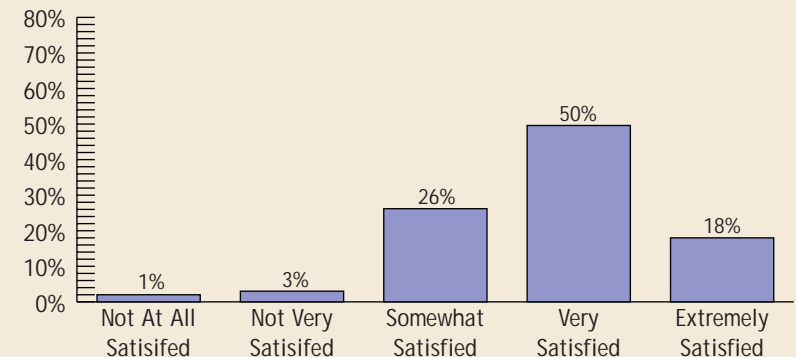
Graph 3.20 Nature of Employment (Pre-Injury vs Current)



Graph 3.21 Hours Per Week (Pre-Injury vs Current)



Graph 3.22 Satisfaction With Current Employment (n=364)



Effect of Functional Ability on Employment

As in *Chapter 1: Demographics*, we have chosen to measure functional ability by mobility aid. We have found mobility aid usage provides a more telling picture of a participant's functional ability than using level of injury, because an injury at a specific level can result in a wide variation of ability.

Graph 3.23 illustrates current employment by mobility aid. As you can see, people who use power wheelchairs are severely under-employed at less than 20%. Power wheelchair users who are employed are also far less likely to work full-time (53%) than those who use manual wheelchairs (69%). Similarly, almost ¼ of working power wheelchair users are self-employed, compared to about 14% of manual wheelchair users. Clearly, the functional ability of power wheelchair users translates into barriers to employment, and vocational rehabilitation efforts must consider flexible workplace alternatives.

A surprising result in this area is that those who said they use crutches, canes and walkers have a lower employment rate than those who use manual wheelchairs. People in this category are likely to have incomplete types of injuries and are generally perceived to be less disabled than those with complete injuries. However, our findings suggest that people in this group do, in fact, encounter serious barriers to employment, which must be kept in mind by vocational rehabilitation professionals.

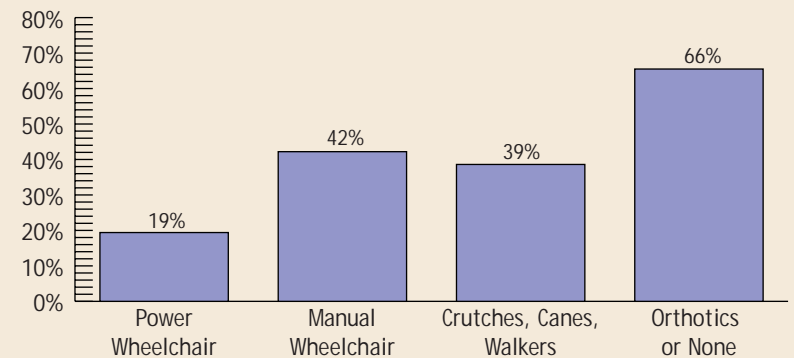
People who said they use orthotics or no aid at all have rates of employment which almost match that of the general population.

Jobs Lost or Left

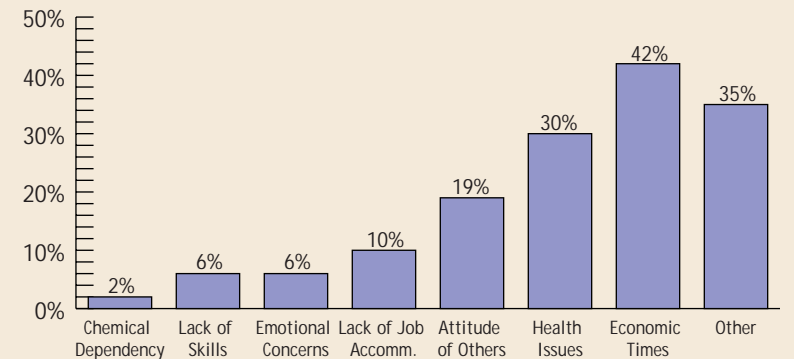
Almost 60% of participants have been employed at some time since injury, but only 63% of those who have ever worked are still working—about 38% of all respondents. Retirement partially explains this, since about ¾ of all participants aged 50 and are not employed. But retirement only partially explains the trend.

About 25% (n=146) of those ever employed since injury said they have lost a job, either voluntarily or otherwise. **Graph 3.24** shows the reasons identified for this. The “economic times” was most often identified, but at over 30%, health issues clearly played

Graph 3.23 Current Employment by Mobility Aid



Graph 3.24 Reasons Given For Losing a Job (n=146)



a role, and almost 20% said the attitude of others was the reason. Respondents who had lost jobs were more likely to be low wage earners and had lower levels of education.

About 45% (n=258) of those who have ever worked left a job. As **Graph 3.25** (next page) illustrates, the most common reasons for this were moving to another job, health reasons, work pressures, and lack of job satisfaction. A significant number answered in the “other” category. Of these, only 12 people said they retired.

The inference is that while many participants left or lost jobs for reasons not associated with disability, many did: SCI, it appears, presents some barriers that may force a premature retreat from the labour market if flexible employment options aren't explored.

Workplace Modifications and Supports

Just over 45% of all participants who have ever worked said they required accessibility modifications to the workplace. At almost 94%, satisfaction with these modifications is high. **Graph 3.26** shows the percentage in each mobility level who required workplace modifications. Almost half of those using power and manual wheelchairs required modifications.

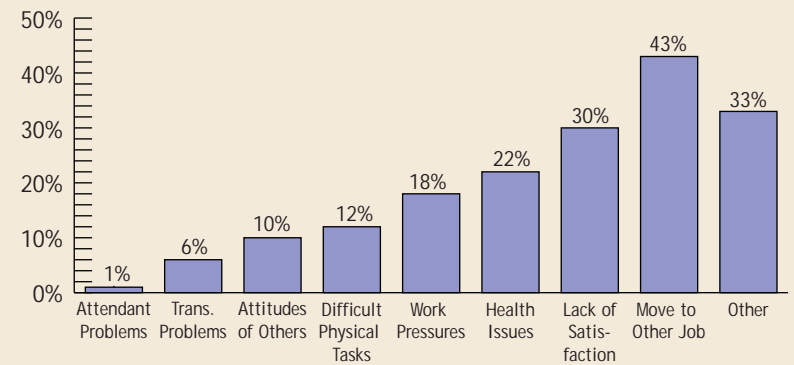
Graph 3.27 shows a breakdown of supports (personal supports and assistive devices) used by participants who have worked at some point since injury. Note that some participants reported using more than one of these supports; thus, the total percentage exceeds 100.

At over 73%, the majority of participants said they don't require any supports. Of those who do, most are power wheelchair users.

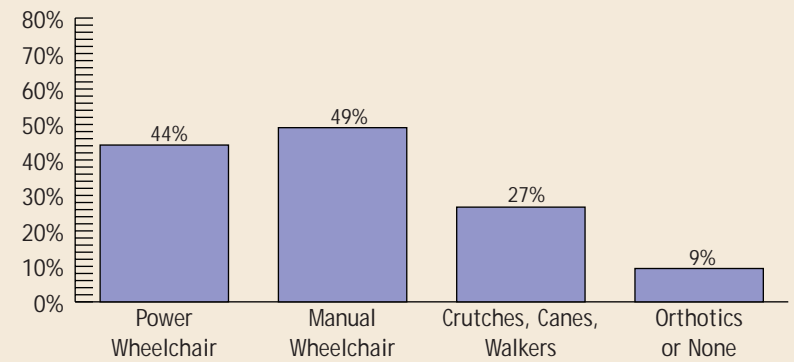
It pays to keep in mind that many studies conclusively point out that most modifications and supports are relatively minor and inexpensive in nature. Further, the impact of ever-improving accessibility requirements contained in various building codes across Canada will no doubt continue to be felt, and, as accessibility becomes built into workplaces as a matter of course, the need for modifications will no doubt continue to decline.

Nevertheless, our results indicate that vocational rehabilitation specialists need to remain diligent in this area, and that workplace accessibility and supports can be crucial to employment success.

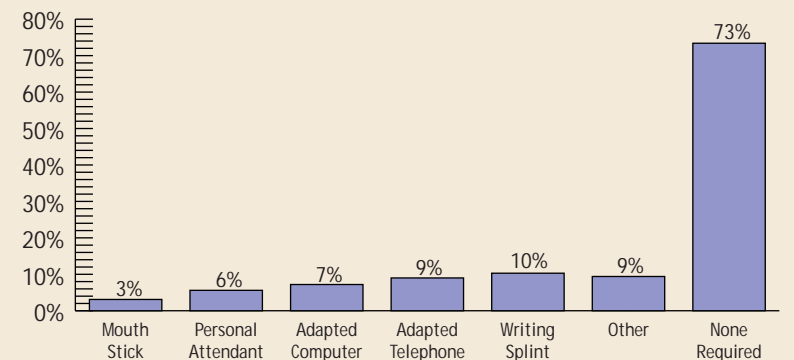
Graph 3.25 Reasons Given For Leaving a Job (n=258)



Graph 3.26 Worksite Modifications by Mobility Aid (n=573)



Graph 3.27 Use of Workplace Supports (n=573)



CHAPTER 4: INCOME

In this chapter, we'll provide a snapshot of the income levels and sources for our participants. The relationship between income, education and employment will also be drawn out.

One factor to keep in mind is that a great many participants couldn't or wouldn't respond to many income questions despite our assurances of confidentiality. For example, 13% didn't provide their total yearly income from all sources, 18% didn't provide their total household income, and 22% didn't provide their employment income. This naturally makes our results less accurate than those in other areas, in which most participants had no problem answering survey questions.

Finally, to simplify this analysis, we have combined several income categories. For example, "less than \$5,000" and "\$5,000 to \$9,999" have combined to form the category "less than \$10,000". The result is that we have used five income categories in our analysis, compared to the nine which were used in the original survey questions.

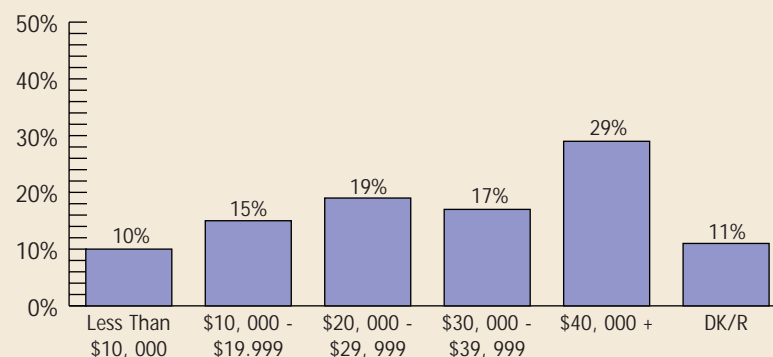
Annual Income from Employment

Graph 4.1 shows employment income for the 364 participants who are currently employed. Approximately 46% are earning more than \$30,000 per year, and 29% are earning more than \$40,000 per year. This is a surprising statistic—almost a third of all currently employed participants are in the highest income bracket.

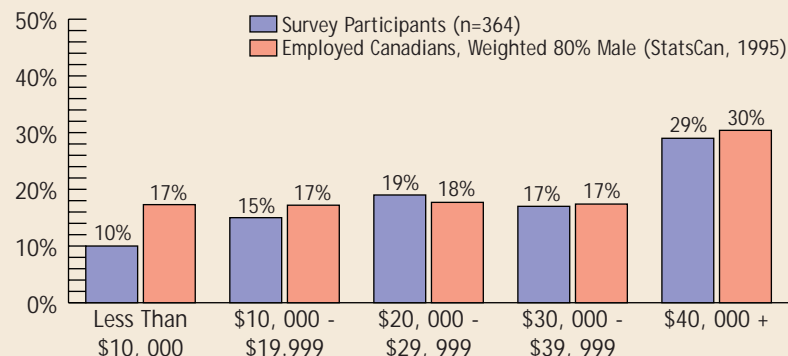
Conversely, 25% earn less than \$20,000 per year. But this must be considered in light of the fact that 22% of employed participants said they work less than 32 hours per week.

Graph 4.2 compares employment income levels of participants with those of the general Canadian population employed in 1995. The Canadian population has been weighted (80% male, 20% female) to provide a more accurate and meaningful comparison.

Graph 4.1 Annual Employment Income (n=364)



Graph 4.2 Employment Income Comparison



As you can see, the comparison is favourable. Fewer of our participants are in the lowest two income brackets, and the number of participants in the top three brackets is similar to the Canadian population. This clearly suggests that when Canadians with SCI gain a foothold in the labour market, they are capable of earning on equal terms with their non-disabled counterparts.

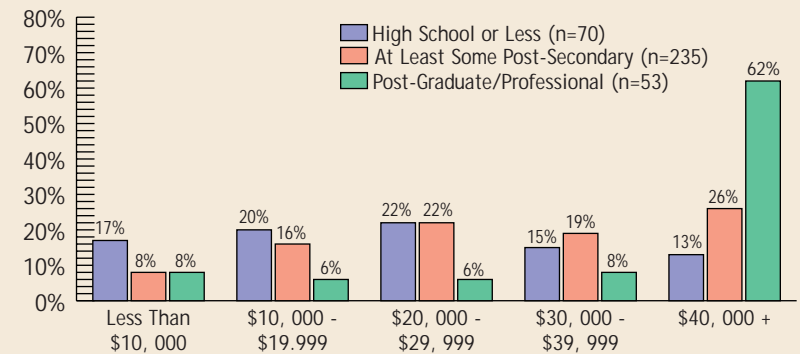
Effect of Education on Employment Income

Our survey results confirm that level of education has a direct bearing on a person's employment income potential. **Graph 4.3** shows the percentage of currently employed participants from each income bracket in the various educational categories.

As you can see, those with only high school education or less are more or less spread between all income categories, with the highest percentage being in the middle income category of \$20,000 to \$29,999 and the lowest percentages being in the two highest income brackets.

Those with some post-secondary education show an upward income trend, with 26% being in the highest income bracket. The vast majority of participants with post-graduate and professional degrees are earning in excess of \$40,000 per year.

Graph 4.3 Education Level and Employment Income

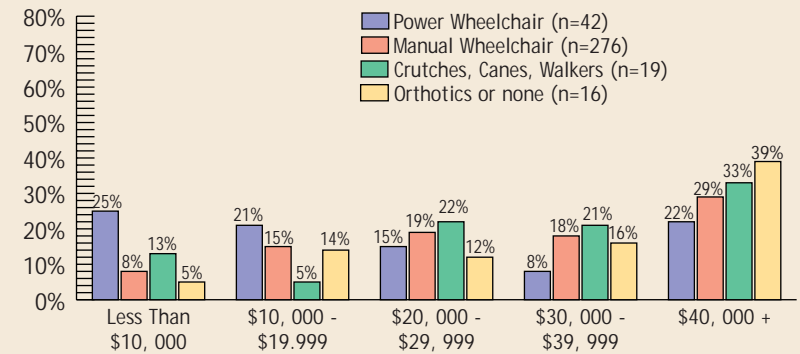


Effect of Functional Ability on Employment Income

Again, we use mode of mobility to measure functional ability after SCI. **Graph 4.4** shows the relationship between mode of mobility and current employment income. Notice that there are many power wheelchair users in the lowest two income brackets, with 46% earning less than \$20,000 per year. This can probably be explained by the fact that power wheelchair users less often work full-time as compared to all other groups.

Despite the large number of power wheelchair users in the lower income groups, 22% are in the highest income bracket. This suggests that, although functional ability appears to often affect the likelihood of becoming employed, it doesn't play as significant a role in determining income from employment.

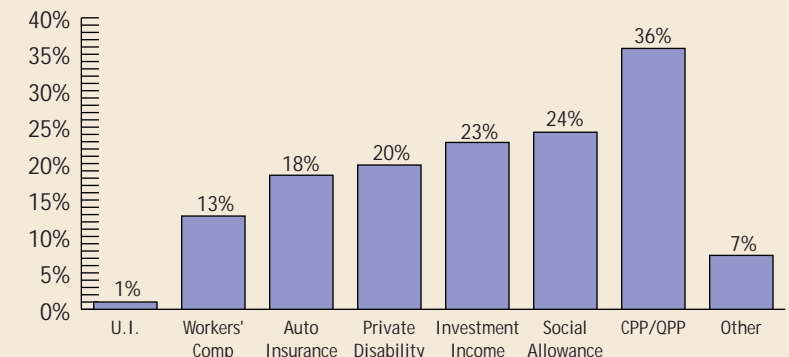
Graph 4.4 Mobility Aid and Employment Income



Non-Employment Income

Over 70% of all participants said they are in receipt of non-employment income. Looking specifically at those who have never worked since injury, 90% report non-employment income. **Graph 4.5** shows the various sources of this non-employment income. Almost 36% receive income from CPP or QPP. A further 24% use provincial government income support programs, or social allowance.

Graph 4.5 Sources of Non-Employment Income (n=679)



Combined, 60% of participants receive non-employment income through income support programs.

Of those participants receiving non-employment income, many obviously receive it from more than one source.

Of the 679 participants who said they receive non-employment income, 19% said that this income caused them not to seek work. Of these, 48% said that they thought they would lose benefits. Over 28% said it was because they have no need for employment income, and a further 28% said they were uncertain of the effect seeking work might have on their non-employment income.

Total Income From All Sources

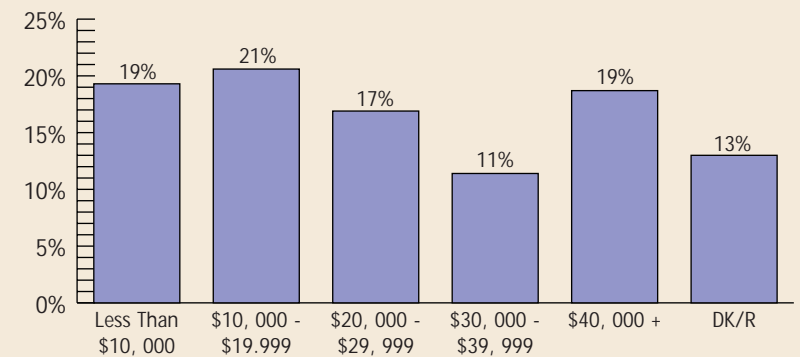
Graph 4.6 provides a snapshot of all participants' income from all sources. At 11%, participants least occupy the income bracket between \$30,000 and \$39,999. Again surprising is the high number of people in the highest income bracket—about 19%.

Explaining High Income From All Sources

About 19% of participants—181 in total—have a total income of \$40,000 and above. Why? To begin with, most of these high income earners do it the old-fashioned way—they earn it. Over 70% of those in this high income category are currently employed.

Of those employed and having a total income exceeding \$40,000, 62% have an employment income of \$40,000 or more. However, this leaves many who earn less than \$40,000, and there are a high number of people—about 20%— in this total income category who *earn* less than \$10,000 per year. Therefore, some obviously have income from other sources.

Graph 4.6 Total Personal Annual Income



Other interesting facts about this high income group include:

- 54% experienced a change in education post-injury
- it contains a high percentage of those with post-graduate or professional degrees, as outlined earlier in this chapter
- functional ability as determined by mode of mobility doesn't play a significant role in determining income, as outlined earlier in this chapter
- almost 54% receive some form of non-employment income, either as the sole means of income or as a supplement to employment income, but this is a substantially smaller proportion than the 70% overall sample and the 90% of those who have never worked since injury who receive non-employment income.

The bottom line is that most participants achieve high incomes through improving education and achieving gainful employment, although non-employment income, in whole or as a supplement, accounts for high income for a small percentage of participants.

CHAPTER 5: LABOUR MARKET EXCLUSION

One of the most troubling facts revealed by the survey was that large number of participants (40%, n=390) have never worked since they were injured. Of these, only 77 have ever sought employment, which means that 32% (n=310) of all participants have never worked—and have never tried to work. Clearly, it's important to further study this group to determine why its members have been excluded from—or opted out of—the labour market since injury.

Effect of Age

Graph 5.1 compares the ages of those who have never worked. As you'd expect, a large percentage (61%) of those aged 15 to 24 have never worked—presumably because many are still in school or training. At 33%, the group between 25 to 34 had the lowest number of people in this category. But the fact that one third of all participants who are at this prime working age haven't even considered working as an option is very telling.

Excluding the youngest age group, the number of people who have never worked increased with age. This could be due to restricted job opportunities in previous decades.

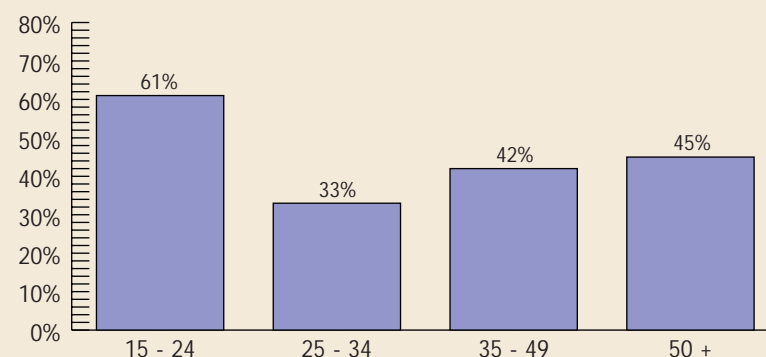
Effect of Functional Ability

A clear trend amongst those not in the labour market is shown in **Graph 5.2**. About 63% of all participants who use power wheelchairs said they have never worked. Again, less functional ability translates into lower representation in the labour market.

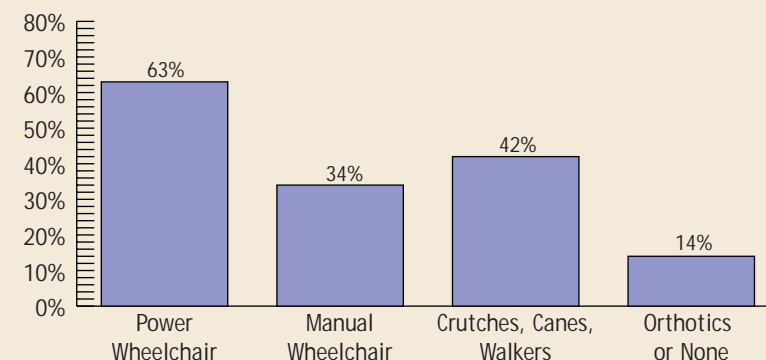
However, keeping in mind that the majority of participants use manual wheelchairs (n=654), people in this category form the majority of those who have never worked.

One surprising result of this comparison is that people who are capable of walking with the assistance of a cane, etc., appear to have even greater difficulty than those who use manual wheelchairs.

Graph 5.1 Never Employed - Age (n=390)



Graph 5.2 Never Employed - Mobility Aid (n=390)



This finding suggests that people in this group experience many of the same barriers as people with less functional ability.

Effect of Education

Once again, lower levels of education also translate into the increased likelihood of never having worked, as shown in **Graph 5.3**. About 60% of those with high school education or less have

never worked. Conversely, only 11% of professionals and those with post-graduate degrees have never worked.

Furthermore, of all participants who experienced a change in education, only 24% have never been employed. In contrast, 55% of those who haven't experienced a change in education have never been employed. The message is clear—education translates into a “working state of mind” and, ultimately, jobs and careers.

Income Levels

Naturally, the high number of people who have never been employed leads us to question whether they have high incomes from other sources, such as a large legal settlement. However, as **Graph 5.4** shows, about 51% have an annual income of less than \$20,000, while only 15% have an income of over \$30,000.

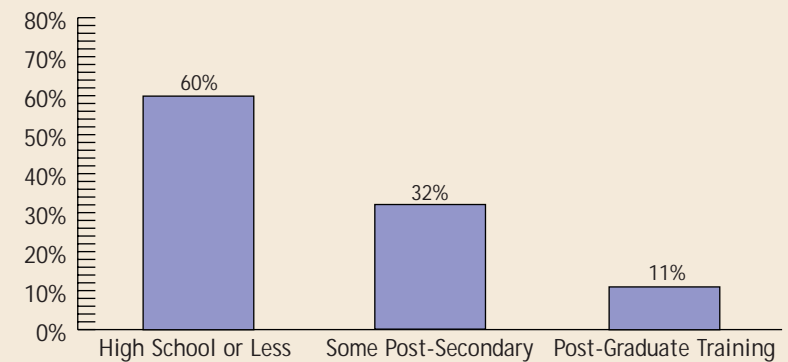
Of course, it's possible that a spouse or other family member could be providing support to individuals who have never worked. **Graph 5.5** shows that household income improves the situation for many who have never worked, with 31% having a household income of \$30,000 or more. But, at 48%, the majority have a household income of less than \$30,000.

This suggests that most people who have been excluded from the labour market since injury aren't independently wealthy and instead appear to rely on income consistent with the type of support offered by the various disability-related income support programs available, such as CPP, or a modest legal settlement.

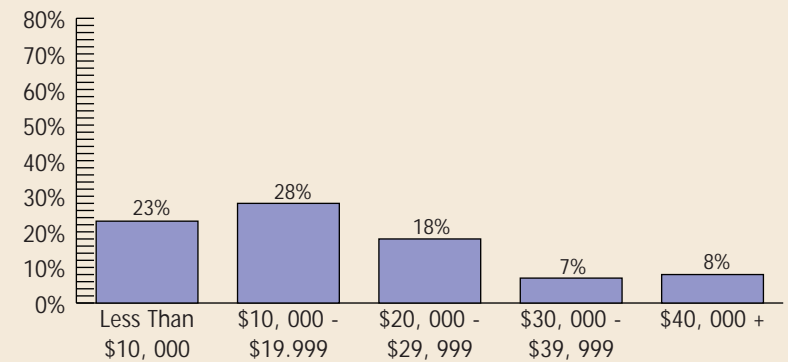
This is confirmed by Graph 4.5 in *Chapter 4: Income*, which provides a breakdown of sources of non-employment income. As shown in this graph, about 73% of participants receiving non-employment income do so via income support programs, private disability insurance, or other pensions.

Recall from *Chapter 4: Income* that 90% of people who have never worked reported receiving non-employment income. But only 21% of those said that their non-employment income has caused them not to seek employment. Therefore, other factors must be affecting their employment status. The next chapter attempts to pinpoint these factors.

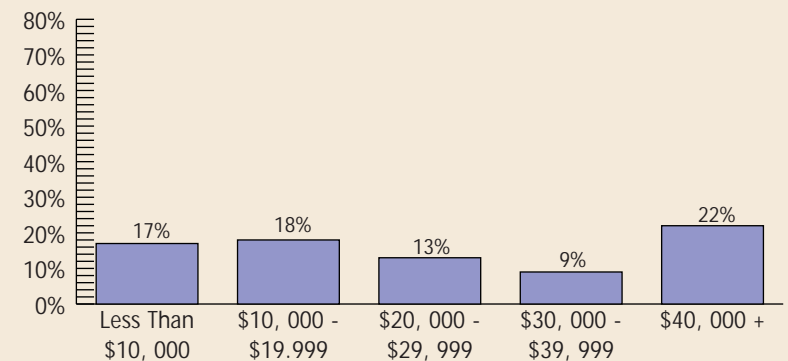
Graph 5.3 Never Employed - Education (n=390)



Graph 5.4 Never Employed - Annual Income (n=390)



Graph 5.5 Never Employed - Household Income (n=390)



CHAPTER 6: INTERFERING FACTORS

The results of this survey demonstrate that many people with SCI are somehow discouraged from seeing employment as viable. From information presented in previous chapters, we can assume there is a host of overriding explanations for this: lack of education, lack of motivation to participate in education or training, and low levels of functional ability.

There are obviously some specific disability-related factors that contribute, in whole or in part, to these employment barriers. This chapter examines some of these interfering factors and how they may discourage people with SCI from gaining education, joining the workforce and, ultimately, reaching their vocational goals.

These results will provide all stakeholders with a glimpse of the forces at play during rehabilitation. In particular, they should provide rehabilitation professionals with insight into issues that they must help clients deal with if employment is to become an option.

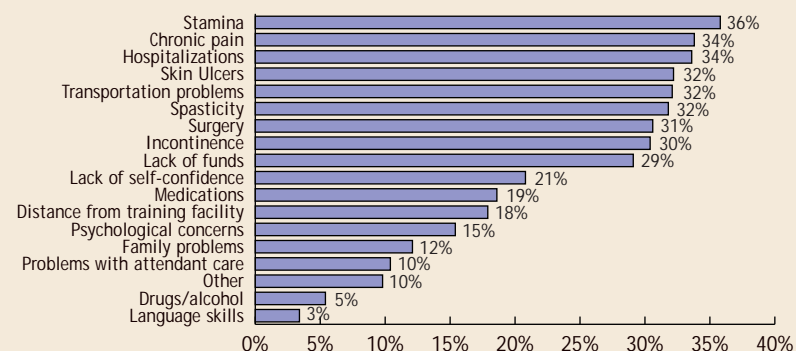
Overview of Factors

We asked all participants to identify the factors that interfered with them achieving their vocational goals. **Graph 6.1** shows the reported incidence of each factor. Lack of stamina is the most frequently cited interfering factor. Pain, hospitalizations, skin ulcers, transportation problems, spasticity, surgery, and incontinence were all cited by more than 30% of participants. Note that problems with drugs/alcohol are rarely reported, contradicting other studies.

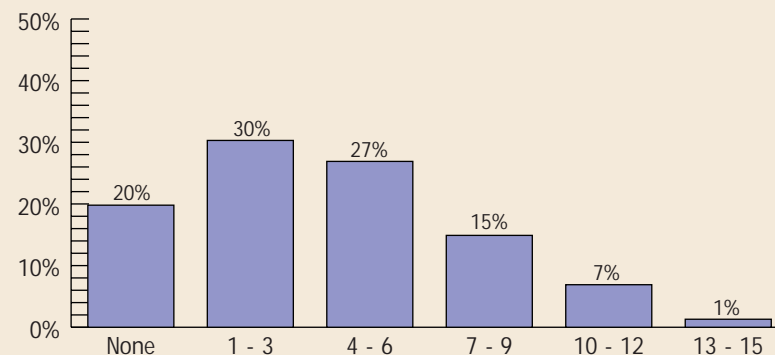
Number of Factors Experienced

When we look at the number of factors reported by participants, as shown in **Graph 6.2**, we can see that about 20% said that none of the factors interfered with their vocational goals. Over 30%, however, said they experience between one and three of the factors, and 50% said that they experience four or more interfering factors.

Graph 6.1 Factors Interfering with Vocational Goals



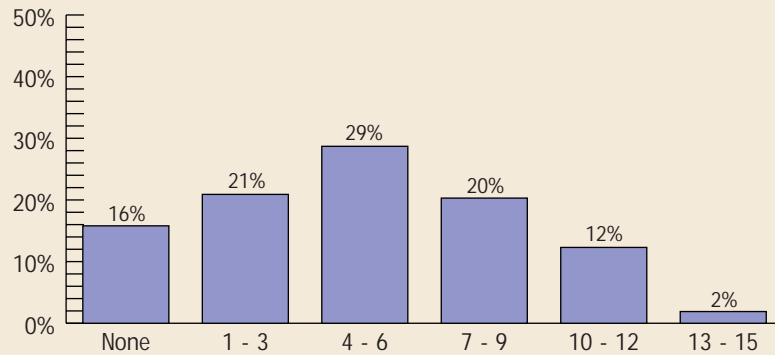
Graph 6.2 Number of Interfering Factors Experienced



Interfering Factors and Level of Ability

How do these interfering factors affect those with different levels of functional ability, as measured by mode of mobility? Graphs **6.3**, **6.4**, **6.5**, and **6.6** show the number of interfering factors experienced by power wheelchair users, manual wheelchair users, those who use crutches, canes or walkers, and those who use orthotics or no mobility aid. From these graphs, we can see that

Graph 6.3 Interfering Factors: Power Wheelchairs



within the power wheelchair user group, 4 - 6 factors were most often reported at almost 29%.

This group had the highest percent reporting 7 or more interfering factors at almost 35%. And overall, this group reported having the greatest number of interfering factors.

Surprisingly, 39% of those in the crutches, canes and walkers group reported 4 - 6 interfering factors. Even more surprising is the litany of factors experienced by those in the orthotics or none group. This group was least likely to have no interfering factors, so appearing able-bodied doesn't translate into trouble-free living.

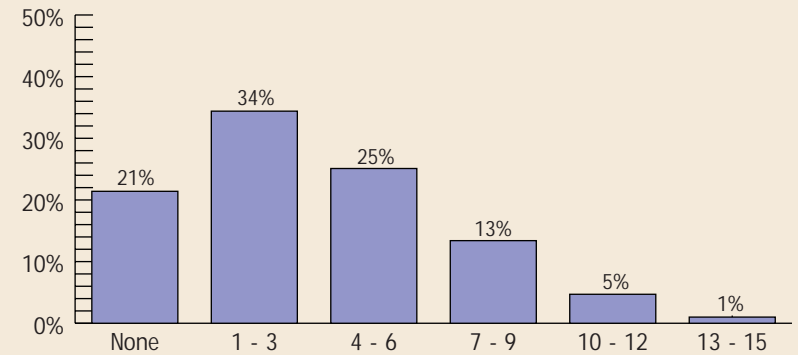
Graphs 6.7, 6.8, 6.9, and 6.10 (on next page) show specific interfering factors experienced for each mode of mobility. Clearly, a major problem for one group isn't necessarily so for another.

Power wheelchair users (n=217) report high incidence of most factors, particularly skin ulcers, attendant care and transportation.

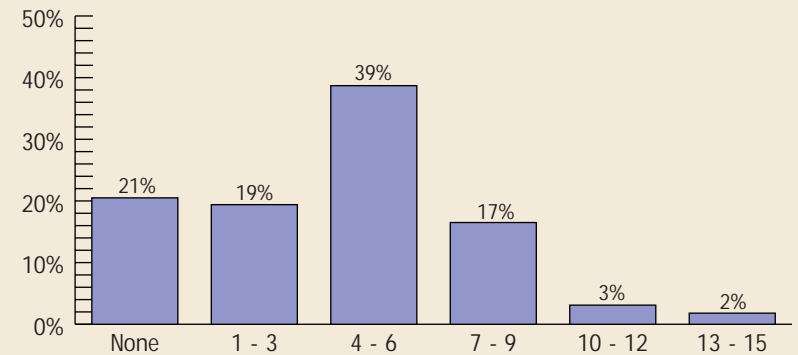
The pattern of interfering factors for manual wheelchair users (n=654) is similar to that of power wheelchair users, except overall incidence rates are lower. This group less often reports problems with stamina, transportation, attendant care and medications.

Examination of **Graphs 6.9** and **6.10** indicates that those who use mobility aids other than wheelchairs experience somewhat different interfering factors. For example, both report much more frequent problems with stamina but less frequent problems with skin ulcers than those who use wheelchairs.

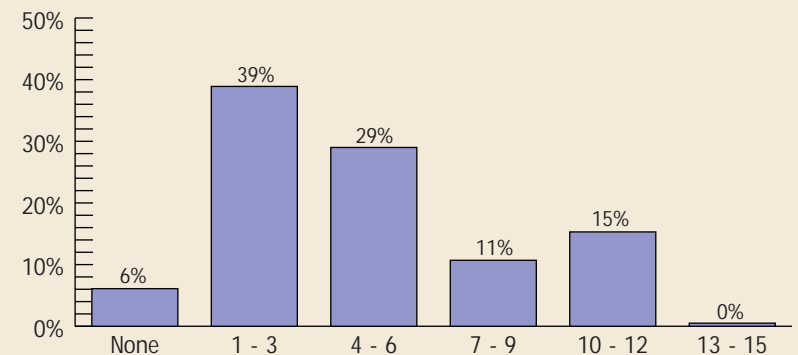
Graph 6.4 Interfering Factors: Manual Wheelchairs



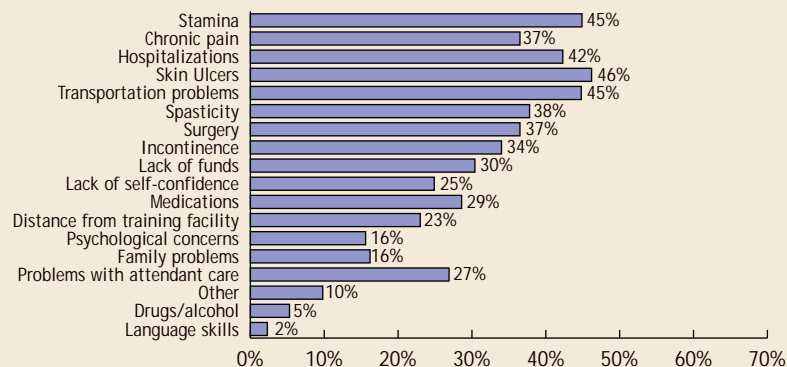
Graph 6.5 Interfering Factors: Crutches, Canes, Walkers



Graph 6.6 Interfering Factors: Orthotics or None



Graph 6.7 Interfering Factors: Power Wheelchairs



Specifically, the crutches, canes and walkers group (n=50) reports the highest incidence of problems with stamina (over 62%) and chronic pain (almost 50%). And self-confidence is a significantly larger problem for those in this group than wheelchair users. Over 32% said self-confidence interferes with vocational goals, compared to about 25% of power wheelchair users and about 18% of manual wheelchair users.

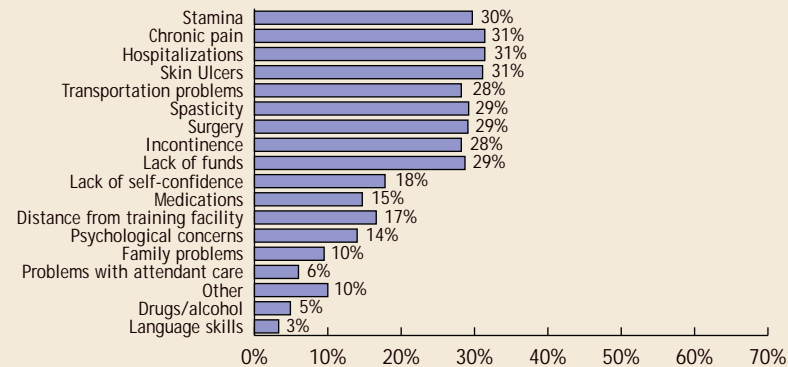
At over 61%, spasticity is the most commonly-identified factor of those in the orthotics or none group (n=25). This group also had many problems with stamina (over 55%), drugs and alcohol (over 16%), self-confidence (almost 33%), psychological problems (over 35%) and family problems (over 34%). Hospitalizations and medical issues aren't nearly as much of concern for this group. But these findings again suggest that people in this group experience many problems that require attention during the rehabilitation process.

Effect of Factors on Employment Levels

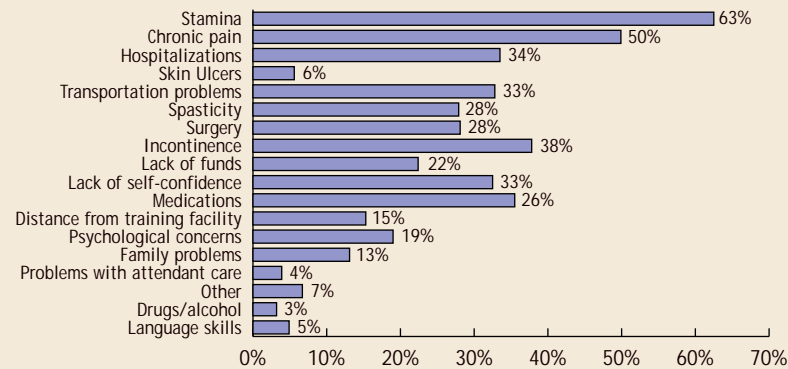
There is a direct correlation between the number of interfering factors experienced and employment levels, as shown in **Graph 6.11** (next page). The more factors, the lower the chance of being currently or ever employed.

The inference that can be made is that by addressing and removing specific factors through effective counselling, assessment, information and advocacy, the chances of employment increase.

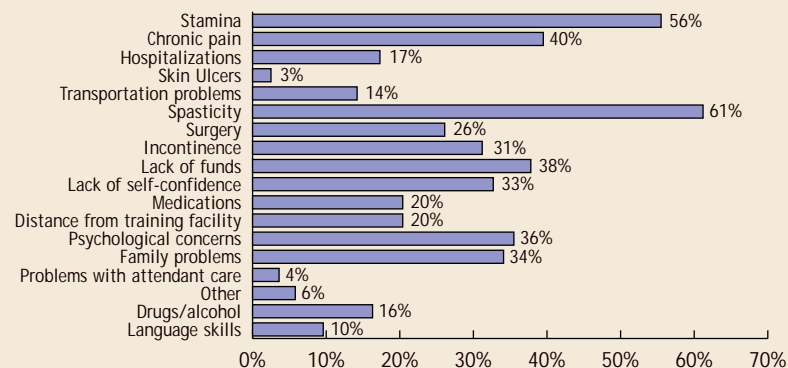
Graph 6.8 Interfering Factors: Manual Wheelchairs



Graph 6.9 Interfering Factors: Canes, Crutches, Walkers



Graph 6.10 Interfering Factors: Orthotics or None

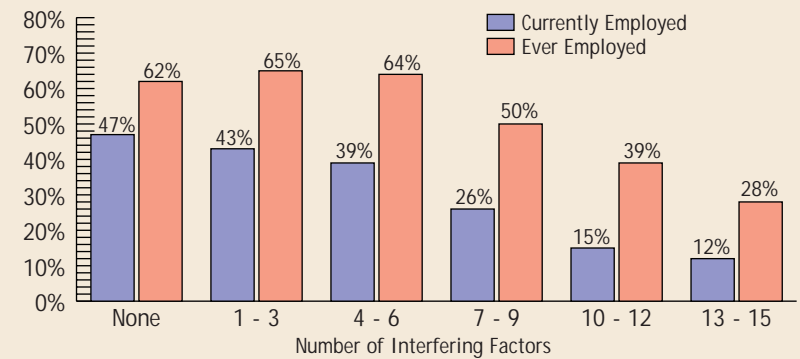


Are any interfering factors more problematic than others? **Graph 6.12** shows the "ever employed" level for those who said they had experienced the factor as interfering with vocational goals.

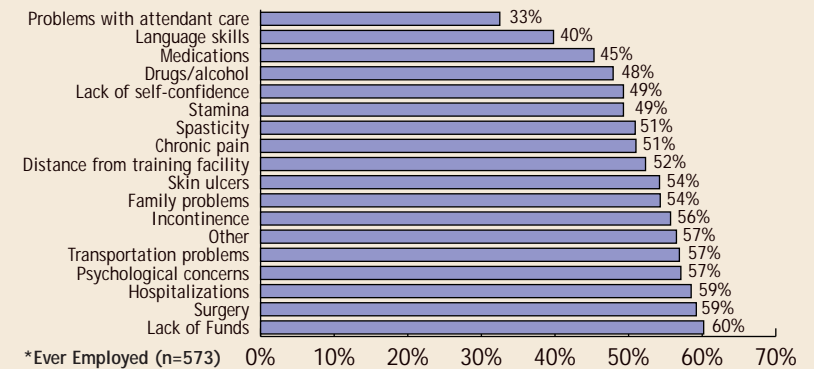
The most conclusive inference that can be made is that problems with attendant care pose the most significant barrier to employment because only about 33% of those who cited this factor have ever been employed since injury. Attendant care problems, overall, have a low rate of occurrence (10%) and are most often experienced by power wheelchair users.

Lack of language skills apparently also can be a significant barrier to employment, even though this factor was cited least frequently overall (3%). This suggests that even the less frequently experienced interfering factors must be identified and addressed during the rehabilitation process.

Graph 6.11 Interfering Factors and Employment



Graph 6.12 Employment* for Each Interfering Factor



CHAPTER 7: COUNSELLING SERVICES

Goals of this survey included measuring participants' use of vocational and employment counselling services, determining which organization or government body provided those services, and gaining an understanding of their effectiveness.

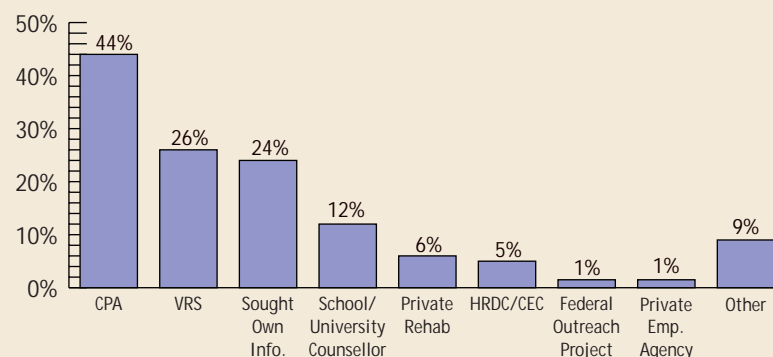
For the purposes of this survey, vocational counselling services are loosely defined as those that are aimed at assisting clients to access education and training, such as providing vocational evaluation and providing information on educational and training options. Employment counselling services are loosely defined as those aimed at assisting clients find employment, such as providing information on employment options and securing employment placements.

From CPA's perspective, it was important to understand all of this given the Association's renewed focus on employment and maximizing effectiveness of its own vocational and employment counselling services.

As you'll read, results outlined in this chapter can be construed as only modest endorsements of CPA services across Canada. But these results must be measured against the fact that CPA Divisions have only made a conscious effort to develop and enhance vocational and employment counselling services in recent years, and that this effort has varied from province to province. Specifically, it's only been in the last five years that larger CPA Divisions have begun to hire accredited vocational or employment specialists (such as certified vocational evaluators, or CVEs).

So, when you consider that all participants have been injured at least five years, and that almost 43% have been injured more than 15 years ago, and that our experience tells us that vocational and employment counselling services are most commonly used in the first few years following injury, it becomes clear why CPA hasn't provided more services to participants.

Graph 7.1 Vocational/Employment Resources Used



Obviously, a survey carried out today of those who had been injured within the last five years would no doubt reveal a much higher usage of CPA's vocational and employment counselling services and yield a more accurate picture of the success of these services.

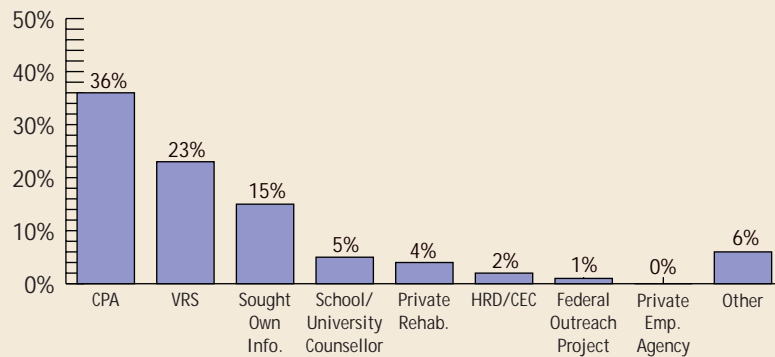
Counselling Service Usage

About 60% (599) of participants said they had accessed information or counselling regarding vocation/employment from a variety of sources. These sources included CPA, other agencies, and government departments. Participants also named themselves as sources, in that many sought out their own information.

Graph 7.1 shows the percentage of all participants who had accessed information from the various sources. About 44% indicated they had accessed such information from CPA. The next most common source was provincial government bodies offering vocational rehabilitation services.

The majority of participants who obtained information did so from more than one source (n=359). Of those who did, 36% named

Graph 7.2 Most Important Singular Resource (n=359)



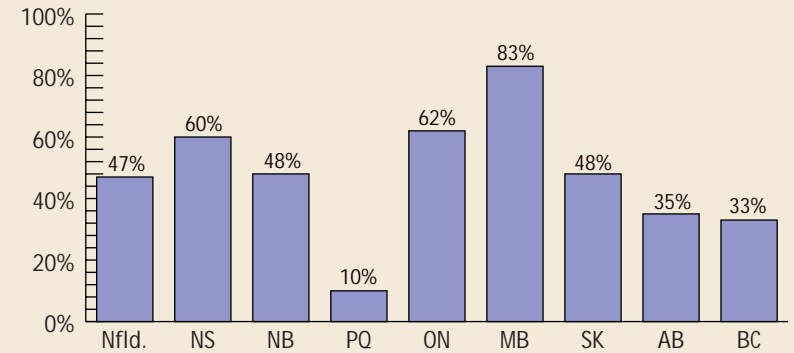
CPA as the singular source of information they required most, as shown in **Graph 7.2**.

Graph 7.3 shows the percentage of participants from each of the provinces who said they had access to CPA vocational or employment counselling services. Rates ranged from 83% in Manitoba to 10% in Quebec.

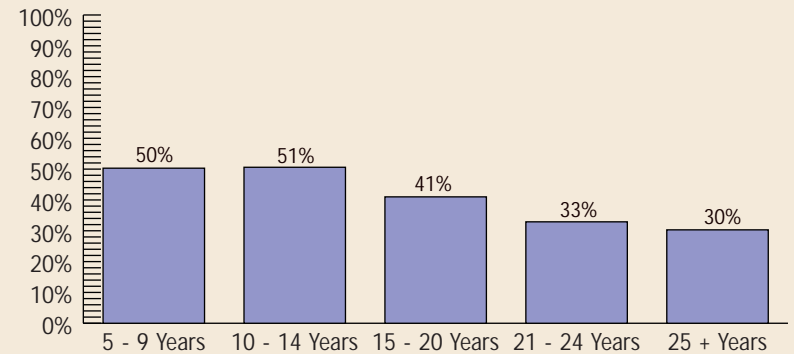
While CPA is identified as the most common provider of these types of services, survey results clearly indicate that over 55% of participants didn't access services from CPA. This suggests that, in the past, CPA hasn't been able to offer its services to all who could potentially use them. This is reinforced by **Graph 7.4**, which shows the percentage of all participants by years since injury who said they accessed CPA vocational or employment counselling services. Those injured 15 years ago or more—well over 40% of participants—were less likely to use these services. For those injured less than 15 years ago, access has improved. Assuming effective counselling services can help lead to employment (and our experience leads to believe this is the case), there remains much work to be done.

As well, over 82% of participants who have ever worked since injury consider their own efforts—and not those of CPA or any other provider of vocational/employment counselling or information service—as being instrumental in finding employment. This is shown in **Graph 7.5**. This is consistent with CPA's service model, which has always emphasized instilling the principles of self-

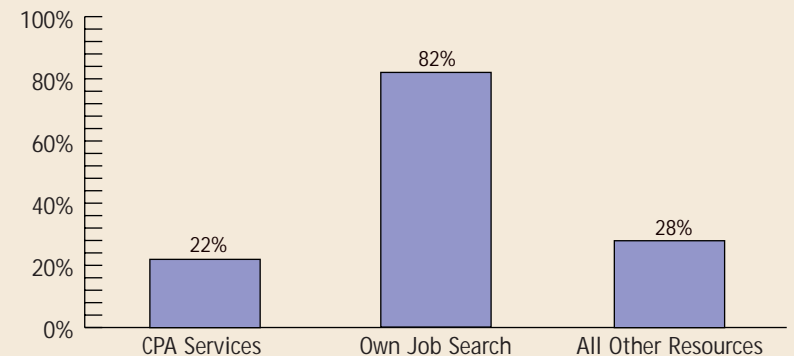
Graph 7.3 CPA Counselling Service Use



Graph 7.4 CPA Counselling Service Use by Years Since Injury



Graph 7.5 Instrumental Resource for Ever Employed (n=573)



reliance so clients can take responsibility in their search for employment. However, this must be considered in light of the fact that participants' overall workforce participation is extremely low, a fact which reinforces the need for specialized, professional vocational and employment services (of the type recently or currently being implemented by CPA Divisions). Our goal is to ensure these services are available to all who require them—but the principle of self-reliance and personal responsibility will continue as our overall underlying service principle.

Commonly Accessed CPA Services

The survey provides some insight as to the most commonly accessed vocational and employment services offered by CPA. All participants were asked to identify any service they had received from CPA from a list of ten vocational services and a list of ten employment services.

The broad category of “information” is the most commonly identified service in both areas (see Q19a and Q19b in the *Appendix* for more information).

In terms of the number of CPA services used by individual participants, 48% indicated they had used no vocational services, 30% used 1 to 3 services, 16% used 4 to 6, and 7% used 7 to 10. The corresponding values for employment service use are as follows: 63% used none, 26% used 1 to 3, 8% used 4 to 6, and only 3% used 7 to 10.

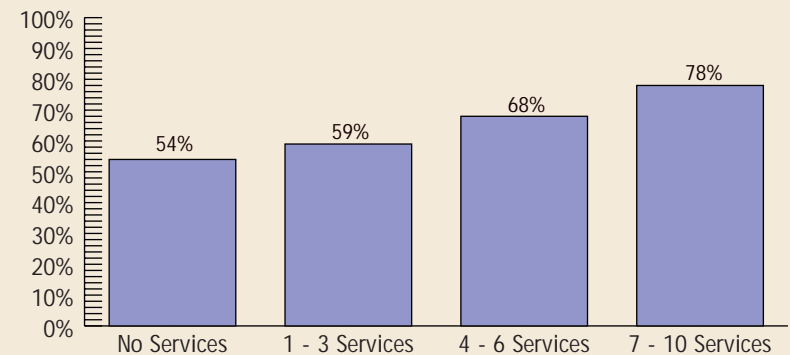
The majority of those who had received any vocational or employment service—over 81%—said they were individualized rather than received in a group.

Effect of CPA Counselling Services on Employment

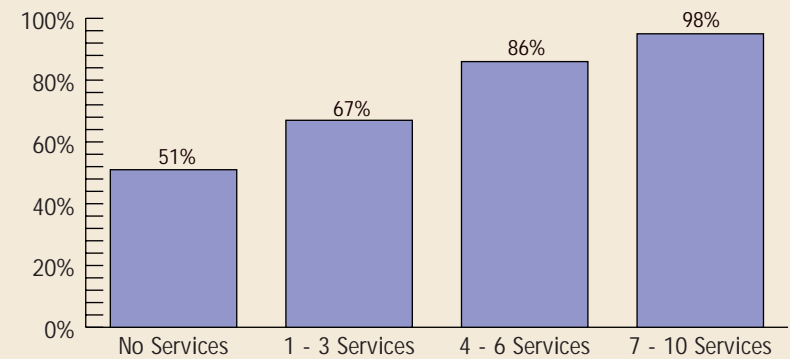
Do CPA vocational and employment counselling services have a bottom line effect on employment rates? It would appear the answer is yes for both types of services.

Graph 7.6 compares the percentage of participants who have ever been employed by the number of CPA vocational services they have received. Under 55% of those who have never received

Graph 7.6 CPA Vocational Service Use by Ever Employed



Graph 7.7 CPA Employment Service Use by Ever Employed



vocational services from CPA have ever been employed. Over 78% of those who have received 7 to 10 vocational services from CPA have been employed.

Graph 7.7 shows a similar result for employment counselling services. Just over half of those who have never received employment counselling services have ever been employed. Almost all of those who have received 7 to 10 employment services have been employed. For both vocational and employment counselling services, those who received a spectrum of services rather than one or two services in isolation clearly receive greater benefit.

This is perhaps the most positive endorsement of CPA produced by the survey. Most people don't directly attribute CPA as being

instrumental in them finding employment; instead, they credit themselves. But all of CPA's services, including vocational and employment counselling, emphasize self-reliance and that ultimate responsibility lies with individuals. These results appear to simply underscore the effectiveness of this approach.

Use and Effect of CPA Services by Province

Graph 7.8 compares use of CPA vocational and employment services, as well as employment rates, from province to province. Provinces are listed in order of percentage of participants ever employed, starting with the provinces with the highest percentages.

As you can see, it appears there are some direct relationships between use of these CPA services and employment. But no doubt there are other contributing factors, such cultural differences, that account in whole or in part for some of the variation of employment levels between provinces. These other differences are difficult to quantify.

Manitoba has the highest percentage of participants who have used vocational and employment services and the highest percentage of participants who have ever been employed.

However, other Western provinces such as Alberta have high employment rates but low use of services, indicating that a cultural difference may be at least part of the reason for this relatively high workforce participation.

Newfoundland has a high percentage of participants who have worked at some time, but a low percentage of those currently employed. This may be due to economic hardships and fishing industry problems experienced in the last decade. Similar problems in B.C. may due to these types of trends.

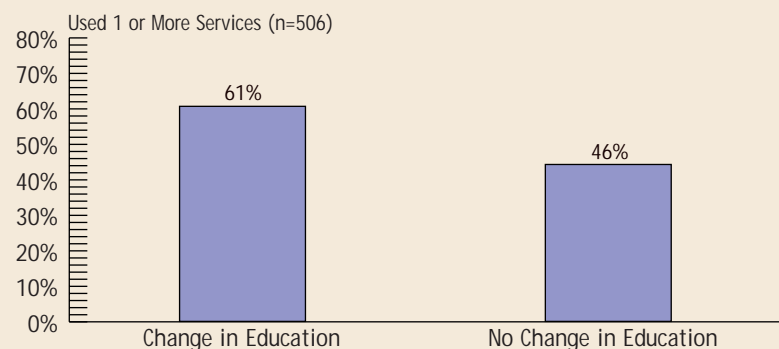
Ontario has a relatively high percentage of service use but employment rates slightly below the national averages. Ontario's large population has a significant lowering effect on the national employment average.

Nova Scotia and New Brunswick have relatively high use of services but employment rates are comparatively lower, signalling an overall employment trend in the Maritimes.

Graph 7.8 CPA Service Use vs. Employment Levels

	Ever Employed	% Who Used 1 or More Vocational Services	% Who Used 1 or More Employment Services
Nat.	59.3%	52.4%	37%
MB	78.5%	87.3%	67.1%
SK	73.2%	65.9%	36.6%
AB	71.6%	40.3%	29.9%
Nfld.	70.0%	53.3%	46.7%
BC	67.5%	50.4%	47.2%
ON	57.5%	71.4%	44.0%
NS	57.5%	65.0%	42.5%
NB	48.4%	54.8%	45.2%
PQ	46.6%	14.9%	13.6%

Graph 7.9 Vocational Service Use and Education Change



Finally, Quebec has abnormally low service usage and employment rates. This indicates a difference in the role the Association plays in the province and significant cultural differences regarding the lower employment levels of people with disabilities, a trend which is reinforced by the findings of the 1991 Health and Activity Limitation Survey.

Effect of CPA Counselling Services on Education

The survey also demonstrates that CPA vocational and employment counselling services may play a role in helping participants increase their education, which is probably the most important factor affecting employment. **Graph 7.9** compares the

educational status of those who have used at least one of the CPA vocational services. Over 61% of those who have used CPA vocational services achieved a change in their education level after injury—25% more than those who didn't access CPA services.

Graph 7.10 compares the educational status of those who have used at least one CPA employment service. Almost 50% more participants who used CPA employment services experienced a change in their education level after injury than those whose education level remained the same.

Satisfaction with CPA Services

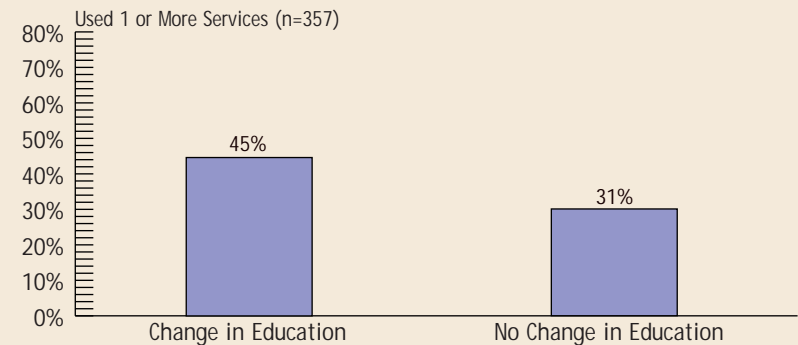
Those who received CPA vocational and employment counselling services indicated a high level of satisfaction with those services, as shown in **Graph 7.11**. About 41% of participants said they were extremely or very satisfied with vocational services, and a further 34% said they were somewhat satisfied. About 63% said they were extremely satisfied, very satisfied, or somewhat satisfied with employment services. The average satisfaction level (on a scale of 1 to 5) was 3.5 for vocational services and 3.4 for employment services.

Participants also rated their relationships in various areas with vocational counsellors highly, as shown in **Graph 7.12**. Employment counsellors were also rated favourably, though not quite as well as vocational counsellors.

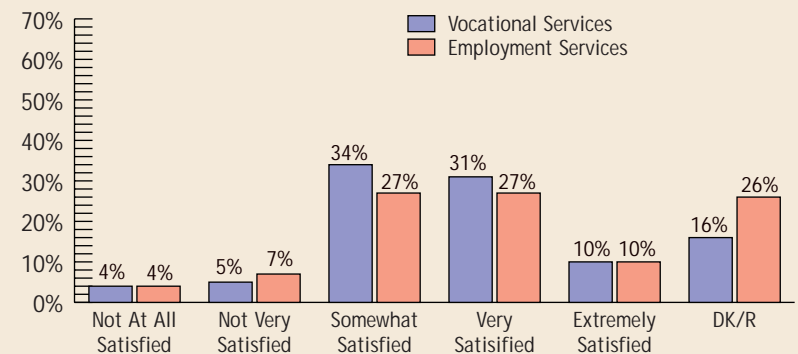
Effect of Peer Counselling

Another goal of the survey was to gauge the effect of peer counselling—formal or informal counselling provided by a “peer” who lived with a SCI. Almost half (47.5%) of participants reported having contact with a CPA peer counsellor within five years of injury. About 58% of these participants said that this contact had a positive impact on their decision to pursue vocational or employment goals, and almost 64% said that the peer counsellor provided them with ways to handle practical day-to-day concerns. However, there appears to be no significant trend of increased employment levels experienced by those who had received peer counselling.

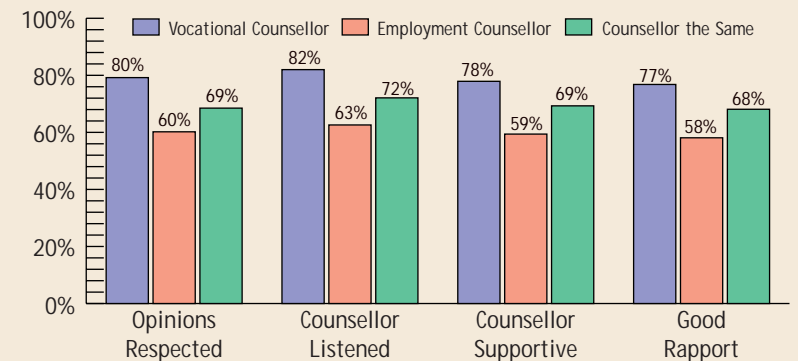
Graph 7.10 Employment Service Use and Education Change



Graph 7.11 Satisfaction with CPA Services



Graph 7.12 Relationship With CPA Counsellors



CHAPTER 8: CONCLUSIONS

Our survey, consisting of about 3% of the estimated 30,000 Canadians living with SCI, confirms that these Canadians are predominantly working age males who were injured at a young age. The majority use manual wheelchairs, a significant number use power wheelchairs, and the remainder use some other type of mobility aid.

The survey also provides us with an accurate snapshot of the education, employment and income levels of these Canadians. It also provides insight of the barriers they experience when attempting to gain access to the workforce, and a solid base for continuing work in removing these barriers.

As highlighted in *Chapter 2*, participants reported higher levels of education than those of the general Canadian population. This difference can probably be largely attributed to the young age of our participants (77% are between the ages of 25 and 49) compared to the general population which includes all Canadians age 15 and over. But we feel fairly comfortable in suggesting that Canadians with SCI are at least educated to the same extent as their non-disabled peers in the respective age categories. The question is, is this enough education? We don't think so. This became clear in *Chapter 3*, when we took an in-depth look at employment levels.

About 38% of our participants are currently employed. At first glance, this figure appears quite positive. But when you consider the young age of our participants, coupled with the fact that most are male, you begin to realize that this is a group that should have a much higher workforce participation rate.

This is confirmed when you look at a similar weighting for the general population: almost 78% of Canadians between the ages of 25 and 64, weighted 4 to 1 male, are employed. So we can assume that our participants aren't even employed at half the rate of their non-disabled peers.

People with differing levels of functional ability, as measured by mode of mobility, are all employed at low levels, but people with higher levels of injury (those who use power wheelchairs) are particularly at risk. In addition to lower employment levels, power wheelchair users have lower levels of education and income.

It should be noted that employment rates for participants living in the Western provinces, excluding British Columbia, are considerably higher than the national average.

We must also emphasize that a great deal of the problem appears to be that many participants (40%) have never worked since injury, and most of these participants who have never worked have never even considered employment as an option.

Is it fair to expect people with any type of paralysis to be employed at rates similar to the general population? We must be careful to acknowledge that employment isn't an option for some. But, as an organization with over 50 years of experience of members helping members, we know that employment is possible and rewarding for even those with the highest levels of injury.

This survey confirms this. Those who are employed come from all levels of functional ability and are in a diverse range of occupations. The vast majority report they are satisfied with their work and have income levels comparable to their non-disabled peers. All of this leads us to conclude that when people with SCI do gain access to the workforce, they do so very successfully.

This must all be considered in light of the fact that we live in comparatively enlightened times. We believe that employers, while not completely agreeable, are becoming more receptive to hiring people with SCI. And our workplace is becoming increasingly dependent on technical skills—a fact which favours well-educated people with SCI rather than those who can only offer physical labour.

So, if all this is true, why aren't more people with SCI employed? The answer brings us back to education. Throughout this report, we have linked higher education levels to employment. It's this simple: those who have completed post-secondary training are at least twice as likely to be employed as those who have a high school education or less. There are many other ways to make this link, as you can read in previous pages. Therefore, we believe we can conclusively say that the key to improving employment levels for people with SCI is to emphasize education during the rehabilitation process.

Naturally, we must also ask why more people don't pursue education and, ultimately, their vocational dreams after injury.

One answer lies in motivation. Our survey reveals that over 40% of participants were not motivated to pursue training or education after injury, and almost 80% of those who haven't worked since injury didn't try to find employment.

Additionally, a wide range of interfering factors were cited that prevent participants from achieving their vocational goals, ranging from various medical concerns to emotional problems. People with varying levels of functional ability, as measured by mode of mobility, reported different types and levels of interfering factors.

Other factors probably include a learned dependence on income support programs that traditionally have not encouraged employment (about 60% of all participants receive income support—almost the same percentage who are not employed) and the effect of aging with SCI (only 26% of those over 50 are currently employed).

We must be careful not to generalize—every individual's circumstances are unique and personal. Nevertheless, we suggest that there are many barriers preventing people from pursuing education and gainful employment. These barriers may be a direct result of SCI (high incidence of pressure sores, for example), or systemic (lack of accessible transportation). They may also be psychological in nature (lack of self-confidence, for instance),

which may often present much more of a serious problem than barriers that are simply medical or physical in nature.

No matter their nature, this survey confirms the existence of these barriers and how they work by themselves or in concert to prevent people from realizing their vocational dreams and, ultimately, independence.

However, this survey also confirms that thousands of CPA members—even the those with the highest levels of injury—have learned to deal with these barriers, are competing successfully in the job market, and are reaping the rewards of a job well-done.

Clearly, there is a continuing need for a wide range of holistic professional and peer counselling services aimed initially at helping people achieve healthy adjustment after the onset of disability. This adjustment is absolutely critical for individuals to regain independence, renew their faith in their own abilities and develop the motivation they need to reach out and grasp life's opportunities.

Equally necessary is a wide range of vocational and employment counselling services that employ the use of qualified professionals and peer mentors while stressing the importance of self-reliance and personal responsibility. The needs of people with SCI in this area are many and require specialized services. Implicit in this is new emphasis on providing people with the all-important first step into the workforce through use of internship programs and employer incentives—and by removing disincentives to employment. It must be remembered that many who gain access to the workforce quickly develop self-confidence and learn they can compete successfully.

Finally, education must be viewed as a top priority. Barriers preventing access to education must be eliminated, and it must be remembered that people with SCI have unique needs. They often require more time to complete a curriculum, and they often have higher costs—and limited access to physically-oriented summer jobs that can help offset education costs.