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Work Preparation and Participation in Ontario for Persons with Intellectual and Developmental Disabilities – A Cross-Region Analysis

Abstract

Being productive and engaged in one's community is an important means of achieving social inclusion. Full participation of adults with intellectual and developmental disabilities (IDD) in productivity roles requires that viable options be available for meaningful and satisfying participation in the full range of productivity roles. Training and supports to help them obtain and succeed in chosen roles should also be provided. This study examined training, transition, and productivity experiences of disability support recipients with IDD in the Greater Toronto, Northern, and Eastern regions of Ontario. The results of the survey portion of the study demonstrate regional disparities, and provide direction for quality improvement relative to service provision models.

Productivity roles, including paid work, volunteerism, and education provide opportunities to build skills, satisfy personal goals and make social contributions (Human Resources and Skills Development Canada (HRSDC), 2011; Steger, Dik, & Duffy, 2012). Paid employment also helps individuals satisfy basic sustenance needs, and allows them to pursue leisure, recreation, and personal growth. Engagement in productive roles can enhance one's overall quality of life, and contribute to the economic well-being and social diversity of a community (HRSDC, 2011). Research has demonstrated that young adults with intellectual and developmental disabilities (IDD) seek paid and voluntary work for the same reasons as other individuals, and most are highly motivated to do so (Andrews & Rose, 2010; Lysaght, Ouellette-Kuntz, & Morrison, 2009). The right to work and to occupational choice has been positioned as a basic human right (Durocher, Gibson, & Rappolt, 2013; Mundlak, 2007; United Nations Select Committee, 2006).

Participation of adults with IDD in community life requires that viable options be available for meaningful and satisfying participation in the full range of productivity roles. Research demonstrates that a large proportion of persons with IDD have the potential to be competitively employed at some level when appropriate programs and supports are in place to ensure a smooth transition to the workplace (e.g., Beyer, Kaehne, Grey, Sheppard, & Meek, 2008; Luftig & Muthert, 2005; Mank, Cioffi, & Yovanoff, 2000; Migliore & Butterworth, 2008; Salkever, 2000). The Ontario government sponsors a number of programs to assist workers with disabilities in obtaining work, including the Ontario Disability Support Program – Employment Supports (ODSP-ES) and Ontario Works (OW), which are available to recipients of disability supports. However, employment rates for adults with IDD remain extremely low relative to the general population (Fujuira, 2003; Luftig & Muthert, 2005; Taanila, Rantakallio, Koiranen, von Wendt, & Jarvelin, 2005).

This project was undertaken to identify trends in the province of Ontario and to examine factors related to choice and social inclusion in the context of productivity. The objective of the study was to examine the training, transition, and productivity experiences of disability support recipients with IDD. The project had four distinct parts – a scoping review of the literature, an analysis of extant ODSP data, a mailed survey, and individual interviews with adults with IDD and/or a caregiver. In this paper we present the results of the survey.

Methods

A mailed survey instrument was sent to 12,000 Ontario Disability Support Program (ODSP) benefit recipients with IDD in July 2012. The sample was randomly selected by staff in the Policy Research and Analysis Branch (PRAB) of the Ministry of Community and Social Services (MCSS) based on criteria provided by the research team. Identification of persons with IDD within the full active ODSP database was conducted based on International Classification of Diseases and Related Health Problems, 9th Edition (ICD-9) codes; the protocol for the codes that identified the population was derived from a previous study (Balogh, Brownell, Ouellette-Kuntz, & Colantonio, 2010). Because one goal of the survey was to recruit a sample of individuals willing to later be interviewed in person, recruitment was limited to the ODSP identified regions of Ontario where the Multidimensional Assessment of Providers and Systems (MAPS) research team was based: the Greater Toronto, Northern, and Eastern regions. The total pool of eligible subjects in the database living in the desired regions of the province was 18,738.

Procedures

Each individual in the sample received a mailing through Canada Post that included:

- 1) A cover letter, in both French and English, from the MCSS Directors of the Community and Developmental Services Branch and PRAB inviting them to participate in the survey;
- 2) A letter of invitation from the project lead, also in French and English. The French version of the letter provided instructions for how to obtain a French language version of the survey;
- 3) A two page questionnaire in English;
- 4) A postage-paid response envelope that was addressed to Queen's University.

All materials were reviewed and cleared by the Queen's University Health Sciences Research Ethics Board. Packages were mailed on July 19, 2012, and a second mailing was sent 14 days later.

Instrument

The survey form included questions on participation in productivity-related activities. An introductory question asked who was completing the form (i.e., the ODSP recipient or a proxy). The first section requested demographic information for the OSDP recipient. The next three sections asked about participation in education, use of vocational support services, and work participation. Finally, there was an open-ended question that invited comments about work or work training.

Data Management and Analysis

Data entry was performed by two research assistants. Data conversions were completed on several of the variables (e.g., converting age as a continuous variable into age groups, consolidating groups of dichotomous variables) under the direction of the investigators. Descriptive statistics were computed relative to each question regarding participation in different programs and forms of productivity. Those responding "don't know" were treated as non-respondents. Chi-square analyses were performed to identify significant differences between groups based on selected demographics. In the event that significant differences were identified within a demographic group, particularly in the case of a categorical variable with more than two variables, as in region or age group, standardized residuals were reviewed in order to determine which levels of the variable were contributing to the significant difference (i.e., which were more than one standard deviation above or below expected levels at the 0.05 significance level).

Results

The survey response rate was 17.1% (1,997 respondents). Although the response rate by region cannot be reliably calculated due to a number of unknown factors, including the actual number of persons in the target population in each region, we estimated the proportion of the population of interest in each region represented in the data. This estimate was based on a regional analysis of the ODSP database subset of persons with IDD, as identified by the same ICD-9 codes, conducted 12 months prior to the sample selection for this study. Using these data, respondents comprised approximately 11.0% of ODSP recipients with IDD in the Greater Toronto Area, 10.2% of those in the Eastern region, and 9.5% in the Northern region. Forms were most often completed by individuals with IDD themselves (30.8%) or by a caregiver (64.3%), who in most cases was a parent. The remainder were completed by a range of other respondents, including care providers (8.8%), siblings (5.9%) and case managers/counsellors (3.1%). Forms completed by other respondent types (i.e., spouse, other family member, trustee/guardian, friend, or "other") comprised fewer than 2% of cases. A small proportion (4.1%) of surveys did not indicate who completed the form.

Sample Demographics

The sample was comprised of 56.7% males, as compared with the ODSP database 2011 figure of 58.4%. Rural/urban residency was determined through postal codes. Using this method, 82% of the sample resided in an urban centre, as compared with 83.2% of the ODSP database. The age of respondents ranged from 18 to 64 years, with a mean age of 37.0 (SD = 10.2)for the 1,902 respondents who reported an age. The response rates among those 18-21 and 55–64 years of age were very low. While these groups made up 16.0% and 14.0% of the overall number of 2011 ODSP recipients with IDD, they comprised fewer than 2% of respondents. This may reflect a self-selection bias towards those who are perceived as eligible for employment and training, since youth with IDD in Ontario may remain in school until the year of their 21st birthday, and many individuals over 55 may be perceived as being beyond their working years.

Participation in Education and Training

Overall, 73.2% of respondents or proxies indicated that the individual had attended high school. Of those who had attended high school, one third reported that they had received a regular high school diploma, and 45.0% reported receiving a "certificate of accomplishment." The likelihood of high school participation was considered relative to demographic characteristics. As Table 1 demonstrates, there was no significant difference in the likelihood of high school attendance based on sex or region of residence. There were significant differences, however, relative to rural/urban residency, with people currently living in urban areas being more likely to have attended high school. We also found that participation in any type of high school program declined as the age of the cohort increased.

Most respondents reported that vocational training was not part of their high school experience, with only about 34% of high school attendees indicating they received vocational preparation at school. About half of respondents received help from informal supports in seeking work or work experience, and over 35% did not indicate receiving any vocational preparation or support at all (see Figure 1).

Participation in vocational training was examined in terms of sex, age, region, and rural/ urban differences. Chi-square analyses revealed little difference in program access based on sex, although males were somewhat more likely to rely on informal supports in seeking employment than females, and females were more likely to have attended a vocational program after leaving school. As might be expected, services accessed differed significantly between age groups. The likelihood of receiving such programming in school largely increased as age decreased, with the highest reports of participation coming from the younger cohorts (22 to 24, and 25 to 34 years old), as compared with older groups. The same pattern held true for use of informal supports.

Table 1. Chi-Square Comparisons of High School Participation by Selected Demographic Variables.						
Variable	Levels	Yes (%)		No (%)		Significance Value
Sex n = 1,927	Male	793	(72.6%)	299	(27.4%)	0.632
	Female	619	(74.1%)	216	(25.9%)	
Region n = 1,899	Eastern	657	(73.6%)	236	(26.4%)	0.966
	Toronto	481	(73.0%)	178	(27.0%)	
	Northern	255	(73.5%)	92	(26.5%)	
Population Base n = 1,849	Rural	215	(65.2%)	115	(34.8%)	< 0.01
	Urban	1142	(75.2%)	377	(24.8%)	
Age (Years) n = 1,860a	18–21	32	(91.4%)	3	(8.6%)	< 0.01
	22–24	217	(91.2%)	21	(8.8%)	
	25-34	488	(88.9%)	61	(11.1%)	
	35-44	367	(73.5%)	132	(26.5%)	
	45-54	265	(51.7%)	248	(48.3%)	
	55-64	12	(46.2%)	14	(53.8%)	





Differences in vocational training preparation were observed based on region of residence, and whether respondents resided in rural or urban areas. Regional breakdown identified few differences related to programs provided in high school, but important differences associated with other forms of vocational support. Post hoc analysis (standardized residuals) indicated that respondents in the Greater Toronto Area were significantly more likely than those in other regions to participate in a post-secondary vocational program. By contrast, individuals residing in Northern regions were significantly more likely to use informal supports. Participation rates in all forms of vocational preparation were significantly higher for urban than rural respondents.

Government Employment Program Participation

Participants were asked if they had ever participated in ODSP-ES or OW programs, or in any other government-sponsored training. A total of 716 (35.9%) respondents indicated they had participated in one government-funded program related to gaining employment, 193 (9.7%) reported that they had participated in two programs, and about 2% reported participating in

three or more such programs. Of those individuals who attended high school, 60.9% had participated in at least one government-funded vocationally related program. Overall, however, 49% indicated they had not participated in any type of government sponsored vocational preparation or support program. The highest level of participation was found among ODSP-ES programs, while very few had ever participated in OW programs (see Figure 2).

In terms of key demographic factors, results revealed that again, there was little difference in vocational program participation based on sex. Age did not emerge as a factor for the ODSP-ES program, but did for all other programs. For example, very low participation was reported in the over 55 age group in the case of both OW and "other" programs; however, since, programs such as Ontario Works were not created until fairly recently (circa 1998), this was expected. Perhaps of greater interest were differences based on region and urban/rural residency. Significantly higher program enrolment rates were reported in the Northern region and, with the exception of ODSP-ES, respondents in the Eastern region were significantly less likely to have enrolled in these programs. Again, residents of rural areas were far less likely than

residents of urban centres to report participation in any government-sponsored program, most notably the ODSP-ES program, the government-funded program most often used by ODSP recipients with IDD.

Productivity

Lifetime participation in all forms of productivity is shown in Figure 3. As described previously, respondents could indicate participation in any or all of the categories listed. Overall, 37.8% of all respondents indicated that they had worked for minimum wage or more at some point in their lives. Just over 30% had worked at a job for less than minimum wage. Overall, the highest proportion of the sample (just over 55%) had engaged in volunteer work, and about 32% had been involved in unpaid work training experiences. Just over one quarter of our sample had engaged in productive activities as part of a day program. Very few respondents held apprenticeship positions. A chi-square analysis showed a significant association between ODSP-ES and work at minimum wage variables showed a positive, significant correlation ($x^2 = 0.31$, p < .001).

Breakdown of the findings in terms of demographic variables again revealed a number of interesting differences. With respect to sex, males were significantly more likely to have held a job paying minimum wage or higher than females, while females were significantly more likely to have worked without pay. Females were also significantly more likely to have held an apprenticeship than males.

In terms of age, respondents in the 25 to 34 year age range were significantly more likely to have worked for minimum wage or higher than respondents in other groups. There were also age-related differences in terms of work paid below minimum wage. Statistical differences identified that younger individuals (18 to 24 years) were significantly more likely to work below minimum wage, compared to those in the 45 to 54 year age group. Significantly more respondents in the 25 to 34 and 45 to 54 year age groups reported volunteer experiences, and along with the 35 to 44 year age group, they also reported significantly higher rates of participation in unpaid job training. Day program work activity was significantly higher in the 25 to 34 year age group than for any other age group.

With respect to region of residence, there was significantly higher participation in paid employment in the Northern region for work both above



and below the minimum wage. Respondents in the Eastern region were significantly less likely to report having ever held an apprenticeship, whereas people in the Greater Toronto Area were significantly more likely to have held an apprenticeship. Respondents in the Greater Toronto Area were also significantly more likely to have participated in a day program with a vocational component.

Finally, examination by urban/rural residency revealed that urban respondents were significantly more likely to have participated in every type of productivity – paid work below or above minimum wage, volunteerism, apprenticeships, and work within a day program – than those residing in rural areas.

Discussion

The data analyzed in this study show that work engagement of adults with IDD in this province is broadly distributed across all forms of productivity. The rate of employment at minimum wage or greater in this study, 38%, reflects lifetime employment. We know from our interview data (Lysaght, Howell-Moneta, Ouellette-Kuntz, Cobigo, & Petner-Arrey, 2013) that many of those who responded affirmatively to this question worked for a short time and dropped out of the labour market, or held sporadic employment over their lifetimes. Data reviewed from an analysis of ODSP disability support recipients with IDD in June of 2012 revealed that just 17.5% of the sample was working at the time, and there was no indication as to whether that income was from minimum wage jobs (Lysaght et al., 2013). U.S. data from the National Core Indicators indicates that 14.5% of persons with IDD work in community-based paid jobs, while the overall work rate, including those employed in social service agencies (a combination of community, sheltered, and day program work) was 39.2% (National Core Indicators, 2011). The rates for community-based, paid work in most U.S. studies range from 16% to 22%, though employment rates for persons with mild IDD are considerably higher, ranging from 35% to 68% (Fujuira, 2003; Luftig & Muthert, 2005; Taanila et al., 2005). Overall, clear benchmarks are difficult to identify; however, what is clear from the literature is that productivity spans a range of options; that most paid employment point prevalence figures hover between 14–20%; and that paid employment rates are higher for individuals who have better adaptive functioning.

Regional differences emerged in the training and productivity outcomes experienced by people with IDD in Ontario. The likelihood of having worked for pay, whether above or below minimum wage, is significantly greater for respondents from the Northern region than other regions. Use of government-sponsored vocational programs was reported by just under 40% of respondents overall, but this was regionally disproportionate, with significantly higher use of all these programs reported in the Northern region. Use of ODSP-ES program in particular may be important to successful outcomes, given that the highest users of the program also reported the highest rates of engagement in paid employment. Residents of rural areas were much less likely to have received vocational supports to move them toward paid work, including government-sponsored vocational support programs, and showed lower rates of participation in all forms of productivity than urban dwellers.

Men appear more likely to work for pay, while women are more likely to work as volunteers. Assuming that skill levels do not differ across the sexes, one must question whether there are other factors favouring entry of men into paid work roles, such as higher levels of caregiver protectionism for women, or lower expectations (or levels of self-determination) for women with IDD in general. This trend is also consistent with international trends in employment, where women remain disadvantaged relative to men in the labour market (Blau & Kahn, 2013; Thevenon, 2013). For example, the employment participation of women globally was more negatively impacted by the economic crisis of 2008–2012 compared to men (International Labour Organization, 2012). Although in North America women have lower rates of unemployment than men, their workforce participation is lower and they are more likely to be engaged in vulnerable work situations, meaning work that is unpaid, casual or unbenefitted (International Labour Organization, 2012). Although the wage gap has narrowed in Canada, women continue to be paid less than men, in part due to differences in job tenure and union membership (Drolet, 2011).

Results indicated that 30% of survey respondents worked for less than minimum wage during their lifetime, and participation of this type appears to be associated with age (i.e., older respondents and those in the youngest age groups were more likely to have worked at less than minimum wage). It is not clear whether sheltered or alternative forms of paid work (i.e., small stipend for work contributions, profit share, allowance, etc.) rather than a regular wage are being used with younger workers as a bridge to employment, or if they are ongoing arrangements agreed to and/or preferred by some families and individuals.

Volunteerism was the most prevalent form of productivity involvement for all demographic groups in this study across all regions. There were also high levels of participation in unpaid work that is seen as "training" (32.7%) and productivity-related engagement in day programs (26.3%). On a positive note, high rates of unpaid work suggest a willingness of community agencies to engage people with IDD, and widespread community involvement in training and/or productivity options for this population. Such situations have the potential, however, to exploit the skills and contributions of the workers involved, especially for those who are competitively employable. Unpaid work placements rarely lead to paid work in the absence of focussed vocational placement programs (Tremblath, Balandin, Stancliffe, & Togher, 2009). A study we conducted in Southeastern Ontario in 2007 and 2008 (Lysaght et al., 2009) indicated that many workers, who on average worked for pay only 13 hours per week, were supplementing their paid work with volunteer hours, on average for six hours per week. The high rates of volunteering identified in this study, and the reports of many interview participants, suggest that some individuals are defaulting to unpaid work due to difficulty finding paid employment. While engaging in this form of productivity can encourage skill development and foster community connections, it is evident that many of the unpaid workers in this study desired paid roles, and could have undertaken paid roles if supports had been available.

Overall, our analysis points to a number of areas where monitoring of service delivery processes and outcomes could lead to substantial quality improvement. Disparities in access to pre-vocational and vocational training should be addressed to ensure that transition from school to work includes meaningful and comprehensive programming. Given the apparent association between use of employment support services and entry to paid employment, analysis of resource allocation relative to the population base could ensure equal access across Ontario to vocational programs for individuals in the post-high school years. Resource allocation to support more broadly available vocational counselling, job entry support and ongoing monitoring would allow for individualized matching of persons with IDD to a full range of productivity options based on aptitudes and preferences. Although rates of paid employment at fair wages are a poor proxy for measurement of effective individualized services, effort should be made to identify a consistent and valid means of tracking this and other productivity outcomes at the system level to monitor progress over time.

Limitations

This study provides new information concerning the experiences of Ontarians with IDD relative to training, transition and productivity. Caution should be exercised in interpretation of results due to a range of factors, including the sampling strategy, possible threats to response validity related to variability in cognitive skills in respondents with IDD, unknown awareness among proxy respondents about historical involvements, factors related to interpretation of the survey questions, and a host of other possible confounds. Data suggest there is likely a response bias towards those who considered work and productivity to be relevant to them, and if this assumption is true, it is likely that the productivity and training participation rates presented here are overestimates. In addition, the results reported included only adults with IDD who were ODSP recipients. Those who choose not to apply for ODSP, were in the process of applying for it, or had their application rejected were not represented.

Conclusions

This study collected data concerning the productivity roles of adults with IDD who are ODSP recipients, and their preparation for those roles. Results identified some disparities in rates of participation in various forms of training and productivity based on rural residency, region of residence, age and sex. Based on this work, there are a number of issues that should be explored further in order to inform policy and practice. Indicators of disparities in opportunities for accessing support and participating in productivity options require ongoing data collection, analysis and interpretation, with particular attention to:

- Reasons for differences across regions in the use of government-sponsored vocationally-directed programs such as ODSP and OW;
- Disparities in access to education, vocational training and work in rural regions of the province;
- The nature of work being performed at less than minimum wage;
- Gender disparities in the rate of paid employment.

Key Messages From This Article

People with intellectual disabilities: You have a right to work in a place and type of work that is right for you. Look for help from vocational counsellors at school and in the community, and from family and friends.

Professionals: Many people with IDD in Ontario have failed to receive sound pre-vocational preparation and ongoing support. Programs should ensure fair access to employment supports and careful matching to productivity options based on skills and individual choice.

Policymakers: Paid employment rates are improving, based on higher lifetime employment rates for younger individuals. Policy should support universal access to pre-vocational training in high school, and transition programs for new graduates. Attention should be directed toward reducing regional and sex differences.

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References

- Andrews, A., & Rose, J. L. (2010). A preliminary investigation of factors affecting employment motivation in people with intellectual disabilities. *Journal of Policy and Practice in Intellectual Disabilities 7*, 239–244.
- Balogh, R., Brownell, M., Ouellette-Kuntz, H., & Colantonio, A. (2010). Hospitalisation rates for ambulatory care sensitive conditions for persons with and without an intellectual disability--a population perspective. *Journal of Intellectual Disability Research*, 54, 820–832.
- Beyer, S., Kaehne, A., Grey, J., Sheppard, K., & Meek, A. (2008). What Works? – Transition to Employment for Young People with Learning Disabilities. Chippenham, UK: Shaw Trust.
- Blau, F. D. & Kahn, L. M. (2013). Female labor supply: Why is the U.S. falling behind? (Working Paper 18702). Cambridge, MA: National Bureau of Economic Research.
- Drolet, M. (Spring 2011). Why has the gender wage gap narrowed? *Perspectives on Labour and Income. Ottawa: Statistics Canada. Retrieved* from http://www.statcan.gc.ca/ pub/75-001-x/2011001/pdf/11394-eng.pdf

Durocher, E., Gibson, B. E., & Rappolt, S. (2013). Occupational justice: A conceptual review. *Journal of Occupational Science, Early Online*, Nov. 13.

Fujuira, G. T. (2003). Continuum of intellectual disability: Demographic evidence for the "forgotten generation." *Mental Retardation*, 41, 420–429.

Human Resources and Skills Development Canada (HRSDC) (2011). *Indicators of wellbeing in Canada*. Retrieved from http:// www4.hrsdc.gc.ca/d.4m.1.3n@-eng. jsp?did=3

International Labour Organization (2012). Global Employment Trends for Women. Geneva, SW: Author.

Luftig, R. L., & Muthert, D. (2005). Patterns of employment and independent living of adult graduates with learning disabilities and mental retardation of an inclusionary high school vocational program. *Research in Developmental Disabilities*, 26, 317–325.

Lysaght, R., Howell-Moneta, A., Ouellette-Kuntz, H., Cobigo, V., & Petner-Arrey, J. (2013). Maximizing Social Inclusion, Choice and Independence through Productivity Options – A Multi-Phase Study. Report submitted to the Ministry of Community and Social Services. Kingston, ON: June.

Lysaght, R., Ouellette-Kuntz, H., & Morrison, C. (2009). Meaning and value of productivity to adults with intellectual disabilities. *Intellectual and Developmental Disabilities*, 47, 413–424.

Mank, D., Cioffi, A., & Yovanoff, P. (2000). Direct support in supported employment and its relation to job typicalness, coworker involvement, and employment outcomes. *American Journal on Mental Retardation, 38*, 506–516.

Migliore, A., & Butterworth, J. (2008). Trends in outcomes of the vocational rehabilitation program for adults with developmental disabilities: 1995–2005. *Rehabilitation Counseling Bulletin, 52,* 35–44.

Mundlak, G. (2007). The right to work: Linking human rights and employment policy. *International Labour Review*, 146, 189 – 215. National Core Indicators. (2011). *Phase XII final report 2009–2010 data*. Cambridge, MA: Human Services Research Institute & Alexandria, DC: National Association of State Directors of Developmental Disabilities Services. Retrieved from http://www2.hsri.org/nci/index. asp?id=reports

Salkever, D. S. (2000). Activity status, life satisfaction and perceived productivity for young adults with developmental disabilities. *Journal of Rehabilitation, 66,* 4–13.

Steger, F. Dik, B. J., & Duffy, R. D. (2012). Measuring meaningful work: The work and meaning inventory. *Journal of Career Assessment*, 20, 322 – 337.

Taanila, A., Rantakallio, P., Koiranen, M., von Wendt, L., & Jarvelin, M. R. (2005). How do persons with intellectual disability manage in the open labour markets? A follow-up of the Northern Finland 1966 Birth Cohort. *Journal of Intellectual Disabilities Research*, 49, 218–227.

Thévenon, O. (2013). Drivers of Female Labour Force Participation in the OECD. *OECD social, employment and migration working papers,* No. 145. Paris: OECD Publishing. Retrieved from: http://dx.doi. org/10.1787/5k46cvrgnms6-en.

Tremblath, D., Balandin, S., Stancliffe, R. J., & Togher, L. (2009). Volunteering and paid work for adults who use AAC. *Journal of Developmental and Physical Disabilities*, 22, 201–218.

United Nations Ad Hoc Committee on a Comprehensive and Integral International Convention on the Protection and Promotion of the Rights and Dignity of Persons with Disabilities (2006). *Convention on the rights of persons with disabilities*. Retrieved from http://www.un.org/ disabilities/convention/conventionfull. shtml