Jorgensen-- Int. Journal of Disability, Community & Rehabilitation

Jorgensen, M., Fichten, C.S., Nguyen, M.N., Budd, J., Barile, M., Asuncion, J., Amsel, R., Tibbs, A., & Jorgensen, S. (2015). Employment realities of recent junior/community college and university graduates and premature leavers with disabilities. International Journal of Disability, Community, and Rehabilitation, 14(1). Online. Retrieved from http://www.ijdcr.ca/VOL14\_01/articles/jorgenson.shtml



both in Canada (Ministry of Training Colleges and Universities, 2012) and the United States (Snyder & Dillow, 2012). Therefore, understanding the transition of well-educated youth with disabilities from postsecondary studies to employment is of great importance. Understanding this transition is vital given that postsecondary students with disabilities graduate at the same rate as students without disabilities, with the main difference being that they take additional time to do so (Jorgensen, Fichten, Havel, Lamb, James, & Barile, 2005; Wessel, Jones, Markle, & Westfall, 2009).

#### Employment of Primarily Nondisabled Individuals with Some Postsecondary Education

Studies of employment of youth with some recent postsecondary education show that between 93% and 94% of Canadians aged 25-29 with junior/community college or university education were employed in 2010, with the two largest Canadian provinces, Ontario and Quebec, reporting unemployment rates between 4.7% and 7.5% (Statistics Canada, 2012). A recent study by Prairie Research Associates (2012) shows that within the first three months, 87% of premature leavers from a university were working compared to 80% of those who left junior/community college. Among those who were working, a majority were working full-time (defined as 25 hours or more), regardless of whether they dropped out of a university or junior/community college.

### **Employment of Well-Educated Young Adults With Disabilities**

Employment of recent Canadian graduates with disabilities is not well understood. Large-scale studies, such as the old Participation and Activity Limitation Survey (PALS) series (e.g., Statistics Canada, 2008), are now badly outdated. Recent large-scale Canadian surveys (e.g., the 2011 National Household Survey (NHS) and the 2012 Canadian Survey on Disability (CSD) - (Statistics Canada, 2014; Turcotte, 2014) have not yet published data on education of youth as it relates to employment, although a recent report on employment of Bachelor's degree graduates with and without disabilities shows that 6 to 7 years after obtaining their degree 96% of nondisabled graduates and 90% of graduates with disabilities were employed (Conway & Montgomery, 2014). A recent Canadian investigation by Fichten, et al. (2012), which studied large samples of graduates with (n=182) and without disabilities (n=1304) three to ten months after graduation from three junior/community colleges, showed only minimal differences. For example, two-thirds of career/technical graduates, both with and without disabilities in the general studies stream continued their studies after graduation. Under 3% were either looking for work or out of the labour force. Although most (> 80%) students with and without disabilities in the general studies stream continued their education , the numbers of employed graduates (14% with and 13% without disabilities) were similar and very few graduates in both groups (<2%) were either looking for work or out of the labour force. Full versus part-time employment of these two groups was also very similar.

### **Relation of Job to Program of Study**

There is limited research regarding relation of job to program of study among individuals with postsecondary education. For example, Coates and Edwards (2009) found that the perceived relevance of a Bachelor's degree shortly after graduation varied by field of study. For the sciences, humanities, and creative arts, the relevance of the Bachelor's degree was less than in professional programs, such as health management and engineering. It is important to note, however, that this applies only to the first year after graduation. Perceived relevance of the Bachelor's degree in the sciences, humanities, and creative arts shows a continuous increase between one and five years after graduation.

A study comparing how closely employment was related to program of study five to 10 months after graduation for junior / community college students with and without disabilities (Fichten, et al., 2012) found that among graduates of career/technical programs, 61% of graduates with and 76% of graduates without disabilities reported that their job was closely related to their program of study. Among those with a general studies diploma, a much lower percentage of graduates both with (11%) and without disabilities (7%) indicated that their job was closely related to their program of study.

#### Job Satisfaction

Another area lacking research relates to job satisfaction of individuals with disabilities who have some postsecondary education. A notable exception is a study by (Madaus, Zhao, & Ruban, 2008), who

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developed a brief (14 item) job satisfaction scale which they administered to 500 American university graduates with learning disabilities. They found that job satisfaction was very high in this group and that the best predictor of job satisfaction was job self-efficacy.

# **Employment and Type of Disability**

Although data from different countries cannot be directly compared, it is interesting to note that individuals with different disabilities may have different employment rates. For example, the AGCAS Disability Task Group (2012) reported on graduates who were not pursuing further studies in the United Kingdom six months after completion of their degree. Forty-one percent of graduates who were bilnd or had a visual impairment were employed full-time, with another 13% being employed part-time. For graduates who were Deaf or had a hearing impairment, 47% were employed full-time and 14% were working part-time. Thirty-three percent of graduates who were blend or impairments worked full-time, while 10% worked part-time. Among graduates with mental health related disabilities, 38% were employed full-time and 10% worked part-time. Of graduates with more than one disability/impairment, 35% worked full-time and 10% worked part-time. The AGCAS Disability Task Group (2012) also reported that the highest unemployment rates were found for those who had autism spectrum disorders (26%).

#### Individuals with Disabilities: Barriers to Employment

A recent Canadian report showed that the number one ranked concern for postsecondary students with disabilities related to employment (Martiniello, Barile, Budd, Nguyen, & Fichten, 2011). Students worried about employment accommodations, about disclosing their impairment, and about whether they could obtain employment that is adapted to their disability. Given such wide-spread concerns, it is important to understand the barriers to employment that recent junior/community college and university educated individuals with disabilities must overcome to facilitate their transition to the workforce.

Lindsay (2011) conducted a study using the 2006 Participation and Activity Limitation Survey (PALS -Statistics Canada, 2007). She found that the barriers that young adults with disabilities had to overcome varied by the type of disability. A high proportion of individuals with mobility impairments reported: inadequate training, inaccessible transport, and jobs that are not adapted to their needs. Those with visual impairments were more likely to report being discouraged by family and friends, being worried about isolation by co-workers, inaccessible transport, and not finding a job. A high proportion of people with communication impairments reported family responsibilities and inadequate training. Individuals with a cognitive impairment were also likely to report inadequate training as well as worries related to isolation from other workers.

Another barrier to employment is discrimination in the workforce. Lindsay (2011), for example, found that young adults with various disabilities and impairments reported that they had been refused an interview or a promotion, had been denied a job accommodation, were given less responsibility and were paid less than workers without a disability with similar jobs.

### The Present Investigation

In the present investigation we explore many of the issues noted above. In particular, we investigate the employment outcomes of graduates with different disabilities as well as those of individuals who recently graduated or dropped out of junior/community college or university. We also examine (a) the reasons reported for being unable to find work and for staying out of the labour force, (b) facilitators and barriers to finding employment, and (c) links with job satisfaction and its relation to program of study.

### Method

### Sample

The sample consisted of 166 individuals who had left postsecondary education during the past 2-1/2 years and had not pursued further studies. The 127 university and junior/community college Graduates (75 females, 52 males) and the 39 Premature Leavers (i.e., individuals who had dropped out prior to completing their program) (25 females, 14 males) were part of a convenience sample  $\frac{1}{2}$ . Graduates had been enrolled in 57 different Canadian universities and junior/community colleges; the Premature Leavers in 30. Average age was 30 (SD =10) for Graduates and 34 (SD = 12) for Premature Leavers; this difference was not significant. The majority of participants had studied in Canada's two largest provinces: Ontario and Quebec. We did not obtain information about where participants lived or worked after leaving school. Participants' disabilities are detailed in Table 1.

#### Procedure

This study is part of a larger investigation of factors related to academic persistence (Fichten et al., 2014). We have not reported on the employment realities of Graduates and Premature Leavers elsewhere.

In spring 2010, invitations were sent to current and former postsecondary students with disabilities who had participated in our previous investigations and indicated that they can be contacted for future studies. We also emailed announcements to discussion lists focusing on Canadian postsecondary education and to project partners (mainly student and campus disability service provider groups). The announcement indicated that we were seeking former junior/community college and university students who had graduated or dropped out of a program of study (i.e., diploma, certificate or degree program) during the past 2-1/2 years to complete an online survey.

Individuals over age 18 who indicated that they were interested were directed to a web site where they were provided with the survey's information and consent form. This form and the procedure were approved by Dawson College's Human Research Ethics Committee. Participants clicked the "Continue" button to signal consent. Four weeks later, those who indicated that we may contact them were e-mailed and asked to complete the same questionnaire a second time to allow calculation of test-retest reliability. Prior to data analysis, the data set was thoroughly scrutinized to ensure the integrity of responses <sup>2</sup> (cf. Prince, Litovsky, & Friedman-Wheeler, 2012).

### Measures

Test-retest reliabilities for the variables of interest were very high, with most r scores in the mid to high 80s. Variables of interest include objective questions related to: gender, qualifications / credentials pursued (e.g., Bachelor's degree, junior/community college diploma, graduate degree), employment status (e.g. employed / self-employed, employed but looking for a job, not employed but looking for a job), relation of job to program of study (3-point scale: very closely related, partially related, not at all related), and job satisfaction (4-point scale: very satisfied to

very dissatisfied). We also inquired about participants' self-reported academic standing (A student, B student, C student, D or less student). Most of these questions have been used in previous studies (Fichten, Asuncion, Nguyen, Budd, & Amsel, 2010; Fichten, Asuncion, Barile, Ferraro, & Wolforth, 2009). We asked those not in the labour force why they were not looking for work; the list of 17 options was based on items used by Statistics Canada (2008b); participants could indicate as many as applied. Unemployed participants were asked why they were unable to find a job in an open-ended manner (textbox); responses were coded by two coders, trained to a minimum 70% inter-rater reliability, into 11 categories.

#### Results

A confidence level of 95% (p < 0.05) was adopted in significance testing.

### **Disabilities and Employment**

Forty-four percent of participants reported having more than one disability. Graduates were most likely to report a learning disability, followed by a psychological/psychiatric disability, low vision, and a chronic health impairment. Premature Leavers were most likely to report a psychological/psychiatric disability, followed by a learning disability, chronic health impairment, attention deficit hyperactivity disorder, and low vision.

Employment and type of disabilityTable 1 shows that the highest unemployment levels, in rank order, occurred among participants with the following: chronic health impairment, psychological impairment, mobility impairment (wheelchair / scooter), and low vision (participants with a neurological impairment and those with an autism spectrum disorder were excluded from consideration because of small sample size).

Conversely, participants in the following groups were most likely to be employed: individuals who were blind, those with limitations in the use of their hands or arms, and those with a mobility impairment (cane / crutches). As for participants not in the labour force, 71% (n = 10) reported having more than one disability. Among those in the labour force there was no significant different in the frequency of multiple disabilities between those who were employed (n = 43, 43%) and those who were unemployed (n = 20, 39%), X2(1, 152) = .69, p = .158.

### Employment, Unemployment, Staying Out of the Labour Force

Compared to Graduates (n = 6, 5%), a significantly larger percentage of Premature Leavers (n = 8, 21%) were out of the labour force, X2 (2,166) = 12.70, p = 0.001. Table 2 shows that among those in the labour force, Graduates were significantly more likely to be employed than Premature Leavers, X2 (1,152) = 3.84 p < .05. Grades were unrelated to the likelihood of being employed, X2(2,147) = 1.97 p = 0.578.

Gender Taking into account participants both in and out of the labour force, there was no significant difference in the employment status of males and females, X2 (2,166) = 4.00, p = 0.136, although males (n = 9, 14%) were somewhat more likely than females (n = 5, 5%) to be out of the labour force, X2 (1,166) = 3.84, p = 0.050.

Age In a two-way analysis of variance comparison we examined the ages of employed and unemployed Graduates and Premature Leavers. Neither the Employment nor the Group main effect was significant. The significant interaction of Employment by Group, F(1,149) = 4.20, p = 0.042, shows that relative to Graduates, where mean age of Employed (30.52) and Unemployed participants (29.46) was similar, among Premature Leavers Unemployed participants were likely to be older (36.20) than those who were Employed (28.53).

*Type of school – junior/community college versus university* Among those in the labour force, there was no significant difference in employment among those whose highest credential was a junior/community college certificate/diploma (n = 24, 71%), a Bachelor's degree (n = 52, 68%), or a graduate degree (n = 17, 77%), X2(2,133) = 0.78, p = 0.677. The difference in employment among Graduates in the labour force who were in career/professional programs (n = 30, 81%) and those who were in general/preuniversity programs (n = 55, 63%), X2(1,121) = 2.99, p = 0.084, approached but did not attain significance.

### **Characteristics of Employment**

Relation of job to program of study Among employed participants, most Graduates (n = 42, 51%) reported that their job was very closely related to their program of study; Premature Leavers (n = 9, 56%) were most likely to indicate that their job was not at all related to their program of study. This difference was significant, X2 (2,98) = 8.93, p = 0.011.

There was also a significant difference in the degree to which participants' jobs were related to their program of study in different fields. Table 3 shows that the fields in which jobs were the least related to the program of study were: arts and humanities, science and engineering, and social sciences; fields where jobs were the most closely related to the program of study were: business, career / technical programs, and computer / information technology, F(6,90) = 2.29, p = 0.042.

When programs of study were categorized into professional / career technical versus general / preuniversity programs, professional programs were somewhat more closely related to participants' program of study, t(98) = 1.88, p = 0.064.

Job satisfaction Regardless of the differences in the relation of the job to their program of study, employed participants were generally satisfied with their jobs (Graduates: 79%, n = 65, Premature Leavers: 63%, n = 10). Only 6% (n = 5) of Graduates and 12% (n = 2) of Premature Leavers were very dissatisfied. There was no significant difference between the satisfaction scores of Graduates and Premature Leavers, t(96) = 0.53, p = 0.598.

# People Who Are Not Working: Barriers to Employment

Why are people unemployed? Table 4 shows reasons for being unemployed reported by Graduates and Premature Leavers. The most frequently reported reasons, in rank order from most to least frequent are: lack of qualifications / training / experience / required certifications, lack of availability of jobs, disability / health reasons, and the economy.

Why are people not in the labour force? Overall, the most common reasons reported were, in rank order: health, disability, and losing some or all of one's current income / additional supports. Other reasons can be seen in Table 5.

# Discussion

### Limitations

The small number of participants with different disabilities/impairments in our sample sets major limitations on finding meaningful differences and on the generalizability of results. While most Canadian provinces and large numbers of different junior/community colleges and universities are represented, our samples are neither random nor fully representative of the populations studied. Self-selection biases, volunteer effects, and the use of e-mail discussion lists as a main form of recruitment pose methodological challenges in this regard. Perhaps the most important limitation is the absence of a comparison sample of individuals without disabilities.

Nevertheless, our sample has more females than males, participants were older than the average university or junior/community college graduates when they left school, and the proportion of participants with different impairments reflects the realities of many universities and colleges (e.g., Fichten et al., 2012; AQICESH, 2014).

# **Key Findings**

Results indicate that among participants in the labour force (i.e., employed or looking for work), 70% of graduates were employed. Premature leavers, on the other hand, were considerably less likely to be employed (52%). Moreover, a larger proportion of premature leavers than of graduates were not participating in the labour force, mainly due to their health or disability. Such a discrepancy between the employement rates of graduates and premature leavers has also been reported for nondisabled individuals (Prairie Research Associates, 2012), and suggests that these two groups need to be considered separately in future research.

Moreover, it should be noted that the employment rate of graduates in our sample does not approach the employment rates of nondisabled junior/community college and university graduates, which has been reported to vary between 87% and 96% (Statistics Canada, 2012; Conway & Montgomery, 2014). Thus, there is still much to be done to assist well-educated youth with disabilities to find employment.

Graduation with a junior/community college diploma, a Bachelor's degree, and a graduate degree resulted in similar employment rates, a finding similar to that of Bayard and Greenlee (2009) and the Prairie Research Associates (2012). While age, gender, and grades were also unrelated to whether or not participants were employed or not, field of study was linked to the likelihood of employment. It was also found that whether graduates had obtained their credential from a career/professional program or a general/pre-university program was not associated with the likelihood of employment.

### **Characteristics of Employment**

Relation of job to program of study Most graduates indicated that their job was very closely related to their program of study. Conversely, most premature leavers indicated that their job was not at all related to their studies. Not surprisingly, the jobs of individuals in professional / career technical programs were more closely related to their program of study than the jobs of those from general programs.

There was also a difference in the degree to which participants' jobs were related to programs of study in different fields. Fields in which jobs were the least related to the program of study were: arts and humanities, science and engineering, and social sciences. Fields where jobs were the most closely related to the program of study were: business, career / technical programs, and computer information technology. Our findings are similar to those of Coates and Edwards (2009), who found lower perceived relevance of field of studies to jobs for graduates from sciences, humanities and creative arts than for professional programs, such as health management. However, it is important to note that in their study the relevance of credentials to jobs in non-professional programs increased steadily over time.

*Job satisfaction* It was encouraging to find that over 2/3 of participants were generally satisfied with their jobs. Less than 7% of employed participants were very dissatisfied and there was no significant difference between satisfaction scores of graduates and premature leavers.

### **Disabilities and Employment**

Individuals with different disabilities in our study had different employment rates. These results should, however, be interpreted with caution because of small sample sizes.

Participants with low vision, wheelchair users, those with psychological impairments, and those with chronic health problems had the highest unemployment rates. The highest employment rates were found among participants who were blind, had a limitation in the use of their hands, or used a cane or crutches.

While it was tempting to compare our findings to those of the British AGCAS Disability Task Group (2012), this was not possible. The British investigators tended to group disabilities / impairments into larger categories than we did. For example they grouped those who were blind and those with low vision together. Similarly, they grouped Deaf individuals together with those who were hard of hearing, and they grouped individuals with all types of mobility impairments together. Given our findings, which suggest different employment outcomes and realities for individuals with diverse and distinct disabilities, we recommend that future studies use finer distinctions.

### People Who Are Not Working: Barriers to Employment

Perceived barriers to employment in our sample were somewhat different for participants who were unemployed and for those who were not in the labour force. The main reasons why individuals were not in the labour force were related primarily to health and disability, followed by fear of losing all or some of their disability related income and additional supports. Each of Canada's 10 provinces has a support program for individuals with disabilities who cannot work. For example, Canada's largest province, Ontario, (Ontario Ministry of Community and Social Services, 2012) provides income support and helps people with disabilities in financial need pay for living expenses. It also provides health benefits, such as drug and dental coverage. In addition, the Canada-wide Canadian Pension Plan (CPP) provides benefits to individuals who contributed to the plan but can no longer work regularly due to a disability. The maximum monthly benefit is \$1212.90 (Service Canada, 2013). If individuals with a disability work regularly on a full or part-time basis, they would lose this benefit.

Unemployed individuals also reported health and disability related concerns as deterrents to finding employment. But they also implicated inappropriate qualifications and the scarcity of jobs in the present economy. Some of these barriers are similar to those reported by Lindsay (2011), who evaluated

barriers to employment as a function of disability type. Although none of our participants reported discrimination as a deterrent, this has been noted as a significant barrier in other studies (Lindsay, 2011; Dalgin & Bellini, 2008).

# Conclusion

It has been noted that employment among junior/community college and university graduates is the high point in the employment picture of individuals with disabilities (Personal communication, 2013). Our results reveal an employment picture that is more disturbing than generally reported. For example, while Conway and Montgomery (2014) found that significantly fewer graduates with disabilities were employed compared to those without disabilities (approximately 90% compared to 96%), our results showed an even lower employment rate (70%).

Given our findings, it is evident that much remains to be done to facilitate employment among recent graduates with disabilities, both in research and in practice. Future research should study larger probability samples of recent graduates with different disabilities. In such investigations a comparison group of nondisabled graduates, preferably matched on gender, type of program, and field of study would be helpful. Full-time and part-time status should be examined along with salary, "underemployment," and opportunities for promotion. Exploring how successful individuals obtained employment, promotion, and needed accommodations could help the next generation of graduates with disabilities. How graduates with different disabilities handled issues related to disclosure of the disability/impairment and negotiating accommodations and access would also be of interest.

Additionally, those who were unemployed in our study most frequently reported having difficulty finding a job because they lacked the qualifications/training needed; this barrier to employment was also reported by young adults with disabilities in Lindsay's study (2011). Our results confirm the need for more research on employment among postsecondary graduates with disabilities to determine what prevents them from obtaining the necessary training/qualifications and what can be done to help them obtain this.

To help graduates with disabilities obtain employment, Gillies (2012) summarized a series of recommendations about what colleges and universities could do in addition to providing friendly advice. This includes: liaison between the school and the job market, a mentorship program, as well as formal transition support, including workshops on résumé writing, interviewing, and job searches specifically geared to address challenges faced by graduates with disabilities. We also suggest that postsecondary institutions provide additional support to help these individuals obtain necessary job qualifications (e.g., job training workshops).

#### References

AGCAS Disability Task Group (2012, January). What happens next? A report on the first destinations of 2009/2010 disabled graduates. Retrieved from http://www.agcas.org.uk/assets/download? file=3992&parent=419

AQICESH. (2014). Statistiques concernant les étudiants en situation de handicap dans les universités *Québécoises (2013-2014)*. Retrieved from http://aqicesh.ca/docs/STATS\_AQICESH\_\_2013-2014.pdf

Bayard, J., & Greenlee, E. (2009). *Graduating in Canada: Profile, labour market outcomes and student debt of the class of 2005*. Ottawa, ON: Statistics Canada. Retrieved from http://www.statcan.gc.ca/pub/81-595-m/81-595-m2009074-eng.pdf

Coates, H., & Edwards, D. (2009, April). The 2008 Graduate Pathways Survey: Graduates' education and employment outcomes five years after completion of a bachelor degree at an Australian university. Australian Council for Educational Research. Retrieved from http://research.acer.edu.au/cgi/viewcontent.cgi?article=1011&context=higher\_education

Conway, C., & Montgomery, S. (2014, June). Labour market outcomes: Summary results of a survey of 2006 and 2007 Canadian university baccalaureate graduates. Queen's University Office of Institutional Research and Planning. Retrieved from http://www.queensu.ca/irp/index/NGOSLabourMarketWeb.pdf

Dalgin, R. S. & Bellini, J. (2008). Invisible disability disclosure in an employment interview: Impact on employers' hiring decisions and views of employability. *Rehabilitation Counseling Bulletin*, *52*(1), 6-15. doi:10.1177/0034355207311311.

Fichten, C. S., Asuncion, J. V., Barile, M., Ferraro, V., & Wolforth, J. (2009). Accessibility of

eLearning computer and information technologies to students with visual impairments in postsecondary education. *Journal of Visual Impairment and Blindness, 103*(9), 543-557.

Fichten, C. S., Asuncion, J. V., Nguyen, M. N., Budd, J., & Amsel, R. (2010). The POSITIVES Scale: Development and validation of a measure of how well the ICT needs of students with disabilities are met. *Journal of Postsecondary Education and Disability*, *23*(2), 137-154.

Fichten, C. S., Jorgensen, S., Havel, A., Barile, M., Ferraro, V., Landry, M.-E., Fiset, D., Juhel, J.-C., Chwojka, C., Nguyen, M. N., & Asuncion, J. V. (2012). What happens after graduation? Outcomes, employment, and recommendations of recent college graduates with and without disabilities. *Disability and Rehabilitation*, *34*(11), 917-924. doi:10.3109/09638288.2011.626488.

Fichten, C. S., Nguyen, M. N., Amsel, R., Jorgensen, S., Budd, J., Jorgensen, M., Asuncion, J., & Barile, M. (2014). How well does the Theory of Planned Behavior predict graduation among college and university students with disabilities? *Social Psychology of Education*, *17*(4), 657-685. doi:10.1007/s11218-014-9272-8.

Gillies, J. (2012). University graduates with a disability: The transition to the workforce. *Disability Studies Quarterly*, *32*(3). Retrieved from http://dsqsds.org/article/view/3281/3115

Jorgensen, S., Fichten, C. S., Havel, A., Lamb, D., James, C., & Barile, M. (2005). Academic performance of college students with and without disabilities: An archival study. *Canadian Journal of Counselling*, *39* (2), 101-117.

Lindsay, S. (2011). Discrimination and other barriers to employment for teens and young adults with disabilities. *Disability and Rehabilitation*, *33*(15-16), 1340-1350. doi:10.3109/09638288.2010.531372.

Madaus, J. W., Zhao, J., & Ruban, L. (2008). Employment satisfaction of university graduates with learning disabilities. *Remedial and Special Education*, 29(6), 323-332. doi:10.1177/0741932507312012

Martiniello, N., Barile, M., Budd, J., Nguyen, M. N., & Fichten, C. S. (2011). Hotline: Students with disabilities speak out. *Communiqué, 12*(1), 14-15.

Ministry of Training, Colleges & Universities Postsecondary Education Division (2012, May).

Update On Students With Disabilities. PowerPoint presentation at PSED.

Ontario Ministry of Community and Social Services. (2012). *ODSP: Information sheet*. Retrieved from http://www.mcss.gov.on.ca/en/mcss/programs/social/odsp/info\_sheets/what\_odsp.aspx

Prairie Research Associates (2012, February 10). *Report on survey of 2009-10 early leavers from universities and colleges in Manitoba*. Retrieved July 9 2012, from http://www.copse.mb.ca/pdf/early\_leavers\_survey\_final\_09\_10.pdf

Prince, K. R., Litovsky, A. R., & Friedman-Wheeler, D. G. (2012). Internet-mediated research: Beware of bots. *The Behavior Therapist*, 35(5), 85, 87-88.

Service Canada (2013, November 1). *Disability benefit*. Government of Canada. Retrieved from http://www.servicecanada.gc.ca/eng/services/pensions/cpp/disability/benefit/index.shtml? utm\_source=campaign%20URL&utm\_medium=twitter&utm\_content=000050,%2003122013,% 20Eng&utm\_campaign=disability%20benefit

Snyder, T. D., & Dillow, S. A. (2012). *Digest of education statistics 2011*. NCES 2012-001. Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Retrieved from http://nces.ed.gov/pubs2012/2012001.pdf

Statistics Canada. (2007, December 3). *Participation and Activity Limitation Survey - 2006.* The Daily. Retrieved from http://www.statcan.gc.ca/daily-quotidien/071203/dq071203-eng.pdf

Statistics Canada. (2008). Participation and activity limitation survey 2006: Labour force experience of people with disabilities in Canada. Catalogue no. 89-628-X no. 007. Retrieved from http://www.statcan.ca/english/freepub/89-628-XIE/89-628-XIE2008007.pdf

Statistics Canada. (2008a). Labour force definition. Retrieved from http://www.statcan.gc.ca/pub/81-004-x/def/4153361-eng.htm

Statistics Canada. (2008b). Participation and Activity Limitation Survey 2006: Table 6:

Limitations and barriers to employment by age group, Canada, provinces and territories for people with disabilities, 2006. Retrieved from http://www.statcan.gc.ca/pub/89-628-x/2008008/t/5201170-eng.htm

Statistics Canada . (2012). Table E.3.2: Unemployment rates of 25- to 29-year-olds, byeducational attainment, Canada and provinces, 1995, 2000, 2005 and 2008 to 2012. Retrieved from http://www.statcan.gc.ca/pub/81-582-x/2013001/tbl/tble3.2-eng.htm

Statistics Canada. (2014, December 3). *Study: Persons with disabilities and employment*. The Daily. Retrieved from http://www.statcan.gc.ca/daily-quotidien/141203/dq141203a-eng.htm

Turcotte, M. (2014, December 3). *Persons with disabilities and employment*. Statistics Canada, Catalogue no. 75-006-X. Retrieved from http://www.statcan.gc.ca/pub/75-006-x/2014001/article/14115-eng.pdf

Wessel, R. O., Jones, J. A., Markle, L., & Westfall, K. (2009). Retention and graduation of students with disabilities: Facilitating student success. *Journal of Postsecondary Education and Disability*, 21(3), 116-125.

Table 1 Employment Status and Disability/Impairment Type for Participants

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	Employment status								
	Employed		Unemployed		Not in labour force		Total		
	n	%	n	%	n	%	n	%	
Type of disability									
Blind	3	100%	0	0%	0	0%	3	100%	
Deaf	1	100%	0	0%	0	0%	1	100%	
Limitations in use of hands and arms	4	100%	0	0%	0	0%	4	100%	
Mobility impairment – cane / crutches	4	80%	1	20%	0	0%	5	100%	
Attention deficit hyperactivity disorder (ADHD)	3	75%	1	25%	0	0%	4	100%	
Learning disability (LD)	14	74%	4	21%	1	5%	19	100%	
Hearing impairment	6	67%	3	33%	0	0%	9	100%	
Chronic health impairment	6	60%	4	40%	0	0%	10	100%	
Multiple disabilities	43	59%	20	27%	10	14%	73	100%	
Psychological impairment	7	50%	6	43%	1	7%	14	100%	
Low vision	6	46%	6	46%	1	8%	13	100%	
Mobility impairment – wheelchair / scooter	4	44%	4	44%	1	11%	9	100%	
Neurological impairment	0	0%	1	100%	0	0%	1	100%	
Autism spectrum disorder	0	0%	1	100%	0	0%	1	100%	
Total people	101	61%	51	31%	14	8%	166	100%	

*Note*: The numbers do not total the entire sample of 172 because some participants did not answer this question. The following distinction between employed, unemployed, and those not in the labour force was taken from Statistics Canada (2008a): "the employed are persons having a job or business, whereas the unemployed are without work, are available for work, and are actively seeking work. Together the unemployed and the employed constitute the labour force. Persons not in the labour force are those who, during the reference week, were unwilling or unable to offer or supply labour services under conditions existing in their labour markets (this includes persons who were full-time students currently attending school."

### Table 2 Employment Status of Graduates and Premature Leavers in the Labour Force

	Graduates		Le	avers	Total	
Employment Status	п	%	n	%	n	%
Employed	85	70%	16	52%	101	66%
Unemployed	36	30%	15	48%	51	34%
Total	121	100%	31	100%	152	100%

Table 3 Relation of Job to Program of Study as a Function of Field of Study

	Relation of job to program of study <sup>1</sup>				
	n	Mean	SD		
Field of study					
Business	16	1.50	0.82		
Career / technical	8	1.50	0.76		
Computer and information technology	6	1.67	0.82		
Professional programs	25	1.68	0.80		
Social sciences	24	2.04	0.86		
Science and engineering	7	2.14	1.07		
Arts and humanities	11	2.45	0.69		

Note: Some participants did not answer this question.

# Table 4 Graduates and Leavers Indicate Why they are Unable to find Work

	Graduates (n=31)		Leavers (n=14)		Total (n=45)	
	n	%	n	%	n	%
Lack of qualifications / training/experience/required certifications	7	23%	3	21%	10	22%
Lack / availability of jobs	5	16%	3	21%	8	18%
Disability / health reasons	3	10%	3	21%	6	13%
Present economy	4	13%	2	14%	6	13%
Others' perception about disabilities	3	10%	2	14%	5	11%
Difficulty finding adequate work aspects	4	13%	1	7%	5	11%
Language barriers	3	10%	1	7%	4	9%
Lack of accommodations / support	0	0%	3	21%	3	7%
Interview performance / skills	1	3%	1	7%	2	4%
I was fired	1	3%	0	0%	1	2%

Table 5 Graduates' and Leavers' Reasons for not Looking for Employment

Reasons	Graduates (n=6)		Leavers (n=8)		Total (n=14)	
	n	%	n	%	n	%
Health reasons	3	50%	3	38%	6	43%
Disability	3	50%	3	38%	6	43%
Would lose some or all of current income / additional supports	4	67%	1	13%	5	36%
Discouraged with looking	3	50%	0	0%	3	21%
Considering/going back to school	2	33%	1	13%	3	21%
Could not find the kind of job wanted	2	33%	0	0%	2	14%
Feel that training is not adequate	1	17%	1	13%	2	14%
Lack of accessible transportation	1	17%	1	13%	2	14%
Other family responsibilities	1	17%	0	0%	1	7%
No longer interested in finding a job	0	0%	1	13%	1	7%
Waiting for recall (to a former job)	1	17%	0	0%	1	7%
Family or friends discourage you from working	1	17%	0	0%	1	7%
No jobs available	1	17%	0	0%	1	7%
Other	0	0%	1	13%	1	7%
Age / near retirement	0	0%	0	0%	0	0%
Worried about being isolated by other workers	0	0%	0	0%	0	0%
isolated by outer workers	-		-	0.01		

# Notes

1. [A non-probability sample where participants are selected because they are available to participate in the research study; can cause problems for the generalization of the results.]

0%

0%

0

0

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0

2. [This included eliminating duplicate and incomplete data as well as consistent yea-saying and nay-saying in addition to typing errors which could influence the findings.--

### Acknowledgements

Was a victim of

Maternity or parental leave /

discrimination

pregnancy

This study was funded by the Social Sciences and Humanities Research Council of Canada (SSHRC). We are grateful for the support.

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International Journal of Disability, Community & Rehabilitation Volume 14, No. 1 <u>www.ijdcr.ca</u> ISSN 1703-3381

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