A Provincial Study of Direct Support Staff Who Work with Adults with Developmental Disabilities in Ontario

The Experience of Client Aggression and its Emotional Impact on Staff

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Aknowledgements

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The Purpose of this Report

This report has been prepared to present the findings from a provincial survey of Ontario's community direct support staff who work primarily with adults with developmental disabilities. The aim of the survey was to examine the experience of client aggression among staff and the emotional impact it has on them. A second aim of the survey was to determine patterns of related resource availability and use as well as interest in additional resources and training to address client aggression and its impact.

This report is intended for agencies and stakeholders in Ontario's developmental services sector and provides some data describing different regions of the province for comparison. This may be useful in identifying areas of strength as well as areas for improvement. It may also provide agencies and upper management with useful information about the experiences of their staff for future hiring and training purposes.

Disclaimer: This study has several limitations which the reader should be aware of and take into consideration when interpreting the results reported herein. Most importantly, participation in the study was voluntary and anonymous and the respondents represent only a proportion of the sector. Therefore, the experiences and opinions of those who participated may not reflect the overall population of direct support staff in the province. Some regions had small numbers which could affect the generalizability of results. In addition, because this is a cross-sectional study, any relationships reported herein are associations only and do not infer causality.

Brief Description of the Project

This project was a collaboration between the Dual Diagnosis and Work and Well-Being Research and Evaluation Programs at the Centre for Addiction and Mental Health in Toronto, Ontario. This project was supported in part by one of the author's CIHR/PHAC applied public health chair. The authors have no relevant conflicts of interest to disclose.

We surveyed community direct support staff across the province of Ontario who work primarily with adults who have developmental disabilities. We were interested in understanding the experiences of client aggression and its impact on staff. Ongoing exposure to stressful and demanding situations at work can lead to staff burnout which affects quality of service provision and can lead to job turnover and associated labour and healthcare costs. Consequently, we were also interested in what resources are available to staff and if there are additional areas for potential intervention.

Organization of the Report

This report begins with the Key Findings which summarize the highlights and most relevant results of the study. The Key Findings were developed by the researchers with consideration given to feedback received from interested parties who were in attendance at meetings where these data were presented and discussed. The Key Findings are followed by Recommendations and Next Steps for the use of this report. Recommendations for modifications to current practice will not be made at this time in the light of recent legislative changes and the need for additional discussion with relevant stakeholders. Subsequent to the recommendations are the detailed descriptions of the data. Appendix A contains further detailed tables with data presented across represented regions and Appendix B is a reference list. For the purposes of this study, participants were asked to identify where they work according to the nine regions of Ontario's Ministry of Community and Social Services (MCSS). Some statistical findings are reported but the report primarily describes trends in the data. Where major regional differences were found, they are highlighted.

Key Findings

1. Community direct support staff who responded to the survey report being frequently exposed to client aggression which appears to have an emotional impact on them. Although most staff are overall able to cope effectively, there is a portion of staff who are experiencing burnout and related problems at work.

FACTS:

- Nearly all staff survey respondents reported experiencing some client aggression and one quarter were experiencing it almost daily.
- The majority of staff had low scores on a validated measure for burnout indicating that they were doing well overall. However, half of staff reported experiencing some emotional difficulties directly related to their experience of client aggression and almost half of staff reported that they experienced days that required extra effort to perform their usual work responsibilities.
- Emotional difficulties and days that required extra effort were associated with frequency and severity of aggression.
- More frequent and more severe aggression was associated with higher burnout scores.

2. Although overall burnout is low, some work environments may put staff at higher risk.

FACTS:

- Residential/Respite and Day Program staff more often reported experiencing near daily aggression than staff in Supported Independent Living (SIL) or Supported Employment/Job Coach settings.
- Residential/Respite and Day Program staff experienced the most severe aggression in all categories. SIL staff also experienced a high degree of self-injurious and property aggression.
- Despite high rates of aggression, Residential/Respite staff did not have higher burnout scores. Day Program and SIL staff on the other hand, were most highly represented among the staff with the highest 10% of overall burnout scores.

3. Most staff who work with adults with developmental disabilities feel effective at managing challenging behaviour and get a positive benefit from their work. These staff report lower rates of emotional stress and less burnout.

FACTS:

- The majority of survey respondents rated their self-efficacy in dealing with aggressive and challenging behaviour as good or excellent.
- A large proportion of respondents reported getting benefit from their work. Sixty percent reported moderate positive effects and one third felt the positive contribution from their work was high.
- Higher perceived self-efficacy in managing challenging behaviour and higher positive contributions were associated with lower burnout scores and fewer reports of emotional difficulties and negative impact on work.

4. There is still a small proportion of individuals who are unsure about their workplace policy on client aggression. Moreover, policies may be inconsistent and a proportion of staff do not always adhere.

FACTS:

- Nine percent of staff reported that their workplace did *not* have a policy and 12% were unsure. According to staff, policies most often mandated reporting of injuries and less frequently behaviour and incident debriefing.
- Of those who knew of a policy, 20% did *not* follow it at all times. Most commonly this was because they found it to be too much work, not helpful or too difficult.

5. While workplace support and resources for dealing with emotional problems related to client aggression are available, they appear to be inadequately used and could be more effective.

FACTS:

- The majority (83%) of respondents reported that resources were available through their agency.
- Only half of staff who reported having suffered emotional difficulties that related directly to their experience of client aggression reported accessing the resources available through their agency. Fifty-four percent of staff who did not use resources, did so because they chose not to seek help. Those who were the most burnt out were no more likely to have accessed resources than other staff.
- Only 30% of those who accessed resources found them helpful or extremely helpful. There was a trend for those who scored highest in burnout to find resources least helpful.

6. Staff are interested in opportunities to further develop their skills in understanding and managing client aggression as well as in resources to improve their own self-care.

FACTS:

- The majority of staff reported that they would be interested in additional resources or training.
- The most often identified area of interest was in skills building for self-care (mindfulness, coping skills, etc).
- Staff also commonly identified an interest in learning behavioural techniques, having clinical supervision and learning how to create and optimize a safe workplace.

Recommendations and Next Steps

This study was completed just prior to the implementation of Bill 168 in Ontario which introduced amendments to the Occupational Health and Safety Act. Bill 168 mandates that all employers develop a program to implement their workplace violence policy which must include controlling the risk, providing immediate assistance and enabling reporting. Due to the passing of Bill 168 it is anticipated that there will be changes happening within the Developmental Services Sector with respect to violence prevention and management. This study was done at an opportune time to provide a snapshot of the status of the sector pre-Bill 168 and may serve as a starting point for future re-evaluation. These data provide a baseline for comparison in ongoing program development and quality improvement.

We suggest that this report be made available to all stakeholders in the sector, from support staff to ministry representatives, to stimulate reflection and discussion around the issue of exposure to client aggression and the impact it has on staff. We anticipate future opportunities for discussion and feedback from these groups with the goal of eventually summarizing additional recommendations to follow Bill 168 and the changes it induces.

Background of the Project

Individuals with developmental disabilities may have deficits in communication and social interaction which can manifest in challenging behaviours including overt aggression. Direct support staff who care for these individuals may be on the receiving end of aggressive acts or may witness self-injurious behaviour and aggression directed at others. The risk of physical injury exists, but there is also the often less recognized risk of emotional injury. Stress at work affects staff well-being in and out of the workplace and is associated with decreased productivity resulting in higher labour costs, job turnover and decreased continuity of care. Ultimately, both the staff and clients are affected and often the challenging behaviour can escalate due to these factors.

For staff, ongoing stress at work can result in burnout which is defined as a state of physical, emotional and mental exhaustion that occurs when workers feel overburdened by the demands of long-term involvement in emotionally demanding situations. Human service workers, including direct support staff, are at risk of burnout given the demanding care-driven nature of the work they do. Dealing with challenging client behaviour is an example of an emotionally demanding situation and susceptible staff will experience the cumulative effects over time (see BOX#1). Burnout syndrome has three key elements: (1) emotional exhaustion (fatigue, feeling emotionally drained), (2) depersonalisation (a sense of detachment accompanied by cynicism), and (3) a reduced sense of personal accomplishment. There are many factors at the organizational and individual levels that have been implicated in the development of burnout across different work groups.

BOX#1: *Burnout can be thought of as analogous to what happens when driving a car with a leaky tire. Under ideal conditions you can have a smooth ride and reach your destination on time. With a leaky tire, however, the ride may be a little less smooth, you might go a little slower and use more gas which costs more. As the tire gradually loses air, these changes will become more and more obvious until the car can no longer be driven without changing the tire. Similarly, the cumulative effect of ongoing stress causes the worker to become increasingly drained of physical and emotional energy or "air" until there is none left and they can no longer function.*

There is limited research exploring burnout in direct support staff, but some small studies done elsewhere in the world have found an association between client aggression and/or challenging behaviour and staff stress. Interestingly, overall burnout rates for direct support staff in developmental disabilities have tended to be lower than health service population norms which has led researchers to study whether there might be some protective factors present. Data from the UK show that staff behavioural knowledge and perceived self-efficacy in dealing with challenging behaviour are inversely associated with stressful reactions. In a small study, they also reported that

direct support staff get a high degree of personal satisfaction and positive benefit from their work. There have been no large scale studies of this kind done in North America.

The Project

This project is a collaborative effort between the Dual Diagnosis Program and the Work and Well-Being Research and Evaluation Program at the Centre for Addiction and Mental Health in Toronto, Ontario. The target population for the project was the direct support staff who work with adults in the community developmental services sector in the province of Ontario, Canada. Project development began in the fall of 2008 and data collection took place from January 2010 to April 2010. Its purpose was to examine the impact of client aggression on direct support staff and identify possible areas for intervention.

Methods and Data Collection

Study Design

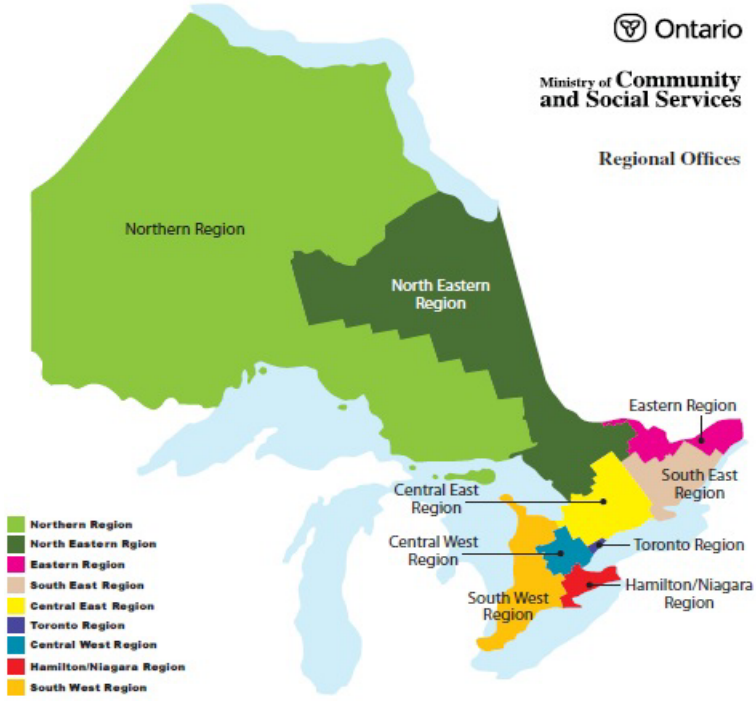
This project used a survey design to collect data from community direct support staff who work primarily with adults with developmental disabilities. The survey underwent multiple revisions and pilot testing. Furthermore, the survey methodology and language were vetted through the Shared Interests Committee, a subcommittee of the Developmental Services Human Resource Strategy, to ensure appropriateness for the developmental services sector prior to mass distribution to unions and community agencies. The survey assessed seven core areas: (1) staff demographics, (2) exposure to client aggression, (3) impact on work, (4) burnout (using a validated measurement instrument, the Maslach Burnout Inventory (MBI), which scores respondents in the three dimensions of burnout – emotional exhaustion (EE), depersonalization (DP) and personal accomplishment (PA)), (5) perceived self-efficacy in dealing with challenging behaviour and positive contributions from the work (using validated instruments), (6) availability and use of policies and resources and (7) interest in training and other

interventions. To examine the group of staff who were the most burnt out we looked at those in the top 10% of overall MBI scores.

Recruitment

Direct support staff in the province's developmental services sector are affiliated with agencies grouped according to the nine regions of Ontario's MCSS (see Figure 1). Agencies and unions were notified of the project and invited to participate by email or word of mouth. When an agency agreed to participate, additional details were provided including the link to the on-line survey. Agency representatives were asked to disseminate the link to their direct support staff by whatever means were convenient. Hard copies were also made available if requested and a return address label was provided. In some cases, a project member visited the site to administer hard-copies of the survey for completion. Survey completion was entirely anonymous and voluntary and agency names were not reported.

Figure 1. Map of Ontario's Ministry of Community and Social Services (MCSS) Regions

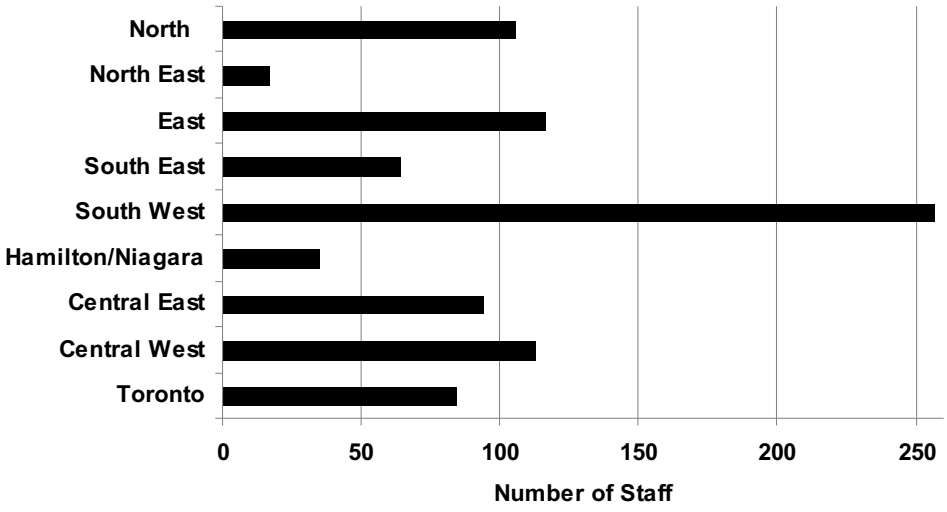


Adapted from http://www.accesson.ca/NR/rdonlyres/D65FF5CE-38E9-46C8-8BFF-717019BE95F9/366/ontario_en.pdf

Direct Support Staff Participation in Study (see Table 1)

Data collection was completed in April 2010. A total of 926 survey responses were received from direct support staff working primarily with adults who have developmental disabilities. About one third of completed surveys were returned in hard copy. All nine MCSS regions across the province were represented (see Figure 2). An additional 101 surveys were returned from staff who primarily support children and will be reported separately. The exact number of direct support staff in the province is not known due to a lack of current census. However, based on available data including number of full-time equivalents, the estimated response rate is 10%.

Figure 2. Direct support staff survey respondents by MCSS region



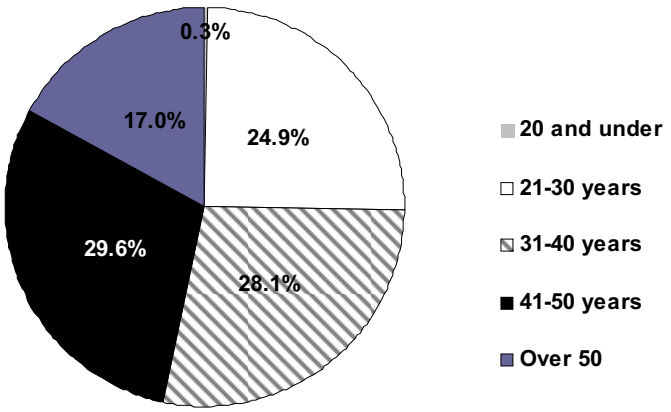
Results

Demographic Characteristics (see Table 1)

Gender and Marital Status. The majority of respondents were female (82%). This female to male ratio was fairly consistent across all regions (range: 72.6 to 87.7% female). Two thirds of respondents were married or living common-law.

Age. The mean age of respondents was 40 years (range: 20 to 65 years) and the majority of respondents were between the ages of 31 and 50 years. Only one quarter of respondents were under the age of 30 (see Figure 3).

Figure 3. Age distribution of survey respondents



Country of Birth. Only 12% of respondents were foreign-born. Toronto region had more foreign-born staff compared to all other regions. Ninety-seven percent of staff identified their main language as English.

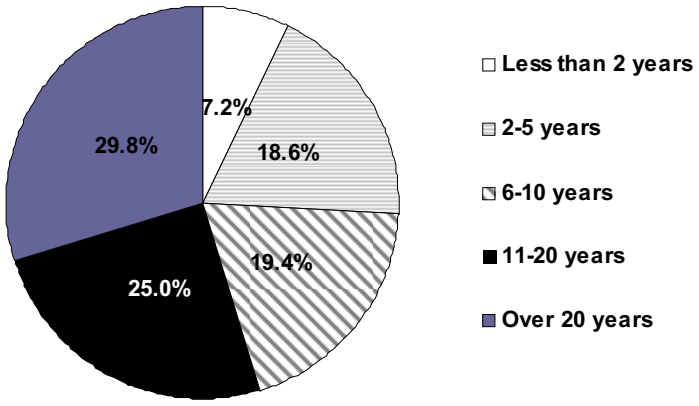
Employment Characteristics (see Table 2)

Special Education and Training. Respondents were asked to indicate if they had any specialized education or training to work with individuals with developmental disabilities.

Sixty-three percent of respondents indicated that they had special training in the form of a college diploma (eg. Developmental Services Worker (DSW), Child and Youth Worker (CYW) or Personal Support Worker (PSW)) or nursing degree.

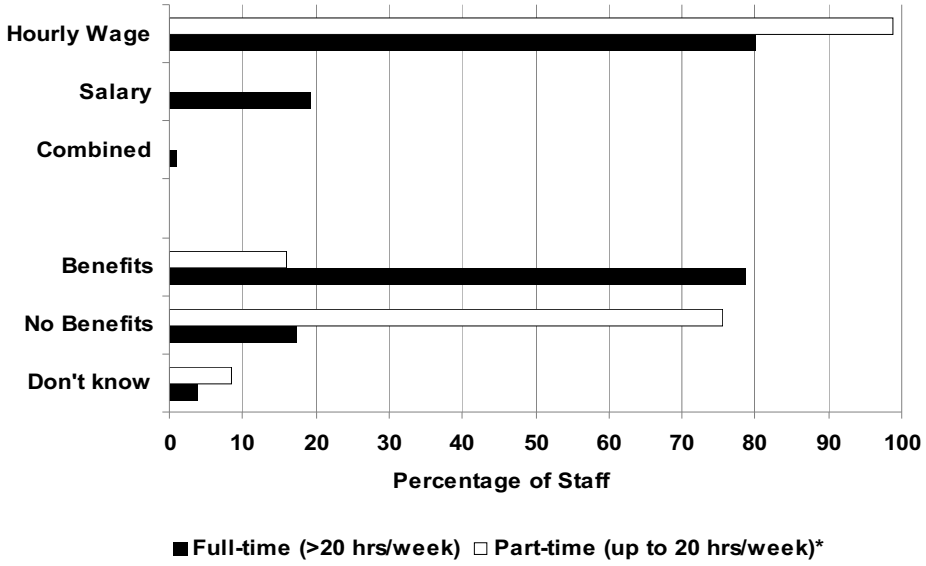
Years of Experience. Respondents had a range of years of experience working in the developmental services sector from less than two years to more than twenty. The greatest proportion of respondents had worked in the area for more than 20 years. About one quarter of staff had fewer than five years of experience (see Figure 4).

Figure 4. Distribution of years of experience in developmental disabilities



Hours and Payment. The majority of workers reported working full-time hours (more than 20 hours per week). However, it should be noted that all the hours were not necessarily worked at a single agency. People may have held more than one part-time position. Thus, this total only indicates hours worked as opposed to full-time equivalents. Most staff were paid an hourly wage (82%) and had workplace provided sick leave benefits (73%) (see Figure 5). Staff who worked more than 20 hours per week were more likely to be paid by salary and receive sick leave benefits.

Figure 5. Staff reported method of payment and sick leave benefits by number of hours worked per week



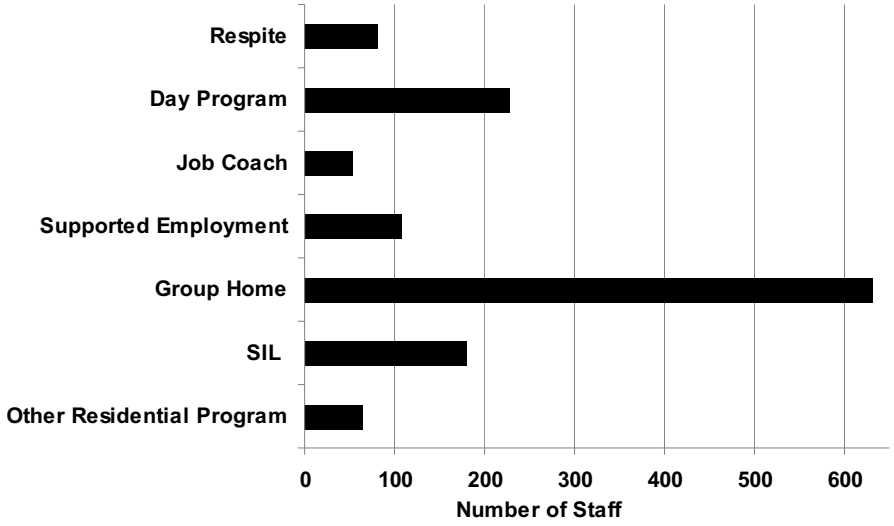
*Significant differences exist for mode of payment and sick leave benefits between staff who work part-time and full-time hours ($p<0.001$).

Work Settings and Special Client Groups

Respondents were asked to indicate what type of setting they worked in and if they cared for any unique needs client populations (see Figures 6 and 7). Thirty-one percent of respondents indicated that they worked in more than one setting (range 1 - 7, mean 1.5). The majority of staff respondents reported working in a residential group home. Work settings were further grouped for the purposes of additional analyses in this report based on assumed similarities in terms of client characteristics and staff resources. These groups were: Residential/Respite (includes residential group homes, other residential settings and respite care), Day Programs, Supported Independent Living (SIL), and Supported Employment/Job Coach. If a staff indicated that they spent any time at all in either residential or respite settings, they were assigned to this group. More than 700 staff (80% of respondents) reported working with some clients with dual diagnosis. Autism spectrum disorders and complex medical needs clients were also highly represented. It should be noted that work settings and client groups were not

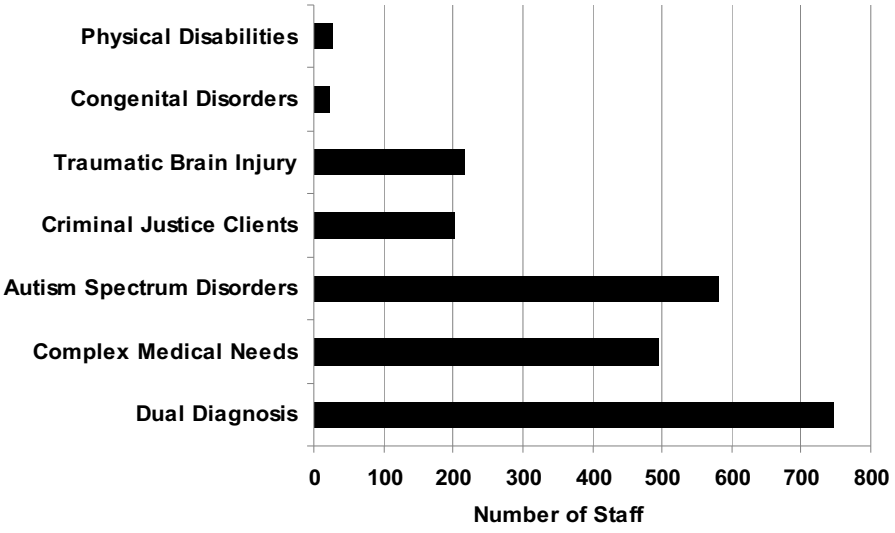
defined in the survey and responses were based on subjective interpretations of these items.

Figure 6. Distribution of work settings



SIL – Supported Independent Living

Figure 7. Distribution of special client populations



Exposure to Aggressive Behaviour (see Tables 3 and 4)

For the purposes of this study, aggressive behaviour was defined as "any verbal, non-verbal or physical behaviour displayed by the client that was threatening or caused harm to self, others or property." This definition was adapted from a research scale commonly used for the assessment of client aggression. Respondents were asked to rate the frequency and perceived severity of their own exposure to this type of behaviour *in the previous six months.* They were also asked about the specific type of aggression experienced (i.e. verbal, physical or property aggression resulting in injury or damage or not).

Frequency. Most staff reported experiencing some aggressive behaviour by their clients. Nearly half were experiencing it at least weekly and for one quarter of respondents it was a near daily occurrence (see Figure 8). There were differences found across regions with North Eastern and Toronto staff tending to report more near daily aggression than their counterparts in the rest of the province. Gender and years of experience were not associated with frequency of exposure. Full-time staff and staff working in Residential/Respite and Day Program settings were more likely to be experiencing near daily aggression.

Severity. Staff reported a high rate of exposure to verbal aggression directed towards the staff or others (co-staff, co-clients, visitors). There was also a high rate of exposure to the client exhibiting self-injurious behaviour and property destruction. Significant rates of physical aggression directed towards staff or others were also experienced or witnessed. Nine percent of staff witnessed aggression only, while 83% directly experienced verbal or physical aggression. Staff working in Residential/Respite and Day Program settings reported higher levels of more serious aggression (i.e. resulting in injury). In SIL settings, the experience of self-injurious and property aggression approached the level seen in these other settings. The mean perceived severity score among respondents was 53 out of 100 (range: 0 to 100). When responses were sub-grouped into four categories according to these responses: mild, mild-moderate,

moderate-severe and severe, there were approximately equal percentages of staff in each (see Figure 9). Severity scores did not differ across region, gender, years of experience or hours of work. Thus, while part-time staff reported less exposure to aggressive behaviour, they rated it as severe as their full-time counterparts. In terms of subjective severity across work settings, Residential/Respite > Day Program > SIL > Supported Employment/Job Coach.

Figure 8. Staff reported frequency of exposure to client aggression

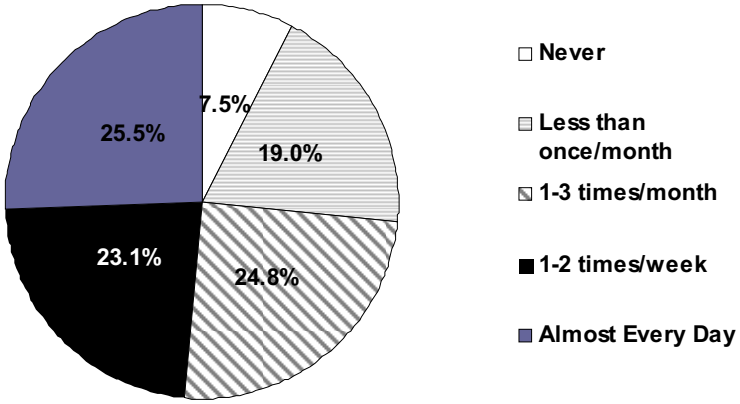
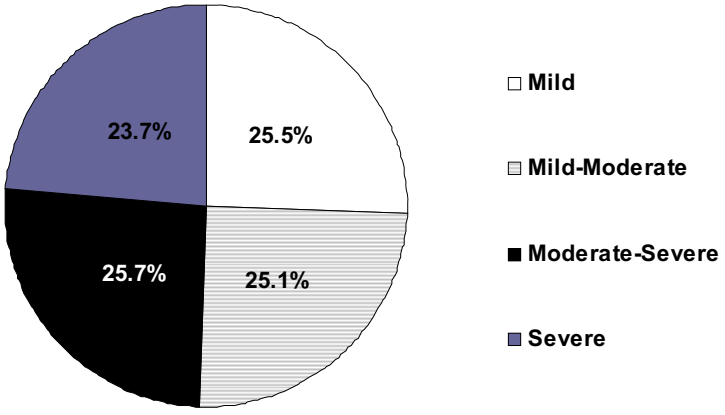


Figure 9. Staff perceived severity of client aggression



Impact on Work Productivity (see Table 5)

Time off. Time off was defined as staff missing work due to a physical injury sustained as a result of client aggression. A small percentage of staff missed time from work due to a physical injury (6%). Missed time due to a physical injury was significantly associated with frequency and severity of aggression. There were also differences across regions with more staff in Hamilton/Niagara and Toronto having missed time due to a physical injury. There was no association with gender, years of experience or hours worked.

Emotional Difficulties. Staff were also asked whether they were experiencing any emotional difficulties they believed to be directly related to their experience of client aggression. More than half reported they felt that they were experiencing associated emotional difficulties. More frequent exposure to aggressive behaviour and a higher perceived severity were associated with emotional difficulties. Report of emotional difficulties did not differ by region, gender or hours worked. Those with fewer than two years of experience, however, tended to report lower rates of emotional difficulties.

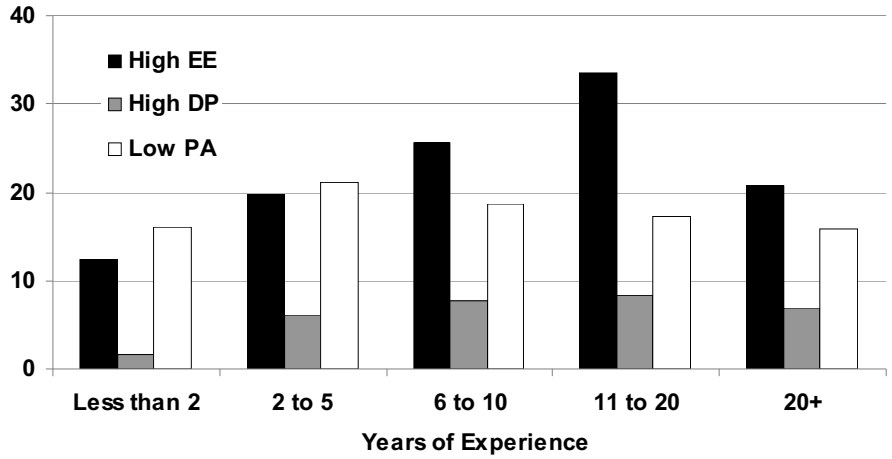
Effort at Work. Staff were asked about experiencing days at work requiring extra effort to perform at their usual standard. Almost half of workers reported that they had days that they felt required extra effort to function at their usual capacity. This was again associated with reports of higher frequency and perceived severity of client aggression. Staff in Hamilton/Niagara and Toronto were most likely to be experiencing days requiring extra effort at work, while the North, East, and Central West were least likely. Gender, years of experience and hours worked were not associated with effort at work.

Burnout (see Table 6)

Respondents completed the human services version of the Maslach Burnout Inventory (MBI), a 22-item validated instrument to measure the three dimensions of burnout: emotional exhaustion (EE), depersonalization (DP) and personal accomplishment (PA). Total MBI scores can range from 0 - 132. In this sample of staff, overall scores (range: 0

- 103) were lower than the published normative values for staff who work in social services; this is consistent with what has been reported in the research literature. However, one quarter of staff scored high in EE, 7% scored high in DP and 18% had a score suggestive of a reduced sense of PA. There were no differences across regions. There was also no difference between those staff who hold either a specialized college diploma or nursing degree and those who do not. There was a significant non-linear relationship between years of experience and burnout scores. Those with an intermediate number of years of experience tended to have the highest scores (see Figure 10). This was especially true for emotional exhaustion where above 20 years of experience there was a notable drop in the number of staff scoring in the high range. Higher burnout scores correlated with higher frequency and severity of aggressive behaviour and a greater subjective report of emotional difficulties and need for increased effort at work. In addition, those directly experiencing aggression (as opposed to witnessing only) more often had EE and DP scores in the high ranges. More staff in Day Programs tended to score in the high range for EE and DP compared to other work settings.

Figure 10. Percentage of staff scoring high in burnout according to years of experience



**EE = Emotional Exhaustion, DP = Depersonalisation, PA = Personal Accomplishment. Note: PA is interpreted in the reverse direction of EE and DP (i.e. low PA is less favourable).

Staff who were in the top 10% with respect to their overall MBI score (i.e. least favourable scores) did not differ demographically or by region. They did not differ in the amount of specialized training or education they had nor were they working in a greater number of work settings, although they were more likely to be in Day Program or SIL settings (see Figure 11). They were more likely to be experiencing client aggression on a near daily basis (43% vs. 24% of the rest of respondents) (see Figure 12) and rated the aggression as more severe. There was no difference in terms of whether they witnessed or directly experienced the aggression. They were more likely to report subjective emotional difficulties and be experiencing days at work requiring extra effort. Conversely, staff who scored in the lowest 10% experienced less frequent aggression, including less aggression directed towards themselves, and rated it as less severe.

Figure 11. Percentage of staff from respective work settings in Top 10% of MBI scores

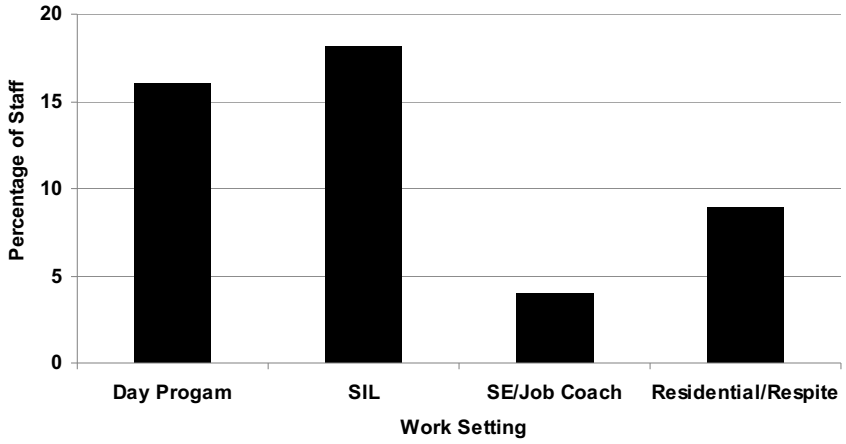
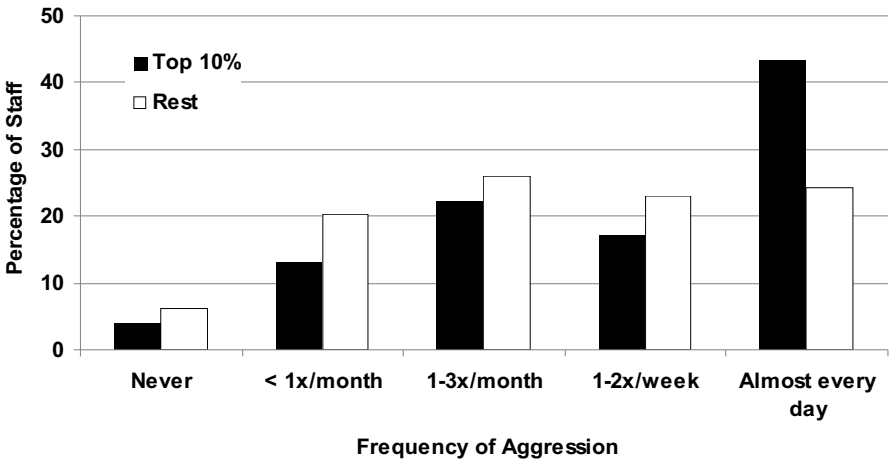


Figure 12. Highest MBI scores by frequency of client aggression



Perceived Self-Efficacy in Managing Client Aggression and Challenging Behaviour (see Table 7)

Staff were asked to rate their perceived self-efficacy in dealing with client aggression. We utilized a validated measure developed by researchers in the United Kingdom which consists of seven questions that assess confidence and perceived ability (see BOX#2). The majority of staff respondents (80%) rated themselves as good or excellent with respect to perceived self-efficacy in dealing with aggressive behaviours. There was a trend for higher perceived self-efficacy to be associated with less frequent exposure and less severe aggressive behaviour. Moreover, those staff who worked in high exposure settings (Residential/Respite) tended to rate themselves as higher whereas those in low exposure settings (Supported Employment/Job Coach) rated themselves lower. Higher ratings of perceived self-efficacy were associated with lower burnout scores and fewer reports of emotional difficulties. In addition, staff who rated themselves higher in self efficacy were less likely to be in the top 10% of MBI scores.

BOX#2: *The Perceived Self-Efficacy scale assessed the rater's confidence, perceived difficulty, satisfaction and sense of control when dealing with aggressive behaviours displayed by their client(s).*

Positive Contributions (see Table 7)

Staff were asked about the positive contributions that they get from their work including a greater sense of responsibility, personal growth or heightened sensitivity. We utilized an abbreviated version of a validated measure developed in the United Kingdom. Thirty-six percent of staff respondents rated their positive contributions as high and 60% rated them as moderate (see BOX#3). Staff in SIL settings more often reported a high level of positive contributions. Staff who endorsed more positive contributions tended to have lower burnout scores and fewer reports of time off for physical injury, emotional difficulties and days requiring extra effort at work.

BOX#3: *Positive statements staff often agreed with:*

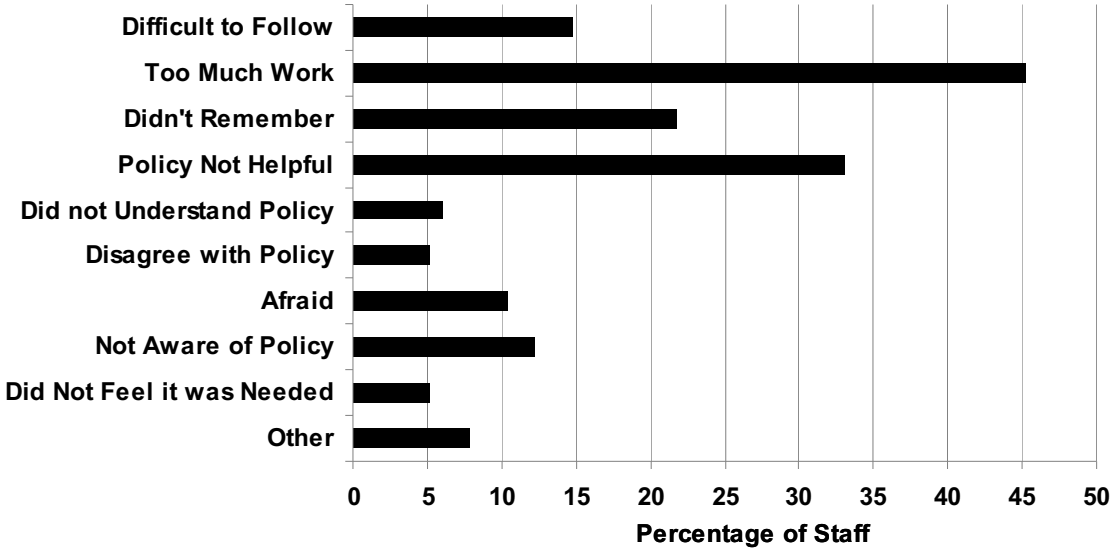
- I consider working with people with developmental disabilities to be responsible for my increased sensitivity to people.
- The presence of people with developmental disabilities is an inspiration to improve my job skills.
- The presence of people with developmental disabilities gives a new perspective to my job.
- The presence of people with developmental disabilities is very uplifting.

Workplace Policies and Adherence (see Table 5)

Seventy-nine percent of staff responded that their agency had a policy in place to address challenging behaviour or aggression experienced in the workplace. Nine percent were certain there was no such policy and 12% were unsure. There were differences across regions with the North and Central areas having the greatest policy awareness. According to respondents, the policies in place required mandatory reporting of the client's behaviour (85%), an injury to the client (98%), an injury to a staff member (96%) and critical event debriefing (66%). Of those who were aware of a policy, 80% always followed it, 16% usually follow it and 3% follow it occasionally or sometimes.

Only 1% of staff who knew about an agency policy reported that they never follow it. Among those who did not always follow policy, the most common reasons for not doing so were that it was difficult, too much work, forgotten or not helpful (see Figure 13).

Figure 13. Reasons for not always following policy

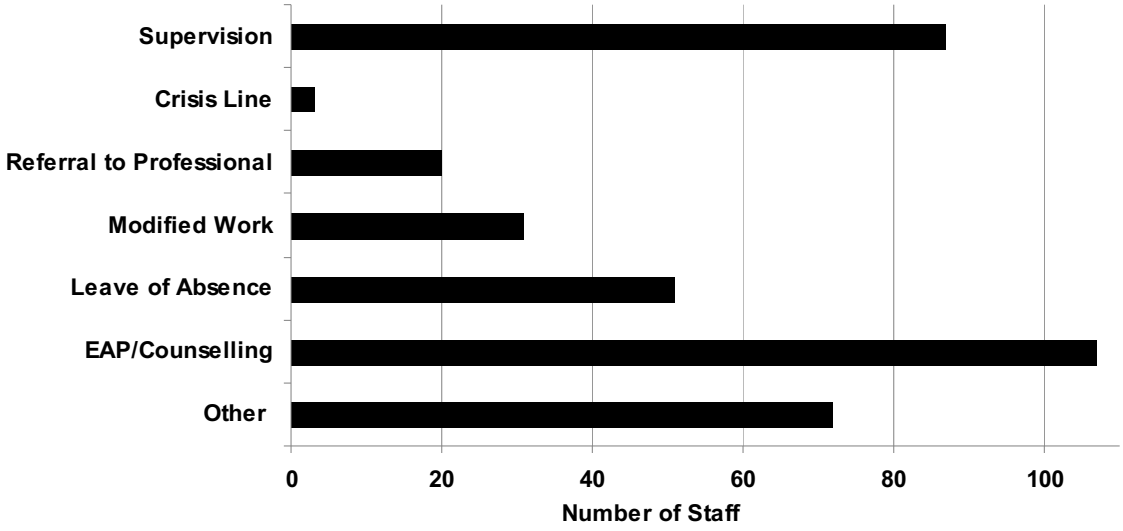


Availability and Use of Resources (see Table 5)

The majority of all survey respondents (83%) reported that some resources were available through their agency for workers who were experiencing emotional difficulties related to client aggression. However, only half of workers who reported experiencing emotional difficulties also reported using available resources in the last six months. There were no differences among resource users and non-users in terms of demographics. However, those staff who had used resources were more likely to be working full-time hours, have access to sick leave benefits and to have directly experienced aggression as opposed to witnessing it only. Supervision (which was not defined in the survey and may have been interpreted as either assistance from a manager or clinical supervision) was commonly used, as were the employee assistance program and counselling services. Not uncommonly, staff were taking leaves of absence or requiring modified work. Other resources that staff indicated in open ended

responses included (number of staff in parentheses): taking sick leave (23), peer support (20), speaking to management (12), speaking to a family doctor (5), calling a crisis line (3), acquiring additional training (3), transferring to alternate position/location (3), speaking to union representative (2) or utilizing the worker's compensation board (2) (see Figure 14). Staff who scored in the top 10% on the MBI were no more likely than the rest of the sample to have used available resources. Among those staff who reported emotional difficulties but had not accessed resources, common reasons for not doing so were being unaware of available resources (23%), choosing not to seek help (54%) or not having access to resources (19%). Of those who utilized available resources, less than one third (30%) found them helpful or extremely helpful. Fifty-two percent found them somewhat helpful and the remainder felt they were not helpful at all. There was a trend for those scoring higher in EE, in particular, and those in the top 10% of overall MBI scores to find the resources least helpful.

Figure 14. Staff utilization of available resources



Interest in Training and other Interventions (see Table 5)

Most staff (88%) reported that they would be interested in additional training to help them manage and cope with aggressive client behaviour and the effect it had on them

(see Figure 15). The most popular area of interest was in skill building for self-care which would include strategies such as developing coping skills, learning mindfulness and other techniques to improve personal well-being. Staff also indicated they would be interested in learning how to create or improve safety in the workplace as well as more traditional training around techniques to understand, prevent and manage difficult client behaviour.

Figure 15. Staff reported interest in future training opportunities

APPENDIX A

Detailed Tables

Table 1. Demographic characteristics of survey respondents

Variable [n (%)]* *unless indicated otherwise	MCSS Region									
	North	North East	East	South East	South West	Hamilton/ Niagara	Central East	Central West	Toronto	Total
Survey Respondents [n (% of total)]	107* (12.0)	17* (1.9)	118* (13.2)	65* (7.3)	258* (28.9)	36* (4.0)	94* (10.5)	113* (12.7)	85* (9.5)	926*
Gender										
Female	93 (87.7)	14 (82.4)	85 (72.6)	51 (79.7)	221 (86.0)	30 (85.7)	74 (78.7)	95 (84.1)	64 (76.2)	727 (82.0)
Male	13 (12.3)	3 (17.6)	32 (27.4)	13 (20.3)	36 (14.0)	5 (14.3)	20 (21.3)	18 (15.9)	20 (23.8)	160 (18.0)
Marital Status										
Married/Common-law	72 (67.3)	11 (64.7)	86 (73.5)	42 (65.6)	169 (65.8)	25 (69.4)	63 (67.0)	75 (66.4)	48 (58.5)	591 (66.6)
Single	19 (17.8)	4 (23.5)	20 (17.1)	14 (21.9)	51 (19.8)	7 (19.4)	15 (16.0)	28 (24.8)	19 (23.2)	177 (20.0)
Divorced/Widowed	16 (15.0)	2 (11.8)	11 (9.4)	8 (12.5)	37 (14.4)	4 (11.1)	16 (17.0)	10 (8.8)	15 (18.3)	119 (13.4)
Canadian-born†	98 (91.6)	14 (82.4)	109 (92.4)	57 (87.7)	231 (90.6)	34 (94.4)	85 (90.4)	99 (87.6)	55 (65.5)	782 (88.0)
Foreign-born	9 (8.4)	3 (17.6)	9 (7.6)	8 (12.3)	24 (9.4)	2 (5.6)	9 (9.6)	14 (12.4)	29 (34.5)	107 (12.0)
Mean Age [years (SD)]	41.2(11.2)	40.2(11.6)	39.8(11.3)	38.8(10.4)	38.2(11.5)	40.9(8.8)	42.0(9.8)	41.5(11.2)	39.7(11.9)	39.9(11.1)
Age Category										
Under 20 years	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.8)	0 (0.0)	0 (0.0)	1 (0.9)	0 (0.0)	3 (0.3)
21-30 years	22 (22.2)	5 (29.4)	32 (27.4)	18 (27.7)	80 (31.4)	5 (13.9)	8 (8.6)	22 (19.8)	21 (26.3)	213 (24.4)
31-40 years	20 (20.2)	3 (17.6)	33 (28.2)	18 (27.7)	64 (25.1)	10 (27.8)	38 (40.9)	32 (28.8)	25 (31.3)	243 (27.8)
41-50 years	37 (37.4)	6 (35.3)	29 (24.8)	19 (29.2)	75 (29.4)	16 (44.4)	31 (33.3)	28 (25.2)	23 (28.8)	264 (30.2)
Over 50 years	20 (20.2)	3 (17.6)	23 (19.7)	10 (15.4)	34 (13.3)	5 (13.9)	16 (17.2)	28 (25.2)	11 (13.8)	150 (17.2)

*Numbers may not total due to missing data. Percentages were calculated after missing cases were removed.
†Statistically significant difference across groups, $p<0.001$

Table 2. Employment characteristics of survey respondents

Variable [n (%)]* *unless indicated otherwise	MCSS Region									
	North (n=107*)	North East (n=17*)	East (n=118*)	South East (n=65*)	South West (n=258*)	Hamilton/ Niagara (n=36*)	Central East (n=94*)	Central West (n=113*)	Toronto (n=85*)	Total (n=926*)
Education/Training										
College Degree or RN	61 (57.0)	9 (52.9)	75 (63.6)	45 (69.2)	162 (62.8)	22 (61.1)	62 (66.0)	72 (63.7)	50 (58.8)	558 (62.5)
Years of Experience										
Less than 2 years	8 (7.5)	0 (0.0)	8 (6.8)	2 (3.1)	21 (8.2)	0 (0.0)	8 (8.5)	6 (5.3)	11 (12.9)	64 (7.2)
2-5 years	19 (17.8)	3 (17.6)	21 (17.8)	16 (24.6)	50 (19.5)	4 (11.1)	16 (17.0)	18 (15.9)	17 (20.0)	164 (18.4)
6-10 years	23 (21.5)	3 (17.6)	24 (20.3)	11 (16.9)	52 (20.2)	6 (16.7)	12 (12.8)	20 (17.7)	18 (21.2)	169 (18.9)
11-20 years	25 (23.4)	7 (41.2)	27 (22.9)	14 (21.5)	64 (24.9)	10 (27.8)	25 (26.6)	32 (28.3)	19 (22.4)	223 (25.0)
More than 20 years	32 (29.9)	4 (23.5)	38 (32.2)	22 (33.8)	70 (27.2)	16 (44.4)	33 (35.1)	37 (32.7)	20 (23.5)	272 (30.5)
Hours worked										
Full-time (35+ hrs/week)	99 (92.5)	16 (94.1)	105 (89.0)	62 (95.4)	236 (91.8)	36 (100.0)	81 (86.2)	101 (89.4)	79 (92.9)	815 (91.4)
Part-time (<35 hrs/week)	8 (7.5)	1 (5.9)	13 (11.0)	3 (4.6)	21 (8.2)	0 (0.0)	13 (13.8)	12 (10.6)	6 (7.1)	77 (8.6)
Method of Payment†										
Hourly Wage	89 (83.2)	13 (76.5)	108 (91.5)	58 (90.6)	218 (84.8)	32 (88.9)	76 (81.7)	83 (73.5)	53 (63.1)	730 (82.1)
Salary	18 (16.8)	4 (23.5)	9 (7.6)	6 (9.4)	38 (14.8)	4 (11.1)	16 (17.2)	29 (25.7)	31 (36.9)	155 (17.4)
Combined	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.1)
Sick Leave Benefits†										
Yes	80 (75.5)	13 (76.5)	75 (63.6)	49 (75.4)	178 (69.5)	33 (91.7)	75 (81.5)	83 (73.5)	63 (75.0)	649 (73.2)
No	26 (24.5)	1 (5.9)	38 (32.2)	16 (24.6)	63 (24.6)	2 (5.6)	15 (16.3)	26 (23.0)	13 (15.5)	200 (22.5)
Don't know	0 (0.0)	3 (17.6)	5 (4.2)	0 (0.0)	15 (5.9)	1 (2.8)	2 (2.2)	4 (3.5)	8 (9.5)	38 (4.3)

*Numbers may not total due to missing data. Percentages were calculated after missing cases were removed.

† Statistically significant difference across groups, $p<0.01$

Table 3. Frequency and severity of client aggression and challenging behaviour

Variable [n (%)]* *unless indicated otherwise	MCSS Region									
	North (n=107*)	North East (n=17*)	East (n=118*)	South East (n=65*)	South West (n=258*)	Hamilton/ Niagara (n=36*)	Central East (n=94*)	Central West (n=113*)	Toronto (n=85*)	Total (n=926*)
Frequency of Aggression†										
Never	13 (12.4)	2 (11.8)	14 (12.0)	6 (9.4)	9 (3.5)	2 (5.6)	6 (6.5)	9 (8.1)	5 (6.2)	66 (7.5)
Less than once/month	19 (18.1)	2 (11.8)	20 (17.1)	11 (17.2)	58 (22.6)	12 (33.3)	16 (17.2)	22 (19.8)	8 (9.9)	168 (19.1)
1-3 times/month	33 (31.4)	5 (29.4)	32 (27.4)	13 (20.3)	57 (22.2)	8 (22.2)	23 (24.7)	24 (21.6)	24 (29.6)	219 (24.9)
1-2 times/week	25 (23.8)	2 (11.8)	25 (21.4)	16 (25.0)	66 (25.7)	6 (16.7)	26 (28.0)	28 (25.2)	12 (14.8)	206 (23.4)
Almost Every Day	15 (14.3)	6 (35.3)	26 (22.2)	18 (28.1)	67 (26.1)	8 (22.2)	22 (23.7)	28 (25.2)	32 (39.5)	222 (25.2)
Severity [mean (SD)]	47.6(30.5)	58.0(32.4)	43.9(29.1)	50.7(31.3)	54.8(35.8)	45.5(29.7)	54.6(28.4)	55.2(29.6)	66.8(57.2)	53.0(35.3)
Severity										
Mild	29 (29.3)	3 (20.0)	36 (32.1)	19 (30.2)	56 (22.9)	13 (37.1)	19 (22.4)	22 (20.6)	14 (18.7)	211 (25.2)
Mild-Moderate	27 (27.3)	5 (33.3)	37 (33.0)	13 (20.6)	67 (27.3)	5 (14.3)	22 (25.9)	24 (22.4)	11 (14.7)	211 (25.2)
Moderate-Severe	24 (24.2)	3 (20.0)	23 (20.5)	15 (23.8)	62 (25.3)	11 (31.4)	20 (23.5)	32 (29.9)	25 (33.3)	215 (25.7)
Severe	19 (19.2)	4 (26.7)	16 (14.3)	16 (25.4)	60 (24.5)	6 (17.1)	24 (28.2)	29 (27.1)	25 (33.3)	199 (23.8)

*Numbers may not total due to missing data. Percentages were calculated after missing cases were removed.
† Statistically significant difference among groups, $p<0.05$

Table 4. Most severe form of aggression experienced toward various targets

Target of Aggressive Behaviour (n=926*)	Severity [n (%)]			
	None	Verbal	Physical with NO injury/damage	Physical WITH injury/damage
The Staff Member	126 (14.0)	351 (39.1)	277 (30.8)	144 (15.6)
Others	132 (14.8)	294 (33.0)	278 (31.2)	186 (20.9)
Self-Injurious	206 (23.3)	n/a	330 (37.2)	350 (39.5)
Property	245 (27.4)	n/a	292 (32.6)	358 (40.0)

*Numbers may not total due to missing data. Percentages were calculated after missing cases were removed.

Table 5. Impact of client aggression and challenging behaviour on work and use of resources

Variable [n (%)]* *unless indicated otherwise	MCSS Region									
	North (n=107*)	North East (n=17*)	East (n=118*)	South East (n=65*)	South West (n=258*)	Hamilton/ Niagara (n=36*)	Central East (n=94*)	Central West (n=113*)	Toronto (n=85*)	Total (n=926*)
Time off Work for Injury†										
Yes	4 (3.8)	1 (6.3)	1 (0.9)	4 (6.3)	16 (6.4)	5 (13.9)	5 (5.6)	6 (5.5)	13 (16.3)	55 (6.4)
No	101 (96.2)	15 (93.8)	113 (99.1)	59 (93.7)	233 (93.6)	31 (86.1)	84 (94.4)	103 (94.5)	67 (83.8)	806 (93.6)
Increased Effort at Work										
Yes	41 (40.6)	7 (46.7)	41 (36.3)	33 (52.4)	127 (50.8)	22 (61.1)	44 (50.0)	41 (38.3)	42 (55.3)	398 (46.9)
No	57 (56.4)	7 (46.7)	70 (61.9)	29 (46.0)	114 (45.6)	13 (36.1)	41 (46.6)	64 (59.8)	28 (36.8)	423 (49.8)
Don't Know	3 (3.0)	1 (6.7)	2 (1.8)	1 (1.6)	9 (3.6)	1 (2.8)	3 (3.4)	2 (1.9)	6 (7.9)	28 (3.3)
Emotional Difficulties†										
Yes	51 (49.0)	9 (60.0)	55 (48.2)	31 (50.0)	142 (56.8)	25 (71.4)	53 (60.9)	57 (52.8)	49 (63.6)	472 (55.4)
No	53 (51.0)	6 (40.0)	59 (51.8)	31 (50.0)	108 (43.2)	10 (28.6)	34 (39.1)	51 (47.2)	28 (36.4)	380 (44.6)
Policy †										
Yes	86 (86.0)	12 (85.7)	81 (75.7)	45 (75.0)	179 (73.4)	23 (71.9)	71 (87.7)	92 (86.0)	54 (74.0)	643 (78.6)
No	8 (8.0)	2 (14.3)	13 (12.1)	5 (8.3)	26 (10.7)	5 (15.6)	5 (6.2)	1 (0.9)	7 (9.6)	72 (8.8)
Unsure	6 (6.0)	0 (0.0)	13 (12.1)	10 (16.7)	39 (16.0)	4 (12.5)	5 (6.2)	14 (13.1)	12 (16.4)	103 (12.6)
Used Resources**,†										
Yes	26 (53.1)	6 (60.0)	28 (53.8)	11 (34.4)	52 (38.0)	18 (72.0)	32 (61.5)	33 (58.9)	23 (45.1)	229 (49.4)
No	23 (46.9)	4 (40.0)	24 (46.2)	21 (65.6)	85 (62.0)	7 (28.0)	20 (38.5)	23 (41.1)	28 (54.9)	235 (50.6)
Interest in Training										
Yes	96 (94.1)	14 (93.3)	94 (83.9)	52 (85.2)	218 (89.0)	32 (91.4)	66 (78.6)	91 (86.7)	69 (88.5)	732 (87.5)
No	6 (5.9)	1 (6.7)	18 (16.1)	9 (14.8)	27 (11.0)	3 (8.6)	18 (21.4)	14 (13.3)	9 (11.5)	105 (12.5)

**Of those who reported experiencing emotional difficulties related to client aggression and challenging behaviour

*Numbers may not total due to missing data. Percentages were calculated after missing cases were removed.

† Statistically significant difference across groups, $p<0.05$

Table 6. Mean scores on the Maslach Burnout Inventory (MBI) and proportions according to standardized low, moderate and high score cutoffs

Variable [n (%)]* *unless indicated otherwise	MCSS Region									
	North (n=107*)	North East (n=17*)	East (n=118*)	South East (n=65*)	South West (n=258*)	Hamilton/ Niagara (n=36*)	Central East (n=94*)	Central West (n=113*)	Toronto (n=85*)	Total (n=926*)
MBI scores [mean (SD)]										
Emotional Exhaustion	16.2 (11.4)	21.5 (13.3)	16.0 (9.8)	20.0 (12.4)	19.5 (12.5)	20.8 (11.7)	17.9 (11.1)	19.3 (11.6)	22.2 (12.3)	18.8 (11.8)
Depersonalisation	3.8 (4.5)	3.9 (4.2)	3.7 (3.9)	4.3 (4.0)	5.3 (5.6)	5.8 (5.3)	4.3 (4.2)	5.2 (5.0)	5.0 (4.4)	4.7 (4.8)
Personal Accomplishment	35.9 (9.3)	38.9 (7.2)	37.1 (6.9)	37.2 (7.5)	37.1 (7.1)	36.8 (7.8)	37.1 (7.0)	37.1 (6.6)	35.7 (8.2)	36.9 (7.4)
Emotional Exhaustion										
High	20 (20.8)	4 (30.8)	16 (15.4)	15 (26.3)	67 (28.5)	8 (26.7)	15 (26.7)	24 (22.6)	25 (35.2)	194(24.5)
Moderate	16 (16.7)	3 (23.1)	29 (27.9)	20 (35.1)	55 (23.4)	7 (23.3)	22 (27.2)	29 (27.4)	16 (22.5)	197(24.8)
Low	60 (62.5)	6 (46.2)	59 (56.7)	22 (38.6)	113(48.1)	15 (50.0)	44 (54.3)	53 (50.0)	30 (42.3)	402(50.7)
Depersonalisation										
High	6 (6.1)	0 (0.0)	4 (4.0)	1 (1.7)	25 (10.7)	3 (9.4)	3 (3.8)	7 (6.6)	4 (5.5)	53 (6.6)
Moderate	6 (6.1)	2 (14.3)	4 (4.0)	9 (15.3)	29 (12.4)	4 (12.5)	8 (10.0)	14 (13.2)	12 (16.4)	88 (11.0)
Low	87 (87.9)	12 (85.7)	92 (92.0)	49 (83.1)	180(76.9)	25 (78.1)	69 (86.3)	85 (80.2)	57 (78.1)	656(82.3)
Personal Accomplishment‡										
Low	24 (26.1)	1 (7.1)	16 (15.8)	10 (17.5)	34 (15.2)	5 (17.9)	14 (18.7)	16 (15.4)	17 (23.9)	137(17.9)
Moderate	16 (17.4)	3 (21.4)	28 (27.7)	16 (28.1)	56 (25.0)	7 (25.0)	19 (25.3)	29 (27.9)	16 (22.5)	190(24.8)
High	52 (56.5)	10 (71.4)	57 (56.4)	31 (54.4)	134(59.8)	16 (57.1)	42 (56.0)	59 (56.7)	38 (53.5)	439(57.3)

‡Personal Accomplishment is interpreted in the reverse order of the emotional exhaustion and depersonalisation scores.
*Numbers may not total due to missing data. Percentages were calculated after missing cases were removed.

Table 7. Respondent ratings of self-perceived efficacy with respect to dealing with client aggression and challenging behaviour and ratings of the positive contributions they receive from their work

Variable [n (%)]* *unless indicated otherwise	MCSS Region									
	North (n=107*)	North East (n=17*)	East (n=118*)	South East (n=65*)	South West (n=258*)	Hamilton/ Niagara (n=36*)	Central East (n=94*)	Central West (n=113*)	Toronto (n=85*)	Total (n=926*)
Perceived Self-Efficacy‡										
Excellent	28 (28.3)	6 (42.9)	33 (30.0)	23 (39.0)	74 (30.2)	9 (31.0)	24 (30.4)	38 (36.2)	26 (36.6)	261(32.2)
Good	46 (46.5)	5 (35.7)	58 (52.7)	27 (45.8)	128(52.2)	13 (44.8)	36 (45.6)	43 (41.0)	31 (43.7)	387(47.7)
Neutral	17 (17.2)	2 (14.3)	16 (14.5)	9 (15.3)	37 (15.1)	6 (20.7)	17 (21.5)	22 (21.0)	12 (16.9)	138(17.0)
Fair	6 (6.1)	1 (7.1)	3 (2.7)	0 (0.0)	6 (2.4)	1 (3.4)	2 (2.5)	2 (1.9)	2 (2.8)	23 (2.8)
Poor	2 (2.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.2)
Positive Contributions‡										
High	30 (36.6)	4 (28.6)	34 (37.4)	24 (42.1)	81 (34.5)	7 (22.6)	21 (30.0)	38 (39.2)	26 (41.3)	265(35.8)
Moderate	51 (62.2)	10 (71.4)	53 (58.2)	32 (56.1)	143(60.9)	22 (71.0)	44 (62.9)	54 (55.7)	35 (55.6)	444(60.0)
Low	1 (1.2)	0 (0.0)	4 (4.4)	1 (1.8)	11 (4.7)	2 (6.5)	5 (7.1)	5 (5.2)	2 (3.2)	31 (4.2)

*Numbers may not total due to missing data. Percentages were calculated after missing cases were removed.

‡Based on aggregate scores obtained using a validated instrument.

APPENDIX B

Reference List

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Who We Are ...

The Centre for Addiction and Mental Health (CAMH) is Canada's leading Addiction and Mental Health teaching and research hospital, fully affiliated with the University of Toronto. CAMH succeeds in transforming the lives of people affected by addiction and mental illness, by applying the latest in scientific advances, through integrated and compassionate clinical practice, health promotion, education and research.

The Work and Well-being Research and Evaluation Program at the Centre for Addiction and Mental Health is built around four research streams: epidemiology; prevention and promotion; diagnosis and treatment; and disability management of mental disorders at the workplace. It has a strong emphasis on applied research including evaluating the effectiveness and cost-effectiveness of workplace interventions and policies that affect the workplace and workers. Program scientists are also involved in projects that examine the impact of work on people with mental illness as well as work's impact on mental health.

The program also seeks to build research capacity in this area. As such, training and mentoring students from a variety disciplines are also program missions. The program recognizes the contribution of work and the workplace to the quality of life, and understands the importance of knowledge exchange. We are committed to collaborating in partnerships with stakeholders in different sectors and to sharing information with these stakeholder groups. Many projects are partnerships with community partners including employers, unions, workers, occupational health, clinicians, providers and insurers.

Program Head: Dr. Carolyn Dewa, MPH, PhD

Work and Well-being
Research and Evaluation Program
Centre for Addiction and Mental Health

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