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### Help-Seeking Preferences and Factors Associated with Attitudes Toward Seeking Mental Health Services Among First-Year Undergraduates

Rosalia Samuel et Stuart B. Kamenetsky

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#### Résumé de l'article

Plusieurs étudiants en première année d'université vivent des situations stressantes qui auront un impact sur leur bien-être. Leurs attitudes par rapport à la demande d'aide et leurs sources d'assistance privilégiées peuvent être influencées par plusieurs facteurs. Les buts de cette étude étaient les suivants : (1) observer les préférences des étudiants en première année d'université pour obtenir de l'aide; (2) explorer les facteurs associés aux attitudes des étudiants par rapport à la recherche de services en santé mentale; et (3) déterminer les obstacles perçus dans l'accès aux sources officielles d'assistance. Les étudiants (N = 167) de première année d'une université canadienne ont participé à un sondage sur leurs attitudes et leurs préférences en ce qui concerne la demande d'aide et les défis associés. Les participants ont aussi soumis de l'information sur leur perception du niveau de soutien social dont ils bénéficient, leur personnalité et leur tendance à éprouver des affects positifs ou négatifs. Les conclusions de cette étude suggèrent que le soutien social et les affects négatifs sont associés de façon significative à une attitude positive à l'égard de la recherche de services en santé mentale. Cependant, les étudiants sont davantage prédisposés à recourir aux sources de soutien informelles, comme leurs parents ou leurs amis, plutôt qu'aux sources officielles d'aide en santé mentale disponibles sur le campus ou à l'extérieur. Pour certains étudiants qui étaient prédisposés à demander de l'assistance auprès d'une source officielle d'aide en santé mentale sur le campus, certaines contraintes ont pu entraver l'accès aux soins disponibles. Parmi les contraintes perçues, nous comptons le coût et les préoccupations relatives à la disponibilité et à l'efficacité des services offerts. Ces conclusions appellent à la création de ressources supplémentaires de soutien informel sur les campus, en plus d'un meilleur accès à des services de soins de santé mentale sur place, à l'université.

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# HELP-SEEKING PREFERENCES AND FACTORS ASSOCIATED WITH ATTITUDES TOWARD SEEKING MENTAL HEALTH SERVICES AMONG FIRST-YEAR UNDERGRADUATES

ROSALIA SAMUEL
UNIVERSITY OF TORONTO

STUART B. KAMENETSKY UNIVERSITY OF TORONTO

### **Abstract**

Many first-year university students experience stressors that impact their adjustment and well-being. Their help-seeking attitudes and preferred sources of support may be associated with various factors. The purpose of the present study was to (1) examine help-seeking preferences amongst first-year university students, (2) explore factors associated with students' attitudes toward seeking mental health services, and (3) identify perceived barriers associated with accessing formal sources of support. First-year students at a Canadian university (*N* = 167) completed a survey assessing help-seeking attitudes and preferences, as well as challenges associated with seeking support. Participants also provided information about their perceived levels of social support, personality characteristics, and their tendency to experience positive and negative affect. Findings suggest that social support and negative affect were significantly associated with positive attitudes toward seeking mental health services. However, students were more inclined to rely on informal sources of support, such as family members and friends, compared to formal sources of support available through on- or off-campus mental health services. For those students who are inclined to access formal mental health support, barriers may impede access to care. Perceived barriers include cost and concerns about the availability of services and their overall effectiveness. These findings call for the creation of more opportunities for on-campus informal support in addition to better access to on-campus mental health services.

Keywords: mental health, university, higher education, social support, community building

#### Résumé

Plusieurs étudiants en première année d'université vivent des situations stressantes qui auront un impact sur leur bien-être. Leurs attitudes par rapport à la demande d'aide et leurs sources d'assistance privilégiées peuvent être influencées par plusieurs facteurs. Les buts de cette étude étaient les suivants : (1) observer les préférences des étudiants en première année d'université pour obtenir de l'aide; (2) explorer les facteurs associés aux attitudes des étudiants par rapport à la recherche de services en santé mentale; et (3) déterminer les obstacles perçus dans l'accès aux sources officielles d'assistance. Les étudiants (N = 167) de première année d'une université canadienne ont participé à un sondage sur leurs attitudes et leurs préférences en ce qui concerne la demande d'aide et les défis associés. Les participants ont aussi soumis de l'information sur leur perception du niveau de soutien social dont ils bénéficient, leur personnalité et leur tendance à éprouver des affects positifs ou négatifs. Les conclusions de cette étude suggèrent que le soutien social et les affects négatifs sont associés de façon significative à une attitude positive à l'égard de la recherche de services en santé mentale. Cependant, les étudiants sont davantage prédisposés à recourir aux sources de soutien informelles, comme leurs parents ou leurs amis, plutôt qu'aux sources officielles d'aide en santé mentale disponibles sur le campus ou à l'extérieur. Pour certains étudiants qui étaient prédisposés à demander de l'assistance auprès d'une source officielle d'aide en santé mentale sur le campus, certaines contraintes ont pu entraver l'accès aux soins disponibles. Parmi les contraintes perçues, nous comptons le coût et les préoccupations relatives à la disponibilité et à l'efficacité des services offerts. Ces conclusions appellent à la création de ressources supplémentaires de soutien informel sur les campus, en plus d'un meilleur accès à des services de soins de santé mentale sur place, à l'université.

Mots-clés : santé mentale, université, enseignement supérieur, soutien social, intervention communautaire



### Introduction

A university experience presents exciting opportunities for self-discovery and may be considered the first step toward pursuing a lifelong career. For many undergraduates, however, the university experience may be marred by difficulties across various domains (Friedlander et al., 2007; Tao et al., 2000). For instance, it is well documented that the transition to post-secondary education often presents academic challenges. New methods of instruction and demanding workloads require undergraduates to develop effective and sustainable strategies to meet academic requirements (Kyndt et al., 2014; Verger et al., 2009). Additionally, educational expectations from family and peers, coupled with self-imposed desires to maintain high achievement in a very competitive environment, may create excessive pressures for students. As academic demands increase, many undergraduates experience pressing concerns regarding their ability to withstand the rigours of university (Dwyer & Cummings, 2001; Friedlander et al., 2007; Lowe & Cook, 2003) and ultimately achieve their career aspirations (Pisarik et al., 2017). Undergraduates are also confronted with personal challenges that impact their university experience, including disputes with parents and peers, poor social relationships, and student loan debt (Brzezinski et al., 2017; Bulo & Sanchez, 2014; Pillay & Ngcobo, 2010; Tran et al., 2018). For the growing number of international (24,691 of 95,055 or 26%, at the University of Toronto, Canada's largest university, in 2020–2021) and out-of-province students, moving away from support systems, experiencing homesickness, and being required to navigate life's hurdles independently may also impact their ability to adapt and adjust to new academic environments (English et al., 2017; Ontario College Health Association, 2009). Such challenges have been amplified due to the ongoing COVID-19 pandemic.

As a result, university students often report high stress levels (Stallman, 2010). Findings from a Canadian campus survey revealed that 33% of undergraduates report at least four symptoms of distress, including strain, unhappiness, depression, and sleep deprivation due to worry (Adlaf et al., 2005). School closures, social isolation, and financial hardships due to COVID-19 may have exacerbated student mental health challenges (Lederer et al., 2021). Nevertheless, while most students do not meet the criteria for clinical diagnoses, the occurrence of four suicides between 2017 and 2019 at the University of

Toronto has prompted serious discussions about student well-being (The Varsity Editorial Board, 2019). A Presidential & Provostial Task Force consisting of key stake-holders was thus convened to address growing concerns about student well-being at this university (University of Toronto, 2019).

## University Students' Help-Seeking Preferences

To manage stress and address mental health concerns, many students rely on informal sources of social support, who are, in general, not formally trained in providing mental health support. These sources may include family members and friends (Goodwin et al., 2016). These, however, are people with whom students have likely developed strong bonds of trust and confidentiality, and may thus naturally be a first source of support. In well-adjusted functional families, such support is natural, free, easily accessible, and mutually expected.

In recent years, the internet has also become a common source for accessing mental health information and support not typically available from family and friends (Powell & Clarke, 2006). A study amongst university students revealed that 31% had previously accessed, and 68% were willing to access the internet to address their mental health concerns (Horgan & Sweeney, 2010). The internet offers many advantages, including privacy, anonymity, and accessibility at low costs, making it a viable option for many (Cline & Haynes, 2001; Horgan & Sweeney, 2010; Kauer et al., 2014).

When seeking formal support from health professionals, including family physicians, psychiatrists, psychologists, counsellors, and other mental health professionals within the community, school, or hospital setting (Canadian Institute for Health Information, 2019), young people tend to gravitate toward relatively familiar sources, e.g., school-based mental health services (Rickwood et al., 2007). Campus-based mental health services are essential, as most community-based services are typically tailored to support clinical populations who meet DSM-V criteria for clinical diagnoses (American Psychiatric Association, 2013) and thus, may not be best equipped to deal with university students' everyday stressors. Accordingly, many academic institutions have noted an increase in students accessing university-based mental health services (Center for Collegiate Mental Health, 2015).

However, despite the need, some students remain reluctant to access care from formal sources. For example, a study of over 3,000 young adults revealed that 39% of males and 22% of females were disinclined to seek help from formal services despite experiencing personal, emotional, or distressing problems (Donald et al., 2000). Similarly, Cooke and colleagues (2006) found that only 3% of first-year students had accessed university services by the end of their second semester, and only 5% had sought counselling services from the university despite experiencing low psychological well-being.

Several factors contribute to students' reluctance to seek formal support, including perceived challenges associated with accessing care and negative attitudes toward seeking mental health services (Marsh & Wilcoxon, 2005; Rickwood et al., 2007).

# Perceived Challenges Associated with Accessing Formal Support

Common barriers to seeking formal support include concerns about associated costs and uncertainty about the effectiveness of professional services (Czyz et al., 2013). Students also indicate limited knowledge about services offered, difficulties obtaining appointments, hours of operation, session limits (e.g., access to three individual counselling sessions per semester), and waitlists (Dunn, 2014). Such perceived barriers may therefore deter students from accessing formal university-based services.

# Attitudes Toward Accessing Mental Health Services

Attitudes toward accessing mental health services are defined as the propensity to seek or resist professional support during a personal crisis or psychological discomfort (Fischer & Turner, 1970). These attitudes influence the degree to which individuals are inclined to seek formal mental health support. People who have sought professional help generally hold more positive attitudes toward accessing mental health services than those who have not (Masuda et al., 2005). Pederson and Vogel (2007) found that males who held negative attitudes toward counselling were less likely to have utilized on-campus counselling services.

### Factors Associated with Attitudes Toward Accessing Mental Health Services

Gender appears to be one of the most salient factors associated with attitudes toward accessing mental health services. Studies consistently show that women report more favourable attitudes toward seeking professional help than men (Ang et al., 2004; Chandra & Minkovitz, 2006; Mackenzie et al., 2006). Researchers propose that gender role expectations and conventional beliefs about masculinity and femininity contribute significantly to gender differences in seeking support (Yousaf et al., 2015). Indeed, research exploring factors related to psychological help-seeking amongst men demonstrated that hesitance to express emotions, embarrassment, and anxiety toward utilizing mental health services have emerged as significant barriers to seeking support (Yousaf et al., 2013).

Race and cultural identity have also been found to be associated with attitudes toward accessing mental health services. Racial and cultural minority groups often hold negative attitudes toward accessing mental health services stemming from mistrust and a perceived or real lack of understanding of the individual's culture by mental health providers (Goldston et al., 2008). These concerns have recently received public attention after Joyce Echaquan, an Indigenous Canadian woman, passed away at a Canadian hospital after being mocked and neglected by staff (Godin, 2020). Moreover, stigmatizing attitudes about mental illness held by racial and cultural minority populations also act as barriers to accessing and utilizing mental health services (Nadeem et al., 2007; Schraufnagel et al., 2006).

Research has also explored the association between socio-economic status (SES) and attitudes toward seeking mental health services. While some studies demonstrate an association between low socio-economic status (SES) and negative attitudes toward accessing mental health services (Jagdeo et al., 2009), perhaps due to concerns about the associated costs, others, however, have demonstrated a positive association between low SES and favorable attitudes toward seeking professional psychological help, particularly among Black males (Duncan, 2003). Given the mixed findings, further investigation into the association between SES and help-seeking attitudes is warranted.

Similarly, evidence of the association between Big Five personality traits and attitudes toward seeking mental health services remains inconclusive (John & Srivastava, 1999). Atik and Yalçin (2011) found that Turkish students who scored high on extraversion, agreeableness, and openness were more likely to hold positive attitudes toward seeking help, while Puma (1996) revealed no significant association between the Big Five personality traits and help-seeking attitudes in American undergraduates. The generalizability and applicability of either of these findings, however, may be limited by the use of homogenous and older samples that may not accurately represent present-day undergraduate students who are highly diverse in many aspects, including racial and cultural identity, age, and personality traits. Additional research utilizing a representative sample of students is therefore necessary.

While research has demonstrated associations between adjustment, well-being, and attitudes toward accessing mental health, where individuals with low adjustment and well-being were found to hold negative attitudes toward seeking mental health services (Jagdeo et al., 2009), very little research has explored the association between affect and help-seeking attitudes. Affect refers to the frequency and intensity of an individual's positive and negative emotions and is most often utilized as a measure of happiness among non-clinical populations (Kammann & Flett, 1983; Luhmann, 2012). Given the paucity of research in this area, we aim to explore this association.

The contribution of perceived social support to attitudes toward seeking mental health services remains unclear. Some studies show that high levels of perceived social support from family members and friends are predictive of positive attitudes toward seeking mental health services (Gulliver et al., 2010; Koydemir-Özden, 2010; Seyfi et al., 2013). In essence, if one is encouraged to seek help from trusted others, one may develop positive attitudes toward seeking professional support. In contrast, other research has shown an association between low perceived social support and positive attitudes toward seeking mental health services (Vogel et al., 2005). In the absence of supportive others, people may be inclined to rely on mental health services, resulting in positive attitudes toward help-seeking.

### **Present Study**

In light of the various stressors that impact student well-being, the present study explores help-seeking preferences, barriers to accessing formal sources of support, and factors associated with attitudes toward seeking mental health services among a diverse sample of first-year undergraduates from a Canadian university. Gaining insight into these areas are crucial first steps toward understanding the mental health needs of the student body and may be useful in informing institutional efforts aimed at adequately supporting student mental health.

The research was therefore guided by the following questions: (1) What sources of support are first-year undergraduates most inclined to utilize? (2) What are the perceived challenges associated with accessing formal sources of support? and (3) What are the factors associated with students' attitudes toward accessing mental health services?

### Method

#### **Overview**

First-year undergraduate students enrolled in an introductory psychology course at the University of Toronto Mississauga completed a broad range of questionnaires presented on a computer screen in a university research room. In addition to descriptive statistics, inferential statistics (regression analyses, analyses of variance) were used to determine whether demographic factors, personality traits, and social support were associated with attitudes toward seeking mental health services.

### **Participants**

Participants consisted of a broad group of University of Toronto Mississauga (UTM) first-year undergraduates in humanities, social sciences, and the life sciences with mid-70s to high-80s admission averages. The campus is situated within the diverse region of Peel (Statistics Canada, 2016). All participants were enrolled in an introductory psychology course as part of their degree requirements, and there were no other inclusion or exclusion criteria.

Participants were recruited using convenience sampling through the psychology department's online data-

base from November 2018 to February 2019, before the onset of the COVID-19 pandemic in March 2020. The study was advertised via this system and all interested participants registered voluntarily. In exchange for their participation, students received partial course credit (0.67%) toward their final grade.

Of 1,144 eligible students in the course, 168 participated and completed the study, indicating a response rate of 5.9%. While the response rate may sound low, this study was one of many advertised studies that participants registered for during this period. Students need to participate in only a few studies to earn the full course credit available through participation. Importantly, the number of participants exceeded 30, which, based on the central limit theorem, suggests that the representative sample mean is close to the true mean (Hogg & Tanis, 2009).

The survey completion rate was 99.4%, with one respondent being excluded due to incomplete data. The

final sample, therefore, consisted of 167 students (130 female, 37 male) who were predominantly between the ages of 17–24 (98.8%). The sample was racially and culturally diverse, and most participants were Canadian citizens (88.6%). The majority were full-time students (98.8%), resided off campus (72.5%), and were from high (19.2%), above average (38.9%), and average (19.8%) socio-economic backgrounds. See Table 1 for a complete description of participant demographics.

#### Measures

### **Demographics**

Participants completed a questionnaire providing information about their age, gender, enrolment status (i.e., full-time, part-time), student status (i.e., international, domestic), and living arrangements (i.e., off-campus, on-campus). Information about racial or cultural group

**Table 1**Descriptive Statistics for Sample

	N	% of sample
Gender	· · · · · · · · · · · · · · · · · · ·	70 or oumplo
Female	130	77.8
Male	37	22.2
<b>A</b> ge		
17–24 years	165	98.8
25-30 years	2	0.2
Ethnicity		
South Asian	45	26.9
White	35	21.0
Mixed	22	13.2
East Asian	19	11.4
South-East Asian	13	7.8
Black	13	7.8

	N	% of sample
West Asian	6	3.6
Arab	5	3.0
Other	5	3.0
Latin American	4	2.4
Socio-economic Status		
Category I	32	19.2
Category II	65	38.9
Category III	33	19.8
Category IV	25	15.0
Category V	10	6.0
Residence		
Off campus	121	72.5
On campus	46	27.5
Student Status		
Domestic student	148	88.6
International student	19	11.4
Enrolment		
Full-time student	164	98.8
Part-time student	2	1.2

Note. Socio-economic status categories are based on Hollingshead's Four-Factor Index (1985). Category I represents the highest socio-economic status whilst Category V represents the lowest.

identity was collected using a question from the sociodemographic characteristics subscale of the Canadian Community Health Survey (CCHS), a questionnaire designed to collect information about health status and health-care utilization (Statistics Canada, 2017).

Participants' SES was measured using the Hollingshead Four Factor Index of Social Status (Hollingshead, 1975). Because participants were first-year university students, SES was determined based on parents' education level and occupation. The education factor is scored on a 7-point scale, and the occupational factor on a 9-point scale. Occupation and education scores are weighted by factors of 5 and 3, respectively, with the products summed to obtain a composite score for each parent. In households with more than one parent, scores are averaged. Higher scores on this measure correspond to higher SES.

### Attitudes Toward Seeking Mental Health Services

Attitudes were measured using the Inventory of Attitudes towards Seeking Mental Health Services (IASMHS) (Mackenzie et al., 2004). This 24-item scale has three subscales. Psychological Openness reflects the degree to which an individual is open to acknowledging psychological challenges and to the possibility of seeking professional psychological help. Indifference to Stiama reflects the degree to which an individual is concerned about what important others may think if they discover this individual is receiving professional psychological help. Finally, Help-Seeking Propensity reflects the degree to which an individual is willing and able to seek help (Mackenzie et al., 2004). Respondents rate items on a 5-point scale, with higher scores indicating more positive attitudes toward seeking mental health services and less concern about stigma.

### Help-Seeking Preferences and Perceived Challenges Associated with Accessing Support

Two items from the Access to Health Care Services subscale of the Canadian Community Health Survey (Statistics Canada, 2017) were used to (1) evaluate the degree to which students are inclined to access various sources of support, and (2) determine the challenges anticipated when accessing formal sources of support. The survey was also revised to include items related to mental health services at the University of Toronto Mississauga and the option to contact friends or family members for support. Respondents indicated on a 5-point scale how likely they are to take a particular action and how likely they are to experience challenges when accessing support.

### **Personality**

Personality traits were measured using the Big Five Inventory (BFI). The BFI is a 44-item scale that assesses five dimensions of personality: openness, conscientiousness, extraversion, agreeableness, and neuroticism (John & Srivastava, 1999). The scale is composed of short phrases describing characteristics and traits. Respondents indicate the degree to which each phrase applied to them on a 5-point scale.

#### Affect

Affect was measured using the Affectometer 2. This scale assesses happiness and well-being in the general population (Kammann & Flett, 1983). The scale comprises 40-items, 20 measuring positive and 20 measuring negative affect. Half of the items are presented as short sentences and the other half as adjectives. Respondents indicate the degree to which each item applied to them using a 5-point scale. The scale assumes that happiness and well-being are determined by the degree to which positive feelings outweigh negative feelings. Thus, overall well-being is measured by the degree to which positive affect outweighs negative affect.

#### Social Support

Perceptions about social support availability were measured using the Interpersonal Support Evaluation List – Shortened Version (ISEL-SV) (Cohen et al., 1985). The ISEL-SV has 12 items and three subscales: *appraisal support*, *belonging support*, and *tangible support*. The appraisal support scale assesses perceptions about the availability of persons who can provide advice and guidance. The tangible support subscale assesses perceptions about the availability of persons who can provide material aid. Finally, the belonging support scale assesses social companionship availability (Cohen et al., 1985). Items are rated on a 4-point scale, with higher scores indicating greater levels of perceived social support.

### **Procedure**

Ethics approval was obtained from the University of Toronto research ethics board. While the proposed study was unlikely to pose significant psychological or emotional risks, it was acknowledged that some participants might become uncomfortable answering questions about their feelings, affect, and overall well-being. With this in mind, participants were given the option to skip questions they did not wish to answer or withdraw from the study without penalty or loss of benefits. Protocols were also established to respond to individuals who appeared to be distraught, including discontinuing the study and escorting the student to the university's health and counselling centre.

All data were collected at the University of Toronto Mississauga from November 2018 through February 2019. Participants were given a verbal description of the study, outlining the purpose, expected duration, procedures, and compensation. Participants were then asked to provide written consent. Questionnaires were administered electronically using Qualtrics software, and participants took approximately 45 to 60 minutes to complete the study. Upon concluding, participants were debriefed and thanked.

### **Results**

### **Help-Seeking Preferences**

Students were most inclined to seek support from informal sources and least inclined to seek support from formal sources. A one-way repeated measures ANOVA (Greenhouse-Geisser correction) revealed that help-seeking preferences differed across sources, F (6.65, 1071.08) = 97.51, p < 0.001,  $\eta^2 = 0.38$ . Focusing on the top five sources of support (friends, family, internet, the university's health and counselling centre, and doctors' offices), Bonferroni-corrected pairwise comparisons showed that students were equally likely to seek support from any of the

top three sources (friends, family, internet, respectively). They were more likely to seek support from the internet then from the university's health and counselling centre, p < 0.00001, which was ranked fourth. Support from a doctor, ranked fifth, did not differ from their fourth choice. The top five sources of support were listed more often than support groups, walk-in clinics, telephone helplines, and community health centres, which did not differ. Finally, students were less likely to seek help from hospital outpatient clinics and emergency departments/rooms than from all other sources (see Table 2).

Two-way between-subjects Analyses of Variance (ANOVAs) were conducted to determine whether help-seeking preferences differed as a function of racial or cultural identity and gender. Because of small group sizes, Southeast Asian and East Asian categories were collapsed into a single category, and Latin American, Arab, West Asian, and Other categories were excluded from the analysis. There were no gender differences and no interactions between racial or cultural identity and gender for any of the sources of support. Differences due to racial or cultural identity were evident only for emergency departments/rooms, F(4, 136) = 2.63, p < 0.05,  $\eta^2 = 0.07$ . White

 Table 2

 Means and Standard Deviations for Students' Help- Seeking Preferences

Sources of Support	М	SD
Friends	4.04	0.99
Family	3.94	1.25
Internet	3.57	1.30
UTM HCC	2.86	1.18
Doctor's Office	2.72	1.24
Support Groups	2.39	1.07
Walk in Clinic	2.36	1.16
Telephone Health line	2.22	1.16
Community Health Centre	2.23	1.15
Hospital Outpatient Clinic	1.91	0.98
Emergency Department/Room	1.87	1.08

Note. Responses were scored using a 5-point scale (1 = extremely unlikely, 5 = extremely likely)

students were significantly more inclined than all other groups to utilize an emergency department or room (see Table 3).

A one-way ANOVA was also conducted to determine whether help-seeking preferences differed as a function of SES, however results revealed no significant differences.

# Perceived Challenges Associated with Accessing Formal Sources of Support

Perceived challenges were associated with the availability and effectiveness of mental health services, and the costs of accessing mental health support. Participants indicated that mental-health services were not always available, especially in the middle of the night, and expressed concerns about having to wait too long to

communicate with someone. Other challenges included being placed on a waitlist and receiving inadequate information or advice (see Table 4).

# Factors Associated with Attitudes toward Seeking Mental Health Services

Three multiple regression analyses were conducted to determine the extent to which gender, SES, affect, perceived social support, and personality traits predicted psychological openness, indifference to stigma, and help-seeking propensity.

Findings from the first analysis revealed that the model was significant, F(12, 152) = 2.72, p < 0.05, and explained 17.6% of the variance in psychological openness. However, only negative affect contributed signifi-

Table 3

Preferences for Emergency Departments/Rooms Across Ethnic Groups

Ethnicity	М	SD
White	2.40	1.27
South Asian	1.76	0.83
East Asian	1.75	1.11
Black	1.69	1.11
Mixed	1.71	0.96

Note. Responses were scored using a 5-point scale (1 = extremely unlikely, 5 = extremely likely)

 Table 4

 Perceived Challenges Associated with Accessing Formal Sources of Support

Challenges	% of sample
Services not available in the middle of the night	58%
Waiting too long to speak with someone	49%
Costs	47%
Waitlists	46%
Receiving inadequate information or advice	40%

Note. Percentages were calculated by combining responses of "somewhat likely" and "extremely likely."

**Table 5**Factors Associated with Psychological Openness

Variables	В	SE	β
Gender (Female = 1)	.244	.151	.134
Socio-economic Status	.000	.005	003
Positive Affect	007	.006	131
Negative Affect	.020	.005	.421*
Appraisal support	.097	.097	.099
Belonging support	119	.095	112
Tangible support	.012	.110	.010
Openness	.205	.113	.140
Conscientiousness	.005	.093	.005
Extraversion	.063	.080	.068
Agreeablness	.004	.126	.003
Neuroticism	.189	.098	.194

p < 0.05, p < 0.01, p < 0.001

cantly to the model ( $\beta$  = .421, p < 0.05). Negative mood and emotions were associated with greater openness to acknowledging psychological challenges and greater openness to the possibility of seeking professional psychological help (see Table 5).

The second analysis revealed that the model was significant F(12, 152) = 4.05, p < 0.05, and explained 24.2% of the variance in indifference to stigma. Both negative affect and appraisal support made significant contributions to the model ( $\beta = .383$ , p < 0.05, and  $\beta = .269$ , p < 0.05, respectively). Experiencing negative emotions and moods, and having persons who could provide advice and guidance, were associated with less concern about what important others may think, should they become aware that an individual is seeking professional help for psychological problems (see Table 6).

The final analysis revealed that the overall model was significant F(12, 152) = 3.63, p < 0.05, and accounted for 22.3% of the variance in help-seeking propensity. However, the only significant contributor to the model was appraisal support ( $\beta = .222$ , p < 0.05). The availability of persons who could provide advice and guidance was

associated with a greater willingness and perceived ability to seek professional psychological help (see Table 7).

A one-way ANOVA was conducted to determine whether attitudes toward seeking mental health services differed as a function of racial and cultural identity. Findings revealed no significant differences.

### **Discussion**

The present study aimed to identify help-seeking preferences among first-year undergraduates. Our findings suggest that most students were inclined to rely on informal sources of support, primarily friends and family members. These results are consistent with the literature exploring help-seeking preferences amongst young people. In general, people tend to seek informal sources, such as family and friends, when psychologically distressed (Atik & Yalçin, 2011; D'Avanzo et al., 2012; Rickwood et al., 2005). Within well-adjusted families and peer relationships, social support is often easily obtainable and accessible. These established relationships are also premised on trust, open communication, and

Table 6 Factors Associated with Indifference to Stigma

Variables	В	SE	β
Gender (Female =1)	.043	.160	.021
Socio-economic Status	006	.005	091
Positive Affect	002	.007	028
Negative Affect	.020	.006	.383***
Appraisal support	.290	.103	.269**
Belonging support	.099	.101	.084
Tangible support	204	.116	150
Openness	.136	.120	.084
Conscientiousness	069	.099	057
Extraversion	039	.085	038
Agreeablness	.173	.133	.103
Neuroticism	.107	.104	.100

 $<sup>^*</sup>p < 0.05, \, ^{**}p < 0.01, \, ^{***}p < 0.001$ 

Table 7 Factors Associated with Help-Seeking Propensity

Variables	В	SE	β
Gender (Female =1)	092	.114	065
Socio-economic Status	.001	.003	.012
Positive Affect	.004	.005	.099
Negative Affect	.020	.005	.421
Appraisal support	.169	.073	.222*
Belonging support	097	.072	117
Tangible support	119	.083	124
Openness	.122	.085	.107
Conscientiousness	.077	.070	.090
Extraversion	.101	.060	.141

Variables	В	SE	β
Agreeablness	.169	.095	.143
Neuroticism	.116	.074	.194

p < 0.05, p < 0.01, p < 0.001

familiarity, thus enhancing natural gravitation to these sources (Rickwood et al., 2005). Our findings, however, contrast with recent data and recommendations outlined by the University of Toronto's Presidential & Provostial Task Force for Student Mental Health (University of Toronto, 2019). Data from the task force suggest that students indicate a need for enhanced communication with wellness centres, and recommendations primarily focused on increasing access to formal mental health services and resources. The differences between our findings and those of the task force may reflect differences in samples. While this study included only first-year undergraduates, the university's task force included a diverse student population from three campuses, including upper-year undergraduates and graduate students enrolled in professional programs (e.g., law, medicine, social work). It is possible that students' needs and support preferences may differ based on year of study and level of post-secondary education.

Support from university-based mental health services and doctors' offices was ranked fourth, indicating that some students are open to accessing professional support for mental health concerns despite a preference for informal sources. Research shows that when young people access professional support, family doctors and school-based mental health services are often sought (Sawyer et al., 2001). Students' inclination to utilize university-based mental health services may be premised on the notion that academic institutions' psychological and counselling services tend to be best suited to address their everyday mental health needs. Further, family doctors may represent lifelong, well-established, familiar, and confidential sources for some students, prompting reliance on this resource for support.

Finally, community-based services, such as hospital outpatient clinics and emergency room departments, were least likely to be identified as potential sources of support. This finding was not surprising, as hospital outpatient clinics and emergency rooms are often accessed by individuals with clinical diagnoses who experience mental health emergencies or crises (Mitchell et al.,

2013). However, for most students, common everyday personal and academic stresses do not require clinical or emergency services (Hurst et al., 2013; Welle & Graf, 2011).

While we anticipated that men would be more inclined to seek support from private and anonymous sources such as the internet, no gender differences were found for help-seeking preferences. This finding was interesting, as women are generally more inclined to seek mental health support from informal sources such as family and friends, while men, in contrast, tend to be more reluctant to seek help from formal sources, as well as from family members and friends (Rickwood et al., 2005). Perhaps this indicates a decline in gender-stereotyped help-seeking behaviours among millennials, whereby young, contemporary men and women are inclined to access various support sources at similar rates.

Of particular concern was the finding that help-seeking preferences due to cultural or racial group identity were evident only for emergency departments/rooms. White students were significantly more inclined to utilize emergency departments/rooms for mental health support than racial and cultural minorities. This finding suggests reluctance among some students who belong to minority groups to access medical care due to negative perceptions and stigma concerning utilizing mental health services (Cheng et al., 2013; Loya et al., 2010; Nadeem et al., 2007). It may also reflect concerns by such groups about institutional racism in health care settings (Grady & Edgar, 2003), as has been reported recently by the media (Godin, 2020). Also noteworthy is that no other differences in help-seeking preferences emerged across racial and cultural groups. This finding was notable as cultural beliefs about the expression and discussion of emotions may influence help-seeking behaviours (Guo et al., 2015). For instance, Asian and African cultures tend to value emotional restraint; thus, persons may conceal mental health concerns and, ultimately, be less inclined to seek support (Han & Pong, 2015; Wallace & Constantine, 2005). Western cultures, however, encourage open communication, emotional expression,

and emphasize help-seeking for personal challenges (Wang et al., 2010). The absence of racial and cultural related differences across all but one of the sources of support may suggest that millennials, regardless of racial or cultural identity, may be similarly influenced by Western values that encourage emotional expression and help-seeking when faced with hardships.

Interestingly, help-seeking preferences did not differ as a function of socio-economic status. While previous research exploring the role of SES on help-seeking preferences appears to be limited, our findings may, in part, reflect students' inclinations to seek support from informal sources, which require no out-of-pocket payments. As it relates to formal mental health sources, for example, campus-based mental health clinics or family doctors, the fees associated with accessing these supports are largely covered by student or provincial insurance. It may be useful to further explore the role of SES on help-seeking preferences with the inclusion of support services where students bear all or most of the associated costs.

Students endorsed several perceived challenges to seeking formal support for mental health concerns. The most common perceived barrier was the inaccessibility of services during the night, while others included having to wait too long to communicate with someone, being placed on waitlists, costs, and receiving inadequate information and advice. These findings support previous research exploring perceived challenges associated with seeking mental health support from community and university-based services (Dunn, 2014; Sareen et al., 2007). Our data also support the University of Toronto's Task Force reports identifying similar barriers (University of Toronto, 2019). These findings may explain students' inclination to seek sources of support that are easily accessible with the fewest potential barriers (e.g., friends, family members, internet). The results also highlight that for students inclined to seek formal support, limited access to mental health services is often a barrier to care.

The degree to which sociodemographic factors, affect, personality traits, and perceived social support are associated with students' attitudes toward seeking mental health services was also investigated. Findings indicated that only negative affect was significantly associated with psychological openness. Although the link between negative affect and psychological openness has not been explored extensively, one possible expla-

nation for this finding relates to the association between high levels of negative emotions and mental health. Negative emotions are predictive of high levels of psychological distress, and in some instances, diagnoses of disorders such as anxiety and depression (Charles et al., 2013). The impact of overwhelming negative moods and emotions may therefore result in greater openness to acknowledging mental health challenges and greater openness to seeking help for these challenges.

Both negative affect and appraisal support (advice and encouragement) were significantly associated with indifference to stigma. Findings on the association between negative affect and indifference to stigma are consistent with research conducted among a sample of Canadian undergraduates, whereby students diagnosed with a mental illness reported fewer stigmatizing attitudes and beliefs than those without a diagnosis (Sandhu et al., 2019). Moreover, research has demonstrated an association between psychological distress and a greater willingness to seek help (Sheffield et al., 2004). It is possible that the impact of negative emotions and distress may encourage help-seeking, thereby reducing concerns about what significant others may think, should they discover that the individual is seeking help for mental health concerns.

Social support has also been shown to contribute to positive help-seeking attitudes.

Individuals connected to people who have sought mental health support tend to hold more positive attitudes toward help-seeking (Vogel et al., 2007). Thus, knowing and interacting with people who have sought professional help may reduce concerns about stigma. Indeed, Sandhu and colleagues (2019) also found that undergraduates who reported a close relationship with someone experiencing mental illness also reported fewer stigmatizing beliefs and attitudes.

It is, therefore, likely that personal connections with individuals who have experienced mental illness, along with advice from trusted family members and peers who have sought professional support, may encourage more favorable attitudes toward seeking mental health services.

Exploration of the influence of personality traits on attitudes toward seeking mental health services revealed no significant results. This finding is consistent with Puma's (1996) research in which the Big Five personality traits did not predict undergraduates' attitudes toward seeking mental health services. Further, contrary to pre-

vious research (Chandra & Minkovitz, 2006; Jagdeo et al., 2009; Mackenzie et al., 2006), gender and SES were not significantly associated with attitudes toward seeking mental health services. These findings suggest that within our sample, neither personality, gender, nor SES accounted for significant variance in students' attitudes toward seeking professional psychological help.

Overall, findings from our study underscore the significance of natural supports for first-year undergraduate students. Friends and family members are not only the preferred source of support for many students, but they also play a crucial role in shaping positive attitudes toward seeking mental health services. Supportive networks also impact student well-being and quality of life (Alsubaie et al., 2019). Students with supportive peers and family members tend to exhibit lower stress levels and report greater adjustment to university life (Friedlander et al., 2007). Given these findings, institutional efforts to support student mental well-being should, at least in part, be directed toward creating environments that enhance opportunities for social interaction and community building early in a student's post-secondary educational experience. This may be achieved by establishing and promoting cultural affinity groups, peer support groups, and community engagement events (e.g., community service projects).

First-year low enrolment seminar courses also provide students with unique opportunities to engage closely with peers and faculty, thus enhancing their sense of community and belonging on campus. They present opportunities for students to develop strategies that will aid their transition and acclimation to higher education, improving their overall university experience and well-being. Programs such as "First-Year Foundations Seminars" offered by the Faculty of Arts and Science on the University of Toronto's St. George campus or "utmONE First-Year Transition Courses" offered by the University of Toronto's Mississauga campus do just that. In fact, the latter states as a benefit that:

utmONE courses are smaller than most first-year classes, capped at 55 students per lecture and 28 students per tutorial. This means you'll have more personal contact with your instructor, TA and fellow students. You'll get to know your classmates and work together more than you might in a larger class (University of Toronto Mississauga, n.d.).

Unfortunately, these programs are available to only a very small number of first-year students. With an enrolment of over 90,000 students, it is indeed difficult to provide small class experiences to all students—especially in first year.

The COVID-19 crisis has also underscored the importance of social support and supportive networks. Research exploring student mental health during the pandemic has consistently demonstrated a link between individuals' perceptions of social support, loneliness, poor mental health, and increased psychological distress (Lai et al., 2020; Sun et al., 2020). In fact, even among students without a history of mental health challenges, social isolation and loneliness experienced during the pandemic contributed significantly to mental health declines (Hamza et al., 2021). For other students, however, the presence of social support appeared to buffer the effects of stressors experienced during the pandemic on psychological health (Szkody et al., 2021). Indeed, infection control measures implemented during the pandemic, including university closures and the suspension of in-person activities, may have reduced opportunities for community building, the creation of strong peer relationships, and the development of a sense of university belonging and connectedness among the student population. This may be particularly true for domestic and international students who begin university without well-established social networks or friend groups. With this in mind, institutions must explore innovative approaches to facilitate support building within the context of COVID; this may include hosting virtual student networking and community-building events.

With regards to formal help-seeking, the study highlights that, for students inclined to utilize formal supports such as university-based wellness centres, accessibility is often a barrier to care. Access to care becomes even more critical during global disasters such as the pandemic, where the psychological and mental health effects tend to linger for extended periods, especially in the absence of timely intervention (McFarlane & Williams, 2012). As a result, during the pandemic and beyond, many institutions may experience an influx of students requiring mental health support and should proactively prepare for increases in the demand for accessible mental health services. Institutional efforts should therefore be geared toward enhancing access to these services by improving hours of operation, reducing

waitlists, reducing costs associated with rescheduled or missed appointments, and providing opportunities for telehealth support.

# Limitations and Directions for Future Research

Our study was correlational, limiting our ability to establish causal relationships between the factors measured and attitudes toward seeking mental health services. Additionally, participants' responses to self-report measures assessing personal attitudes toward seeking professional support and perceptions about the availability of social support may have been influenced by social desirability bias.

While our sample was drawn from a broad and diverse group of first-year students enrolled in an introductory psychology course at a midsize suburban campus, our findings may not generalize to undergraduates in higher years of study whose experiences may differ from that of first year students. For example, students in higher years of study may endure different stressors or may have had more opportunities to adjust to university life and develop meaningful connections through various avenues. As a result, their help-seeking preferences and attitudes toward seeking professional mental health services may differ, presenting an opportunity for future exploration.

Finally, our study did not explore associations between students' help-seeking preferences, attitudes toward seeking mental health services, and perceptions about the culture on campus. A growing body of research has demonstrated that aspects of the university environment, including the degree of inclusivity, administrative approaches to mental health, and mental health stigma on campus, have influenced student mental health outcomes, as well as their willingness and intentions to seek support (Chen et al., 2016; Henderson et al., 2019). For instance, students who felt a sense of belonging and perceived their campus to be supportive of student mental health reported fewer mental health challenges but a greater willingness to seek help for mental health concerns if needed (Henderson et al., 2019). While the University of Toronto Mississauga strives to develop a strong culture driven by inclusion and diversity, create opportunities for student integration and engagement, and commit to supporting student mental health, future studies must explore whether these institutional efforts align with students' perceptions of the university's culture. In addition, studies should further examine whether and how perceptions about the campus culture impact student help-seeking preferences and their attitudes toward seeking mental health support.

### Conclusion

To effectively respond to the mental health crisis Canadian universities face, it is important to separately consider the needs of those students who are at risk for or have diagnosed mental illness from those who experience more typical stress due to the demands of the university experience. The latter group prefers friends and family members over professional support as key sources of social support. While it is important for universities to scale up support for students with clinical diagnoses, it is important to also consider building community capacity through small class sizes in first year, along with social/recreation programs that can build natural support within the student community.

### References

Adlaf, E. M., Demers, A., & Gliksman, L. (2005). Canadian campus survey 2004: Highlights. Center for Addiction and Mental Health. <a href="https://collections.ola.org/mon/25005/309709.pdf">https://collections.ola.org/mon/25005/309709.pdf</a>

Alsubaie, M. M., Stain, H. J., Webster, L. A., & Wadman, R. (2019). The role of sources of social support on depression and quality of life for university students. *International Journal of Adolescence and Youth*, 24(4), 484–496. <a href="https://doi.org/10.1080/02673843.2019.1568887">https://doi.org/10.1080/02673843.2019.1568887</a>

American Psychiatric Association. (2013). *Diagnostic* and statistical manual of mental disorders: DSM-5 (5th ed.). American Psychiatric Publishing. <a href="https://doi.org/10.1176/appi.books.9780890425596">https://doi.org/10.1176/appi.books.9780890425596</a>

Ang, R. P., Lim, K. M., Tan, A. G., & Yau, T. Y. (2004). Effects of gender and sex role orientation on help-seeking attitudes. *Current Psychology*, *23*(3), 203–214. https://doi.org/10.1007/s12144-004-1020-3

Atik, G., & Yalçin, Y. (2011). Help-seeking attitudes of university students: The role of personality traits

- and demographic factors. *South African Journal of Psychology*, 41(3), 328–338. <a href="https://doi.org/10.1177/008124631104100307">https://doi.org/10.1177/008124631104100307</a>
- Brzezinski, S., Millar, R., & Tracey, A. (2017). What do tertiary level students in the U.S.A. and Northern Ireland (UK) worry about? An exploratory study. *British Journal of Guidance & Counselling*, 46(4), 402–417. https://doi.org/10.1080/03069885.2017.1286634
- Bulo, J. G., & Sanchez, M. G. (2014). Sources of stress among college students. *CVCITC Research Journal*, 1(1), 16–25.
- Canadian Institute for Health Information. (2019). Mental health chartbook report 2019 CIHI. https://www.cihi.ca/sites/default/files/document/mental-health-chartbook-report-2019-en-web.pdf
- Center for Collegiate Mental Health. (2015). Anxiety in college students: 2014 annual report. (Publication No. STA 15–30). https://files.eric.ed.gov/fulltext/ED572760.pdf
- Chandra, A., & Minkovitz, C. S. (2006). Stigma starts early: Gender differences in teen willingness to use mental health services. *Journal of Adolescent Health*, 38(6), 754.e1–754.e8. <a href="https://doi.org/10.1016/j.jadohealth.2005.08.011">https://doi.org/10.1016/j.jadohealth.2005.08.011</a>
- Charles, S. T., Piazza, J. R., Mogle, J., Sliwinski, M. J., & Almeida, D. M. (2013). The wear and tear of daily stressors on mental health. *Psychological Science*, 24(5), 733–741. <a href="https://doi.org/10.1177/0956797612462222">https://doi.org/10.1177/0956797612462222</a>
- Chen, J. I., Romero, G. D., & Karver, M. S. (2016).

  The relationship of perceived campus culture to mental health help-seeking intentions. *Journal of Counseling Psychology*, 63(6), 677–684. <a href="https://doi.org/10.1037/cou0000095">https://doi.org/10.1037/cou0000095</a>
- Cheng, H. L., Kwan, K. L. K., & Sevig, T. (2013). Racial and ethnic minority college students' stigma associated with seeking psychological help: Examining psychocultural correlates. *Journal of Counseling Psychology*, 60(1), 98–111. https://doi.org/10.1037/a0031169
- Cline, R. J. W., & Haynes, K. M. (2001). Consumer health information seeking on the Internet: The state of the art. *Health Education Research*, 16(6),

- 671-692. https://doi.org/10.1093/her/16.6.671
- Cohen, S., Mermelstein, R., Kamarck, T., & Hoberman, H. M. (1985). Measuring the functional components of social support. In I. G. Sarason & B. R. Sarason (Eds.), *Social support: Theory, research and applications* (pp. 73–94). Springer. <a href="https://doi.org/10.1007/978-94-009-5115-0">https://doi.org/10.1007/978-94-009-5115-0</a> 5
- Cooke, R., Bewick, B. M., Barkham, M., Bradley, M., & Audin, K. (2006). Measuring, monitoring and managing the psychological well-being of first year university students. *British Journal of Guidance & Counselling*, 34(4), 505–517. <a href="https://doi.org/10.1080/03069880600942624">https://doi.org/10.1080/03069880600942624</a>
- Czyz, E. K., Horwitz, A. G., Eisenberg, D., Kramer, A., & King, C. A. (2013). Self-reported barriers to professional help seeking among college students at elevated risk for suicide. *Journal of American College Health: J of ACH*, 61(7), 398–406. https://doi.org/10.1080/07448481.2013.820731
- D'Avanzo, B., Barbato, A., Erzegovesi, S., Lampertico, L., Rapisarda, F., & Valsecchi, L. (2012). Formal and informal help-seeking for mental health problems. A survey of preferences of Italian students. Clinical Practice and Epidemiology in Mental Health: CP & EMH, 8, 47–51. https://doi.org/10.2174/1745017901208010047
- Donald, M., Dower, J., Lucke, J., & Raphael, B. (2000). The Queensland young peoples' mental health survey report. Centre for Primary Health Care, School of Populations Health and Department of Psychiatry, University of Queensland. <a href="https://eric.ed.gov/?id=ED457424">https://eric.ed.gov/?id=ED457424</a>
- Duncan, L. E. (2003). Black male college students' attitudes toward seeking psychological help. *Journal of Black Psychology*, *29*(1), 68–86. <a href="https://doi.org/10.1177/0095798402239229">https://doi.org/10.1177/0095798402239229</a>
- Dunn, E. I. (2014). Overcoming help-seeking barriers and service demands on Canadian university campuses and the role of campus support services [Doctoral dissertation, University of Alberta]. ERA: Education & Research Archive. <a href="https://era.library.ualberta.ca/items/597c10e6-30ba-4572-a24c-10561ba46c7d/view/d3162ddc-9062-4434-820c-db2a85d575a1/Dunn Erica I 201408 PhD.pdf">https://era.library.ualberta.ca/items/597c10e6-30ba-4572-a24c-10561ba46c7d/view/d3162ddc-9062-4434-820c-db2a85d575a1/Dunn Erica I 201408 PhD.pdf</a>

- Dwyer, A. L., & Cummings, A. L. (2001). Stress, self-efficacy, social support, and coping strategies in university students. Canadian Journal of Counselling, 35(3), 208–220. <a href="https://dev.journalhosting.ucalgary.ca/index.php/rcc/article/view/58672">https://dev.journalhosting.ucalgary.ca/index.php/rcc/article/view/58672</a>
- English, T., Davis, J., Wei, M., & Gross, J. J. (2017). Homesickness and adjustment across the first year of college: A longitudinal study. *Emotion*, 17(1), 1–5. <a href="https://doi.org/10.1037/emo0000235">https://doi.org/10.1037/emo0000235</a>
- Fischer, E. H., & Turner, J. L. (1970). Orientations to seeking professional help: Development and research utility of an attitude scale. *Journal of Consulting and Clinical Psychology*, 35(1), 79–90. https://doi.org/10.1037/h0029636
- Friedlander, L. J., Reid, G. J., Shupak, N., & Cribbie, R. (2007). Social support, self-esteem, and stress as predictors of adjustment to university among first-year undergraduates. *Journal of College Student Development*, 48(3), 259-274. https://doi:10.1353/csd.2007.0024
- Godin, M. (2020). Canada outraged by death of Indigenous Woman Joyce Echaquan. *Time*. <a href="https://time.com/5898422/joyce-echaquan-indigenous-protests-canada/">https://time.com/5898422/joyce-echaquan-indigenous-protests-canada/</a>
- Goldston, D. B., Molock, S. D., Whitbeck, L. B., Murakami, J. L., Zayas, L. H., & Hall, G. C. N. (2008). Cultural considerations in adolescent suicide prevention and psychosocial treatment. American Psychologist, 63(1), 14–31. <a href="https://doi.org/10.1037/0003-066X.63.1.14">https://doi.org/10.1037/0003-066X.63.1.14</a>
- Goodwin, J., Behan, L., Kelly, P., McCarthy, K., & Horgan, A. (2016). Help-seeking behaviors and mental well-being of first year undergraduate university students. Psychiatry Research, 246, 129–135. https://doi.org/10.1016/j.psychres.2016.09.015
- Grady, M., & Edgar, T. (2003). Racial disparities in healthcare: Highlights from focus group findings. In B. D. Smedley, A. Y. Stith, & A. R. Nelson (Eds.), Unequal treatment: Confronting racial and ethnic disparities in healthcare (pp. 392–405). The National Academies Press.
- Gulliver, A., Griffiths, K. M., & Christensen, H. (2010). Perceived barriers and facilitators to mental

- health help-seeking in young people: A systematic review. *BMC Psychiatry*, 10(1), 1–9. https://doi.org/10.1186/1471-244X-10-113
- Guo, S., Nguyen, H., Weiss, B., Ngo, V. K., & Lau, A. S. (2015). Linkages between mental health need and help-seeking behavior among adolescents: Moderating role of ethnicity and cultural values. *Journal of Counseling Psychology*, 62(4), 682–693. <a href="https://doi.org/10.1037/cou0000094">https://doi.org/10.1037/cou0000094</a>
- Hamza, C. A., Ewing, L., Heath, N. L., & Goldstein, A. L. (2021). When social isolation is nothing new: A longitudinal study on psychological distress during COVID-19 among university students with and without preexisting mental health concerns. *Canadian Psychology/Psychologie canadienne*, 62(1), 20–30. https://doi.org/10.1037/cap0000255
- Han, M., & Pong, H. (2015). Mental health help-seeking behaviors among Asian American community college students: The effect of stigma, cultural barriers, and acculturation. *Journal of College Student Development*, *56*(1), 1–14. <a href="https://doi.org/10.1353/csd.2015.0001">https://doi.org/10.1353/csd.2015.0001</a>
- Henderson, L., Thompson, K., Hudson, A., Dobson, K., Chen, S. P., & Stewart, S. (2019). An analysis of campus culture, mental health, and drinking at three Canadian universities. Canadian Journal of Community Mental Health, 37(3), 97–113. https:// doi.org/10.7870/cjcmh-2018-013
- Hogg, R. V., & Tanis, E. A. (2009). *Probability and* statistical inference. Pearson Educational International.
- Hollingshead, A. (1975). Four factor index of social status. Department of Sociology, Yale University.
- Horgan, A., & Sweeney, J. (2010). Young students' use of the Internet for mental health information and support. *Journal of Psychiatric and Mental Health Nursing*, 17(2), 117–123. <a href="https://doi.org/10.1111/j.1365-2850.2009.01497.x">https://doi.org/10.1111/j.1365-2850.2009.01497.x</a>
- Hurst, C. S., Baranik, L. E., & Daniel, F. (2013). College student stressors: A review of the qualitative research. Stress and Health, 29(4), 275–285. <a href="https://doi.org/10.1002/smi.246">https://doi.org/10.1002/smi.246</a>

- Jagdeo, A., Cox, B. J., Stein, M. B., & Sareen, J. (2009). Negative attitudes toward help seeking for mental illness in 2 population-based surveys from the United States and Canada. The Canadian Journal of Psychiatry, 54(11), 757–766. https://doi. org/10.1177/070674370905401106
- John, O. P., & Srivastava, S. (1999). The Big Five Trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), Handbook of personality: Theory and research (pp. 102–138). Guilford Press.
- Kammann, R., & Flett, R. (1983). Affectometer 2: A scale to measure current level of general happiness. *Australian Journal of Psychology*, *35*(2), 259–265. https://doi.org/10.1080/00049538308255070
- Kauer, S. D., Mangan, C., & Sanci, L. (2014). Do online mental health services improve help-seeking for young people? A systematic review. *Journal of Medical Internet Research*, 16(3), e66. <a href="https://doi.org/10.2196/jmir.3103">https://doi.org/10.2196/jmir.3103</a>
- Koydemir-Özden, S. (2010). Self-aspects, perceived social support, gender, and willingness to seek psychological help. *International Journal of Mental Health*, 39(3), 44–60. <a href="https://doi.org/10.2753/IMH0020-7411390303">https://doi.org/10.2753/IMH0020-7411390303</a>
- Kyndt, E., Berghmans, I., Dochy, F., & Bulckens, L. (2014). 'Time is not enough. Workload in higher education: A student perspective. Higher Education Research & Development, 33(4), 684–698. <a href="https://doi.org/10.1080/07294360.2013.863839">https://doi.org/10.1080/07294360.2013.863839</a>
- Lai, A. Y., Lee, L., Wang, M. P., Feng, Y., Lai, T. T., Ho, L. M., Lam, V. S., Ip, M. S., & Lam, T. H. (2020). Mental health impacts of the COVID-19 pandemic on international university students, related stressors, and coping strategies. Frontiers in Psychiatry, 11, 584240. https://doi.org/10.3389/ fpsyt.2020.584240
- Lederer, A. M., Hoban, M. T., Lipson, S. K., Zhou, S., & Eisenberg, D. (2021). More than inconvenienced: The unique needs of U.S. college students during the COVID-19 pandemic. Health Education & Behavior: The Official Publication of the Society for Public Health Education, 48(1), 14–19. https://doi.org/10.1177/1090198120969372

- Lowe, H., & Cook, A. (2003). Mind the gap: Are students prepared for higher education? *Journal of Further and Higher Education*, 27(1), 53–76. <a href="https://doi.org/10.1080/03098770305629">https://doi.org/10.1080/03098770305629</a>
- Loya, F., Reddy, R., & Hinshaw, S. P. (2010). Mental illness stigma as a mediator of differences in Caucasian and South Asian college students' attitudes toward psychological counseling. *Journal of Counseling Psychology*, 57(4), 484–490. <a href="https://doi.org/10.1037/a0021113">https://doi.org/10.1037/a0021113</a>
- Luhmann, M., Hawkley, L. C., Eid, M., & Cacioppo, J. T. (2012). Time frames and the distinction between affective and cognitive well-being. *Journal of Research in Personality*, 46(4), 431–441. <a href="https://doi.org/10.1016/j.irp.2012.04.004">https://doi.org/10.1016/j.irp.2012.04.004</a>
- Mackenzie, C. S., Gekoski, W. L., & Knox, V. J. (2006). Age, gender, and the underutilization of mental health services: The influence of help-seeking attitudes. *Aging and Mental Health*, 10(6), 574–582. https://doi.org/10.1080/13607860600641200
- Mackenzie, C. S., Knox, V. J., Gekoski, W. L., & Macaulay, H. L. (2004). An adaptation and extension of the attitudes toward seeking professional psychological help scale 1. *Journal of Applied Social Psychology*, 34(11), 2410–2433. <a href="https://doi.org/10.1111/j.1559-1816.2004.tb01984.x">https://doi.org/10.1111/j.1559-1816.2004.tb01984.x</a>
- Marsh, C. N., & Wilcoxon, S. A. (2015). Underutilization of mental health services among college students: An examination of system-related barriers. *Journal of College Student Psychotherapy*, 29(3), 227–243. https://doi.org/10.1080/87568225.2015.1045783
- Masuda, A., Suzumura, K., Beauchamp, K. L., Howells, G. N., & Clay, C. (2005). United States and Japanese college students' attitudes toward seeking professional psychological help. *International Journal of Psychology*, 40(5), 303–313. https://doi.org/10.1080/00207590444000339
- McFarlane, A. C., & Williams, R. (2012). Mental health services required after disasters: Learning from the lasting effects of disasters. *Depression Research and Treatment*, 2012, 13. <a href="https://doi.org/10.1155/2012/970194">https://doi.org/10.1155/2012/970194</a>

- Mitchell, S. L., Kader, M., Haggerty, M. Z., Bakhai, Y. D., & Warren, C. G. (2013). College student utilization of a comprehensive psychiatric emergency program. *Journal of College Counseling*, 16(1), 49–63. https://doi.org/10.1002/j.2161-1882.2013.00026.x
- Nadeem, E., Lange, J. M., Edge, D., Fongwa, M., Belin, T., & Miranda, J. (2007). Does stigma keep poor young immigrant and US-born Black and Latina women from seeking mental health care? *Psychiatric Services*, *58*(12), 1547–1554. <a href="https://doi.org/10.1176/ps.2007.58.12.1547">https://doi.org/10.1176/ps.2007.58.12.1547</a>
- Ontario College Health Association. (2009). Towards a comprehensive mental health strategy: The crucial role of colleges and universities as partners. <a href="http://www.oucha.ca/pdf/mental\_health/2009\_12\_OU-CHA\_Mental\_Health\_Report.pdf">http://www.oucha.ca/pdf/mental\_health/2009\_12\_OU-CHA\_Mental\_Health\_Report.pdf</a>
- Pederson, E. L., & Vogel, D. L. (2007). Male gender role conflict and willingness to seek counseling: Testing a mediation model on college-aged men. *Journal of Counseling Psychology*, 54(4), 373–384. <a href="https://doi.org/10.1037/0022-0167.54.4.373">https://doi.org/10.1037/0022-0167.54.4.373</a>
- Pillay, A. L., & Ngcobo, H. S. (2010). Sources of stress and support among rural-based first-year university students: An exploratory study. South African Journal of Psychology, 40(3), 234–240. <a href="https://doi.org/10.1176/ps.2007.58.12.1547">https://doi.org/10.1176/ps.2007.58.12.1547</a>
- Pisarik, C. T., Rowell, P. C., & Thompson, L. K. (2017). A phenomenological study of career anxiety among college students. *The Career Development Quarterly*, 65(4), 339–352. https://doi.org/10.1002/cdq.12112
- Powell, J., & Clarke, A. (2006). Internet information-seeking in mental health: Population survey. The British Journal of Psychiatry, 189(3), 273–277. https://doi.org/10.1192/bjp.bp.105.017319
- Puma, L. M. (1996). The relative contribution of knowledge of counseling services, personality style, and psychological distress on attitudes toward seeking professional psychological help: A test of three theoretical models (Unpublished doctoral dissertation). University of Akron.
- Rickwood, D., Deane, F. P., Wilson, C. J., & Ciarrochi, J. (2005). Young people's help-seeking for mental health problems. AeJAMH (Australian e-Journal for

- the Advancement of Mental Health), 4(3), 218–251. https://doi.org/10.5172/jamh.4.3.218
- Rickwood, D. J., Deane, F. P., & Wilson, C. J. (2007). When and how do young people seek professional help for mental health problems? *The Medical Journal of Australia*, 187(S7), S35–S39. <a href="https://doi.org/10.5694/i.1326-5377.2007.tb01334.x">https://doi.org/10.5694/i.1326-5377.2007.tb01334.x</a>
- Sandhu, H. S., Arora, A., & Brasch, J. (2019). Correlates of explicit and implicit stigmatizing attitudes of Canadian undergraduate university students toward mental illness: A cross-sectional study. *Journal of American College Health*, 69(5), 567–571. <a href="https://doi.org/10.1080/07448481.2019.1682002">https://doi.org/10.1080/07448481.2019.1682002</a>
- Sareen, J., Jagdeo, A., Cox, B. J., Clara, I., ten Have, M., Belik, S. L., de Graaf, R., & Stein, M. B. (2007). Perceived barriers to mental health service utilization in the United States, Ontario, and the Netherlands. *Psychiatric Services*, *58*(3), 357–364. <a href="https://doi.org/10.1176/ps.2007.58.3.357">https://doi.org/10.1176/ps.2007.58.3.357</a>
- Schraufnagel, T. J., Wagner, A. W., Miranda, J., & Roy-Byrne, P. P. (2006). Treating minority patients with depression and anxiety: What does the evidence tell us? *General Hospital Psychiatry*, 28(1), 27–36. <a href="https://doi.org/10.1016/j.gen-hosppsych.2005.07.002">https://doi.org/10.1016/j.gen-hosppsych.2005.07.002</a>
- Sawyer, M. G., Arney, F. M., Baghurst, P. A., Clark, J. J., Graetz, B. W., Kosky, R. J., Nurcombe, B., Patton, G. C., Prior, M. R., Raphael, B., Rey, J. M., Whaites, L. C., & Zubrick, S. R. (2001). The mental health of young people in Australia: Key findings from the child and adolescent component of the national survey of mental health and well-being. The Australian and New Zealand Journal of Psychiatry, 35(6), 806–814. https://doi.org/10.1046/j.1440-1614.2001.00964.x
- Seyfi, F., Poudel, K. C., Yasuoka, J., Otsuka, K., & Jimba, M. (2013). Intention to seek professional psychological help among college students in Turkey: Influence of help-seeking attitudes. *BMC Research Notes*, 6(1), 1–9. https://doi.org/10.1186/1756-0500-6-519
- Sheffield, J. K., Fiorenza, E., & Sofronoff, K. (2004).
  Adolescents' willingness to seek psychological help: Promoting and preventing factors. *Journal of Youth and Adolescence*, 33(6), 495–507. <a href="https://doi.org/10.1023/B:JOYO.0000048064.31128.c6">https://doi.org/10.1023/B:JOYO.0000048064.31128.c6</a>

- Stallman, H. M. (2010). Psychological distress in university students: A comparison with general population data. *Australian Psychologist*, 45(4), 249–257. https://doi.org/10.1080/00050067.2010.482109
- Statistics Canada. (2016). Peel, RM [Census division],
  Ontario and Ontario [Province] (table). Census
  Profile. 2016 Census. (Catalogue no. 98-316X2016001) https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E
- Statistics Canada. (2017). Canadian Community
  Health Survey (2017). https://www23.statcan.
  gc.ca/imdb/p3Instr.pl?Function=assembleInstr&a=1&&lang=en&ltem Id=507367#qb508379
- Sun, Y., Lin, S. Y., & Chung, K. (2020). University students' perceived peer support and experienced depressive symptoms during the COVID-19 pandemic: The mediating role of emotional well-being. International Journal of Environmental Research and Public Health, 17(24), 9308. <a href="https://doi.org/10.3390/ijerph17249308">https://doi.org/10.3390/ijerph17249308</a>
- Szkody, E., Stearns, M., Stanhope, L., & McKinney, C. (2021). Stress-buffering role of social support during COVID-19. *Family Process*, *60*(3), 1002–1015. https://doi.org/10.1111/famp.12618
- Tao, S., Dong, Q., Pratt, M. W., Hunsberger, B., & Pancer, S. M. (2000). Social support: Relations to coping and adjustment during the transition to university in the People's Republic of China. *Journal of Adolescent Research*, 15(1), 123–144. <a href="https://doi.org/10.1177/0743558400151007">https://doi.org/10.1177/0743558400151007</a>
- The Varsity Editorial Board. (2019). Enough is enough, this is an emergency: U of T must immediately address its mental health crisis. The Varsity. https://thevarsity.ca/2019/09/29/enough-is-enough-this-is-an-emergency-u-of-t-must-immediately-address-its-mental-health-crisis/
- Tran, A. G. T. T., Mintert, J. S., Llamas, J. D., & Lam, C. K. (2018). At what costs? Student loan debt, debt stress, and racially/ethnically diverse college students' perceived health. *Cultural Diversity and Ethnic Minority Psychology*, 24(4), 459–469. <a href="https://doi.org/10.1037/cdp0000207">https://doi.org/10.1037/cdp0000207</a>

- University of Toronto. (2019). University of Toronto Presidential & Provostial Task Force on Student Mental Health: Final report and recommendations. <a href="https://www.provost.utoronto.ca/planning-policy/student-mental-health/#section\_5">https://www.provost.utoronto.ca/planning-policy/student-mental-health/#section\_5</a>
- University of Toronto Mississauga. (n.d.). UtmONE firstyear transition courses. https://www.utm.utoronto. ca/isup/utmone-first-year-transition-courses#benefits
- Verger, P., Combes, J. B., Kovess-Masfety, V., Choquet, M., Guagliardo, V., Rouillon, F., & Peretti-Wattel, P. (2009). Psychological distress in first year university students: Socioeconomic and academic stressors, mastery and social support in young men and women. Social Psychiatry and Psychiatric Epidemiology, 44(8), 643–650. https://doi.org/10.1007/ s00127-008-0486-y
- Vogel, D. L., Wade, N. G., Wester, S. R., Larson, L., & Hackler, A. H. (2007). Seeking help from a mental health professional: The influence of one's social network. *Journal of Clinical Psychology*, 63(3), 233–245. https://doi.org/10.1002/jclp.20345
- Vogel, D. L., Wester, S. R., Wei, M., & Boysen, G. A. (2005). The role of outcome expectations and attitudes on decisions to seek professional help. Journal of Counseling Psychology, 52(4), 459–470. https://doi.org/10.1037/0022-0167.52.4.459
- Wallace, B. C., & Constantine, M. G. (2005). Africentric cultural values, psychological help-seeking attitudes, and self-concealment in African American college students. *Journal of Black Psychology*, 31(4), 369–385. https://doi.org/10.1177/0095798405281025
- Wang, S.-w., Shih, J. H., Hu, A. W., Louie, J. Y., & Lau, A. S. (2010). Cultural differences in daily support experiences. *Cultural Diversity and Ethnic Minority Psychology*, 16(3), 413–420. <a href="https://doi.org/10.1037/a0019885">https://doi.org/10.1037/a0019885</a>
- Welle, P. D., & Graf, H. M. (2011). Effective lifestyle habits and coping strategies for stress tolerance among college students. *American Journal of Health Education*, 42(2), 96–105. <a href="https://doi.org/10.1080/19325037.2011.10599177">https://doi.org/10.1080/19325037.2011.10599177</a>

Yousaf, O., Grunfeld, E. A., & Hunter, M. S. (2013). A systematic review of the factors associated with delays in medical and psychological help-seeking among men. *Health Psychology Review*, 9(2), 264–276. https://doi.org/10.1080/17437199.2013.8 40954

Yousaf, O., Popat, A., & Hunter, M. S. (2015). An investigation of masculinity attitudes, gender, and attitudes toward psychological help-seeking. *Psychology of Men & Masculinity*, 16(2), 234–237. https://doi.org/10.1037/a0036241

### **Contact Information**

Stuart B. Kamenetsky stuart.kamenetsky@utoronto.ca