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Mental Health Services for Students at Post-Secondary Institutions: A National Survey

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Abstract

Objectives: Although the high prevalence of mental health issues among post-secondary students is well-documented, comparatively little is known about the adequacy, accessibility and adherence to 'best practices' of mental health services/initiatives on post-secondary campuses. We evaluated existing mental health promotion, identification and intervention initiatives at post-secondary institutions across Canada, expanding on our previous work in one Canadian province. ***Methods***: A 54-question online survey was sent to potential respondents (mainly front-line workers dealing directly with students, e.g. psychologists/counsellors, medical professionals) at Canada's publicly funded post-secondary institutions. Data were analyzed overall, and according to institutional size (small [<2,000 students], medium [2,000-10,000 students], large [>10,000 students]). ***Results***: In total, 168 out of 180 institutions were represented, and response rate was high (96%; 274 respondents). Most institutions have some form of mental health promotion and outreach programs, although most respondents felt that these were not a good use of resources. Various social supports exist at most institutions, with large ones offering the greatest variety. Most institutions do not require incoming students to disclose mental health issues. While counselling services are typically available, staff do not reliably have a diverse complement (e.g. gender or race diversity). Counselling sessions are generally limited, and follow-up procedures are uncommon. Complete diagnostic assessments and the use of standardized diagnostic systems are rare. ***Conclusions***: While integral mental health services are offered at most Canadian post-secondary institutions, the range and depth of available services is variable. These data can guide policymakers and stakeholders in developing comprehensive campus mental health

strategies.

Key Works: Campus mental health, post-secondary students, assessment

Clinical Implications:

1. Most publicly-funded post-secondary institutions in Canada offer some elements of mental health promotion, identification and treatment services.

2. Accessibility of mental health services is variable across Canadian post secondary institutions.

3. Evaluation of mental health services is needed at post-secondary schools.

Limitations

1. Certain components of mental health provision/initiatives on campus were not assessed.

2. Regional variations in campus mental health services/initiatives were not assessed.

3. There is limited information regarding best mental health services/practices for post-secondary students and universities/colleges, making it difficult to evaluate the quality of the services provided.

Psychiatric disorders (and coincident suicide) are common in adolescents/young adults,[1-5] and negatively influence their academic, occupational and social development.[6] Concern for the mental health of post-secondary students (PSS), in particular, has garnered increased attention. In the United States (U.S.), 15-20% of PSS reported being treated for some form of mental disorder,[7] while 17% screened positive for depression and 15% for non-suicidal self-injury.[8] A report by the Ontario College Health Association found PSS to be more than twice as likely to report mental illness symptoms and elevated distress than non-university youth.[9] Others, however, have noted comparable rates of psychiatric disorders among PSS and age-matched populations,[10] suggesting that PSS may be more likely to disclose psychiatric issues/seek help. Further, the nature of distress in PSS may be transient, since the transition to post-secondary is an acute stressor.[11] Regardless, while it is recognized that mental health issues are prevalent among PSS,[12] less is known about the nature and effectiveness of available campus mental health services (MHS).

Post-secondary institutions face challenges when attempting to prevent, identify and treat mental illness on campus (e.g. fragmented services, reactive response, piecemeal funding, high resource needs[9]). They report struggling with an increase in student psychopathology, severity of issues and counselling services usage.[13-15] This may be related to increased numbers of non-traditional groups on campus (e.g. students with disabilities),[16] treatment advances[17] and/or a greater willingness to report mental health issues and seek treatment.[18] The pressure on strained campus MHS is especially true at smaller institutions, which tend to have fewer staff (including mental health professionals), budgetary constraints and dual relationship/boundary concerns.[19]

While the goal of post-secondary institutions is not necessarily to provide psychiatric interventions *per se*, most strive towards creating a mental health strategy that supports students.

Despite the challenges in constructing comprehensive strategies for post-secondary institutions, guidelines have started to emerge.[20] Further, some research has assessed the success of certain initiatives based on 'best practices' with respect to addressing mental illness/distress on campuses. One 'best practice' is for prevention efforts to target high-risk populations, such as LGBT (lesbian, gay, bisexual, transgendered), international and first-year students.[21,22] Prevention initiatives should be focused on reducing stress, providing social supports and encouraging self-care.[23] Additionally, campus programs focused on early identification and intervention, such as gatekeeper training (i.e., identifying suicidal/distressed students and referring them to appropriate resources),[24] can foster an environment that deals more effectively with students' mental health needs.[25-27] Finally, integrating and sharing information among campus mental health service groups, as well as encouraging students to use available disability/accessibility services, is viewed as an optimal service provision strategy.[23]

There are knowledge gaps regarding the services that post-secondary institutions are currently offering, whether/which best practices are implemented, and the feasibility of providing comprehensive mental health programs by institutions. The current study broadens our previous work, which evaluated post-secondary MHS in the province of Alberta,[28] to the national level. The Alberta survey identified the need for institutions to evaluate campus mental health initiatives and develop strategies to optimize mental health among students (e.g. tracking success/retention of students who access campus MHS). This likely entails a comprehensive approach that identifies priority problems and establishes long-term goals to address them.

Our primary aim was to acquire a comprehensive, nation-wide understanding of the MHS that Canadian post-secondary institutions are providing (i.e., assess current state of MHS on campus). An assessment of the national scene is a necessary precursor for comparing regional patterns in campus MHS/initiatives. As a secondary aim, we were interested in the extent to which services varied as a function of institutional size, as suggested by the literature, and whether these differences were consistent with what was observed in the Alberta study.[28] These data should allow institutions to

compare their services with similar-sized schools as a starting point for analyzing local service gaps and developing comprehensive mental health policies.

Methods

Survey Development & Overview

This project was approved by the University of Calgary's Research Ethics Board. It was an update of the original, which was refined for clarity, readability and user-friendliness,[28] and adhered to the recommendations for survey data collection.[29] A literature search on strategies/programs relevant to mental health at post-secondary institutions guided question development.

The survey (54 items; French/English; **Supplementary Material**) was disseminated via email using SurveyMonkey® (2014). Most items (ordinal responses) pertained to institutional mental health promotion, outreach, identification and intervention services/initiatives (defined in survey). "Promotion" referred to programs/initiatives with the goal of increasing mental health awareness. "Outreach" referred to encouraging students with known or potential issues to seek help; questions on initiatives to identify such students were included. Additional items assessed social supports and campus climate, including questions on stress-reduction and self-care initiatives. Finally, questions regarding campus medical, counselling and accessibility services as well as mental health policies were incorporated. Some questions were opinion-based and most permitted commenting.

Participants & Procedures

One hundred eighty publicly funded Canadian post-secondary institutions were identified by searching the Association of Universities & Colleges of Canada and Colleges & Institutes Canada websites. Survey invitations were emailed to 286 potential respondents (purposive sampling[29]). Respondents were identified through institutional websites or by communicating directly with staff. Participants were selected based on their perceived knowledge/involvement with campus MHS (i.e., individuals with job titles/descriptions that identified them as front-line workers dealing with students,

such as counsellors/psychologists, resident advisors [RAs]). Individuals who appeared to be *most* informed regarding available campus services were solicited. If a respondent did not complete the survey after the initial request, a reminder was sent after one week and a second reminder was sent as necessary (January-August 2014). When possible, two or more responders per institution were contacted. Study personnel analyzing the data did not have access to respondents' personal information (i.e., a third person de-identified responses pre-analyses). Respondents were assured of confidentiality/anonymity at the beginning of the survey.

Data Synthesis

Surveys from multiple respondents at one institution were combined to develop a representative profile.[28] For additive questions, multiple responses were summed. If the response option was categorical, and multiple responses from the same institution differed, the institutional profile reflected the majority or was coded as "unsure". For Likert scale questions, responses were analyzed for all respondents (not combined).

Summary data (%) and results per institution size (small [S]: <2,000; medium [M]: 2,000-10,000; large [L]: >10,000 students) are presented. Responses from institutions with satellite campuses were combined with the parent institution if the satellite was S and close to main campus (likely shared resources). Satellite schools were considered independent institutions if they were L/M, not in close proximity to main campus or listed independently on government websites.

Categorical responses (e.g. yes/no) between S, M and L schools were compared using Pearson's Chi-square tests; significant tests ($p<.05$) were followed by Chi-square tests to identify response differences between school sizes ($p<.02$).

Results

Responder & Institutional Information

Of the 286 individuals contacted, 274 completed the survey (96%). Most institutions were represented (168/180; 48 S, 60 M, 60 L; 4 S, 8 M, 0 L not represented). Of these, 13% had 3-4, 34% had 2, 56% had 1, and 7% had 0 respondent(s). Positions of respondents and institutional types/categories are presented in **Figure 1**.

Mental Health Promotion & Outreach

A majority of institutions (73%) reported that they had campus mental health promotion programs. A relation between school size and response existed [$X^2(9,226)=254.90$, $p<.001$; S: 54%, M: 72%, L: 92% responded positively]; follow-up tests indicated a difference in responses between all school sizes ($p<.001$). The Counselling Centre/Student Counsellor was most commonly identified as responsible for mental health promotion. At S institutions, the Student Affairs Office, Students' Association and Residence Staff/Advisors (RA) also have a big role. At M and L ones, promotion was carried out by the Accessibility/Disability Office and Campus Medical Services. Across institutions, promotion programs aimed to inform students about available campus MHS, reduce stigma and educate students about mental illness, in that order. Mental health issues targeted by promotion programs are presented in **Table 1**.

Most institutions engage in mental health outreach (86% overall; non-significant [N.S.] relation between school size and response), with the Counselling Centre being primarily responsible for this (S: 60%, M: 78%, L: 83%; N.S.). At S institutions, the Student Affairs Office also plays a large role, while at M and L ones, the Accessibility/Disability Office is active in outreach. Groups most frequently targeted by outreach initiatives in S institutions are Aboriginal, international and LGBT students; though 34% indicated that targeted outreach initiatives did not exist (M: 30%. L: 27%; N.S.). At M/L institutions, international students are the most frequent targets of outreach initiatives followed by Aboriginal students at M and LGBT groups at L ones. First-year students are common targets for outreach, with 75% of all respondents indicating that information about available campus MHS is provided as part of first-year orientation.

Professors are able to request presentations on mental health promotion and outreach/intervention at most institutions (71% overall; 16% unsure). However, 52% of respondents from S and 43% from M institutions indicated that such presentations were rarely/never requested (35% at L ones; N.S. relation between school size and response). Classroom outreach, through mental health curriculum integration programs, was largely absent, though uncertainty was high.

Seventy-four percent of all respondents agreed (somewhat-to-strongly) that students are informed about mental health and available services. However, 84% agreed that their institutions could benefit from expanding mental health promotion and outreach programs. Not as many respondents were confident that current promotion programs were an effective and good use of campus resources/budgets; 41% of respondents from S (21% unsure), 49% from M (8% unsure) and 35% from L (L: 8%; N.S.) agreed with this. Only a minority endorsed current outreach programs as an effective use of resources (43% overall). There was a relation between school size and response [$X^2(6,225)=13.71$, $p=.033$], with a difference between S and M/L schools ($p<.05$; positive response: S: 36%, M: 43%, L: 50%; unsure/neutral: S: 33%, M: 21%, L: 25%).

Social Support & Mental Health Climate on Campus

For S institutions, Peer Support Centres are the most commonly available support structures, followed by an Aboriginal Centre and LGBT Club/Safe Meeting Space. Almost a third of S institutions (31%) do not have specific social supports in place (M: 8%, L: 0%; relation between school size and response [$X^2(2,168)=24.87$ $p<.001$]; follow-up tests indicated difference between S vs. M/L schools, $p<.001$). For M ones, an Aboriginal Centre, International Student's Centre and LGBT Club are the most frequent social supports. L institutions are most likely to report having multiple types of social supports. Fifteen percent of S institutions indicated that either have no specific support services for international students or do not usually host them (relation between school size and response [$X^2(2,168)=10.28$ $p=.006$]); responses for S institutions differed from L ones ($p=.002$; L: 0% M: 5%). Specific supports for first-year students are outlined in **Table 2**.

Almost three quarters of all institutions (74%) have a student residence (S: 58%, M: 80%, L: 85%; relation between school size and response [$X^2(2, 137)=16.79$, $p<.001$]); follow-up tests indicated difference between S and M/L institutions ($p<.01$). RAs/staff are typically trained in crisis intervention at S (40%) and M (52%) institutions; at L ones, they are most commonly trained to know about available campus resources (73%). One in three of all institutions have programs to train students to be 'leaders' for mental health awareness on campus. **Table 2** lists services that contribute to a healthy campus climate.

Identification

Most institutions do not require incoming students to fill out a medical/mental history questionnaire; only 8% do. Gatekeeper training programs, most commonly provided to RAs, are available at 27%, 40% and 62% at S, M and L institutions, respectively ([$X^2(4,137)=11.86$, $p=.018$]); follow-up tests indicated a difference between S and L institutions ($p=.003$). Other measures to identify/report students in distress are presented in **Table 3**. Among S institutions, the most common means of identification is through self-referral; at M and L ones, it is via the Counselling Centre website (electronic self-referral). A minority of schools have an "early alert program."

Campus Medical Services, Counselling Services & Disability/Accessibility Services

On-campus medical services are offered at 31%, 67% and 85% of S, M and L institutions, respectively ([$X^2(4,136)=32.91$, $p<.001$]); follow-up tests indicated response differences between S/M compared with L schools ($p<.02$). Ninety-one percent of schools offer some form of on-campus counselling services. Most provide this through a designated Counselling Office/Centre or "Wellness Centre" (S: 63%, M: 75%, L: 87%; [$X^2(2,168)=7.212$, $p=.027$)]); follow-up assessments yielded a difference in responses between S and L schools ($p=.007$). Of those with dedicated Counselling Offices/Centres, the most commonly employed professionals are psychologists, followed by therapists. Two thirds of schools have designated walk-in times for students needing immediate help. Smaller institutions were less likely to employ a triage system (students needing urgent care are seen first; S:

35%, M: 57%, L: 73%; relation between school size and response [$X^2(2,168)=15.06$, $p<.001$]; follow-up tests indicated a difference between S vs. L schools, $p<.001$). **Table 4** presents services offered by Counselling Centre/Services and further options for students.

Counselling Centre/Services staff are offered cross-cultural training at 48%, 63% and 75% of S, M and L institutions, respectively (N.S.), most staff have suicide prevention training (S: 69%; M: 78%, L: 90%; N.S.). A greater number of respondents from L institutions (64%) rated their staff to be diverse on aspects such as gender, race or nationality compared to S (35%) and M (31%) institutions (relation between school size and response [$X^2(6,126)=26.79$, $p<.001$]; follow-up tests indicated difference in responses between L vs. S/M schools, $p<.001$).

A sizeable proportion of respondents indicated that counselling sessions are limited in number (42%; the majority of S school respondents skipped this question). The limit is typically 6-10 (~1hr each), though respondents commented that restrictions were flexible. Across all institutions, only a minority (16%) provide a complete diagnostic, psychosocial and functional assessment during the visit (uncertainty/non-response was high).

Overall, a limited proportion of respondents indicated that formalized diagnostic systems were used at their institution (yes: 21%, no: 48%). About half do not provide long-term therapy (53%) but refer students needing further care to appropriate off-campus services. Overall, 28% reported using a follow-up system to ensure that referrals are completed, though uncertainty/non-response was high (24/13%).

Most institutions offer disability/accessibility services, which facilitate classroom accommodations, provide needs assessments and develop 'individual services plans.' (S: 79%, M: 87%, L: 95%; [$X^2(4,131)=13.19$, $p=.01$], follow-up tests yielded difference between S vs. L schools, $p=.011$). However, only about half of respondents indicated that these services include staff with mental health training (high uncertainty).

Discussion

This study examined the current state of MHS/initiatives at Canadian post-secondary institutions. An up-to-date understanding of MHS across Canadian campuses is lacking; such information is a critical first-step for regional investigations/comparisons. In our previous study of Alberta's post-secondary institutions,[28] we found notable differences in MHS/initiatives according to institution size, thus, we wanted to explore this on a national scale. Our response rate was high, increasing the probability that the data are a generalizable portrayal of campus MHS/initiatives.

This survey addressed the need to define the responsibilities that universities/colleges have with respect to student mental health, as "duty to care" encompasses this domain.[30] The first step in exercising "duty to care" lies in the provision of campus mental health promotion/outreach programs. Such programs are critical, as students may not seek help because of stigma, limited knowledge about available campus MHS or both.[25,26,31] Enhancing promotion/outreach programs targeting specific disorders (e.g. addictions, eating disorders), was identified as a need across Canadian post-secondary institutions, especially small ones. Interestingly, most respondents did not think that current promotion or outreach programs were a good use of, presumably, scarce resources. This may reflect the view that existing programs need improvement, as most respondents indicated that they should be expanded.

Mental health is closely tied to overall wellbeing, and services that reduce stress and encourage self-care reflect this.[32] Most institutions offer some form of social supports to vulnerable groups, as well as programs that facilitate campus community involvement, and contribute to a healthy campus climate. Student-to-student or peer health educator programs have been shown to extend the reach of health (including mental health/wellbeing) services.[33] Such programs involve training students on how to identify those in distress, and what services exist for such individuals.[33] Only a minority of institutions offer peer health educator training, despite evidence that students who come into contact with peer educators are likely to consume less alcohol, have fewer alcohol-related negative consequences and unhealthy behaviours.[34] Implemented peer support initiatives, such as the Student

Support Network (SSN) in the Worcester Polytechnic Institute, U.S., have been promising. The SSN is an initiative that educates student leaders on mental health campus resources and on reducing stigma associated with help-seeking. Since its inception, a substantial increase in counselling centre consultations with 'students of concern' (and with the student population in general) has been noted. While this may strain services initially, it may mitigate more serious mental health issues in the long-term (and, likely, more costly strains on counselling services).[33] As such, it is worth considering whether adopting peer health educator programs should be encouraged more broadly across Canada.

Most institutions do not employ methods for actively identifying students in distress, and few smaller institutions have gatekeeper training initiatives. This raises the possibility that these schools may have less comprehensive or effective programs for training students/staff. While identification of those in distress is important, ensuring that such students are able to access appropriate services is paramount. A recent study found that increased identification (by RA gatekeepers) does not necessarily lead to increased mental health service utilization on campus.[27] Thus, further initiatives aimed at facilitating the use of campus MHS may be needed.

A key recommendation from a Canadian student alliance was that institutions must develop mechanisms to allow incoming students opportunities to self-identify as needing additional supports.[35] Given that a large proportion of institutions do not have/do not know if they have procedures on how incoming students can alert schools regarding mental health issues, adopting and clarifying such procedures may be worthwhile. "Early alert" programs aimed at identifying under-performing first-year students, contacting them and directing them to appropriate support programs[36] may also be useful in minimizing distress and psychiatric issues.[37]

Most institutions have some form of on-campus counselling services/center, consistent with increasing demand for such services at post-secondary institutions.[38] Among the small institutions that have counselling services/center, relatively few employ a triage system for students needing urgent care. Admittedly, small schools are more likely to face specific barriers with adopting a triage system

(e.g. preparing for increased client flow with limited staff).[39] However, the presence of such a system allows counselling centres to utilize the brief "window of opportunity" during which time a distressed student is willing to access care. Further, employing non-traditional triage systems involving educators, ministers or aboriginal advisors, particularly at small institutions, should be considered.

Complete diagnostic assessments tend not to be available and the use of standardized diagnostic tools is rare across post-secondary institutions. More consistent use of such assessments and tools may assist campus personnel in guiding students to appropriate resources (e.g. further counselling, support services, etc.).[19]

Some research suggests that culturally-adapted mental health interventions (e.g. in clients' native language), are more effective than non-adapted ones.[40] However, few respondents indicated that counselling services staff is comprised of individuals from diverse backgrounds. As such, a policy regarding staff diversity may be beneficial. For instance, Canadian institutions in northern communities with higher aboriginal student populations, may benefit from hiring aboriginal advisors.[41] Further, "e-health interventions", linking minority students with specialized providers, should also be considered.[42] Finally, peer counsellors or incorporating self/group components in counselling sessions were seldom reported in smaller institutions. Such approaches could reduce the stress on limited resources, particularly at smaller schools, although further research on their effectiveness is needed.[43]

Consistent with concerns that campus MHS are focused on short-term therapy,[44] long-term therapy is generally not provided. Off-site referral may be associated with an extra financial burden, which may be particularly problematic for students with limited income/insurance.[10] Formal follow-up procedures for those requiring long-term (generally off-campus) therapy are lacking. Having a formal policy is important, as data suggests that a large proportion of off-site referrals are unsuccessful.[45] Washburn et al. (2010) suggested that regularly updating lists regarding available community practitioners and offering formal campus follow-ups for clients through the transition may be useful.[30]

One limitation of the current study is that the accuracy of each institution's profile was limited by the personal knowledge of respondents. However, the *awareness* of available services by campus personnel may be as functionally important as the "on-paper" services. Despite assurances of anonymity, social desirability may have also influenced the responses. Additionally, although the survey was comprehensive, it was not all-encompassing. We did not explore the ways in which schools are addressing social media and other technologies relevant to student wellbeing. Further, we did not focus on detailed assessments of suicide-specific programs, nor did we thoroughly assess the length and types of available on-campus interventions (and who provides them).

Conclusion

To date, systematic evaluation of mental health campus initiatives are absent or unreported. Until post-secondary institutions identify performance indicators, measure the impact of initiatives/services and publically disseminate this information, our understanding of whether an institution is doing well in supporting mental health relies is limited. This survey describes what is currently available on campuses of various sizes; the data may provide a reference for schools that are reviewing their own MHS.

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Figure Captions & Tables

Figure 1. Upper graph: Positions of post-secondary institution respondents. "Other" represents positions such as Campus Life Coordinator, Student Outreach Coordinator or Support Staff. **Lower graph:** Types of post-secondary institutions represented in the mental health survey.

Table 1. Targeted mental health issues of mental health promotion programs at post-secondary institutions

Targeted promotion programs (%)	Small (N=48)	Medium (N=60)	Large (N=60)	Average (N=168)	Chi-square test (*P* value)[#]
Alcohol abuse	37.5	41.7	48.3	42.5	N.S. (.51)
Drug abuse	29.2	30.0	33.3	30.8	N.S. (.85)
Eating disorders	20.8	20.0	41.7	27.5	.013
Depression	39.6	38.3	48.3	42.1	N.S. (.49)
Bipolar disorder/schizophrenia	12.5	11.7	11.7	12.0	N.S. (.99)
Suicide	35.4	36.7	48.3	40.1	N.S. (.30)
Stress/anxiety	41.7	51.7	70.0	54.5	.010
Focus is only on promoting mental health as a whole	27.0	23.3	10.0	16.8	N.S. (.057)

NOTE: Small: <2000 students; Medium: 2000-10,000 students; Large: >10,000 students; #Chi-square tests represent the results of the three school sizes; N.S.: Non-significant (p>.05)

Table 2. Support services for first-year student & services offered to students that contribute to a healthy mental health campus climate at post-secondary institutions

Support services for 1st year students (%)	Small (N=48)	Medium (N=60)	Large (N=60)	Average (N=168)	Chi-square test (*P* value)#
Orientation	72.9	75.0	80.0	76.0	N.S. (.67)
Peer tutors	47.9	53.3	63.3	54.8	N.S. (.27)
Transition program	31.3	40.0	48.3	39.9	N.S. (.14)
Mentors	20.8	38.3	56.7	38.6	*P*<.001
Advisors	54.2	61.7	68.3	61.4	N.S. (.32)
Workshops	54.2	58.3	76.7	63.1	.03
None of the above	4.2	1.7	0.0	2.0	N.S. (.27)
Other services offered to students (%)					
Access to a recreation center/gym	52.1	75.0	83.3	70.1	.0013
Opportunity to participate in wellness program	31.3	48.3	56.7	45.4	.029
Meditation center access	27.1	36.7	50.0	37.9	.048
On-campus preventive health care programs	33.3	46.7	66.7	48.9	.0022
Programs facilitating community involvement	50.0	56.7	70.0	58.9	N.S. (.093)
Programs facilitating campus involvement	64.6	65.0	81.7	70.4	N.S. (.071)
Unsure	2.1	3.3	0.0	1.8	N.S. (.26)

NOTE: Small: <2000 students; Medium: 2000-10,000 students; Large: >10,000 students; #Chi-square tests represent the results of the three school sizes; N.S.: Non-significant (p>.05)

Table 3. Methods used to identify/report students in distress at post-secondary institutions

Identification/reporting methods (%)	Small (N=48)	Medium (N=60)	Large (N=60)	Average (N=168)	Chi-square test (*P* value)[#]
Depression screening	20.8	26.7	46.7	31.4	.0089
Problem drinking screening	20.8	26.7	36.7	28.1	N.S. (.18)
Problem video gaming/online gambling screens	10.4	16.7	23.3	16.8	N.S. (.21)
Substance abuse screening	20.8	18.3	36.7	25.3	.048
Problematic eating patterns screening	12.5	18.3	28.3	19.7	N.S. (.079)
Student "at-risk" committees	35.4	20.0	53.3	36.2	*P*<.001
Information on counseling website	31.3	58.3	73.3	54.3	*P*<.001
Telephone hotline for students in distress	18.8	40.0	46.7	35.2	.0085
Confidential email service	16.7	31.7	23.3	23.9	N.S. (.19)
Onus is on students to self-refer	54.2	45.0	48.3	49.2	N.S. (.64)

NOTE: Small: <2000 students; Medium: 2000-10,000 students; Large: >10,000 students; #Chi-square tests represent the results of the three school sizes; N.S.: Non-significant (p>.05)

Table 4. Specifics regarding the services and options provided by counseling centers/services at post-secondary institutions

Counseling services offered (%)	Small (N=48)	Medium (N=60)	Large (N=60)	Average (N=168)	Chi-square test (*P* value)[#]
Personal counseling	66.7	75.0	83.8	75.0	N.S. (.13)
Counseling for international students	56.3	70.0	76.7	67.7	N.S. (.07)
Counseling for aboriginal students	50.0	58.3	63.3	57.2	N.S. (.25)
Academic counseling	58.0	51.7	55.0	54.9	N.S. (.84)
Career counseling	54.2	50.0	60.0	54.7	N.S. (.96)
Crisis counseling	54.2	68.3	76.7	66.4	.046
Options offered for student seeking help (%)					
Student assistance programs	37.5	36.7	41.7	38.6	N.S. (.86)
Peer counselors	20.8	16.7	28.3	21.9	N.S. (.27)
Mental health information available online	35.4	50.0	75.0	53.5	*P*<.001
Opportunity to talk with a counselor over the phone	37.5	38.3	40.0	38.6	N.S. (.96)
Self-help programs	31.3	13.3	35.0	26.5	.017
Group help programs	18.8	28.3	51.7	32.9	*P*<.001
Referrals to psychiatrists/physicians	45.8	60.0	65.0	56.09	N.S. (.12)

NOTE: Small: <2000 students; Medium: 2000-10,000 students; Large: >10,000 students; #Chi-square tests represent the results of the three school sizes; N.S.: Non-significant (p>.05)