



# Campus Mental Health In Times of COVID-19 Pandemic: Data-informed Challenges & Opportunities

Tayyab Rashid, PhD. & Lina Di Genova, PhD.

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With gratitude,

Tayyab Rashid and Lina Di Genova

# OVERVIEW

Higher education all over the world has been facing tremendous challenges regarding the mental health of students, further exacerbated by COVID-19. The Campus Mental Health Community of Practice from the Canadian Association of College and University Student Services has been surveying counselling centre evolving needs and trends for the past two years. In April 2020, the survey was modified to reflect COVID-19 realities. More than 60 PSIs participated in this survey, with representation from each of the ten provinces and territories and colleges (24%). The data has allowed to compare the COVID-19 related challenges with prior data and information from emerging practices at an international level.

Specifically, the survey results share webinar perceptions of student mental health from the perspective of campus mental health service professionals / administrators and student affairs administrators. The findings illustrate how students have embraced or continue to face challenges in adapting to remote mental health services delivery. We also share challenges faced by post-secondary institutions in making their mental health services amenable to online adaptation and outline specific infrastructural needs, at the various and ongoing phases of COVID-19 pandemic.

This report presents synthesized perspectives on crisis management, how to respond to most vulnerable students, ensuring accessibility, inclusion and ethos of social justice from multiple perspectives. These include voices of from nationally representative sample of mental health professional and insights from emerging research findings. Towards the end of this report, we have consolidated these perspectives to offer pragmatic ideas, suggestions and recommendations to leave our readers with ideas for actions to shape their campus based mental health services according to the evolving circumstances of COVID-19 pandemic. We are fully cognizant and sensitive to ongoing challenges of campus-based mental health professionals face to balance professional duties and personal care to prevent burnout. This report includes a number of appendices including student's narratives, 25 salient articles, summarized with key insights with practice implications, COVID-19 related psychological measures, COVID-19 related mental health resources at various PSIs and list of free apps and web platforms.





# ROADMAP FOR NAVIGATING THIS REPORT

We have had the pleasure to serving as co-chairs of the Campus Mental Health Community of Practice (CoP), through Canadian Association of College and University Student Services (CACUSS) over the last few years. This report provides a summary of our collaborative, consultative and iterative model in actively engaging with our CoP members. Over the last three years we have been working with our CoP members to assess emerging campus mental health needs.

This report provides an overview of post-secondary mental health within the larger societal context of the COVID-19 pandemic. (Section one). Next, we describe our assessment process — from administration of our first CoP counselling gap analysis survey in 2018 to its current COVID-19 iteration. Section two describes the results of the survey in three segments, specific mental health challenges faced and reported by students, process and provision of moving mental health services online, and challenges faced by student services professionals. Section three presents synthesized voices of campuses, integrated with relevant research findings and specific recommendations intended to help campuses offer effective, inclusive and adaptable mental health services in times of COVID-19 and beyond.

The report also includes appendices listing COVID-19 related 25+ peer reviewed published research papers, and psychological measures for post-secondary settings, COVID-19 related resources, collated from various campuses, list of COVID-19 related measures, and ethical consideration in delivering mental health services virtually.



## SECTION ONE: INTRODUCTION



## BUILDING A COLLABORATIVE, CONSULTATIVE AND ITERATIVE MODEL TO RESPOND TO EVOLVING STUDENT MENTAL HEALTH NEEDS

Campus Mental Health has conducted two previous surveys to explore gaps and needs of student mental health on Canadian Post-Secondary Institutions (PSIs) in 2018 and 2019. The current survey was adapted in the context of COVID-19. 39% of our respondents stated that they participated in the previous surveys. Half (50%) were unsure about their participation. This could be due to a variety of reasons such as the change in professional roles and employment of the recipients within and across PSIs. 11% (7 PSIs) confirmed that they had not participated in similar surveys previously. We estimate that half of the unsure PSIs had participated in previous two surveys. This increases the probability of same PSIs participating in each of the three survey to more than 60%. This figure is important to help establish longitudinal campus mental health trends across Canada and provide critical information about emerging and evolving COVID-19 related needs.

In May, we devised a survey to capture the emerging needs of PSIs as they transition from in-person to online mental health services for students. We collected data (through Campus Lab online platform) from late May and late July from 64 PSI. On August 28<sup>th</sup>, we presented the primary findings of the survey, at a national CACUSS webinar, inviting respondents and other PSIs professionals. During this interactive webinar, we invited attendees to share their ideas, anticipated needs as they move to Fall 2020 and Winter 2021 semester. Their input has been incorporated in this report (page # 34). Our aim is to build a collaborative, consultative and iterative model with CoP members. Our approach has been to engage with members through online surveys, discussions and webinars to share findings and insights about ways mental health services on campuses can respond to emerging needs during very phases of the COVID-19 pandemic and beyond.



## SOCIETAL CONTEXT


COVID-19 pandemic is truly an unprecedented event. COVID-19 simultaneously forced nearly four billion people into lock-down or some form of home confinement—something which has never transpired in human history (Sanford, 2020). The long-lasting and uncertain situation which requires significant lifestyle changes which include onerous measures such as social-isolation, social distancing, facing covering, and being vigilant about touching surfaces has produced an axes of disruption which has impacted almost all facets of life, including mental health. Mental health of young adults, before the pandemic has reached epidemic proportions (Landau, 2020), the COVID-19 pandemic has exacerbated it. In middle of March 2020, Canadian Post-secondary Institutions (PSIs) made sudden changes, shifting in-person classes and services from face to face to online, remote and virtual channels. PSIs are not known to make remarkable and sudden pivots in such short time.

Yet, changes which under normal circumstances take years or decades took place in a few weeks. Classes, courses and exams moved online, and the majority of international and out of province students were asked to return home. This caused enormous amount of distress among Canadian post-secondary students including undergraduates, professional and international students. Staff and faculty, now tasked to offer teaching and services remotely, for most part, also faced enormous challenges of adapting to working online from home while balancing work-home needs and obligations.

These disruptions have caused enormous challenges including financial, academic, social and access to services, thus leading to mental health challenges as well. Financial losses include losing on- and off campus jobs, teaching and research assistantships, and loss of financial support from parents and loved one being laid off, cessation of on-campus. Academic challenges include disruptions in ongoing and forthcoming co-op and work-term placements, ceasing or dramatically altering their ongoing research and service projects. Disruptions of accommodations provided by accessibility services and ones which cannot be replaced easily through virtual means were also a concern. For students moving back home, sharing spaces and bandwidths with siblings and parents also working from home, dealing with COVID-19 positive cases, in many cases, led to severe restriction in movement.

For some access to appropriate services accessed confidentially that were available while studying suddenly became limited. Especially for concerns not shared or disclosed with family members due to stigma, for example, against sexual identities we extremely difficult and potentially unsafe.

All these challenges along with loss of social connections, such as, not being able to see their friends or romantic partners were significant for many students. These disruptions have not only caused learning challenges but also enormous short and long-term mental health challenges.



The purpose of this survey is to assess different aspect of this distress from the lens of mental health professionals and administrators.

The purpose of the Campus Mental Health CoP COVID-19 survey is to assess different aspect of this distress from the lens of mental health professionals and administrators. The findings encapsulated in this report represent a nationally representative sample and are framed in the contemporary zeitgeist of our times — equity, social justice, digital connections. In addition to quantitative data, we have synthesized and categorized qualitative and open-ended responses broad themes. We have also included actions, practices, and illustrations from participants and from emerging and relevant research to so that PSI can take purposeful actions amidst an uncertain pandemic.

## COVID-19 AND MENTAL HEALTH: INSIGHTS FROM NATIONAL AND INTERNATIONAL SURVEYS, REPORTS & RECOMMENDATIONS FROM TASK FORCES

To help contextualize the societal context affecting student mental health in PSIs, we have summarized findings from major reports and related papers on mental health and COVID-19 below:

- **Mental Health Commission of Canada (MHCC) and Nano's polls** conducted an online poll between April 25-27, 2020, with 1049 Canadians. The poll found that financial hardship was the top concern for Canadians (39%), followed by economic impact/loss of jobs (30%), spreading the virus/health (23%), and mental health (22%). A majority of Canadians (83%) say that mental and physical health care are equally important (MHCC, 2020).

- **Canadian Mental Health Association (CMHA, 2020) and University of British Columbia (UBC)**  
A national survey of more than 3,000 Canadians, conducted during May 14-29, 2020, by the Canadian Mental Health Association (CMHA, 2020) and University of British Columbia (UBC) on COVID-19 effects on the mental health of vulnerable populations. The survey found that only 2% were accessing in-person services, 14% virtual mental health care, and 5% reported using online resources. The survey found that ones with existing mental health concerns, compared to ones without, are struggling and are:
  - twice as likely to say their mental health has declined (59% vs 33%)
  - 5 times as likely to feel depressed (46% vs 17%)
  - three times as likely to have trouble coping (28% vs 11%)
  - four times as likely to have had suicidal thoughts (18% vs. 4%)
  - four times as likely to have tried to harm themselves (4% vs. 1%)
- **Active Minds**, a student-led American organization, with chapters on more than 800 campuses, focusing on mental health awareness, advocacy, and outreach, surveyed 2086 post-secondary students in April 2020 and found that 80% reported that their mental health worsened and has negatively impacted them. The most common ways COVID-19 has impacted them are: stressed and anxious 91%; disappointed and sad 91%; loneliness 80%, relocation 56% and financial stress 48% (Active Minds, 2020)
- **Steve Fund Crisis Response Task Force** report titled *Adapting and Innovating to Promote Mental Health and Emotional Well-Being of Young People of Color: COVID-19 and Beyond* recommended, with specific implementation strategies; a) creating trust and engaging all stakeholder, including students of colour on post-secondary campuses; b) establishing and maintaining an authentic and welcoming and culturally inclusive environment, and. c) acknowledging the effects of racial trauma associated with the COVID-19 pandemic and social injustice
- **The Association for University and College Counseling Center Directors (AUCCCD)** recently surveyed 144 colleges and asked them to compare the first four weeks of Fall, 2020 semester with the first four weeks of fall 2019 (Brown, 2020). The survey found:
  - 29% decrease in the number of students seeking counseling services
  - 22% decrease in appointments
  - 57% reported an increase in student anxiety, comparing the first four weeks of fall 2020 to fall 2019
  - 81% reported an increase in student loneliness
  - 36% reported an increase in student bereavement/grief and 40% reported an increase in depression
  - 23% of students sought counseling for COVID-19 related reasons
- **Centers for Disease Control and Prevention** has found that nearly 25% of 18- to 24-year-olds — the traditional age group of undergraduates — considered suicide in the previous 30 days. The data was collected from 5412 adults, during June 24-30, 2020. The report found that younger adults, racial/ethnic minorities, essential workers, and unpaid adult caregivers reported having experienced disproportionately worse mental health outcomes, increased substance use, and elevated suicidal ideation (Czeisler et al., 2020).





## SECTION TWO: RESULTS FROM THE NATIONAL CAMPUS MENTAL HEALTH CoP COVID-19 SURVEY



## PURPOSE

This COVID-19 survey is a follow-up to the national campus mental health 2018 and 2019 gap analysis projects. The purpose of this specific survey was to present a portrait of Canadian PSI trends during the first few months of the pandemic through to early summer 2020. At the time of the data collection, although many PSIs were working under the assumption that teaching would be remote for the fall semester, many provinces and territories had not yet presented resumption implications for campuses and student affairs/service expectations.

The questions included in this survey were inspired by CACUSS members' national posts on discussion boards, observations of student behavior and feedback and research literature.

The results portion of this report will outline the methodology and findings from the three major sections of the survey:

- A) Student challenges
- B) Remote service delivery
- C) Challenges and opportunities for Student Affairs Professionals

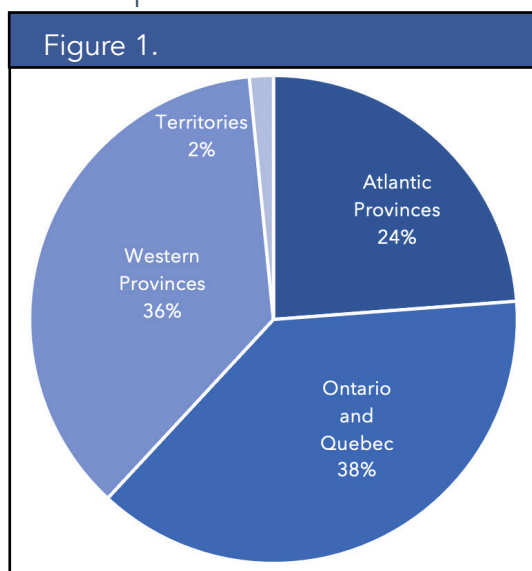
## METHODOLOGY

Over 100 Directors of health and wellness, counselling and senior student affairs professionals from across Canada were invited via email to participate in the online survey using the Campus Labs Baseline platform. The survey was launched in May, 2020 and closed on July 10, 2020.

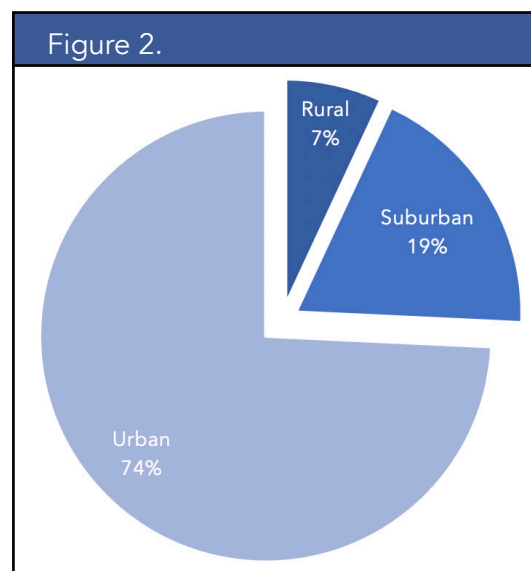
## NATIONAL REPRESENTATION

In total, 64 student affairs professionals from Canadian PSIs responded to the online survey, with 38% having completed the previous gap analysis surveys and 50% unsure.

With at least two responses per province and feedback from the territories, the results presented in this report are representative of Canadian PSIs. The chart below summarizes the regional distribution of respondents.

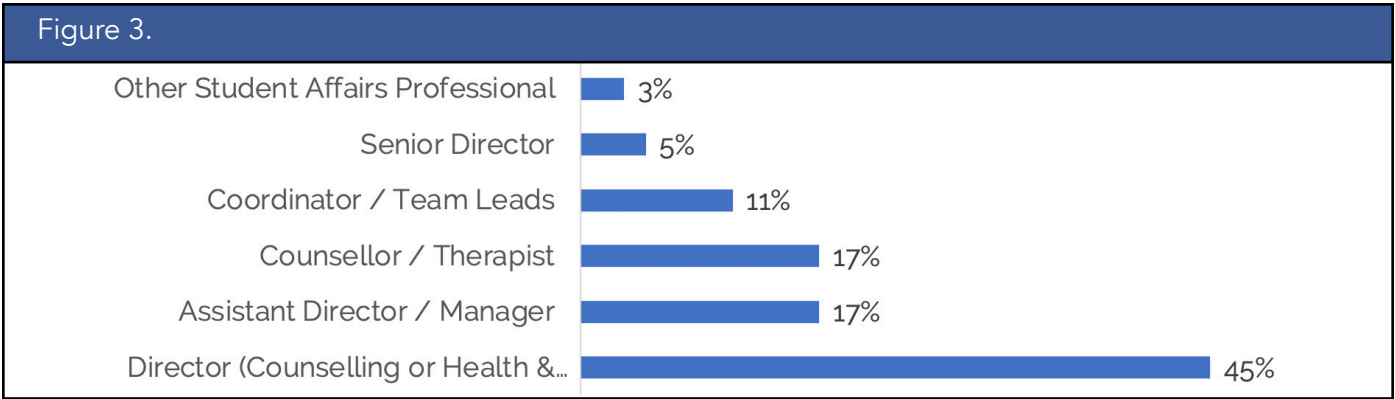


The majority, 75%, of responses were from universities, and 24% from colleges, CEGEPs, and polytechnics.



The of geographic location of PSI responses were predominantly from urban centres 74%, 19% suburban, and 7% from rural areas.

The professional roles of participants ranged from Directors of Health / Counselling Centres (45%) to Assistant Directors (17%) and Managers (17%), Coordinators/Team Leads (11%), to other student affairs professionals (8%). We heard from participants, particularly in small units, that often counsellors or team leads make significant service delivery decisions about campus mental health.





## SECTION 2A: STUDENT CHALLENGES

The first section of the survey results examines students' challenges and presenting concerns, prior to and at the start of the pandemic. The findings also outline perceptions from student affairs professionals on how students are responding to the new online services and supports.

## Presenting Student Concerns: Pre & Early Pandemic

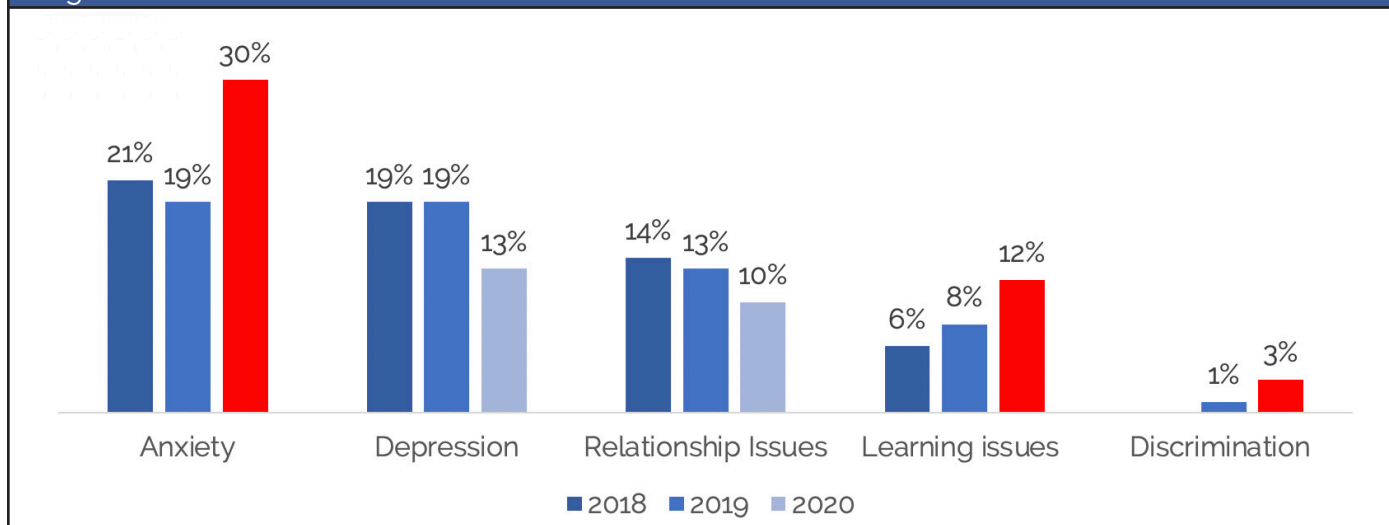
In our two previous iterations, we presented mental health professionals (counselling centre administrators, clinical leads) with a list of commonly presented student mental health issues and asked them to select five which are most salient ones at their respective counselling centres. They were presented with following: Anxiety, Depression, Relationship Issues, Suicidal ideation and behaviors, Self-harm, Attention & Concentration Issues, Substance Abuse (alcohol & drugs), Trauma (recent & historical), Discrimination (xenophobia, racism, sexism, homophobia, Islamophobia, immigration status, disability), Academic issues (i.e., probation, suspension, faculty-student interaction), Learning issues (i.e. motivation, procrastination, lack of interest in course content, learning disability). Discrimination was added in 2019. For 2020, we parsed anxiety into two categories, Anxiety related to COVID-19 and Anxiety otherwise.

Table 1.	2018 N=58	2019 N=70	2020 N=64
Anxiety	21%	19%	30%
Depression	19%	19%	13%
Relationship Issues	14%	13%	10%
Learning issues	6%	8%	12%
Trauma	11%	9%	9%
Suicidal ideation and behaviors	11%	9%	9%
Academic issues	7%	8%	8%
Attention & Concentration Issues	3%	5%	9%
Substance Abuse (alcohol & drugs)	3%	3%	5%
Discrimination		1%	3%

Respondents were not asked to rank, only select up to five of the most commonly presented concerns. The following table presents ten most salient issues identified by campuses by year. The chart below highlights (in red) three issues which appear to have escalated during early phase of COVID-19. While depression and relationship concerns declined slightly, the anxiety—both general and related to COVID-19 seems to have escalated significantly, along with a spike in learning and discrimination. Please note that data on discrimination was collection prior to Georg Floyd's death in June, 2020 which was followed by a global anti-Black racism movement.



Figure 4.



### Presenting issues identified by CoP members at the of Summer 2020:

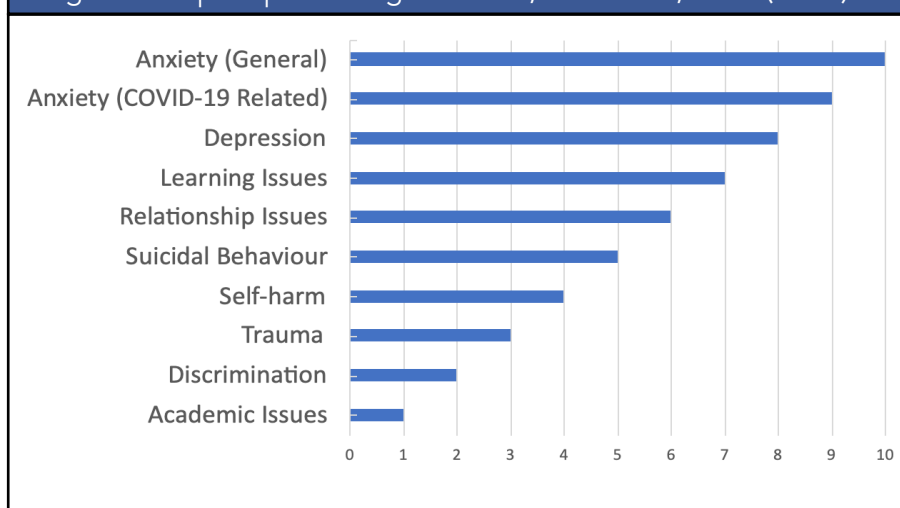
Following a presentation of the findings to the CoP members, we also elicited participant's feedback of student mental health top presenting concerns. Participants identified anxiety, trauma and social justice as the three most important concerns.

### Presenting Concerns Fall 2020:

We also presented the results of the survey at the annual conference of Centre for Innovation in Campus Mental Health (CICMH), usually attended by professionals associated with campus mental health. Provided them the list of all ten concerns—as listed in the survey administered in May-June, 2020. 35 participants responded and ranked the ten presenting concerns, in order of prevalence at their campuses.

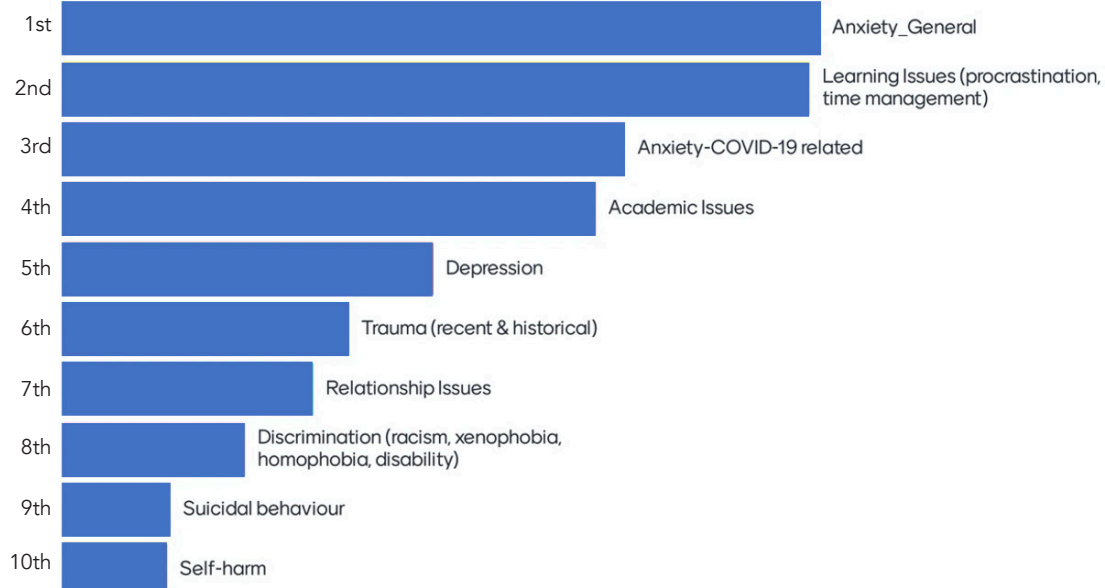
These concerns, from most prevalent to least are listed in Figure 1.

Figure 5. Top 10 presenting concerns, as of Nov., 2020 (n=35)



## What other issues have you been facing? (N = 27)

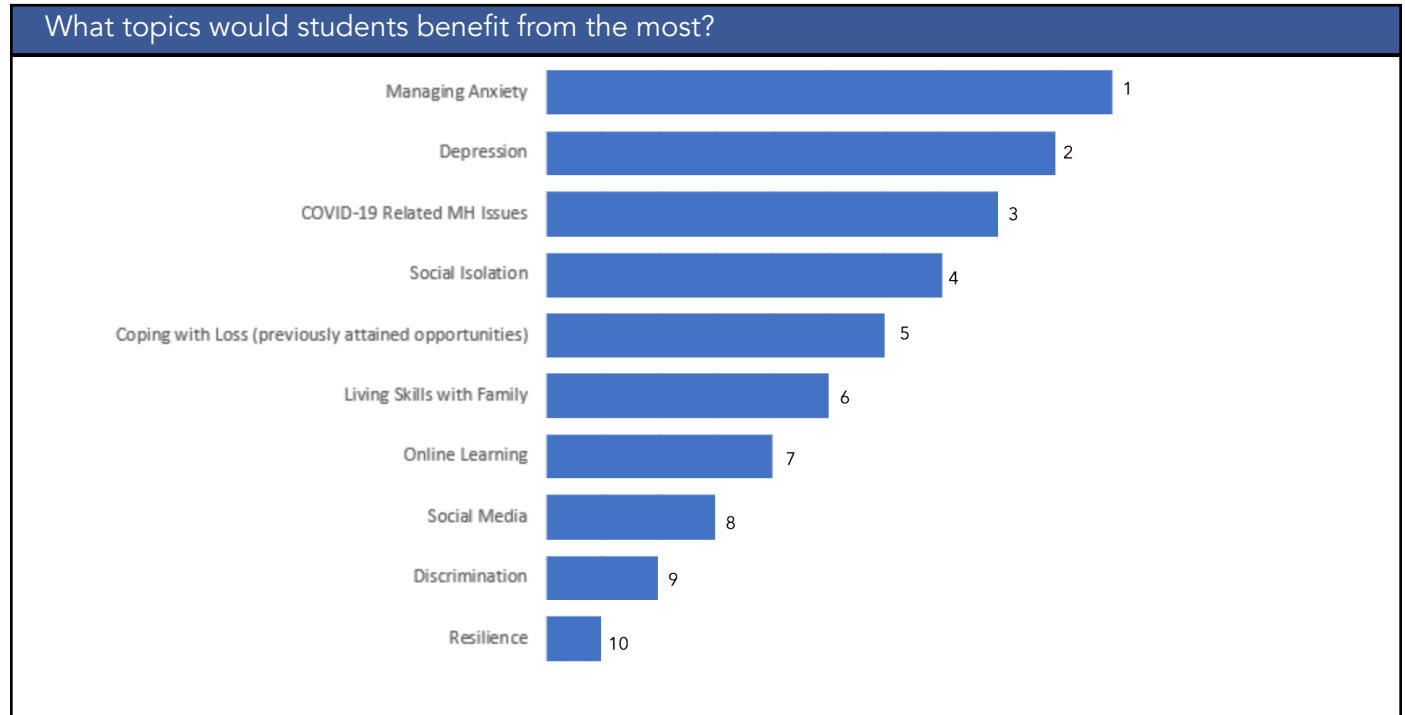
Student Issues:	<ul style="list-style-type: none"> <li>• International students (Worry about family back home, time-zone differences affecting co-op opportunities, etc.)</li> <li>• Students don't feel a sense of connection or belonging</li> <li>• Eating disorders (likely caused by anxiety / depression from other issues)</li> <li>• Relationship issues resulting from online communications (lack of context and high reactivity)</li> <li>• Grad students without access to what is needed to do their research</li> <li>• Hard for first year students to make friends</li> <li>• Living with family, family conflict, establishing boundaries</li> <li>• Separation of home and school life</li> <li>• Identity formation in isolation</li> <li>• Financial hardship</li> <li>• Lack of motivation</li> <li>• COVID Fatigue - Students being sick of having to follow health regulations</li> <li>• Difficulty with online learning</li> <li>• Creating a routine</li> </ul>
Work:	<ul style="list-style-type: none"> <li>• Time zone differences</li> <li>• Tech issues</li> <li>• Lack of community engagement</li> <li>• Backlog of emails</li> <li>• Working late (unhealthy work hours)</li> <li>• Lack of space at home for working</li> <li>• ZOOM Apnea</li> <li>• Increased workload</li> </ul>
Personal:	<ul style="list-style-type: none"> <li>• Separating life domains (ie: work, family, school or exercise)</li> <li>• Parenting young children</li> <li>• Getting enough sleep</li> <li>• Finding ways to disconnect</li> </ul>



## Additional Concerns:

In addition, participants shared the following concerns, as reported by students:

- COVID-Fatigue
- lack of reliable and relevant information about COVID-19 for international students
- time zones differences
- challenges of living with family and boundaries, taking care of younger siblings
- lack of privacy at home
- financial challenges
- no closure from high school
- lack of motivation
- eating concerns
- parenting young children
- separation from family
- creating routine
- past trauma
- identity formation challenges, online learning, balancing school & personal life



# Salient Mental Health Concerns on Canadian Post-Secondary Campuses in Relation to COVID-19 Anxiety

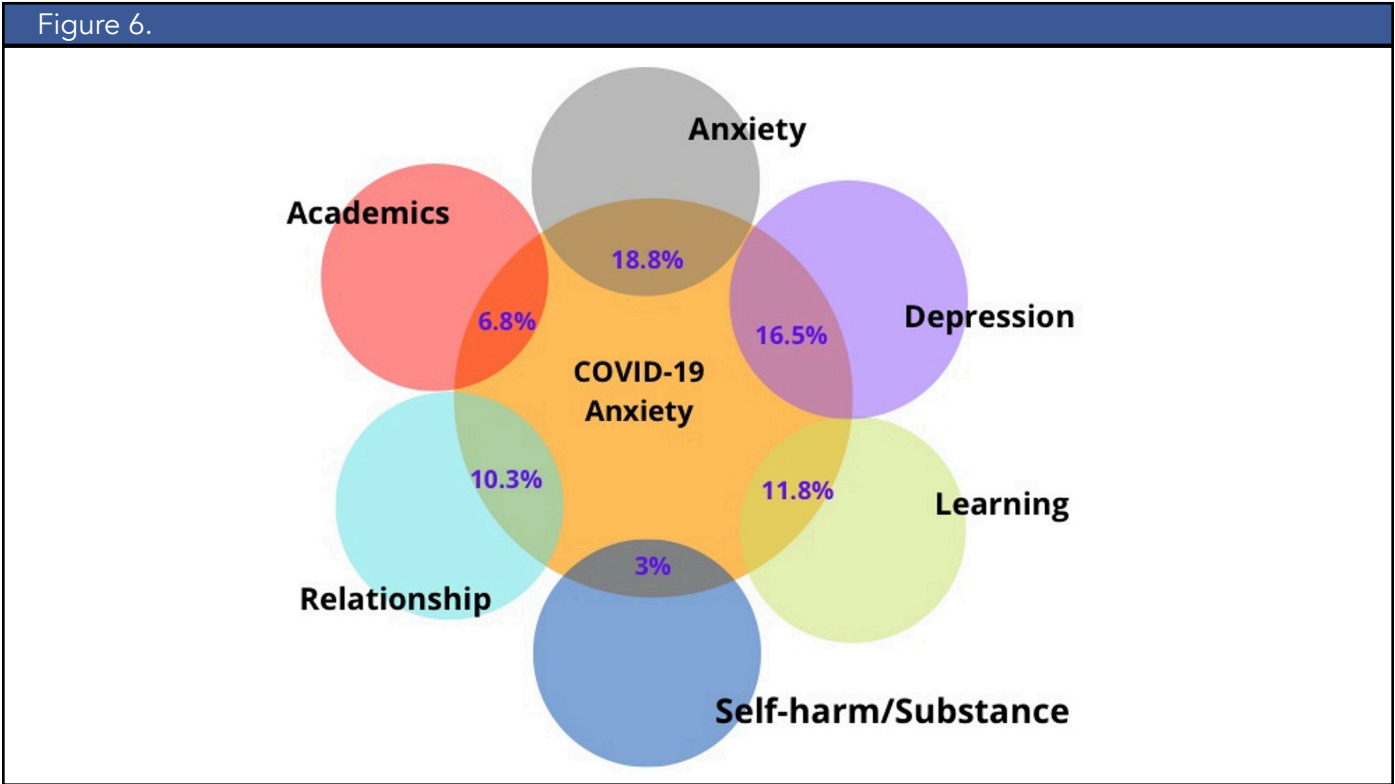
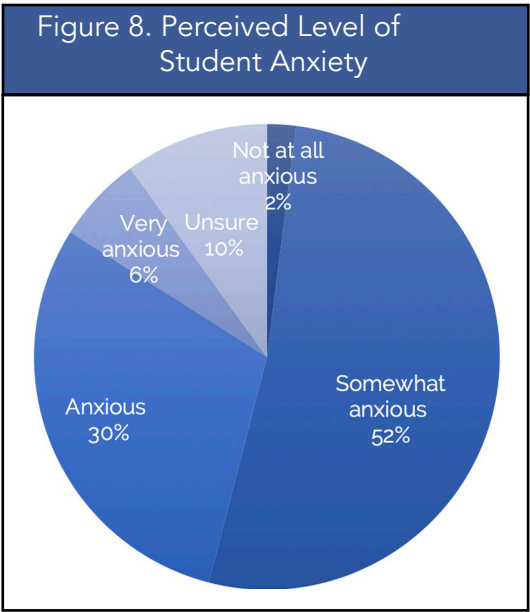
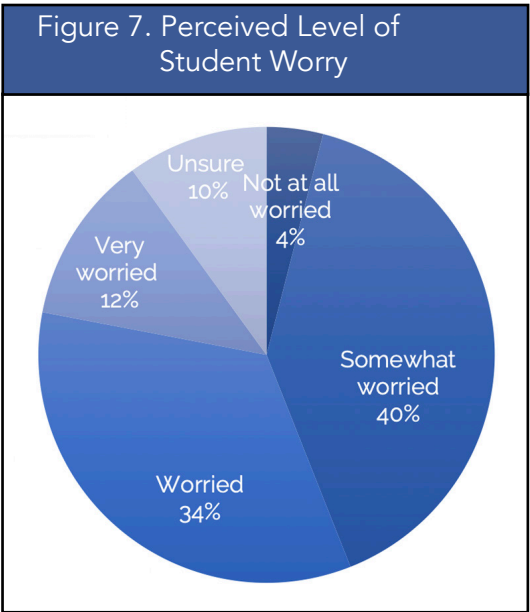


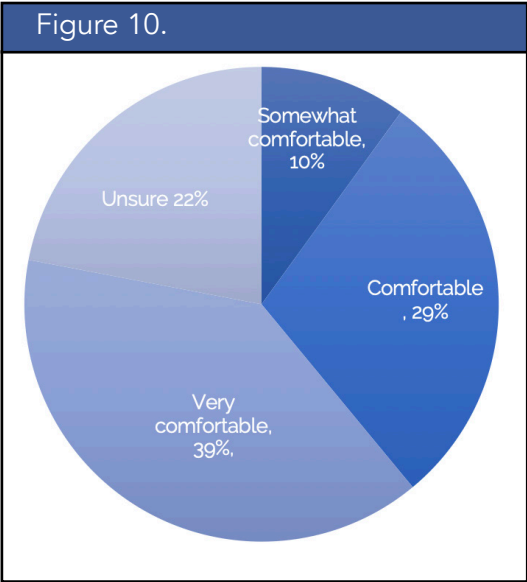
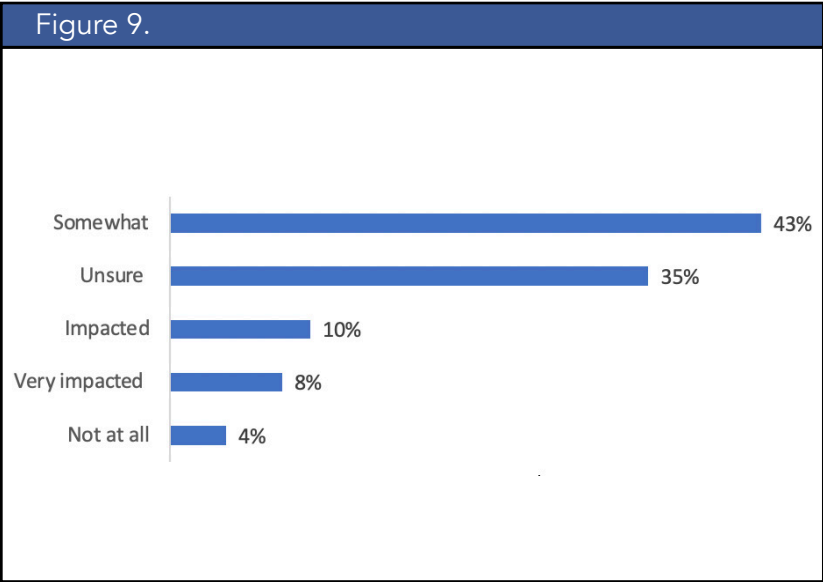
Figure 6. The Venn diagram represents six presenting concerns and their overlap (in terms of %) with COVID-19 anxiety. Anxiety (18.8%) and depression (16.5%) had the greatest overlap, followed by learning issues (11.8%) and relationship issues (10.3%).

Respondents were asked to rate their perception of students’ levels of worry, anxiety and adverse impact of COVID-19 on overall mental health. Participants rated 46% of students as being worried/very worried, 36% as being anxious/very anxious and 18% of student mental health as being adversely impacted (very and impacted) by COVID-19.





# Students & COVID-19: Adverse Impact on Overall Mental Health



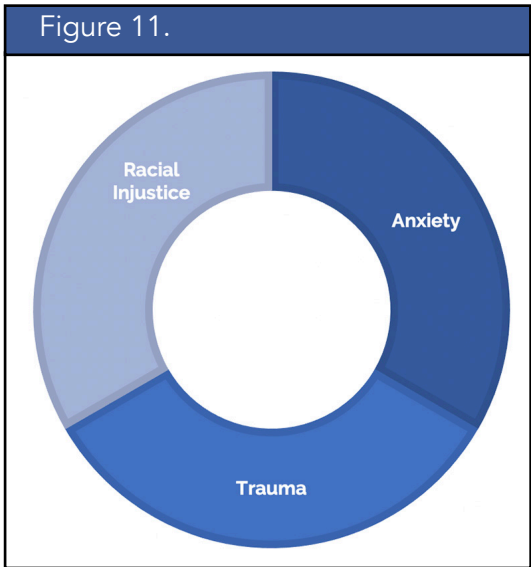
When asked about how comfortable students are to discuss mental health concerns related to COVID-19, two-thirds reported strong levels of comfort and 22% were unsure.

## Presenting Issues by end of August 2020

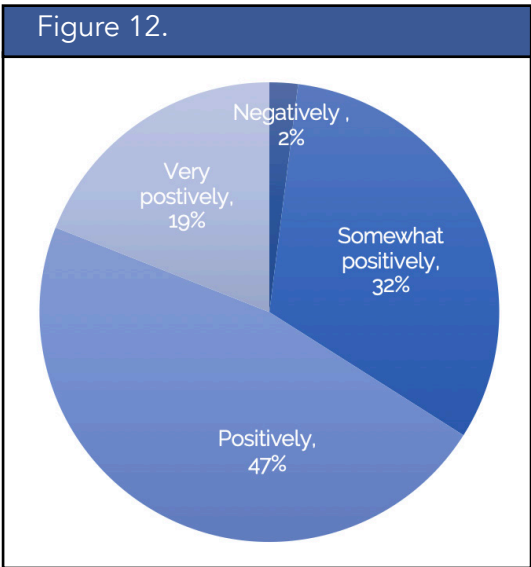
Survey and webinar participants identified the following top presenting concerns for students at the end of August, 2020 through a real time app (Mentimeter): anxiety, trauma and racial justice as illustrated in Figure 11.

## Uptake of New Online Service Options for Students

While very few campuses reported a complete shut-down of services due to provincial regulations, the majority offered some form of online support to students. More information about service changes are outlined in this section below.



Top three presenting issues by end of Summer 2020.



Student affairs professionals were asked their perceptions of how students responded to the service/support changes and the results were predominantly positive, with 19% reporting very positive, 47% positive, and 32% somewhat positive.

## How have students responded to the service/support changes?

Student affairs professionals provided valuable insights into their experiences working with students. Respondent comments below highlight student appreciation for remote support, although in-person is preferred for improved connectivity, especially for new clients:

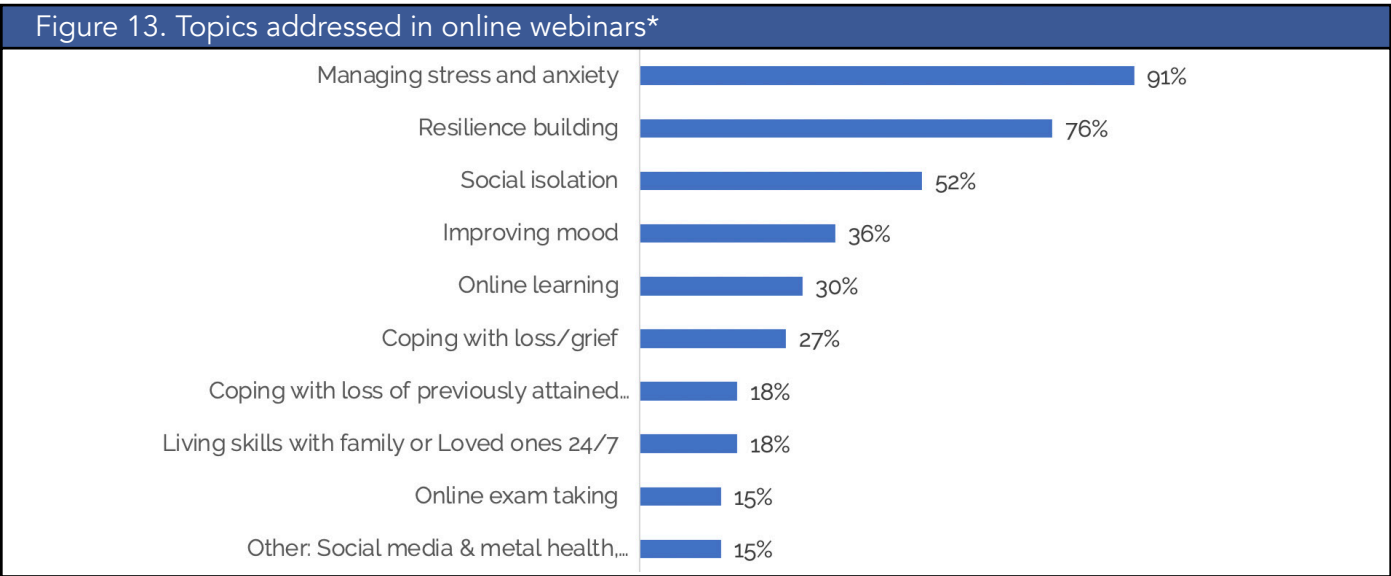
*“Students are aware that we are facing unusual circumstances and in their work with counsellors have expressed appreciation for the supports available. Have not seen a push for in-person. Although students are generally clear that they prefer in-person counselling despite stereotypes that they all want to do everything online. Feedback is that telepsych is much better than nothing, but few would want to continue this way if they were on campus and in person was offered.”*

*“Existing clients were very adaptable to virtual meetings with counsellors as they had established relationships; new clients had a harder time/as did counsellors - more challenging to develop therapeutic relationships in this manner.”*

*“Moving established therapeutic alliances online is quite smooth, but starting online or by phone and not having any other option is a barrier to building rapport and getting a clear understanding of what’s happening in some cases as some data is missing. There is a lot of talk about university students all ‘living online’ and really wanting service online but in our experience clients have been clear that while online is better than nothing they don’t feel like they get as much as they would in person and that it does not meet the same connection need.”*

## Online Webinar Topic Offerings

To address presenting concerns, many webinars were developed to support students. The main topics are found in the table below with managing stress & anxiety (91%), resilience-building (76%), social isolation (52%), online learning and exams (45%) and coping with loss – including grief and previously attained opportunities (45%) such as summer/fall jobs or placements, graduate school admission, research/volunteer opportunities. Some PSIs offered sessions on social media and mental health, roommate conflict and communication, substance use, international student sessions, DBT, and LGBT2SQ safety at home.

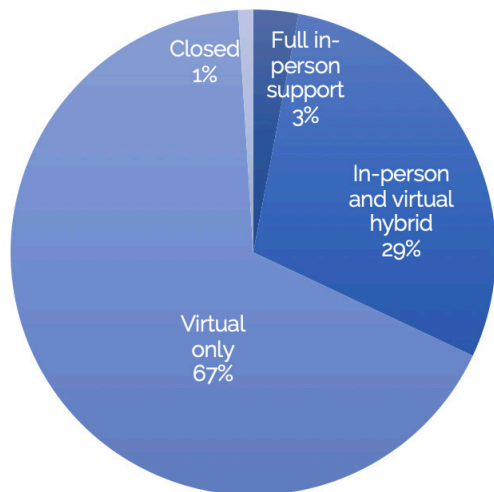


\* % is greater than 100% as respondents selected more than one option.



## SECTION 2B: REMOTE SERVICE DELIVERY

Figure 14.



## Service Changes

During the pandemic over 90% of respondents pivoted to remote services within three weeks, with two-thirds offering only remote services, and 29% offering a hybrid of virtual and in person services.

## Support model for students during the pandemic

Changes to service delivery options are presented in the table below and mostly characterized as offering online supports for the first time.

Table 2. Supports and service changes during the pandemic	%*
Offered online group sessions	55%
Offered webinars for the first time	50%
Remote sessions only	50%
Offered more webinars to replace in-person workshops	35%
Updated websites with articles and resources	15%
Telephone and video	10%
Online wellness checks	5%
Services shut down completely due to government regulations	1%
Other – Examples: Online peer sessions, Facebook live	5%

\* % is greater than 100% as respondents selected more than one option.

### Online supports options for students were provided with tools, such as:

- Therapy Assisted Online (26%),
- Zoom (33%) for therapy and 64% for webinars
- WebEx (19%) for therapy and 17% for webinars
- MS-Teams for therapy (4%)
- OTN for therapy (7%)
- In-house platforms for therapy (7%),
- mySSP for therapy (6%)
- Social media (6%)
- Blackboard (4%) for webinars



## Emerging Needs

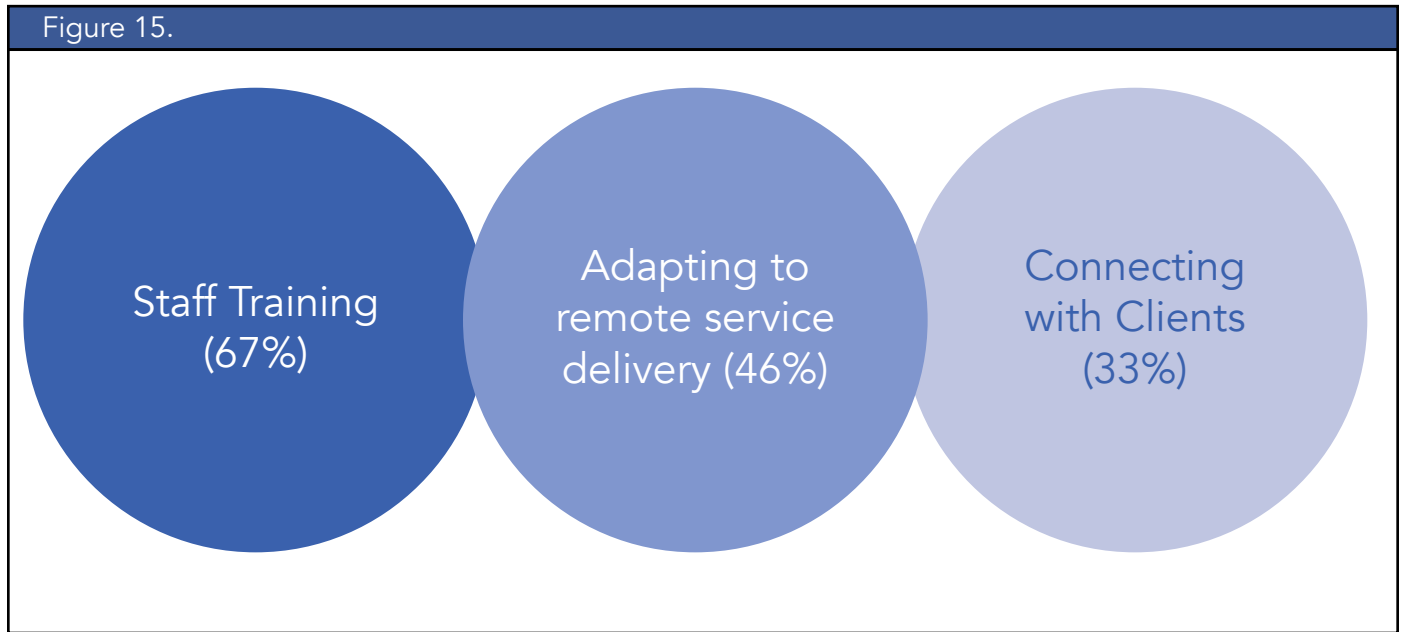







Figure 15. Participant identified the following emerging needs during the pandemic: staff training (67%), adapting to remote service delivery (46%), and connecting with clients (33%).

## Staff Training



At the onset of the pandemic, the quick turnaround to remote service delivery for most participating PSIs promoted the need for immediate staff training and protocol updates. According to respondents to most common staff training offered during the early phase of the pandemic was related to updated clinical protocols (82%), technical training (76%), clinical practice (62%) and self-care (62%).

Figure 16. Type of staff training provided during early phases of the pandemic

Technical Training	Updated clinical protocols	Clinical practice	Self-care	Informational Webinars
(e.g. online platforms, call centre)	(e.g. intake, informed consent)	(e.g. confidentiality, ethical dilemmas, standards of practice for remote services)	(e.g., balancing personal and professional responsibilities)	(National and Provincial Training)
				
76%	82%	61%	62%	16%

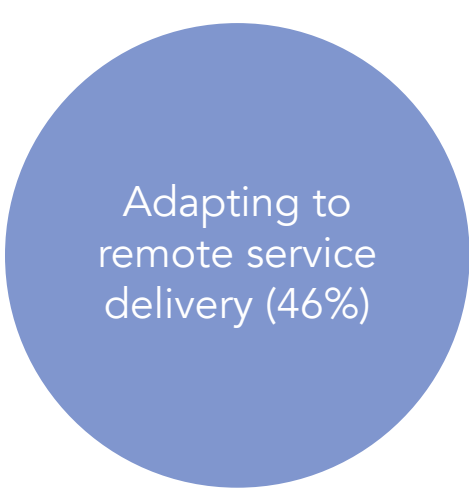
Below are respondent sample comments about their staff training experiences:

- *"Prior to the University closure, to ensure that staff had assistance configuring their devices remotely, guides and in-person training activities were organized use remote management software including TeamViewer or Microsoft Teams which allow a user to remotely take control of a computer (e.g., balancing personal and professional demands while working from home)."*
- *"In order to help staff transition to the COVID-19 reality, one-on-one and group training sessions were supplemented with coaching conducted to assist staff in setting up their home equipment, ironing out issues and providing scaffolding and training for the use of new technologies."*

Participants commented on the most helpful resources in dealing with COVID-19 for staff. The following table summarizes the results as follows: virtual resources (37%), online lectures/webinars (29%), resources provided by campus (14%) and videos pertinent to mental health issues (2%).

Table 3. Helpful Resources in Dealing with COVID-19	%
Virtual Resources (website, apps, online groups...etc.)	37%
Online lectures/webinars	29%
Resources provided by campus	14%
Videos about pertinent mental health issues	2%
Other (please specify) (e.g., Peer support, team consultation)	18%

# Adapting to Remote Service Delivery



Participant voices:  
*“Counselling sessions were conducted from both participants’ home, so without having control over the environment, confidentiality could not be guaranteed. This aspect of informed consent needed to be revisited and discussed.”*

While training staff was a major priority, adapting to remote service delivery emerged as an important need. Adapting to remote service delivery included staff fluctuations as well as challenges with remote clinical adaptation.

## Staff Fluctuations

Participants provided insights into staff fluctuations during the early stages of the pandemic with 57% reporting no change, 42% indicating a staffing decline and 1% unsure. The most commonly reported reasons for staff reductions were layoffs caused by contracts not renewed (23%), staff leaves due to personal circumstances and some medical personnel left to support high demand areas (9%).



Participant voices:  
*“Student usage dropped by 50%, which resulted in layoffs; also coincided with usual down time during summer.”*

## Remote Service Delivery

In addition to staff fluctuations, participants reported several emerging needs related to providing remote mental health services. In particular, the need for technical support (79%), staff well-being – both physical and psychological (56%) emerging ethical issues (confidentiality, scope of practice limits, equity issues in terms of access to internet, paid apps/programs, etc.) (52%), limited access to training (25%) and improved supervision of staff to ensure quality (10%).

Table 4: Emerging Needs Related to Adapting to Remote Service Delivery	%
Technical challenges	79%
Wellbeing of staff (physical and psychological)	56%
Emerging ethical issues (confidentiality, scope of practice limits, equity issues in terms of access to internet, paid apps/programs...etc.	52%
Limited access to training support	25%
Lack of adequate supervision to ensure quality	10%

### Participant voices:

*"We do not have a secure online method for record -keeping and we are not allowed to remove records from campus. once or twice a week Counsellors have to come to campus and inform security when entering office, take notes from records to prepare for up coming counselling sessions and file notes they took from sessions they conducted at home. "*

*"Staff that continued working faced some challenges balancing home responsibilities (e.g. taking care of dependents) while working from home. Managers met with staff members in order to help facilitate a healthy balance."*

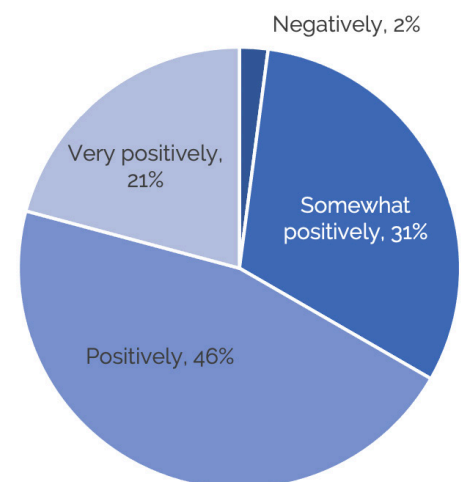
### How it All Came Together

Figure 16. Adapting to the COVID-19 working conditions had its challenges in supporting student mental health via virtual modalities. Overall, students reported reacting positively to the changes, as have staff. Two-thirds of participants reported positive/very positive staff adaptations and 31% somewhat positive.


### Below are sample comments from survey participants:

- "A secure platform was implemented in order to collect consent from students. Prior to their appointment, students are sent detailed instructions which includes how to access this portal and how to complete the consent process. At the time of their appointment, an in-session informed consent discussion occurs with the clinician in order to ascertain that the student has read and understood the terms of their consent."
- "If counsellors felt they needed to see a student in person protocol with screening questions and physical distancing were set up (though we have not had to use this system, we are prepared should the need arise)."
- "Intake was completed over the phone. Students contacted wellness services via email to request mental health support. Counsellors contacted students directly by email/phone to book appointments as reception was no longer available. Informed consent was updated to include a checklist of important ethical considerations for online service."

Figure 16.



## Connecting with Clients



Connecting  
with Clients  
(33%)

Participant voices:

*"Our counselling team have all been surprised at the connection still possible via virtual sessions. Staff have also reported that working from home has enabled them to take healthier breaks and increase their own mental health resilience and ability to support clients."*

The third emerging need reported by participants was connecting with clients. There were two main categories of needs reported: the first is related to technological connectivity, and the second is therapeutic alliance with students.

## Technological Connectivity

*"Still using paper files - Not able to secure records. Old laptops needed to be replaced. Bandwidth problems, phone call drops"*

*"Lots of differences in knowledge level and skills in managing technology issues, glitches, with the technology itself, connection to remote secure server, Internet"*

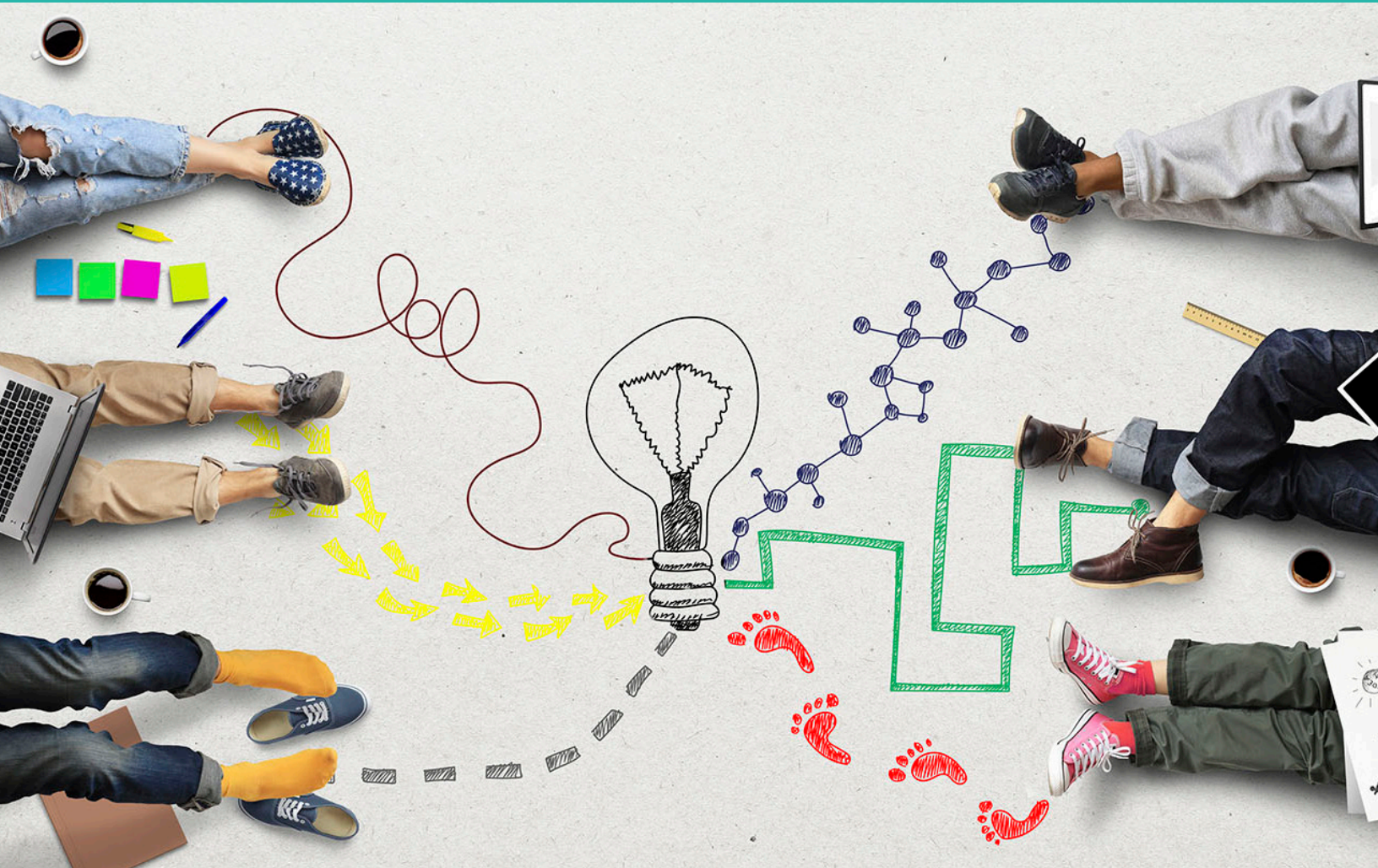
*"Mostly students are appreciative of still having supports in place and being able to access even if they have moved back home some negative feedback that services not on video quick enough"*

## Therapeutic Alliance - Rapport with Students

*"Existing clients were very adaptable to virtual meetings with counsellors as they had established relationships; new clients had a harder time/as did counsellors - more challenging to develop therapeutic relationships in this manner"*

*"Moving established therapeutic alliances online is quite smooth, but starting online or by phone and not having any other option is a barrier to building rapport and getting a clear understanding of what's happening in some cases as some data is missing. There is a lot of talk about university students all 'living online' and really wanting service online but in our experience clients have been clear that while online is better than nothing they don't feel like they get as much as they would in person and that it does not meet the same connection need."*





## SECTION 2C: CHALLENGES & OPPORTUNITIES FOR STUDENT AFFAIRS PROFESSIONALS

Survey participants were invited to provide comments on challenges and opportunities from the pandemic. Four major themes emerged following a content analysis of the open-ended comments:

- Effective online crisis management
- Ethical dilemmas & challenges posed by online counselling
- Equity & diversity
- Striking personal & professional life balance

Table 5. Within those themes, these were the reported challenges and potential solutions that were suggested:

Table 5. Challenges Reported by Survey Participants	Potential Solutions Suggested by Survey Participants
Effective online crisis management	
<ul style="list-style-type: none"> <li>• With fewer in-person connections with students, there are fewer opportunities to identify students who may be in crises and who would benefit from a counselling referral.</li> <li>• Creating back up plans for technical issues when working with clients in crisis remotely was a challenge at first. Also, many clients indicated strong preference for in person support so working with resistance to use virtual support was difficult.</li> </ul>	<ul style="list-style-type: none"> <li>• In order to increase comfort levels with interacting with students in distress, all clinicians have received extensive training with intervention models such as Suicide Action best practice training in suicide intervention and LivingWorks Applied Suicide Intervention Skills Training (ASIST).</li> <li>• At the beginning of the session, we confirm where the student is currently living and, if there is any indication of risk, we ask the student to download the Keep.me.Safe app and explain how to set the region so they can find local crisis resources.</li> </ul>
Ethical dilemmas & challenges posed by online counselling	
<ul style="list-style-type: none"> <li>• Counselling sessions were conducted from both participants' home, so without having control over the environment, confidentiality could not be guaranteed. This aspect of informed consent needed to be revisited and discussed.</li> <li>• Concerned that investments are being made in programs that have not been rigorously evaluated and lack research evidence without consultation with those who specialize and practice in this area who have more awareness of needs.</li> </ul>	<ul style="list-style-type: none"> <li>• Lead counsellor completed a quick environmental scan to identify the most secure, easy to use, platform for video counselling. Decided on Doxy.me. Instructed rest of counselling team on how to use it</li> <li>• In order to help staff transition to the COVID-19 reality, one-on-one and group training sessions were supplemented with coaching conducted to assist staff in setting up their home equipment, ironing out issues and providing scaffolding and training for the use of new technologies.</li> </ul>

## Ethical dilemmas & challenges posed by online counselling cont'd

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>• Lack of understanding about the parameters of practicing outside the province in which counsellors reside and are registered &amp; navigating cross-jurisdiction (province) provider licensure issues</li> <li>• Perception that telepsychology is just a variation of what counsellors do rather than really a competency area on its own is a real challenge. Expectation that everything can just go online raises ethical concerns for counsellors.</li> <li>• Although there has been a considerable focus on developing and providing access to e-mental health resources, there has been very little consideration of this as something of a specialized area of practice that clinicians are not trained in. Competency in online counselling is assumed.</li> </ul> | <ul style="list-style-type: none"> <li>• After the initial chaos of a quick move to an online environment and working from home, our counsellors began to develop additional materials to support students. We learned to do webinars, we regularly updated our social media with current information, Our counsellors wrote articles and researched resources to help our students with specific issues they might be facing -- COVID-19 and Grief, Exercise in Isolation, Social Media and News and the Impact on Mental Health, What to Expect with Phone Counselling, and a series of four articles related to coping with stress based on DBT skills.</li> <li>• Supervisor-led coaching sessions were provided. Some peer coaching also took place. Furthermore, best practice guidelines for remote work were put in place and published in the Master Manual of operating procedures. Processes were put in place to ensure smooth functioning.</li> <li>• Some students appreciate not having to come in-person or take transit to attend counselling sessions. Due to online instruction, students' schedules are more flexible, and they have more flexibility in attending telephone counselling appointments.</li> <li>• New consent forms reflecting risks associated with tele counselling; how to have students complete intake paperwork on-line; ensuring confidentiality.</li> </ul> |
|---|---|

## Equity and Diversity

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• Some clients had minimal internet and were in rural areas. We also faced the challenge of clients moving home and away from the province the school is in. Some provinces were a challenge to be granted permission to continue treatment service remotely without undergoing the long formal registration process. Some provinces were fast to adapt and had temporary measures in place.</li> </ul> | <ul style="list-style-type: none"> <li>• Campus partners: Residence Life, Office of Risk Management, International Office obtained additional resources available internationally through SOS International and their service providers to support student mental health abroad.</li> </ul> |
|--|---|



## Equity and Diversity cont'd

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>• A number of existing clients were stuck in a living environment that made virtual counselling a struggle. Privacy was a concern and impacted vulnerability in many cases.</li> <li>• Students who left the province could not be served by psychologists, scope of practice, student access to private space.</li> <li>• Staff with less space and more people in the home found it challenging to adapt and ensure client privacy.</li> <li>• Hardware &amp; equipment challenges; limited bandwidth depending on home service (ie living outside of city - less reliable service, also number of users in household impacted hardware available and also internet reliability).</li> </ul> | <ul style="list-style-type: none"> <li>• No specific protocols but all international students have access to Keep.meSafe Student Support Program. Keep.meSafe is confidential and accessible 24/7. Access articles, tools, resources, and a Keep.meSafe counsellor through the telephone chat and MY SSP app.</li> <li>• Counselling Services partnered with the International Student Advisor to contact each international student and check on their well-being. Financial support was made available and hand delivered by Counselling Services.</li> <li>• Students living in residence were the most likely to receive crisis supports if required. There were new protocols put into place about how to enter residence facilities safely.</li> <li>• Accessibility Services revised expectations for documentation of a disability and provided webinar to build skills for remote learning.</li> <li>• Each student who worked with Accessibility Services through the year was contacted individually for a wellness check. Financial support was available, and hand delivered by Counselling Services.</li> </ul> |
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## Striking personal & professional life balance

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• Counsellors reported feeling pressured by institution to show they were working hard and not treating work-from-home as time off, despite having no access to school or any structured online instruction for their children in this province, no childcare, increased caring responsibilities on several fronts, and dealing with the stress experienced as individuals.</li> <li>• With the reality of working from home with family responsibility, scheduling and working full-time as is expected of our 'essential' services is a challenge we continue to face.</li> <li>• Many staff, particularly those who live alone, found the isolation to be difficult. Also concern for family/friends, feeling no control over the pandemic and resulting restrictions, financial concerns.</li> </ul> | <ul style="list-style-type: none"> <li>• Weekly reminders from Director to the team to practice self-care, be kind to self and expect less productivity due to complications of working from home with families and internet issues.</li> <li>• Ongoing discussion about self-care is part of regular staff meetings. Staff have flexible schedules to make time for self-care and work/life balance and a reduction in clinical hours (number of sessions) per week to give staff an opportunity to adjust and develop online competencies was implemented and remains over the summer months.</li> <li>• Counsellors availed of national and provincial training and informational webinars, but this was self-initiated. Supervisors provided additional supports to their trainees.</li> </ul> |
|---|--|

### Striking personal & professional life balance cont'd

- |   |   |
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| <ul style="list-style-type: none"> <li>• Child-care is a significant concern.</li> <li>• Staff have supported one another and have been flexible and open to changes. Main concerns are that their own well-being is not being considered and the reality of working from home with no child-care/school and more care taking responsibilities is really being acted in except in general statements. Focus is exclusively on student mental health needs without consideration of the professionals caring for them.</li> <li>• Some issues with technology - that was the biggest hurdle. Issues with some feeling alone and isolated working from home while others on the opposite end of the spectrum and overwhelmed with childcare, home schooling and working from home.</li> </ul> | <ul style="list-style-type: none"> <li>• Staff appear to have adjusted well and are positive about the changes. Supervisor has been great at providing a safe space during weekly meetings to acknowledge struggles with the adjustment and gains.</li> </ul> |
|---|---|

## Mentimeter Results from the August 2020 Campus Mental Health CoP

The following three questions were asked to participants at the COVID-19 Mental Health CACUSS webinar on August 28<sup>th</sup>, 2020 through Mentimeter interactive presentation software. All questions were free-response, and the following themes were synthesized from the feedback:

Table 6. What webinar topics are you looking to cover this fall? (N = 23)

Coping Strategies:	<ul style="list-style-type: none"> <li>• Mental Health Literacy</li> <li>• Self-Care</li> <li>• Coping with Uncertainty</li> <li>• Keeping a Balance</li> <li>• Managing Anxiety &amp; Stress</li> </ul>	<ul style="list-style-type: none"> <li>• Staying Active</li> <li>• Mindfulness</li> <li>• Motivation</li> <li>• Adaptability</li> </ul>
Job Searching and Career:	<ul style="list-style-type: none"> <li>• Advocacy</li> <li>• Job Searching</li> <li>• Financial Support</li> </ul>	
Effective Online Learning:	<ul style="list-style-type: none"> <li>• Transitioning to Online Learning</li> <li>• International Support</li> </ul>	<ul style="list-style-type: none"> <li>• Learning Online Effectively with ADHD</li> <li>• Time Management Skills</li> <li>• Learning and Mental Health</li> </ul>
Connections:	<ul style="list-style-type: none"> <li>• Connecting with Peers &amp; Classmates</li> <li>• Online Community Building</li> <li>• Connecting with the Community</li> </ul>	<ul style="list-style-type: none"> <li>• Staying Connected</li> <li>• Social Connections &amp; Relationships</li> </ul>



Table 7. What are your current remote service delivery needs? (N = 22)	
Technical Issues:	<ul style="list-style-type: none"> <li>• Supporting students who do not have stable internet access</li> <li>• Solutions for completing introductory paperwork (intake forms &amp; confidentiality)</li> <li>• Technology potentially not working in other countries</li> <li>• A better remote workplace is needed</li> <li>• E-supervision solutions</li> </ul>
Restrictions to Online Care:	<ul style="list-style-type: none"> <li>• More difficult to create meaningful relationships and build trust</li> <li>• How do we maintain those connections and having meaningful contact?</li> <li>• Addressing unique student needs including accessibility, trauma, difficult home situations, etc.</li> <li>• Maintaining confidentiality</li> <li>• Time zone solutions</li> <li>• Professional registration requirements can prevent staff from providing care to those outside their province</li> </ul>
Changes and Problems in the Workplace Environment:	<ul style="list-style-type: none"> <li>• Working with external partners</li> <li>• How we maintain connections with campus colleagues and team members</li> <li>• Increased staff burnout</li> <li>• Managing the increased demand for counselling services</li> <li>• Onboarding new counsellors</li> <li>• Managing new service delivery models</li> </ul>
Community Awareness and Outreach:	<ul style="list-style-type: none"> <li>• Creating engaging communities with students</li> <li>• Reaching, connecting with, and welcoming new students</li> <li>• Awareness that we are still there to support students</li> <li>• Navigating professional colleges and offering services across jurisdictions</li> </ul>

Table 8. What are your plans for Fall 2020? (N = 21)	
Models for Providing Care:	<ul style="list-style-type: none"> <li>• Individual counselling</li> <li>• Hybrid model of default remote services with limited, safe, in-person services of student whose needs warrant this</li> <li>• In person care on campus</li> <li>• Piloting parts of Stepped Care</li> <li>• Transitioning to a single session model</li> <li>• All counselling done virtually in both group and/or individual format</li> </ul>
Working with Students and the Community:	<ul style="list-style-type: none"> <li>• Virtual support groups and workshops</li> <li>• Develop community building through the Peer Support team</li> <li>• Foster resilience and build networks with other campus services</li> <li>• Provide validation and space for students to express feelings of uncertainty</li> <li>• Trying to meet students where they're at online; variety of content both real time, and available to access when it's timely for them</li> </ul>
Adapting to Changes in How We Provide Care:	<ul style="list-style-type: none"> <li>• Extra emphasis on survival, self-care, persistence, positivity, flexibility, staying relaxed</li> <li>• Doing our best in these circumstances and using support networks</li> <li>• Balancing keeping up to date information with preserving positive mental health</li> <li>• Problem-solving student accessibility concerns</li> <li>• Utilizing creativity to engage with students, staff, and faculty</li> <li>• Supervising practicum counselling students online</li> </ul>

## CAMPUS MENTAL HEALTH

The following illustration attempts to capture the maximal number of factors that directly and indirectly impact campus mental health.

**Top Left Quadrant:** includes the most common presenting problems, including COVID-19 related concerns such as, Health anxiety, social isolation, and common presenting problems including depression, anxiety, relationship concerns and such.

**Top Centre Quadrant:** illustrates factors related to academic success and failure, including co- and extra-curricular activities, internships/co-ops, technical support and academic advising.

**Top Right Quadrant:** includes remote mental health services can also be offered in regular (non-COVID-19) times, including remote individual and group therapy, Virtual Walk-in and Drop-in hours, online self-help and remote community support.

**Lower Right Quadrant:** highlights factors associated with the delivery of competent clinical services including online e-mental health training, ethical issues such as confidentiality, consent and record keeping.

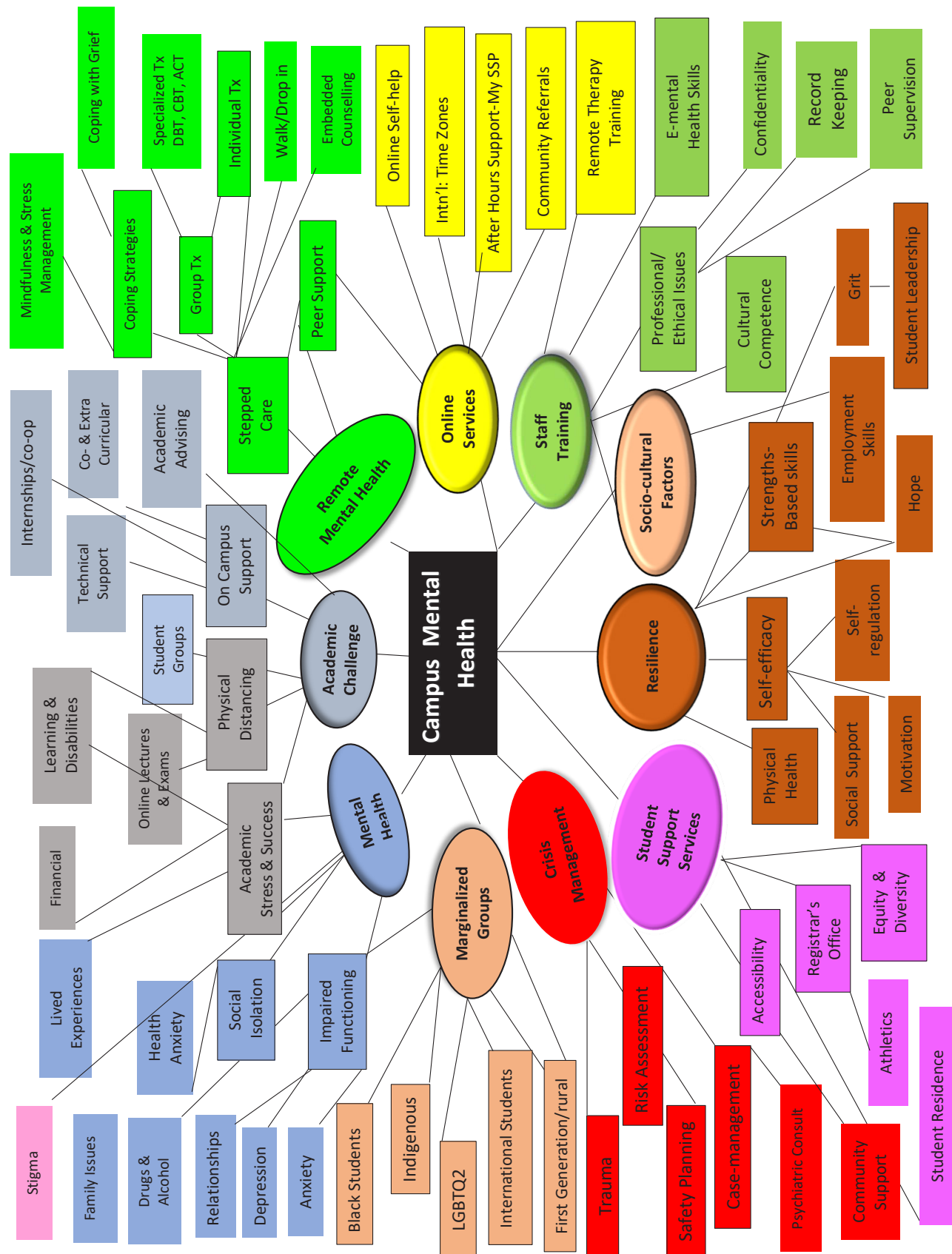
**Lower Bottom Quadrant:** includes factors that build resilience and well-being which includes attributes such as grit, hope, self-efficacy, self-regulation, as well as student leadership.

**Lower Right Quadrant:** highlights student services that support student's academic and psychological well-being including accessibility, registrar's office, physical health and student residence.

**Lower Left Quadrant:** has crisis management factors including risk management, safety planning, trauma, psychiatric consult and community referrals. Just above it are list the marginalized student populations on campus, including Black, radicalized, LGBT2SQ, First Generation, and Indigenous students.

By illustrating these factors through this framework, we do not intend that these variables are the exhaustive elements depicting a blueprint of campus mental health. Instead, our goal is to provide a visual and macro view to help campuses consider all potential variables from a visual vantage point to help them take into account all potential factors which shape campus mental health.

Figure 17. COVID-19 and CAMPUS MENTAL HEALTH





## SECTION THREE:

# CONNECTING RESEARCH AND PRACTICE IN A COVID-19 REALITY

A scan of the most recent and relevant research related to student mental health during times of COVID-19 is presented in Appendix E. In light of the survey results, and webinar feedback from the Campus Mental Health CoP and student affairs professionals across the country. The next section presents a list of suggestions/recommendations with the intention of supporting campuses in connecting research and practice.



## SUGGESTIONS/RECOMMENDATIONS

Our experience of working with students closely in COVID-19 settings, offering direct clinical services individual, group and outreach as by first author (TR) and assessing the impact of COVID-19 from the [campus-wide lens](#) (LDG) at our respective institutions, conducting a national survey, facilitating two follow-up webinars with the Campus Mental Health, Community of Practice (CoP) and colleagues, and following up the emerging lines of research, has helped us to frame following suggestions and recommendations, which we share with great humility and hope. These are divided broadly in: Clinical Concerns, Equitable and Inclusive Mental Health Services, Accessability, Evidence-based Mental Health Services, Building Clinical Capacity and Crisis Management—all in the context of COVID-19.

### CLINICAL CONCERNS (5)

- **Assess the pre-existing challenges in the context of COVID-19 disruptions:** Pre-existing conditions such as depression, anxiety and interpersonal challenges may be exacerbated by wide-spread and prolonged disruptions including the shift of academics to online which are meant to be delivered in-person, financial strain and loss of in person interaction with peers and romantic partners.
- **Health Anxiety:** Health anxiety is likely to have significant ramifications for student mental health amidst the global pandemic. Assess whether students are unable to adhere to physical distancing guidelines due to crowded living conditions, poor ventilation, lack of awareness about the severity of the virus. Students may have but no choice to frequently use public places to take care of elderly relatives or accompany younger siblings.
- **Living with Family Members:** Assess/appraise the impact—negative and positive—of living with family members for a prolonged period. Include issues related to sharing physical spaces, appliances, access to mobile phone and internet bandwidth, changes in eating and sleeping patterns, extent of familial duties or obligations (e.g., taking care of younger siblings or grandparents, time spent in household chores) and potential loss of parental employment and their impact on mental health.
- **Pandemic-adapted Psychological Services:** Post-secondary institutes should invest in adapting validated treatments to respond to COVID-19 related mental health issues such as how to mitigate ill effects of social isolation, limited outdoor activities, COVID-fatigue, and psychological distress exacerbated by pre-existing conditions. In adapting these treatments, cultural context should be front and centre to ensure that students from marginalized backgrounds are not overlooked. Engage students proactively in designing, adapting and delivering treatments, especially virtually.
- **Community Partnerships for Specialized Treatment:** Clinical leaders and campus administrators can support connecting students' chronic and complex mental health needs with effective and available community mental health supports, such as creating and reserving spots in the local hospital or specialized clinics for students who need specialized treatment such as Dialectical Behavior Therapy (DBT), culturally informed, trauma-focused treatment persons of colour, or mental health support services for non-binary individuals from unsupportive families.



## EQUITABLE & INCLUSIVE MENTAL HEALTH SERVICES

- **Personalized Outreach:** Promote Mental Health for students of color by having offices such as Diversity, Equity and Inclusion and Student Affairs partner with the counselling center to enhance capacity, provide personalized outreach to students of colour; and strengthen equity, inclusion, and belonging. Engage closely with marginalized students and staff to discuss which specific campus policies and processes adversely impact of health and mental health of marginalized students and provide incentive and support to students and staff to suggest concrete steps towards equitable mental health supports across the campus.
- **Communication Challenges:** Offer a variety of secure ways (e.g., text, flexible times for appointments) for students to communicate with mental health professionals, safely. Students with diverse gender and sexual identities and those living in stigmatizing environments and not supported by family members otherwise are likely to be experiencing challenges in communication.
- **Equitable, culturally responsive and inclusive Mental Health Support:** Ensure that counselling staff has demonstrable competence in equity, diversity and inclusion to provide effective and respectful clinical care to students seeking counselling from marginalized groups (e.g. gender, race, ethnicity, age, abilities, socio-economic status, language, gender expression, sexual orientation, immigrant status, religion, invisible and visible disability, language ability) in person or online?
- **Combating Domestic Abuse:** Embed discussion and share practical tips about domestic abuse, intimate partner violence, ways to overcome cultural stigma to seek help, diverse ways to report abuse and seek support and contact information of agencies or centres which provide support in all mental health as well as in course content.
- **Engage Students from Diverse Backgrounds to Design Antiracism Programs:** Engage marginalized students and staff to discuss which specific campus policies and processes adversely impact their health and mental health. Create a truly inclusive and representative of all groups of campus work together to create a safe and inclusive space for students from marginalized backgrounds to discuss their psychological distress which results from inequities. Follow up these discussions with actions that are specific, concrete, and practical, tied with impactful outcome in combating, anti-Black racism, anti-Indigenous racism, Islamophobia (or anti-religious racism), and other forms of oppression growing number of mental health.

## ACCESSABILITY

- **First contact:** Ensure an efficient and accessible process of booking first counselling appointment, especially during peak periods of the semester when students encounter academic stress. Ensure that ways to access services are described and readily available at places of high traffic and online, with assurance of. Furthermore, policy about booking and cancelling appointment is clearly explained.
- **Flexible Application of Policies:** List and share widely among students' flexibility in academic policies and procedures which can decrease student stress during COVID-19. Arrange outreach to students from marginalized and racialized background who may not readily have access to most updated information from campus as most might be working in essential services sectors and/or may have accessibility barriers.

- **Offer Accessible & Flexible Models of Mental Health Care:** Design, re-design or improve your services from lens of accessibility and flexibility. Offer same day, drop in hours (in-person (where appropriate and/or virtual), brief consults. Elicit regular and anonymous feedback and suggestions from vulnerable and marginalized students as how specific cultural, economic, logistical and administrative barriers can be overcome. For example, students who work during regular office hours, are offered counselling services during evenings and through a variety of remote means. Student with specific problems are offered short-term skill-based, strength-based and culturally responsive interventions.

## EVIDENCE-BASED MENTAL HEALTH SERVICES

- **Elicit Timely and Anonymously Feedback:** Elicit feedback from students from minority backgrounds about the effectiveness and relevance of treatment you offer. Modify existing and mostly Euro-centric counselling practices in light of the suggestions provided by representative student voices. Develop an index of Idiom of distress and an index of risk, which takes into account existing vulnerabilities.
- **Collection Diverse Range of Data Regularly:** Senior administration and clinical leadership need to collect data, using published measures which assess the mental health impact of COVID-19, conduct case studies, administer regular student satisfaction and need assessment surveys to stay abreast with evolving trends of the pandemic and respond accordingly. Data should be collected longitudinally to analyze the long-term impact of COVID-19 in order to devise specific interventions suited for various phases of the pandemic.
- **Ongoing feedback system:** Put in place a thoughtful, planned and ongoing feedback system to track the effectiveness of online counselling and mental health services, which is responsive to COVID-19 related societal as well as campus issues. Use standardized outcome measures as well as COVID-19 specific measures to inform research, education and training.
- **Preventing PTSD:** Campuses, in collaboration with other PSIs, should put place clinical research initiatives designed to prevent Post-Traumatic Stress Disorder (PTSD) among students who tested positive for COVID-19, have recovered, recovering but continue to experience what is known as long-haul symptoms, have pre-existing mental health concerns or have been impacted significantly (e.g., loss of a significant one due to COVID-19). The research should include baseline measures assessing specific symptoms of post-traumatic exposure, multiple outcomes measures and long-term follow-ups. If conducting randomized control trials is difficult, campuses should consider quasi-experimental and time-series designs.

## BUILDING CLINICAL CAPACITY

- **Training about Online Deliver of Mental Health Support:** Offer ongoing training opportunities to clinicians and staff so that they engage students with mental health concerns in creative and supportive online interventions and programs. These can include online workshops, forums, webinars on current issues, such as virtual therapy, gendered-based violence, and COVID-19 fatigue.
- **Collaborate with Academic and Student Services:** Offer online individual group, psycho-educational workshops and interactive discussions in collaboration with academic other student services, using multiple mediums (e.g., online synchronous and asynchronous, hybrid options (when and where appropriate), in person, group. Integrate mental and academic challenges and offer high impact, resource-rich problem-solving programs.

- **Accurate and Timely Dissemination of Information:** Inaccurate, incomplete and decontextualized information, especially filtered through social media platforms, can exacerbate the mental health of students, especially those already experiencing challenges. Put in place a practical, accessible through a wide range of media, information system which is consistent and responsive to inquiries, to disseminate information to students and other campus community members during different phases of COVID-19.
- **Resilience and Wellbeing Programming:** Embed evidence-based, relevant to the post-secondary online milieu, resilience and wellbeing multiple tiered programs (e.g., short courses and groups which award co-curricular credits, workshops, webinars, and virtual discussion groups) as preventative as well as treatment options. Ensure that programs explicitly address scientifically based notions of wellbeing and resilience and are not merely used as an attractive title of programs that do not explicitly resilience and wellbeing (please see 101 Strengths-based Actions to build resilience and wellbeing; Rashid & McGrath, 2020).

## CRISIS MANAGEMENT

- **Well-coordinated Crisis Response:** Plan and Plan and train all relevant staff, with specific, relevant case studies and scenarios about how a well-coordinated cross-campus response works to deal with emergency situations in times of COVID-19, especially when services are being offered virtually or on-site to students in residence. Ensure that each stakeholder is well familiar with campus security protocols, crisis response individuals/team, student residence, counseling, medical, disability, equity, student services supporting Indigenous /marginalized students, international, and other at-risk students student services?
- **Outreach to at Risk:** Put in place well an effective, culturally informed, early outreach program for at-risk students populations including Indigenous, first-generation, racialized/marginalized, students with disabilities, LGBT2SQ, first-year students in residence, non-traditional students. These students are most likely to experience an elevated degree to stress due to strain caused by COVID-19. With their consent to collect data, conduct evaluation and elicit anonymous feedback about the effectiveness of outreach initiatives. This will help in making necessary changes.
- **Crisis Management:** Ensure that counselling staff is well trained in assessing (quantitatively or qualitatively) suicidal ideation and is able to identify culturally informed behaviours, and is equipped skills to engage the student in online milieu to participate in safety planning. Also, ensure that staff regularly explore specific risk factors and predictors of suicide and are well equipped with a range of resources to share with the student.
- **Care:** Put in place effective integrated interdisciplinary mental health services (e.g., counsellor/therapist, family physician, psychiatrist, nurse, health promotion, social worker, case coordinator, crisis management support, etc.), to support students with complex and chronic needs that require integrated care and at times additional care in the context of COVID-19.

## ETHICAL CONSIDERATIONS FOR VIRTUAL/REMOTE MENTAL HEALTH SERVICES

- **Minimizing Potential Harm:** Campus mental health professionals, while transitioning from face-to-face to online services, should consider specific ways of minimizing the potential harm that can result from prolonged social distancing, being quarantined.

- **Fidelity and Responsibility:** Establishing a trusting relationship, especially with new clients, through remote means could be challenging. This could cause potential barriers for whose first language is not English, and they could share their psychological distress better in-person, with the help of non-verbal cues, which might be challenging to spot in virtual sessions. Consult to minimize such barriers.
- **Integrity:** Integrity regarding the treatment has three-element, especially in unprecedented times such as a global pandemic, COVID-19. These are, a) can be delivered reasonably well online, as intended to be delivered in-person); b) does the person providing the treatment have sufficient online delivery training? c) Will online delivery produce similar effects as attained in-person.
- **Competing Goals:** In some jurisdictions, providing psychological service, including (psychotherapy, counselling, outreach) could be deemed an essential service, and practitioners might be asked to provide in-person service or be physically present. Consult with local public health authorities to ensure all safety measures are in place (e.g., providing personal protective equipment, protective barriers and shields, masks, sanitizers). The underlying ethical principle is doing no harm.
- **Boundaries of Practice:** Campus mental health Practitioners should not extend themselves outside the realm of their training, experience and competence, due to unprecedented circumstances, beyond emergency needs. That is, if the licensing jurisdictions do not allow the practitioner to deliver services to students/clients physically located outside of these jurisdictions. Should one jurisdiction allows to practice outside, it is important to ensure the jurisdiction where the client is located allows psychological services to be provided from outside. It might be worthwhile to explore with the licensing authorities if there are flexible regulations for inter-jurisdictional practice, especially until students who moved out of province clients are unable to find alternative treatments in their local area. If clinicians work in different roles, in offering cohesive programming such as being an educator, researcher, advocate or leader, organizer or coordinator, clarify the role in the context of services being offered.
- **Consent:** Modify existing consent forms to ensure that clients and participants are fully informed of the risks and benefits of remote practice and research. In particular, a discussion about potential risks and limits of confidentiality is critical. This should include child abuse and intimate partner abuse. In recent times, prolong lockdowns and home confinement has resulted in an escalation in emotional and physical abuse. Let the client fully appraise the potential risks and weigh them with benefits and then make an informed decision. Also, discuss limits to confidentiality and how in case of an emergency, what specific information might be disclosed and how the practitioner will handle emergency remotely.
- **Record-Keeping:** Discuss how the record will be maintained through secure online platforms. What plans are in place if something happens to the practitioner? The record needs to show the nature of mental health services offered (e.g., telephone counselling session or counselling session via Zoom, Skype, Google hangouts), location of the client, and what discussed or practiced during the session. Also include technological challenges experienced during the interaction, if any.



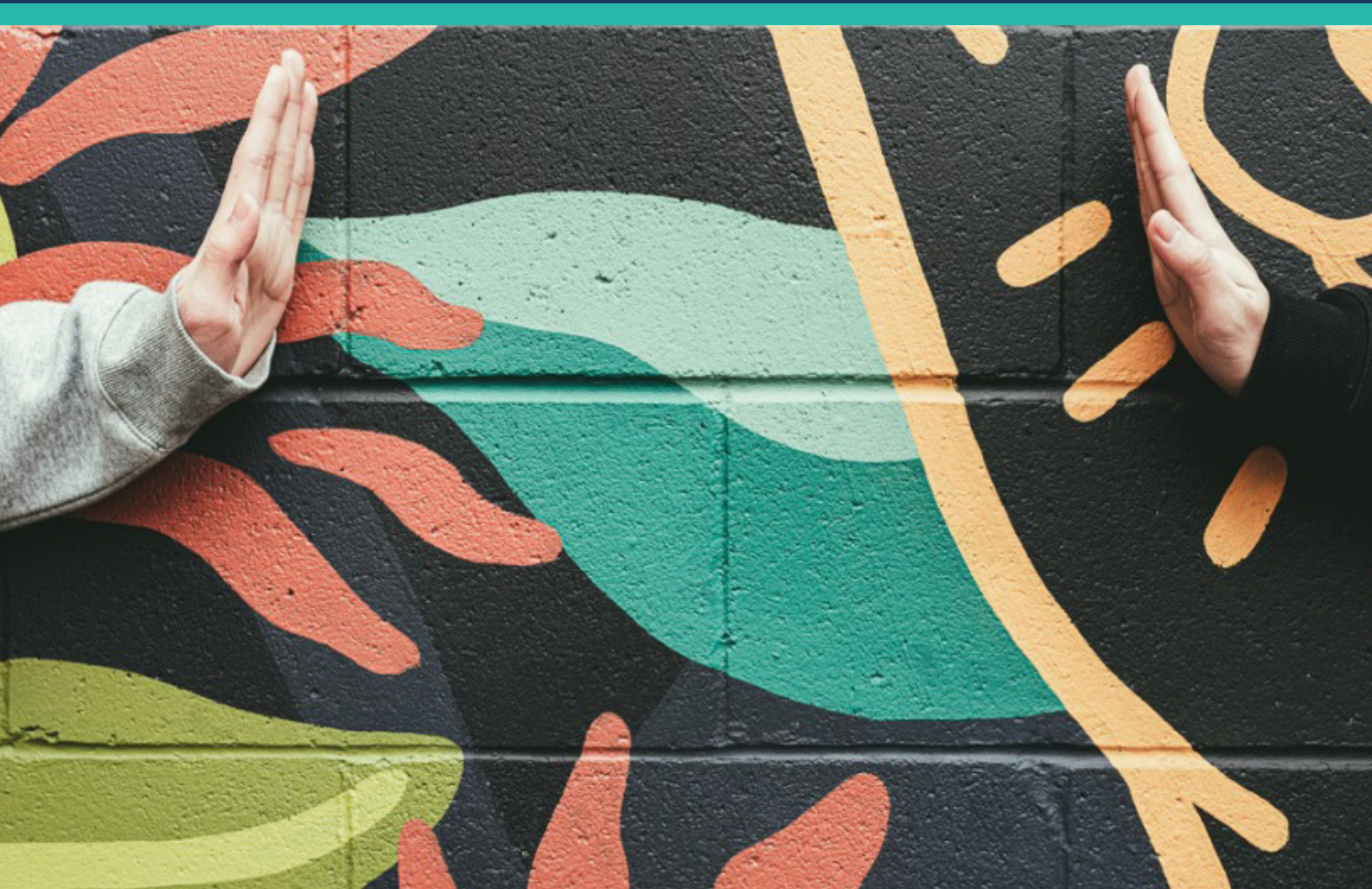


## CONCLUSIONS



The COVID-19 pandemic has dramatically changed our world. Post-secondary institutions within weeks moved classes and services online as most of the world hunkered down in safer confines. Campus mental health, already on fragile feet needed to find its wings to navigate the virtual world. Accounts and anecdotes shared by our colleagues testify that they rose to the challenge. Our findings amply demonstrate that Campus Mental Health professionals have been able to navigate the remote service delivery world, supporting distressed students from their homes while juggling home life and negotiate bandwidth encroachments. Professionals adapted to remote therapeutic space, using the same ingredients of healing and helping. The research studies, described in this report are not a compendium of doom and gloom but insights into the resilience of our students who adapted to the circumstances leaving the in-person vibrance of campus life and quickly adjusted to on-line exams and therapy from their homes.

We are also acutely aware that COVID-19 has simultaneously exposed and amplified the deep-ingrained inequalities of health, and mental health, disproportionately impacting students from marginalized, racialized, gender and sexually diverse backgrounds. This is a moment for all higher education stakeholders to adopt an open, flexible, inclusive and innovative mindset to design and co-design with students campus mental health services that are strength-focused, culturally responsive, accessible, adaptable with evidence-based practices and policies. At this turning point in our society, this is the beginning of our collective efforts to endeavour to best support mental health in the midst of a pandemic and what is often called our new normal.



## APPENDICES

## APPENDIX A: STUDENT PERSPECTIVE

**Student 1: Undergraduate male;** *“Completing an undergraduate degree is an exceptionally stressful experience for most students, at this level. Every undergraduate student I know has found that performing optimally, combined with an expectation of excellence, puts a tremendous burden on a population going through a lot of life changes and new experiences. Although many may consider their time in university to be some of the best experiences they’ve ever had - few, if any, would attribute that positivity to the times their course content comprehension was evaluated. This is by design of course, taking tests isn’t supposed to be fun. However, one of the few healthy, accessible, and used ways we could escape from the hundreds of hours we pour into our studies was to spend time with our peers. It is safe to say that as an experience, university is defined by the people who go there. Spending day after day in the same environment without access to in-person social activities can make it harder than it already was to cope with academic pressures which have not only remained but increased with new course structures. This has significantly diminished the university experience.*

*The long-term isolation from seeing friends and loved ones in person has for many made it difficult to find the motivation to excel academically when the non-work aspects of daily life have been crippled or removed as options wholesale. More than ever, we spend time on social media platforms where we are exposed to negative information, the potential for damage to our self-esteem, and spending less time communicating face-to-face. That last part is good for preventing infection, but also promotes feelings of isolation.*

*There is also a constant internal conflict in balancing our inherent need to reach out and be social, with the competing societal and governmental directive to limit social interaction to contain the spread of the COVID-19 virus. For those of us that interact regularly with aging family members and those with underlying health conditions, there is an extra level of worry.”* Zachary Zarowsky

**Student 2: Undergraduate female;** *“The necessity of social and physical distancing practices in response to the coronavirus disease pandemic has made social media more indispensable than before, because the loss of direct social contacts during the lockdown makes students feel they’ve lost freedom, recreation, and supports. Such sense of loss may mean losing control with our normal, healthy life, losing a sense of reality, losing a sense of time, and questioning whether time is real, or whether days are real. These types of thoughts and feelings can increase the stress levels in how students feel about the pandemic situation, and as a result of the uncertainty we feel, we turn toward social media to cope with the stress, to gain a sense of connection with the rest of the world, as well as to be informed about the updates of the pandemic. However, the downside of screen dependency can lead to over reliance on social media, as well as screen stress due to overexposure of information. As a result of feeling stressed out, this can potentially fog our ability to exercise good judgements, causing us to believe information that are not accurate. Although many universities, colleges and other educational institutions provide students with information related to COVID-19 from reliable sources, there is still a high potentiality where misinformation can spread through online sources and social media platforms that are frequently used by young adults, and further contributing to the stress, anxiety, and depression among students. There is also an uncertainty regarding how long this period will last before our lives can change back to the way it was before, such uncertainty has also increased anxiety about the future amongst the student population. Even in a world where a vaccine for COVID-19 has been invented, and it has put an end to the pandemic, how much damage will remain? How will our generation and the next generation secure jobs that may no longer exist? How will the studies of those who have lost loved ones to the disease be impacted by such loss? Will universities be forced to reduce essential services, programs and opportunities? These questions that are yet to have an answer to them keep the anxiety levels high in undergraduate students.”*



## APPENDIX B: Science Matters: Emerging Lines of Campus Mental Health Research

Our intention to showcase emerging lines of research is to reinforce what we have learnt repeatedly during the COVID-19 pandemic. We want to underscore that in dealing with the mental health pandemic, *Science Matters*. In this appendix, you will find 25 lines of research on the impact of COVID-19 on Student Mental Health. We have summarized these studies succinctly and also added implications. We hope this will strengthen the bridge between practice and science for the greater good.

### SECTION ONE: MENTAL HEALTH CHALLENGES & THEIR IMPACT DUE TO COVID-19 PANDEMIC

#### **Psychological concern exacerbated by physical challenges**

A cross-sectional survey with 622 youth, age 14-28, with existing clinical and community cohorts from Ontario, Canada, found that COVID-19 caused significant deterioration in mental health. Participants also reported substantial mental health service disruptions. A second study with the same sample found that those with physical health concerns reported heightened mental health responses to the pandemic situation (Hawke, Barbic, Voineskos ... 2020; Hawke, Monga, Korczak ... 2020).

#### **Key Insights:**

- There is an urgent need to engage young people as coresearchers to understand and address the impacts of the pandemic and the short, medium, and long term.
- The integration of physical and mental health services should be a priority policy and service direction moving forward, acknowledging the importance of primary prevention and early intervention in low-barrier settings.
- System planners striving to adapt mental health services to meet social/physical distancing recommendations are urged to consider youth with physical health conditions and ensure that adequate integrated mental health and physical health supports are available to them.

#### **Mental health needs of lesbian, gay, bisexual & transgender students during the COVID-19 pandemic**

(N=477) LGBT identifying students (18-25), completed rapid-response survey. Nearly half (45.7%) of LGBT college students have immediate families that do not support or know their LGBT identity. Approximately 60% of sampled LGBT college students were experiencing psychological distress, anxiety, and depression during the pandemic (Gonzales et al., 2020)

#### **Key insights:**

- Colleges & universities should utilize campus, community, or national LGBT resources to provide privacy-enabled asynchronous digital content, webinars, and/or podcasts for students and families from unsupportive households.
- Universities should seek to eliminate any closure-related stressors by providing housing accommodations and financial resources to those expressing need.
- Financial resources should not be solely based on the parental/family information attained through traditional financial aid processes, as separation from one's parental household may be a necessary option for students to remain physically and emotionally safe.
- Primary health-care professionals should be mindful of the mental health needs of LGBT students who may have returned home to unsafe or unaccepting environments.

### Effects of COVID-19 on mental health of medical students

This cross-sectional, survey-based, region-stratified study collected demographic data and mental measurement from 2,498 medical students and 1,177 non-medical students in 31 provinces from March 5, 2020, to March 10, 2020, in China. Results showed that medical students are suffering from more stress than non-medical students almost in all provinces of China (Ye et al., 2020)

#### Key Insight:

- Four risk factors that could significantly increase the psychological stress in the medical students in the pandemic period were the lower level of familiarity with COVID-19, older age, lower family income, and the intern student status.
- Five positive psychological states on which student scored low were: "health protection measures," "following the epidemic news," "health condition," "concern about public morality," and "caring for others" were also related to psychological stress. It is obvious that the positive states of students are lower under the high pressure in the pandemic period.

### Impact of COVID-19 on suicide rate

The psychological sequelae of the pandemic will probably persist for months and years to come. Studies indicate that the COVID-19 pandemic is associated with distress, anxiety, fear of contagion, depression and insomnia in the general population and among healthcare professionals. Social isolation, anxiety, fear of contagion, uncertainty, chronic stress and economic difficulties may lead to the development or exacerbation of depressive, anxiety, substance use and other psychiatric disorders in vulnerable populations including individuals with pre-existing psychiatric disorders and people who reside in high COVID-19 prevalence areas (Sher, 2020).

#### Key Insights:

- To reduce suicides during the COVID-19 crisis it is imperative to decrease stress, anxiety, fears and loneliness in the general population. There should be traditional and social media campaigns to promote mental health and reduce distress.
- Screenings for anxiety, depression and suicidal feelings ought to be employed.
- Transparent, timely and responsible media reporting is absolutely necessary.
- Community or organizational gatekeepers may have an opportunity to identify individuals at risk for suicide and direct them to proper evaluation and treatment.

### Impact of a lockdown on social networks and mental health during COVID-19

The usage of social networks and mental health indicators between two groups of Swiss undergraduate students (N = 212) both before and after the COVID 19 outbreak were compared to examine differences (Elmer et al., 2020).

#### Key Insight:

- When compared to pre-COVID-19 levels, stress, anxiety, loneliness, and depressive symptoms increased, compared and stressors shifted from social aspects to health, family, friends, and the future.



192 Post-secondary students, enrolled in an introductory core curriculum course, in New Jersey, USA, completed a cross-sectional survey. The survey collected information on demographics, knowledge levels and sources of COVID-19 information, behavior changes, academic and everyday difficulties, and mental health measurements (depression, anxiety, somatization, and stress; Kecojevic et al., 2020)

#### **Key Insights:**

- Students who tend to use and trust the official sources and changed their behaviors in accordance with public health recommendations (i.e., increased hand washing, wore masks).
- Female students tended to perceive higher level of stress, were unable to focus on academic work, and reported difficulties in obtaining medications and cleaning supplies.

### **SOCIAL ISOLATION & QUARANTINE**

#### **Impact of isolation policies during COVID-19 on mental health of college students**

Chinese college students (N=992) were assessed to determine the impact of COVID-19 related isolative policies. They were assessed on dimensions of psychological wellbeing including mental status, knowledge of stress management, behavioral patterns, risk perception, academic stress, family relationships, and peer relationships in (Chen et al., 2020).

#### **Key insight:**

- The isolation was found to have a particularly high influence on those with Obsessive-Compulsive Disorder, including elevated levels of fear, hypochondria, depression and neurasthenia.

#### **Making confinement experience tolerable**

Confinement or lock-down is an effective measure to control the wide spread of an infectious disease. However, pre- and two-week post-confinement data from (N=555) university students in the Hubei province, China, showed increases in fear, anxiety, and depression (Cao et al., 2020).

#### **Key insight:**

- Administrations should take measures to ensure that the experience of confinement, especially for out of province or country students is as tolerable as possible for students, with a duration that is appropriate and ensures that adequate amounts of basic supplies are available (such as food, water, and medical and hygiene supplies).

#### **Excessive exposure to COVID-19 news while be home-quarantine**

Financial uncertainty, fear of COVID-19 infection, inadequate valid information on COVID-19, and excessive exposure to COVID-19 news on social & mass media had significant negative impact on (N=505) Bangladeshi university and college students' mental health while they quarantined at home. Physical exercise was significantly associated in lowering scores of DASS depression Subscale (Khan et al., 2020).

#### **Key insight:**

- Health and financial concerns, combined with an overexposure to inaccurate and overwhelming levels of COVID-19 information on social media can have a strong negative impact on the mental health of students.

### **Psychological effects of the COVID-19 outbreak and lockdown among university students and workers**

Data from 2530 members of a Spanish university showed moderate to severe level of anxiety and depression. Students in the humanities, social sciences, and law have been more impacted by the pandemic when compared to engineering and architecture students (E&A) (Odriozola-González et al., 2020).

#### **Key Insight:**

- It is important to attend to concerns of university employees. Because they fall in higher risk category, compared to students who are comparatively less vulnerable. University employees from all groups showed higher concern scores than students, except for concern about relatives' health."

### **Adaptive & maladaptive coping mechanism**

A vast majority of the post-secondary students sampled in this interview-based study of American undergraduates (N=195) reported health concerns, concentration and sleep difficulties, decreased social interactions, and concerns about academic performance (Son et al., 2020).

#### **Key insights:**

- The maladaptive coping behaviors, such as denial and disengagement predict depression while adaptive coping such as acceptance and proactive behaviors are known to positively impact mental health.
- Digital technologies and telehealth applications hold the promise to enable self-management of mental health issues. For instance, social media networks can reach out to students and screen for depression and anxiety to reduce stigma against seeking treatment.

### **Need for proactive & accessible digital mental services**

Australian adults (N=5040) completed online survey measures of psychological distress (depression, anxiety and stress), health anxiety, contamination fears, alcohol use, and physical activity. Participants with self-reported history of a mental health diagnosis had significantly higher distress, health anxiety, and COVID-19 fears than those without a prior mental health diagnosis (Newby et al., 2020).

#### **Key Insights:**

- There is an acute need for proactive, accessible digital mental health services to address these mental health needs, particularly for those most vulnerable, including people with prior history of mental health problems.
- Longitudinal research is needed to explore long-term predictors of poor mental health from the COVID-19 pandemic.

### **Promoting resilience to prevent poor mental health outcomes**

Exploring the prevalence and risk factors for poor mental health, (N=2038) Chinese university students completed a number of measures between February 12-17, 2020. Results showed that A significant proportion of young adults exhibit clinically relevant posttraumatic stress disorder (PTSD), anxious or depressive symptoms, but a larger portion of individuals showed to effectively cope with COVID-19 pandemic. Interventions promoting resilience should be provided, even remotely, to those subjects with specific risk factors to develop poor (Chi et al., 2020)

**Key insights:**

- Resilience is a modifiable factor and a potential therapeutic target to prevent poor mental health outcome during COVID-19 pandemic.
- Resilience can be promoted in different ways such as providing a supportive social network, enhancing active coping self-efficacy strategies (e.g., enhancing the perception that one is able to manage or recover from a stressful event), learning mindfulness skills (e.g., deep breath and focusing on the present moment), as well as nurturing a sense of purpose of life and the ability to find meaning in face of COVID-19 pandemic.

**REMOTE MENTAL HEALTH SERVICES****Web-based counselling service offerings during COVID-19**

College counselling services are vital for providing care to student's mental health, yet only half of the (N=138) PSI websites included information regarding remote learning and remote counselling, and less than half contained information about COVID-19 related mental health (Seidel et al., 2020).

**Key Insights:**

- Despite the importance of counselling services, several institutions lack appropriate information on how to use available services during the pandemic.
- Mental health messaging, services, and community connections can be improved to ensure that students have the mental health support they need to thrive in this new landscape.

**SOCIAL MEDIA, COMMUNICATION****Behavior of college students during early phases of COVID-19**

Depression and anxiety in (N=217) United States undergraduate students, increased at the beginning of the COVID-19 pandemic and peaked when institutional policy changes took place (Huckins et al., 2020).

**Key Insights:**

- Sedentary behaviour and phone usage increased as COVID-19 news reporting increased. Location visits also decreased.
- Understanding behaviors during typical academic cycles can be fruitful for determining how everyday events impact students' mental health and behaviors.

**Infodemic amidst the public health crisis**

Social media exposure (SME) and depression of (N=4872) participants from 31 Chinese provinces and regions was assessed. 82% of the participants who reported SME, also reported higher odds for experiencing anxiety (Geo et al., 2020).

**Key Insights:**

- Social media is saturated with disinformation and false reports about the COVID-19. This has stoked unfounded fears among many individuals. Post-secondary institutions should adopt clear, concise and consistent lines of communication with students to dispel such fears to prevent unwarranted worry and anxiety among students
- In addition to inaccurate information, some students may also express their fears, worries nervous, anxiety on social media which are contagious on social network. It is important for PSIs to monitor and filtering out false information and promote accurate information through cross-section collaborations between various campus services and departments.

### **Behavioural fatigue: real phenomenon, naïve construct, or policy contrivance?**

This article argues that the concept of Behavioural Fatigue remains a mystery but modellers have argued that the delay in implementing lock-down policies, for which it was at least partly responsible, led to the loss of at least 20,000 lives.

#### **Key Insight:**

- It is reasonable to conclude that behavioural fatigue is either a naïve construct or a myth that arose during the development of policy designed to tackle the Covid-19 crisis.

## **COVID-19 MARGINALIZED POPULATIONS**

### **Social and structural determinants of health, racism and discrimination**

Racial/ethnic minority populations are disproportionately burdened by underlying comorbidities in addition to living in more crowded conditions in urban setting. This combined with a higher tendency for employment in public-facing occupations such as services and transportation can prevent social distancing (Webb et al., 2020).

#### **Key Insight:**

- A deeper understanding of the reasons for the health disparity among certain populations may improve the scientific, public health, and clinical community by allowing the efficient and effective implementation of interventions which mitigate these outcomes.

### **Barriers to times access to health care**

Compared to non-Hispanic white patients, non-Hispanic African American patients were 2.7 times more likely to be hospitalized, after adjustment for age, sex, comorbidities, and income. Because they face barriers to timely access to care or care is provided with significant delay, work in low wage employment sectors, use public transit, or have multiple health comorbidities — together these barriers increase the odds of contracting COVID-19 (Yearby & Mohapatra, 2020).

#### **Key Insight:**

- All workers, which often include young college and university students, deemed as essential should receive a guaranteed basic minimum income and paid sick leave until the end of the pandemic, i.e. the last confirmed death from COVID-19.
- Provide legal protections and public health plans that address the specific needs of racial and ethnic minorities.

### **Collecting race based data**

A systematic review of 207 COVID-19 related articles such as clinical trial protocols and preprint articles found that only five reported ethnicities. Yet, COVID-19 has been found to have higher rates of adverse clinical outcomes in individuals from minority groups (Pan et al., 2020).

#### **Key Insight:**

- The data on ethnicity in patients with COVID-19 remains limited and it is of vital healthcare importance that the role of ethnicity be further studied.

### **Disproportionate Impact on ethnic minorities**

African American COVID-19 death rates are higher for African Americans than their percentage of the population; Milwaukee, Wisconsin (66% of deaths, 41% of population), 13 Illinois (43% of deaths, 28% of infections, 15% of population), and 14 Louisiana (46% of deaths, 36% of population). Racial and ethnic minorities are more susceptible to contracting viruses because of residential segregation due to structural racism which entails crowded households, few resources, and chronic health conditions (Oppel et al., 2020).

#### **Key Insight:**

- Promote health justice for marginalized communities which includes policies and initiatives for fair allocation resources such as testing, PPE, ventilators, clinical trial enrollment, future treatment and vaccine access.

### **Impact of COVID-19 pandemic on college students mental health: Risk-to-Resilience**

Many students of colour may encounter increased stressors at home due to scarcity of basic needs (e.g., food, shelter), or access to healthcare or technology required for maintaining contact with others. Many of these students are assuming increased household responsibilities for childcare and financial support while negotiating legal, financial, and healthcare issues on behalf of family members. Students of color, who tend to be marginalized from campus-based mental health care systems and support resources, may find these resources even further out of reach, despite the stress compounded by racial tensions in the U.S. that have taken place during the pandemic (Liu, Pinder-Amaker et al., 2020).

#### **Key Insights:**

- Amplifying and scaling these culturally-informed, evidence-based interventions should be prioritized by college systems, through following steps:
- Acknowledge and validate the stories and images depicting risk and identity (e.g., vivid accounts of the disproportionate impact of COVID on people of color and distressing images of police brutality against African Americans) being shared through multiple media platforms and their potential negative mental health impacts.
- Help students name and claim pre-COVID-19 identity-based factors to promote resilience,
- Use evidence-based therapeutic approaches to promote student resilience by targeting their most salient and meaningful aspects of identity.
- Design interventions that will lead to the prevention of anticipated negative mental health outcomes.

### **Dynamics of health-care inequalities**

When compared to non-Black or Hispanic individuals, members of those groups are more likely to not be able to work from home in the current pandemic. Many marginalized workers are on a contractual basis which removes the benefit of paid sick leave and puts them at greater risk of losing their job (Smith et al., 2020).

#### **Key Insight:**

- The additional factors that minority groups tend to face make them more likely to be exposed to COVID-19 and limit the options available to prevent infection.



### **Reconceptualizing Resilience**

Resilience should be conceptualized as a developmental, multilevel, multidimensional, construct that may operate in different ways as a function of context. For example, in addition to individuals and families, what are the aspects of peers, schools, communities and neighborhoods that combine to disrupt and change a negative life health trajectory from one of risk to one of adaptation?

#### **Key Insight:**

- The integration of assets such as racial identity, racial socialization, and African-centered worldview could lead to strategies that disrupt the sequelae of racism and maximize the effectiveness of programming or policy efforts.
- We need to be flexible in our epistemological approaches (i.e., ways of knowing) and use different tools (e.g., measures of online racism) and methodologies to study more contemporary forms of racism and eliminate racial gaps in health equity.
- We must identify and develop new tools (e.g., media campaigns), methods, and analyses that will allow us to capture and explain racism in its entirety and its impact on health. For example, photovoice—is a method that allows participants to share the concerns of a community through photography.

### **Indigenous health & equity**

Previous novel viruses have had an impact several times higher for indigenous groups such as the Māori than for other groups. It has been estimated that a quarter of all absolute differences between Maori and non-Maori (Indigenous people of New Zealand) was the result of amenable healthcare (McLeod et al., 2020).

#### **Key Insights:**

- Mental health problems of indigenous people may exacerbate due to socio-economic factors such as unemployment and financial hardship.
- It is important when new technologies for health and mental health care are developed, health and equity are monitored in real time.

### **International students and COVID-19**

Student experience survey in the Research University (SERU) consortium survey of 22519 undergraduate and 7690 graduate and professional students at five public research universities reported that compared to domestic, international students, adjust better online learning. (Chirikov & Soria, 2020).

#### **Key Insight:**

- Offer flexible options about course completion in coming academic sessions.
- Offer attractive online student engagement opportunities including student support services.

### **First-Generation students and COVID-19**

In comparison to continuing-generation students, first generation students were more likely to face financial hardships during the pandemic. First generation students were also less likely to live in safe environments free from abuse (physical, emotional, drug, or alcohol) and more likely to experience food and housing insecurity (Soria et al., 2020).

#### **Key Insight:**

- Provide resources and assistance to First-generation students to guide them through things they and their families may be unfamiliar with. Whether it's language, forms that need to be filled out or financial support to guide them towards success.

## APPENDIX C: PSYCHOLOGICAL MEASURES OF COVID 19

Assessment Focus	Scale Name	Factors	Authors*	Language Version(s) Cited*
Stress	COVID-19 Stress Scale (CSS)	Danger Socio-economic Consequences Xenophobia Contamination Traumatic Stress Compulsive Checking	Taylor et al., 2020	English
	Perceived Stress Scale modified for COVID-19 (PSS-10-C)	Stress (unifactorial)	Pedrozo-Pupo et al., 2020	English Spanish
Distress	COVID-19 Peritraumatic Distress Index (CPDI)	Peritraumatic Distress (unidimensional)	Petrozzi et al., 2020	English Spanish
	COVID-19 related psychological distress in healthy public (CORPD)	Anxiety and fear Suspicion	Feng et al., 2020	Chinese
Anxiety	Anxiety of COVID Scale (CAS)	Anxiety (unifactorial) Fear of social interaction	Lee et al., 2020aa Lee, Mathis, et al., 2020b	English <sup>a,b</sup>
	COVID-19 Anxiety Scale	Illness anxiety	Chandu et al., 2020	Hindi
Fear	Fear of COVID-19 Scale (FC-19S)	Fear (unifactorial)	Ahorsu et al., 2020;	English
Obsessions	Obsession with COVID-19 Scale	Obsession (unifactorial)	Lee et al., 2020b	English
Attitude	Attitudes Towards the Response to COVID-19 Pandemic	Attitudes towards responses plans Attitudes towards activities plans Attitudes towards crisis communication plans Psychological factors Psycho-somatic factors Economics factors	Abdelaziz et al., 2020	Arabic

Phobia	COVID-19 Phobia Scale (C19P-S)	Social factors	Karatas & Baloglu, 2020	English
Perception	Perceived vulnerability to COVID19	Perceived infectiousness	Gonzalez-Olmo et al., 2020	Spanish
	Brief Illness Perception Questionnaire to COVID-19	Germ aversion Illness perception (unifactorial)	Pérez-Fuentes et al., 2020	Spanish
Information	Knowledge About COVID-19	Knowledge (unifactorial)	Zhong et al., 2020	Chinese English
	Knowledge, Attitudes and Practices (KAP) towards COVID-19	Knowledge Attitude Practice	Al-Hanawi et al., 2020	Arabic English
Function	Post-COVID-19 Functional Status (PCFS) Scale	Functional status (unidimensional)	Maheshwari et al., 2020; Haque et al.; Klok et al., 2020	English

Adapted from: Cortez et al., 2020.

\* Most of these measures are available in multiple languages. For the sake of simplicity, only English language versions are cited, except for those in which English is not available in which case the primary language version is cited.

# APPENDIX E: COVID-19 RELATED MENTAL HEALTH RESOURCES AT PSIs

Canadian Post-Secondary Institutions

	Post-secondary Institute	Description
1	Brock University	Links to guides helping students with general well-being, anxiety, and self-care such as meditation and yoga exercises. Links to free community services (Ex: CAMH online mental health courses about addiction and depression). <a href="https://brocku.ca/mental-health/main/covid-19-and-mental-health/">https://brocku.ca/mental-health/main/covid-19-and-mental-health/</a>
2	George Brown College	Mindfulness mobile applications, interactive self-help resources (Ex: Mindshift mobile application), and comprehensive guides on anxiety and depression. <a href="https://www.georgebrown.ca/current-students/services/counselling/taking-care-of-your-mental-health">https://www.georgebrown.ca/current-students/services/counselling/taking-care-of-your-mental-health</a>
3	Guelph University	Video and telephone counselling. Links to coping with COVID-19 related anxiety and website platforms (Ex: Big White Wall) and mobile applications (Ex: Mindshift) <a href="https://wellness.uoguelph.ca/covid-19-faqs-student-wellness-services">https://wellness.uoguelph.ca/covid-19-faqs-student-wellness-services</a>
4	Humber College	Offering telephone and video counselling and accessibility services. Providing free access to website therapy and self-help platform – Therapy Assistance Online (TAO) <a href="https://appliedtechnology.humber.ca/current-students/resources/student-support/mental-health-resources.html">https://appliedtechnology.humber.ca/current-students/resources/student-support/mental-health-resources.html</a>
5	McGill University	Links to helplines, guidelines, and online therapy and counselling platforms that address domestic violence, self-care, meditation, and more. <a href="https://www.mcgill.ca/definetheline/impacts/covid-19-resources">https://www.mcgill.ca/definetheline/impacts/covid-19-resources</a>
6	McMaster University	Links to help students with stressors (Ex: emergency financial support or Hamilton food share program), mental health textlines and community website platforms, and a research-based anxiety toolbox. <a href="https://wellness.mcmaster.ca/resources/support-during-covid-19/">https://wellness.mcmaster.ca/resources/support-during-covid-19/</a>
7	Ryerson University	Tips on managing anxiety such as journaling self-care, and online learning/school. Links to crisis and mental health hotlines and one-to-one virtual learning supports. <a href="https://www.ryerson.ca/student-wellbeing/staying-well-during-covid-19/">https://www.ryerson.ca/student-wellbeing/staying-well-during-covid-19/</a>
8	Seneca College	Telephone counselling and accessibility services. Learning Strategists help guide students on time management skills, test anxiety, assignment completion, etc. <a href="https://www.senecacollege.ca/student-services-and-support/support-services/counselling.html">https://www.senecacollege.ca/student-services-and-support/support-services/counselling.html</a>
9	Simon Fraser University	A list of articles and links to helping manage non-COVID-19 and COVID-19 related anxiety and loneliness/isolation. Link to Conference Board of Canada video series for mental health and COVID-19 topics. <a href="https://www.sfu.ca/human-resources/covid-19-and-your-well-being.html">https://www.sfu.ca/human-resources/covid-19-and-your-well-being.html</a>
10	University of Alberta	Links to guides, webinars, audio files and online resources to help students manage anxiety, depression, relationships, self-image, grief, and general mental health. <a href="https://www.ualberta.ca/current-students/counselling/resources/index.html">https://www.ualberta.ca/current-students/counselling/resources/index.html</a>
11	University of British Columbia	List of articles and resources to help students manage anxiety and isolation. Links to crisis hotlines and virtual tools supported by the Government of British Columbia. Offering online counselling. <a href="https://students.ubc.ca/covid19/mental-health-during-covid-19-outbreak">https://students.ubc.ca/covid19/mental-health-during-covid-19-outbreak</a>

12	University of Manitoba	Offering telecounselling. Tips and links to resources addressing anxiety management, isolation, and studying. Mobile applications such as Headspace and the Province of Manitoba Mental Health Virtual Therapy Program (CBT) <a href="http://umanitoba.ca/student-supports/counselling-resources-emotional-wellness-covid-19">http://umanitoba.ca/student-supports/counselling-resources-emotional-wellness-covid-19</a>
13	University of Ottawa	Tips on mindfulness, general coping strategies and links to online classes (Ex: MindfulNYU) and Zoom workshops on DBT for life skills, dating relationships, sleep, procrastination, and time management. <a href="https://www.nyu.edu/students/health-and-wellness/services/counseling-services/mental-health-during-covid-19.html">https://www.nyu.edu/students/health-and-wellness/services/counseling-services/mental-health-during-covid-19.html</a>
14	University of Saskatchewan	Links to webinars and toolkits to help students manage anxiety, COVID-19 related stress, and resilience. <a href="https://wellness.usask.ca/covid-19.php">https://wellness.usask.ca/covid-19.php</a>
15	University of Toronto	Offering telephone and video counselling. Providing free access to My SSP mobile application for 24/7 confidential counselling support. Free online course to manage anxiety, isolation, and depression. <a href="https://www.coursera.org/learn/manage-health-covid-19?mc_cid=98be981ed4&amp;mc_eid=7f830899d6#enroll">https://www.coursera.org/learn/manage-health-covid-19?mc_cid=98be981ed4&amp;mc_eid=7f830899d6#enroll</a>
16	University of Waterloo	Links to tips and activities for anxiety, family resilience, and website platforms such as Stronger by BEACON, a guided digital therapy platform funded by the Ontario Government. <a href="https://uwaterloo.ca/mental-health-research-treatment/resources-covid-19">https://uwaterloo.ca/mental-health-research-treatment/resources-covid-19</a>
17	University of Western Ontario	Full-time telephone and Zoom video counselling. Providing virtual group care and workshops for mindfulness, ACT, and general wellness. <a href="https://www.uwo.ca/health/psych/index.html">https://www.uwo.ca/health/psych/index.html</a>
18	University of Windsor	Launched a Wellbeing Portal which gives access to resources to cope with anxiety, big life changes, isolation, and self-care. Free access to My SSP and Therapy Assistance Online (TAO) for counselling and self help. <a href="https://www.uwindsor.ca/coronavirus/377/wellbeing-portal">https://www.uwindsor.ca/coronavirus/377/wellbeing-portal</a>
19	York University	A list of evidence-based, online mental health resources for general well-being, anxiety management, and workings/studying from home. <a href="https://www.yorku.ca/health/mental-health-resources-during-covid-19/">https://www.yorku.ca/health/mental-health-resources-during-covid-19/</a>

## American Post-Secondary Institutions


	Post-secondary Institute	Description
1	University of Michigan	A comprehensive guide on how students can adjust their study habits to thrive in an online learning and evaluation environment. At-length tips for organization, schedule-making, group work, and more. <a href="https://lsa.umich.edu/content/dam/rll-assets/rll-docs/Study%20Habits.pdf">https://lsa.umich.edu/content/dam/rll-assets/rll-docs/Study%20Habits.pdf</a>
2	Georgetown University	Virtual support groups and interpersonal workshops, and education on violence, sexual health, eating disorders, and alcohol and drug-use concerns. <a href="https://www.georgetown.edu/mental-health-and-telehealth-resources/">https://www.georgetown.edu/mental-health-and-telehealth-resources/</a> <a href="https://mailchi.mp/13585756d7e9/mental-health-resources-for-students">https://mailchi.mp/13585756d7e9/mental-health-resources-for-students</a>
3	Harvard University, Chan School of Public Health	Launched an online forum series under their REACH initiative that introduces evidence-based stress management skills and resiliency techniques. <a href="https://www.hsph.harvard.edu/coronavirus/covid-19-news-and-resources/covid-19-mental-health-forum-series/covid-19-mental-health-forum-resources/">https://www.hsph.harvard.edu/coronavirus/covid-19-news-and-resources/covid-19-mental-health-forum-series/covid-19-mental-health-forum-resources/</a>











4	New York University	Tips on mindfulness, general coping strategies and links to online classes (Ex: MindfulNYU) and Zoom workshops on DBT for life skills, dating relationships, sleep, procrastination, and time management. <a href="https://www.nyu.edu/students/health-and-wellness/services/counseling-services/mental-health-during-covid-19.html">https://www.nyu.edu/students/health-and-wellness/services/counseling-services/mental-health-during-covid-19.html</a>
5	Penn State University	A list of tips and links to crisis lines, community mental health services and service provider search platforms such as ThrivingCampus. Offering telephone counselling. <a href="https://beaver.psu.edu/covid19/mental-health">https://beaver.psu.edu/covid19/mental-health</a>
6	Stanford University	List of telehealth and virtual counselling resources students may access for general well-being, sexual violence, alcohol and substance abuse, and spiritual and financial well-being. Queer, Black, and Native American specific resources also provided. <a href="https://vaden.stanford.edu/virtualwellbeing/resources">https://vaden.stanford.edu/virtualwellbeing/resources</a>
7	University of California Berkeley	Providing access to Teledoc – 24/7 teletherapy with a mental health professional. List of mental health handouts, and guided mindfulness exercises. <a href="https://uhs.berkeley.edu/coronavirus/student-mental-health">https://uhs.berkeley.edu/coronavirus/student-mental-health</a>
8	University of California Los Angeles	Compilation of mindfulness webinars, UCLA mindfulness mobile application, and free guided meditations. <a href="https://www.uclahealth.org/marc/covid19-mindfulness">https://www.uclahealth.org/marc/covid19-mindfulness</a>
9	University of Michigan	Individual, group, and couple online clinical counselling and workshop services. Free Stressbusters mobile application and mental health, mindfulness, and anxiety care guides. <a href="https://caps.umich.edu/topic/caps-covid-19-support">https://caps.umich.edu/topic/caps-covid-19-support</a>
10	University of Pennsylvania	Tips to manage difficult anxiety, sadness, and racial bias. Links to hotlines, textlines, mobile applications. Offering telecounselling and virtual groups and workshops. <a href="https://caps.wellness.upenn.edu/your-mental-health-and-covid-19/">https://caps.wellness.upenn.edu/your-mental-health-and-covid-19/</a>
11	Yale University	Offering telecounselling. Links to mobile applications (Ex: COVID Coach), video workshops and information sessions on strategies for sleep, insomnia, anxiety, and self-care. <a href="https://yalehealth.yale.edu/directory/departments/mental-health-counseling">https://yalehealth.yale.edu/directory/departments/mental-health-counseling</a> <a href="https://yalehealth.yale.edu/resources-students-quarantine">https://yalehealth.yale.edu/resources-students-quarantine</a>

# APPENDIX F: COVID-19: FREE APPS AND WEBSITES

## FREE MENTAL HEALTH APPS

GENERAL	
<b>What's Up:</b> Based on Cognitive Behaviour Therapy (CBT) and Acceptance Commitment Therapy (ACT) to help with general mental health signs and symptoms.  	<b>Moodflow:</b> this app keeps track of your emotions, moods, thoughts and general well-being.  
ANXIETY	
<b>Mindshift CBT:</b> Activities based on Cognitive Behavioural Therapy (CBT), includes relaxing audio and progress tracing.  	<b>Self-help Anxiety Management:</b> Provides self-help methods, relaxation techniques to reduce physical symptoms of anxiety.  
<b>Stop Panic &amp; Anxiety Self-Help:</b> Helps in managing symptoms of panic and skills to encounter fearful thinking.  	<b>Anxiety Reliever:</b> Through calming audio sessions, this app helps in evaluating one's thinking patterns, developing awareness about signs and patterns of anxiety related thoughts and physiological symptoms. 
DEPRESSION	
<b>MoodTools - Depression Aid:</b> Also based on CBT, aims to help overcome cognitive barriers and distressing emotions. 	<b>Mood Kit:</b> Mood Kit uses the principles of CBT to offer users with over 200 different mood improvement activities. 
<b>Pacifica- Anxiety, Stress &amp; Depression relief:</b> Based on CBT to identify, track, and monitor cyclical negative thinking patterns. 	<b>CBT Thought Record Diary:</b> This app helps you to document your negative thoughts, analyze your cognitive shortcoming, and re-evaluate your thoughts, with an aim to improve your emotional health.  
TRAUMA, POST-TRAUMATIC STRESS DISORDER (PTSD)	
<b>VA Mobile Apps:</b> This, website, offer 15 mobile applications (apps) which provide self-help, education and support following trauma. These include treatment companion apps, for use with a health care provider, to make treatment easier. There are apps for iOS and Android devices.  	<b>PTSD Coach Canada:</b> The PTSD Coach app can help one to learn about and manage symptoms that often occur after trauma.    <a href="#">Canada (French)</a>
<b>PTSD Coach:</b> This app can help you learn about and manage symptoms that can occur after trauma	<b>PTSD Family Coach:</b> This app provides support to concerned family member of those with PTSD  

MINDFULNESS/ RELAXATION	
<b>Metta:</b> Is a simple gratitude journal. One can record, save, and playback audio clips of what one has been grateful for throughout the day. 	<b>Mindfulness Coach:</b> This app helps practicing mindfulness, teaching you how to be in the present moment.  
SLEEP HYGINEE	
<b>CBT-i Coach:</b> Based on CBT: this app teaches ways to improve sleep hygiene and decrease insomnia  	<b>Breathe2Relax:</b> Developed by the National Center for Telehealth & Technology for all ages; this app teaches diaphragmatic breathing and other relaxation techniques. 
<b>Best Sleep Hygiene:</b> Offers useful sleep hygiene recommendations  	

## WEBSITE PLATFORMS: COVID-19 AND MENTAL HEALTH RELATED

### COVID-19: WEB-BASED RESOURCES FOR YOUNG ADULTS

Centre for Innovation in Campus Mental Health: COVID-19 Resources

CICMH has created and collated resources that may be helpful.

<https://campusmentalhealth.ca/covid-19-resources/>

#### CAMH COVID-19 Discussion Forum

An online peer-to-peer support community for mental health issues such as anxiety or stress related to the pandemic where users can receive and provide encouragement and the sharing of experiences. <https://covid19.camhx.ca/mod/forum/view.php?id=1>

#### Jack.org: COVID Resource Hub

Resource hub by Jack.org, School Mental Health Ontario and Kids Help Phone Jack.org, designed to make access to education, tools, support and reliable information easier. <https://jack.org/covid>

#### COVID-19 And Canadian Universities: Resources and Supports

Find out more information on how universities are investing and planning to provide more resources and support for post-secondary institutions.

<https://www.univcan.ca/coronavirus-covid-19-and-canadian-universities-information-and-resources/>

#### Indspire: COVID-19 Resources:

Find resources specifically for students, educators, and additional health resources.

<https://indspire.ca/covid19/>

#### National Standard of Canada for Mental Health and Well-being for Post-Secondary Students

The first of its kind in the world — is a set of flexible, voluntary guidelines to help PSIs support the mental-health and well-being of their students.

<https://www.mentalhealthcommission.ca/English/studentstandard>

### **APA: Coping from the Healthcare Provider's Perspective**

Find out how psychologists over the world suggest that you can better cope with the psychological effects of COVID-19. <https://www.apa.org/topics/covid-19/world-psychologists>

## **GENERAL RESOURCES SUPPORTING MENTAL HEALTH OF YOUNG ADULTS**

### **Strengths-Based Actions to Maintain Wellbeing in Times of COVID-19**

This paper offers 101 easily implementable, concrete ideas and actions to maintain daily wellbeing to mitigate behavioural fatigue in times of COVID-19.

<https://www.internationaljournalofwellbeing.org/index.php/ijow/article/view/1441>

### **Wellness Together Canada**

Provides online tools, self-guided courses, online community for support and coaching, as well as one-to-one counselling with a mental health professional for all mental health needs for both youth and adults. <https://ca.portal.gs/>

### **MindBeacon**

An internet CBT (iCBT) tool that takes users through a CBT course lasting 6-10 weeks that includes readings and activities. The platform provides users access to a therapist for up to 12 weeks. Free for Ontario residents. <https://www.mindbeacon.com/>

### **Bliss Depression Therapy**

Offers 8 free interactive CBT sessions to improve depression, mood, and overall mental health. <https://cimhs.com/bliss-free-online-therapy-for-depression.html>

### **BounceBack**

Free skills-building program managed by the Canadian Mental Health Association (CMHA) aims to develop coping techniques to overcome current and future challenges.

<https://bouncebackontario.ca/>

### **Naseeha**

Provides immediate, anonymous and confidential support over the phone and text from 12-9, 7-days a week; also offers culturally-sensitive educational program to raise awareness against Stigma. <https://naseeha.org/>

### **Real Campus**

This resource provides select Canadian college and university students free online therapy, virtual doctor visits, lifestyle courses, counselling, and tools to improve student mental health.

<https://realcampus.ca/>

### **Togetherall**

An anonymous online peer-to-peer support community for mental health, available worldwide 24/7. Self-guided courses, creative tools for expression, and self-assessments are also available. Trained practitioners are available 24/7 to manage a safe environment for users.

<https://togetherall.com/en-ca/>

### **Good2Talk**

Provides confidential services for post-secondary students 1-866-925-5454 or Text GOOD2TALKON to 686868 <https://good2talk.ca/ontario/>

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