# Academic and Mental Health Needs of Students on a Canadian Campus Les besoins académiques et en santé mentale des étudiants sur un campus canadien

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#### ABSTRACT

The focus of the current study was to examine student-identified academic and mental health concerns, the prevalence of psychological distress in the student population, student utilization of counselling services, and perceived barriers to accessing counselling services. A convenience sample of students (N = 400) from a large university in western Canada completed a four-page questionnaire that included The General Population – Clinical Outcomes in Routine Evaluation (CORE-GP) and researcher-generated questions. Survey results indicated that 63.1% of students identified having academic concerns, 36.1% of students identified anxiety as a concern, and 31.9% endorsed depressive symptomology as a mental health concern. The criteria for clinical psychological distress were met by 42% of males and 43% of females, yet only a small portion of students identified accessing counselling services for these concerns. Students reported numerous barriers that impeded access to counselling services. Recommendations for targeting student-identified concerns and addressing potential barriers to counselling services are offered.

#### RÉSUMÉ

La présente étude est centrée sur l'examen des enjeux académiques et de santé mentale déterminés par les étudiants, la fréquence de la détresse psychologique au sein de la population étudiante, le recours aux services de counseling chez les étudiants, et les obstacles perçus à l'accès à ces services. On a demandé à un échantillon de commodité d'étudiants (N = 400) d'une grande université de l'Ouest du Canada de remplir un questionnaire de quatre pages, y compris les questions liées au système CORE-GP (General Population – Clinical Outcomes in Routine Evaluation) et celles formulées par les chercheurs. Les résultats du sondage révèlent que 63,1 % des étudiants ont déclaré avoir des préoccupations liées aux études, suivis de 36,1 % qui ont pointé l'anxiété comme étant une préoccupation et, finalement, 31,9 % ont reconnu des symptômes dépressifs comme étant une préoccupation de santé mentale. Quarante-deux pour cent des répondants masculins et 43 % des répondantes féminines ont satisfait aux critères associés à la détresse psychologique clinique, et pourtant, seul un petit nombre d'entre eux a précisé l'accès à des services de counseling en lien avec ces préoccupations. Les étudiants ont cité de nombreux obstacles à l'accès aux services de counseling. L'article propose des recommandations qui permettraient de cibler les préoccupations identifiées par les étudiants et les obstacles potentiels aux services de counseling.

University student life is thought to be a time of self-discovery, freedom, and new social experiences. However, for some it can be a stressful and difficult period to navigate, placing students at greater risk for mental health disorders (Blanco et al., 2008). Mental health disorders represent approximately half of all diagnosed health concerns of young adults (World Health Organization, 2010) and 12-month prevalence estimates for a *DSM-IV* psychiatric disorder among adults in the United States are between 18.5% (Narrow, Rae, Robbins, & Regier, 2002) and 30% (Kessler, Chiu, Demler, & Walters, 2005). Previous epidemiological research indicates that three-fourths of mental health disorders occur before age 24 (Kessler et al., 2005).

Controversy surrounds the notion of whether young adults in university experience greater risk for mental health problems than their nonuniversity peers. A national survey conducted in the United States by Blanco et al. (2008) found prevalence rates of any psychiatric disorder within the last 12 months to be similar for both college students and noncollege students. An Australian study, however, compared psychological distress in the general population to a university population and found the student population to be at significantly greater risk for mental health concerns (Stallman, 2010). In addition, qualitative interviews with college administrative staff unveiled a perceived increase in severe psychological concerns presenting at campus counselling services (Watkins, Hunt, & Eisenberg, 2011).

In a systematic review of student mental health problems, researchers Storrie, Ahern, and Tuckett (2009) found that 47% of students reported at least one mental health problem, with depression, anxiety, and psychotic disorders representing the majority of mental health concerns. In a randomized sample at a prominent university in the United States, 13.8% of students in the study screened positive for major depressive disorder or other mood disorders, 3.8% screened positive for an anxiety disorder, and 2.5% indicated having suicidal ideations in the previous four weeks (Eisenberg, Gollust, Golberstein, & Hefner, 2007). More recently, a national college student survey conducted by the American College Health Association (2014) found 37% of students identified experiencing anxiety, 33% endorsed symptoms of depression that made it hard to function, and 9% of college students reported attempting suicide at one point in their life. Within the Canadian landscape, there is a growing trend for students with pre-existing mental health problems to attend postsecondary institutions (MacKean, 2011). Considering this trend, it becomes imperative for postsecondary institutions to provide services that are responsive to the mental health needs of the student population.

Assessing the ever-changing and diverse needs of university students is an important and ongoing process. Previous research has indicated that student success and mental health are highly correlated (Choi, Buskey, & Johnson, 2010; Lee, Olson, Locke, Michelson, & Odes, 2009; Pritchard & Wilson, 2003). The impact of mental health concerns on students' performance was documented by Pritchard and Wilson (2003), who found that elevated stress levels were associated with lower GPA scores, while fatigue and lower self-esteem were associated with

student intent to drop out and poor coping skills. Accessing university counselling services has been significantly associated with student retention (Lee et al., 2009; Sharkin, 2004). Research conducted by Lee and colleagues (2009) found that attending counselling improves student retention, and students who access counselling services were three times more likely to complete their program than those who did not access counselling, regardless of GPA or preuniversity performance. More recently, Choi et al. (2010) found that university students who made clinically significant changes postcounselling reported higher levels of improvement in academic commitment goals and problem resolution.

The impacts of student mental health and wellness reach far beyond the individual, extending to the larger student body, which may hold reputational consequences for institutions (Prince, 2015). Beyond the direct impact on individual students, educational institutions have a vested interest in student health and wellness as an integral aspect of supporting students to attain institutional goals. As university stakeholders have come to recognize the direct and indirect benefits of student mental health and wellness, the effectiveness of campus counselling services has become an important consideration (MacKean, 2011).

There is a growing body of research exploring campus mental health service utilization rates (Russell, Thomson, & Rosenthal, 2007) and barriers to service utilization (Masuda & Boone, 2011). Although they remain low, there has been a steady increase in utilization rates. Utilization rates documented at the University of California found that approximately 9% of the student population sought oncampus counselling services for mental health concerns in 2004, which increased to 16% in 2014 (Prince, 2015). In a 2007 study that assessed counselling needs of university students, 27.6% of students surveyed indicated that they were in need of counselling services. Interestingly, of those in need of counselling, only 19.8% actually utilized counselling services (Russell et al., 2007).

Eisenberg, Golberstein, and Gollust (2007) found that of university students who screened positive for depressive and anxiety disorders, 37%–84% did not utilize any services including psychotropic medications or psychotherapy in the past year. Survey data suggest that students struggling with depression may turn to friends, family, or other supports rather than mental health professionals (Eisenberg, Golberstein, et al., 2007). Furthermore, Gallagher (2013) reported that an overwhelming majority of students who had died by suicide had never reached out for support from their university counselling centre. The disparity between psychological distress and service utilization among university students remains poorly understood.

Of the literature reviewed, there is a paucity of research to date that has identified the mental health needs of students at Canadian universities. This area of research becomes important as there continues to be a growing movement to increase mental health awareness and services at Canadian universities. To address this knowledge gap, this report highlights findings of a mental health screening conducted at a large university in western Canada. The aims of the research were fourfold:

- 1. Identify academic and mental health concerns of students.
- 2. Determine the prevalence of psychological distress in the general student population.
- 3. Ascertain student utilization of counselling services.
- 4. Identify barriers to accessing counselling services.

#### METHOD

### Sample and Participant Selection

To determine the necessary number of participants, a power analysis at .95 was used to calculate the number of participants required to provide a representative sample of the student population. A convenience sample of 400 university students was thus chosen as a cost-effective, efficient, and accessible way to capture a representative sample. Student participants were recruited from various common areas throughout the university campus. Before commencing this research, ethical clearance was given by the university's research ethics board.

## Participant Description

Table 1 offers a description of participant demographics. Participants consisted of university students between the ages of 17 and 44, with an average age of 21. Females comprised 60% of the respondents, which was fairly representative of the student gender ratio. Students had been enrolled in university for 1 to 6 years, with the average participant having completed 2.5 years of studies. Ninety-one percent of the sample consisted of undergraduate students, and 55% identified as Caucasian. Graduate students at the university represent 19% of student enrolment, but only 9% of the total sample consisted of graduate students. See the Discussion section for a further consideration of the generalizability of our sample.

Table 1 Demographic Data

Variable	n (%)	Variable	n (%)	
Age		Years in University		
17–20	226 (56.5)	1	139 (34)	
21–25	136 (34)	2	88 (22)	
26-30	22 (5.5)	3	64 (16)	
31+	9 (2.25)	4	44 (11)	
Missing	7 (1.75)	5	30 (8)	
Sex		6	33 (9)	
Male	160 (40)			
Female	240 (60)			

#### Data Collection

Students who agreed to participate were given a four-page questionnaire that took approximately 10–15 minutes to complete. All participants received the same questionnaire, and each was provided with a pen and an envelope. Researchers provided privacy while participants completed the questionnaires, but stayed in close proximity to answer questions. Completed questionnaires were returned to the researchers in the envelopes provided to ensure confidentiality of participant answers. Students were offered a debriefing form containing additional information about the needs assessment, information about mental health services in the metropolitan area, and researcher contact information.

The questionnaire consisted of a combination of both standardized measures and researcher-generated questions. The standardized measures included The General Population – Clinical Outcomes in Routine Evaluation (CORE-GP; Sinclair, Barkham, Evans, Connell, & Audin, 2005) and The Self Stigma of Seeking Help Scale (Vogel, Wade, & Haake, 2006; not reported in this article). Researcher-generated questions included (a) student demographics (including date of birth, year of study, program level, campus, gender, and ethnicity), (b) questions identifying student awareness of campus counselling services, (c) perception of cost for counselling services, (d) student-identified academic and mental health concerns, (e) rating of likelihood of accessing counselling services, and (f) student-identified barriers to accessing services. A combination of forced-choice survey questions derived from the literature and open-ended survey questions was used to assess student-identified academic and mental health concerns as well as student-identified barriers to accessing counselling. A brief review of the measures analyzed for this report is provided in the following section.

#### Measures

CORE-GP. One identified limitation of research with student populations is the lack of standardized measures normed with student populations (Stallman, 2010). To address this concern, the CORE-GP was used as it has been standardized for use with student populations (Sinclair et al., 2005). The CORE-GP was developed as a nonproprietary measure to assess psychological distress within a general population (Sinclair et al., 2005). The CORE-GP consists of 14 items that were derived from the Clinical Outcomes in Routine Evaluation – Outcome Measure (CORE-OM), a standard measure of psychological well-being. The 14 items assess three main domains of psychological well-being, specifically subjective well-being, symptoms (anxiety, depression, and physical), and life functioning (general and social). The CORE-GP was developed and is most appropriate for assessing well-being within a general nonclinical population and/or student samples (Barkham, Mellor-Clark, Connell, & Cahill, 2006), as items from the CORE-OM that are of high intensity and risk have been removed (Sinclair et al., 2005).

All items are scored according to how often an individual has experienced the event described within the last week using a Likert-type 5-point scale from 0 (not at all) to 4 (most or all of the time; Sinclair et al., 2005). Scores are converted and calculated as described by Sinclair and colleagues (2005) to distinguish between students who fall within nonclinical levels of well-being and students whose CORE-GP scores resemble levels similar to those of students in clinical distress and who are seeking counselling. These clinical cutoff scores for the CORE-GP are 1.49 for males and 1.63 for females. Lower scores indicate better mental health (Cooke, Bewick, Barkham, Bradley, & Audin, 2006).

The CORE-GP has demonstrated good reliability, with high internal consistency ranging from .82 to .90. The CORE-GP has also been shown to have good convergent validity against the full version CORE-OM, with correlations ranging from .90 to .95, as well as good convergent validity with other measures of psychological well-being including the Beck Depression Inventory (.77), Beck Depression Inventory-II (.84), Symptom Checklist-90-Revised (.71), and the Inventory of Interpersonal Problems-32 (.57; Sinclair et al., 2005). In addition, the CORE-GP has been found to demonstrate good reliability to distinguish between clinical and nonclinical populations.

Student-identified concerns. Student concerns were identified using a 68-item self-report checklist developed at the university counselling centre. The checklist contains academic concerns (i.e., low grades, procrastination, probation) and mental health concerns (i.e., depression, anxiety, eating disorders, personality disorders). The checklist also contains an option for students to include "other" concerns if the generated items did not capture the student's concerns.

# Analysis

Descriptive statistics were used to identify participant characteristics, prevalence rates of student-identified concerns, likelihood of accessing counselling services, and barriers to accessing services. Scores from the CORE-GP were converted and cut-off scores were used to assess the prevalence of psychological distress among the general student population.

#### RESULTS

The most prevalent student-identified concern was within the category of academics, with 63.1% of the students endorsing this area. Specifically, procrastination (32%) and time management (29%) were the most frequently identified academic concerns. More than a quarter of participants (26.3%) identified relationship issues as a concern. Anxiety and depression were the most prevalent mental health concerns of students surveyed, with 36.1% of students indicating anxiety as a concern and 31.9% identifying depression as a concern. Students also identified sleep problems (12%) and addictions (6%), and 4.9% of students surveyed identified trauma and/or abuse as a concern (see Figure 1).

## Prevalence of Psychological Distress in the General Student Population

The CORE-GP was scored, converted, and analyzed to assess the prevalence of psychological distress. Of the males who completed the CORE-GP (n = 148), 42% (n = 62) met the criteria for clinical mental health needs (i.e., above the threshold for psychological distress). Female scores on the CORE-GP (n = 239) were slightly higher, with 43% (n = 103) meeting clinical criteria for psychological distress.

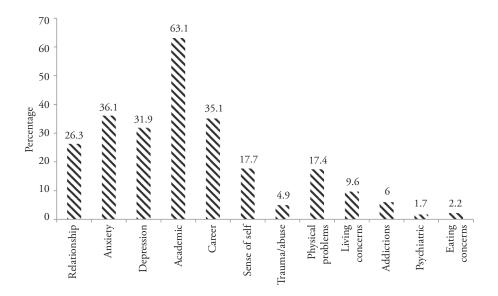
### Awareness and Utilization of Services

Of the 400 students surveyed, a large majority (74%; n = 296) were aware of the services available. However, only 8% (n = 29) of students said that they had accessed these services in the past. Students who reported being aware of counselling services were asked to identify how they learned of the services. Of those aware, the majority of students reported that they learned of the counselling services through student orientation (43.4%). The second most common medium was through the university web page (20.1%), followed by learning through a friend (16.3%).

#### Likelihood of Accessing Services

The total sample overwhelmingly indicated that they were not likely to access counselling services within the next month. In particular, only 8% indicated that they were likely to access services, and a minimal 1% indicated that they were very likely to access services. Of the distressed population, 55.8% indicated they were unlikely or very unlikely to access services, 30% were neutral, and 12.8% were likely or very likely to access services.

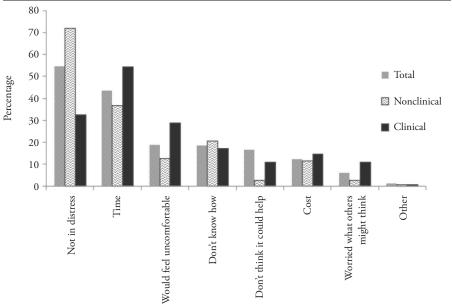
Figure 1
Student-Identified Academic and Mental Health Presenting Concerns



# Barriers to Accessing Counselling Services

The majority of students (54.5%) said that the main reason for not accessing services is because they are not in distress (see Figure 2). Interestingly, of the participants who met the criteria for psychological distress, 32.5% indicated one of their reasons for not accessing services is due to not being in distress. Less surprisingly, 71.8% of the participants below the psychological distress threshold indicated this as a reason for not accessing services. Lack of time was identified as a barrier in 43.5% of the sample, with this being the most identified reason for those in psychological distress (54.3%). Additionally, 28.7% of psychologically distressed participants indicated that they would feel uncomfortable accessing services, while only 12.7% of the nondistressed population identified this as a barrier. A smaller portion of students identified not knowing how to access services as a barrier (18.5%). Of the distressed population, 11% did not think counselling services would help, while only 2.7% of the nondistressed population identified this as a reason. Perceived cost was also identified as a reason for not accessing services (12.5%), with a slightly higher percentage of the distressed participants (14.6%) than the nondistressed participants (11.4%) identifying cost as a barrier. The least identified reason for not accessing services was due to worry about what others might think (6%); however, distressed participants identified this as a barrier more often than did the nondistressed participants (11% and 2.7%,





respectively). None of the students identified "other" barriers to accessing services using the open-ended question.

#### DISCUSSION

# Prevalence of Psychological Distress

The prevalence rate of psychologically distressed students was markedly higher than that of the general population. According to the Canadian Community Health Survey – Mental Health and Well-Being (which surveyed 36,984 Canadians), 25% of Canadians between the ages of 15 and 44 had experienced psychological distress over a one-month period (Caron & Liu, 2010). Researchers at Leeds Institute of Health Sciences asked students from all faculties to complete the CORE-GP prior to starting their undergraduate degree and on six occasions throughout the first three years of their undergraduate degree. Results showed that students experienced greater distress throughout their degree than at preenrollment levels (Bewick, Koutsopoulou, Miles, Slaa, & Barkham, 2010). The elevated levels of distress among this age group and, in particular, among university students identify this group as vulnerable and highlights the need for targeted mental health services for university populations.

## Student-Identified Concerns

The most highly endorsed categories of student-identified concerns included academic/career concerns, anxiety, depression, relationship concerns, and addiction/substance use. These are discussed below.

Academic/career concerns. It is hardly surprising that academic concerns were the most frequently identified concerns among students surveyed. However, relatively few students accessed, or had plans to access, the counselling centre for these concerns. It is likely that students do not utilize the counselling centre for academic concerns due to the fact that the university provides a student centre, which offers career and academic success programs. Academic concerns may also be normalized in the context of academia and, therefore, counselling support may be viewed as unnecessary or not any more helpful than devoting the same amount of time to focusing on the student's studies. Career concerns were also frequently identified as a presenting concern. Again, it is not surprising that students, especially early in their studies, experience uncertainty about career options when they graduate. Students are known to change career plans as they are exposed to more courses and learn of positive factors associated with a new major (Malgwi, Howe, & Burnaby, 2005).

Anxiety. Findings from this study demonstrate that anxiety-related concerns are the most prevalent mental health concerns among students. The prevalence of anxiety-related concerns in our study were 36.8%. In a large web-based study conducted in the United States, 15.6% of students surveyed met the clinical criteria for an anxiety or depressive disorder (Eisenberg, Gollust, et al., 2007). Although

this study did not assess if anxiety levels were clinically significant, considering the high prevalence of psychological distress in the student population (43%), it is possible that a proportion of the students who indicated anxiety as a presenting concern may also meet the clinical criteria.

Depression. A substantial number of students surveyed (31.9%) identified concerns associated with depression at a similar rate to anxiety. Findings from the Canadian Community Health Survey conducted from 2001 to 2007 reported the prevalence of depression in the general population to remain stable across time with 6–7% annual prevalence for women and 3–4% for men (Simpson, Meadows, Frances, & Patten, 2012). Our findings are much higher, but are consistent with findings from a recent systematic review of depression among university students between 1990 and 2010 that found the weighted mean prevalence rates of depressive symptoms to be 30.6% (Ibrahim, Kelly, Adams, & Glazebrook, 2013). Problems associated with depression are known to adversely affect academic achievement (Hysenbegasi, Hass, & Rowland, 2005) and problems in relationships (Rice & Fallon, 2011); thus, the elevated prevalence rates of depressive symptoms among university students may be contributing to the higher rates of other related problem presentations (i.e., relationship issues and academic concerns).

Relationship concerns. Relationship issues were identified by 26.3% of students. This finding is inconsistent with problem presentation data found in earlier studies. For example, a longitudinal study of 20 university counselling centres between 1991 and 2001 identified relationship problems as the most frequently reported presenting concern prior to 1994 (Benton, Robertson, Tseng, Newton, & Benton, 2003). According to this report, relationship problems still represented 57% of all problem presentations post-1994 and continued to be one of the main reasons for accessing counselling services. This discontinuity in findings may reflect the changing trends in diagnostic practices, increased reporting of mental health concerns, and improved mental health literacy (Simpson et al., 2012).

Addiction/substance abuse. Addictions and substance use concerns were slightly lower than expected. Six percent of students identified addictions/substance abuse (i.e., alcohol, drugs, gambling) as a potential need for counselling. However, the student-identified concerns inventory did not include many of the contemporary forms of addiction such as pornography, gaming, and Internet addictions. Thus, it is possible that these rates would be higher if more subcategories were included.

The Canadian Alcohol and Drug Use Monitoring Survey found that 14.4% of Canadians ages 15 and above consume alcohol at a level that is associated with chronic risk (Health Canada, 2013). Additionally, youth ages 15–24 consume significantly greater amounts of marijuana (21.6% vs. 6.7%) and illicit drugs (4.8% vs. 1.1%) than do older adults (Health Canada, 2013). Pathological gambling is more prevalent among younger (i.e., college-aged) populations than among adults, 4.67% versus 1.67%, respectively (Shaffer, Hall, & Vander Bilt, 1999). Interestingly, the rate of self-identification in the current student sample is lower than that of the Health Canada sample, which may suggest underreporting or a

lack of awareness that addictions and substance use are problematic. Additionally, Cranford, Eisenberg, and Serras's (2009) study of addiction in student populations found that of those who self-identified as needing help with substance use and mental health issues, only about half sought treatment. The prevalence of help-seeking behaviour is consistent with student likeliness of accessing services in the current study.

## Likeliness of Accessing Services

Our findings indicate that the majority of the students surveyed who screened for clinical distress are unlikely to access services despite elevated levels of distress, but are more likely to access services than the nonclinical population. Another study that compared service utilization rates of students who indicated one or more problems found that only 8% accessed their university counselling centre (Surtees, Wainwright, & Pharoah, 2000). National data on service utilization suggests approximately 10% (Gallagher, 2013) to 16% (Prince, 2015) of students access counselling services. Our findings illustrate a lower utilization rate, with only 8% of those surveyed having previously accessed services and 9% indicating they were likely to access services. One of the challenges for university counselling centres is to promote the benefits of early intervention among students who are psychologically distressed, but who are unlikely to access services or neutral on the topic (55.8% and 30.9%, respectively).

## Barriers to Accessing Service

Such high prevalence rates of psychological distress and academic concerns in the student population invites the question: Why are more students not accessing counselling services? As previously mentioned, the majority of students (54.5%) indicated that the main reason for not accessing services would be because they are not in distress. Interestingly, of those who met the criteria indicative of psychological distress, 32.5% still indicated one of their reasons for not accessing services is due to not being in distress.

For a student, time is of the essence, and indeed, the next most often identified reason for not accessing services was not having enough time (total sample = 43.5%), with this being the most identified reason for the distressed population (54.3%). These findings suggest that students, especially those in distress, do not think that spending the time and effort to engage in help-seeking behaviours is urgent enough to compete with other demands on their time. It is possible that there is a perception that receiving counselling services is a time-consuming process (think of images that may be conjured up if the Hollywood presentations of psychoanalytic modalities happens to be a person's only exposure to psychotherapeutic interventions), although we did not ask questions related to perceptions of counselling services.

Possibly related to perceptions, 28.7% of the distressed population indicated that they would feel uncomfortable accessing services, while only 12.7% of the nondistressed population identified this as a barrier. In another study that assessed

barriers to accessing service, the greatest number of respondents indicated that they would prefer to deal with issues on their own (54.9%; Eisenberg, Hunt, Speer, & Zivin, 2011). It may be that accessing services rather than dealing with issues alone could decrease a sense of self-efficacy. Further research into what is causing students' level of discomfort with accessing services would help counselling centres address these barriers.

An interesting difference between the distressed and nondistressed population was that 11% of the distressed population did not think counselling services would help, while only 2.7% of the nondistressed population identified this as a barrier. It may be that those who are in distress are less optimistic about prospects of feeling better or the efficacy of therapeutic interventions than those who are not. Another surprising finding was that despite counselling services being provided at no (direct) cost to students at this particular university, perceived cost was identified as a reason for not accessing services (12.5%). More specifically, a slightly higher percentage of the clinical population (14.6%) than the nonclinical population (11.4%) endorsed this as a reason. Again, further clarification of student services may help minimize this as a barrier for accessing services.

#### Limitations

There are a few limitations that should be noted within the present research. First, our method of nonprobability convenience sampling poses constraints with how the data can be generalized. The majority of participants were first-year undergraduate students, and graduate students were underrepresented in our sample. Graduate students have been identified as having higher levels of distress than undergraduate students (Hyun, Quinn, Madon, & Lustig, 2006). Because this population is underrepresented in our sample, it is likely that if more graduate students had been surveyed, the percentage and extent of student distress may have been even more pronounced.

Another limitation of this research was the use of a pregenerated list of academic and mental health concerns. This list was not an exhaustive list of mental health concerns and did not include many of the *Diagnostic and Statistical Manual* (DSM) mental health categories such as panic disorder, social phobia, obsessive compulsive disorder, or other specific mood disorders (American Psychiatric Association, 2013). Although students were provided with an option to include "other" concerns, only one student endorsed this. Thus, the identified concerns are only meant to provide a general idea of student needs.

Finally, this research was conducted at a large university in western Canada. Counselling and academic services differ relative to the institution; thus caution should be used when generalizing these findings to other student populations. Despite these limitations, the findings from this research still provide valuable information regarding the concerns and needs of a subset of students. This information provides a launching point for future research and provides universities with preliminary recommendations to better support students.

# Implications for University Counselling Services

Findings from this research clearly indicate that there is a high prevalence of psychological distress among university students. Furthermore, this high prevalence indicates the ongoing importance of providing comprehensive counselling and intervention services to university students. Ongoing collaboration with other student services (e.g., career services, academic success programs, wellness programs, and academic advisors) and programs is believed to be critical and is highly recommended. Academic concerns are the primary identified concern among the students surveyed, but relatively few students access counselling for this reason. It is speculated and hoped that students may be accessing alternative programs for support in this area. Consulting and networking with the other centres is recommended to validate this speculation. Due to limited staffing resources, it would be unrealistic for counselling services to be the primary centre supporting students in this area. Collaborating with the other services and referring students to other services and programs to meet student needs is important in order to operate within counselling centre capacities.

It is recommended that promotion campaigns (a) target depression and anxiety concerns, (b) advertise the brief counselling model (e.g., "It's amazing the difference an hour can make!"), (c) normalize counselling services and how mental health support can benefit students (i.e., "What to Expect" or "How We Can Help"), and (d) ensure that students are aware if their university provides counselling subsidies. Mental health awareness campaigns that provide students with information on "noticing the signs of mental health distress" and/or utilize brief mental health screeners are recommended.

An easily remedied barrier to accessing services was not knowing how to access services. Posters, brochures, and web-based applications could easily clarify this process. Further research into what is causing students' level of discomfort with accessing services to help address barriers to service utilization is also recommended. University-based counselling centres are well positioned to address the aforementioned identified academic and mental health needs of students, in particular, in areas where there is a marked discrepancy between student distress and service utilization.

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