# STUDENT MENTAL HEALTH AND WELL-BEING SURVEY 2021

## September 2021

#### STUDENT MENTAL HEALTH IN THE CONTEXT OF COVID-19

The COVID-19 pandemic has resulted in significant disruptions to our daily lives. This report describes the mental health and well-being of students at the Dalla Lana School of Public Health during the COVID-19 pandemic.



#### What's inside?

- Description of students' mental health experiences
- Overview of lifestyle changes during the COVID-19 pandemic
- Impact of COVID-19 on academic milestones and progress

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Dear Dalla Lana School of Public Health community and key stakeholders,

It is with great pleasure that we present the results from the **2021 Dalla Lana School of Public Health Mental Health and Well-Being Survey**. 341 (of 1250) master's and doctoral students from across the school responded to the survey, providing insight into the mental health and well-being experiences of students.

The Mental Health and Well-Being Survey Working Group started in the fall 2019 though the Doctoral Epidemiology Training Association (DELTA) student group. In light of known stressors associated with graduate school and mounting concerns about student mental health on campus, we sought to describe DLSPH students' mental health and well-being in order to develop recommendations and guide interventions.

Several months into the survey development process, the COVID-19 pandemic changed our social and academic lives. To address the changing needs of the student population, we shifted the focus of the survey to capture mental health and well-being in the context of COVID-19 and to assess how the pandemic has impacted students' wellness and academic experiences. For information on the survey's methods, including timeframes, population, measures, and analysis, please see **Appendix A** (a link to the survey tool can be found in **Appendix B**).

This report covers several aspects related to mental health, including the prevalence of self-reported depression, anxiety, stress, and thoughts related to suicide and self-harm. Estimates are provided overall and within select subgroups (e.g., students who identify as Black or as a sexual minority). Later sections of the report present findings on how students' behaviours (e.g., alcohol consumption and physical activity levels) have changed during the COVID-19 pandemic. Students' financial well-being and concerns are also discussed.

Throughout the report, quantitative and qualitative findings are used in concert to provide an in-depth perspective into students' experiences. Students' recommendations for DLSPH were drawn from themes that emerged directly from a question soliciting students to provide what they think should be implemented.

We are very thankful for DLSPH and the COVID-19 Student Engagement Award from the University of Toronto for funding this work and look forward seeing these results put into action.

Sincerely,

#### **Survey Development Team**

Daniel Harris, David J Kinitz, Miranda Loutet, Corey McAuliffe, Christa Orchard

# STUDENT MENTAL HEALTH

Concerns about student mental health and well-being have been growing across university campuses. Studies from North America estimate that nearly half of all graduate students experience stress, anxiety, or depression symptoms, with as many as 47% of PhD students and 37% of master's students meeting the clinical threshold for depression<sup>(1-3)</sup>. Other dimensions of mental health, such as thoughts of self-harm and suicide, have been captured less frequently in these studies.

The following section reports on aspects related to DLSPH student mental health overall, followed by a closer examination into specific sub-groups.



**Box 1** highlights that poor mental health was common among respondents, with 38% and 53% of respondents meeting self-reported clinically significant thresholds for depression and anxiety, respectively (see **Appendix A** for detail on methods for identifying clinical thresholds). Thoughts of self-harm and suicide were also concerningly common among respondents, well exceeding estimates of suicidal ideation from the general adult population (2% among adults in high-income countries before the pandemic and 6% among adults in Canada during the COVID-19 pandemic)<sup>(4, 5)</sup>.

Respondents further reported feelings of uncertainty, apathy, loneliness, and hopelessness. Family structure, proximity, and connection played an important role in respondent's well-being. Many reported living alone or away from family, and felt concerned for their family's health, yet helpless in their ability to respond. A quarter of respondents felt isolated nearly every day (24%) and 84% felt concerned for their loved ones' well-being at some point within two-weeks of participating in the survey. Some took on the role of a support person for their

children or aging parents. While others, who are parents themselves, had to take a formal leave from school or faced challenges with balancing caregiving for children at home. Those who had these additional responsibilities, identified not having any time to themselves.

Overall, 71% of respondents reported that their mental health was worse during the pandemic compared to before the pandemic. Due to their worsening mental health over the past year, several respondents reported needing to start a new medication, increase their current medication's dose, or had re-started a prior medication. Many respondents stated that they developed anxiety since the pandemic or that their pre-existing conditions, such as PTSD, anxiety, and depression, worsened.

Some respondents reported being bored with nothing to do beyond academic work, while others struggled to manage competing priorities due to working from home or having too much time to think and worry. However, others found that their new work-from-home schedules improved their ability to prioritize family and wellness.

During the two weeks prior to taking the survey, a third of respondents reported having difficulty concentrating nearly every day (34%), while another third felt unproductive nearly every day (33%). Student respondents shared concerns for their future career trajectory due to a lower capacity to be productive and feelings of increased burden from everyday activities. **Respondents articulated that even when causes of their poor mental health came from outside of academia, their mental health had a direct impact on their education.** The majority (88%) reported feeling unable to separate work (e.g., Research Assistantships, coursework) from life at some point during the two weeks prior to taking the survey. However, 84% of respondents felt optimistic about the future at some point during the two weeks prior to taking the survey.

Due to worsening mental health, students reported starting a new medication, increasing medication or going back on a medication





34% of students had difficulty concentrating nearly every day



84% of students felt optimistic about the future

# MENTAL HEALTH & WELL-BEING AMONG KEY GROUPS

Mental health is known to vary by gender, race and ethnicity, sexual orientation and other characteristics<sup>(6, 7)</sup>. Individuals who face structural forms of oppression and discrimination based on their social identities are at a greater risk of negative mental health. Further, prior reports and publications show that the pandemic has impacted some people differently than others, acting to magnify social and structural inequities in physical and mental health<sup>(5, 8)</sup>.

The following section explores mental health by respondents' gender, sexual orientation and race and ethnicity.

#### Gender

Participants were asked to identify as a woman, man, gender-fluid or gender non-binary; however, due to small sample sizes, estimates for respondents who identified as gender-fluid or gender non-binary are not reported. Most respondents identified as women (82%).

**Figure 1** shows that over a third of men and women self-reported clinically significant depression symptoms. We also observed that Figure 1. Proportion of respondents reporting clinically significant anxiety and depression symptoms, and thoughts of suicide and selfharm by gender



self-reported anxiety symptoms were substantially more common in women than men. Some respondents noted that their anxiety was related to feeling unsafe as a result of gender discrimination at work, past assaults and having fewer people out in public spaces. One woman stated, "*the mental well-being concerns of myself and my peers who are mostly female are minimized/ignored by the postgraduate office*."

The proportion of women reporting difficulty concentrating (women: 36%, men: 25%), feeling isolated (women: 26%, men: 17%) and feeling unproductive (women: 35%, men: 26%) also exceeded men. Women described having increased household duties and "*feminized roles*", decreasing their ability to focus on schoolwork.

"The research is telling us that this pandemic is putting back the women's movement 30 years. I feel this every single day!" - DLSPH Student

## **Sexual orientation**

Sixteen percent (n=54) of respondents identified as a sexual minority (e.g., gay, lesbian. bisexual). Among this group, clinically significant, self-reported depression (41%) and anxiety symptoms (59%) were hiaher compared to participants who did not identify as a sexual minority (Figure 2). Respondents who identified as a sexual minority were over two times as likely to report thoughts of self-harm or wanting to die than respondents who did not identify as a sexual minority (25%) vs 12%).





Almost a third (32%) of respondents who identified as a sexual minority experienced discrimination, compared to 19% of those who did not identify as a sexual minority. Moreover, these respondents more frequently reported having difficulty concentrating (sexual minority: 40%, not sexual minority: 33%), feeling isolated (sexual minority: 28%, not sexual minority: 24%), feeling unproductive (sexual minority: 37%, not sexual minority: 32%), and having concern for loved ones' well-being (sexual minority: 33%, not sexual minority: 24%) compared to those who did not identify as a sexual minority. Among those who identified as a sexual minority, feelings of isolation and disconnection from their communities caused "*disrupted relationships*" – both romantic and platonic – due to the pandemic. This isolation was further exacerbated for those who had an inability to move back home due to non-affirming families.

"I have had the option to move home with my parents to reduce isolation and get some support. However, as a queer person, home is not a comfortable space for me where I can be myself. This would come with its own set of mental health consequences. I have seen some friends move home and am somewhat jealous of that. I think the pandemic is harder on those who don't have the ability to move back home with their families." – DLSPH student

### Race & ethnicity

Race and ethnicity were captured using several non-exclusive groups (see **Appendix A** for more detail on how race and ethnicity were collected and analysed). Self-reported clinically significant depression symptoms were highest among respondents who identified as Latino/a/x (73%) and Middle Eastern (50%). Self-reported clinically significant anxiety symptoms were highest among respondents who identified as Latino/a/x (82%) and Black (65%). Reporting thoughts of self-harm or wanting to die was high among almost all race and ethnicity groups (24% among East and South East Asian, 18% among Latino/a/x, 17% among Black, and 17% among Middle Eastern respondents).

Respondents who identified as Black, Latino/a/x or Middle Eastern commonly reported having difficulty concentrating (48%, 45%, 58%, respectively), feeling isolated (44%, 45%, 42%, respectively), and feeling unproductive (61%, 27%, 50%, respectively). Worry for family members living in other countries, constant media coverage of the pandemic, and the frequency with which Black and Indigenous peoples are being harmed have led participants to report detrimental mental health impacts.

Some who identified as Indigenous further reported frustration that DLSPH courses continued to "*fail to provide a critical race perspective to the Eurocentric research paradigms, methodologies, and methods*" and that "*this harms BIPOC [Black, Indigenous, People of Color] by not acknowledging the damage this research continues to do to their communities.*" Some members of every non-white racial or ethnic group experienced racism and/or discrimination at least several days during the two weeks prior to taking the survey (46% of Black, 37% of South Asian, 33% of Middle Eastern, 27% of Latino/a/x and 24% of East and South East Asian respondents). Both personal and community-related Indigenous and anti-Black discrimination (highlighted in the news) were further cause for anxiety and feeling overwhelmed.

"Constantly witnessing structural and interpersonal violence against my communities has definitely had an adverse impact on my mental health."- DLSPH Student

The rise of anti-Asian racism due to the pandemic heightened concerns of safety for South, Eastern and South East Asian respondents. Participants reported racist and verbal harassment, including microaggressions in the workplace, that caused increased anxiety and feeling disconnected from work colleagues. Accounts of anti-Semitism were also reported.

## **International students**

Nearly ten percent of respondents were international students (n=32). Selfreported clinically significant depression (41%) and anxiety (56%) symptoms were high among this student population. Almost all international students who completed the survey reported feeling concerned about their loved ones' wellbeing at least several days during the two weeks prior to taking the survey (90%). This worry extended to difficulties with being unable to return to one's country of origin, especially the mental distress that comes with the Canadian government's banning/stopping of flights to/from specific countries. As one respondent reported, "international students can be alone in this country...We always want to perform the best and show we are competitive and capable. We try to demonstrate everything is perfect when it is not. We [should] stop that behaviour and acknowledge we are humans." Further difficulties for international students who participated included issues with study permits, financial burdens, poor internet connection, and issues with time zones and participating in synchronous class sessions for those who returned to their countries of origin.

#### Respondents with a chronic or intermittent disability

Respondents were asked whether they had a chronic or intermittent disability and/or condition that impacted their daily functioning. As we wanted respondents to use their own judgement and experience, we did not provide specific examples of disabilities or conditions. As such, this could theoretically include a range of both mental and physical conditions that respondents felt impacted their daily functioning.

Figure 3. Proportion of respondents reporting anxiety, depression and thoughts of suicide and self-harm by chronic or intermittent disability



Eighteen percent of respondents reported having a chronic illness or intermittent disability (n=60). Among those, 67% self-reported clinically significant depression symptoms, 70% self-reported clinically significant anxiety symptoms and 26% self-reported thoughts of self-harm or suicide (**Figure 3**). Moreover, the overwhelming nature of the pandemic's many challenges disrupted traditional coping strategies, leaving many respondents feeling overlooked. Lack of access, such as having a private space, has created issues for therapeutic services, while stress from the pandemic has been identified as causing relapses and absences from work. Almost 60% of those with a disability or condition reported having difficulty concentrating, while half reported feeling unproductive nearly every day. Many respondents who identified as having a disability reported that online settings were extremely distracting and exacerbated symptoms. They further

identified that limited support had been received from university-based accessibility services. Forty percent of respondents with a chronic illness or intermittent disability reported experiencing discrimination compared to 16% among those who did not report a disability. However, one respondent did mention that some professors were incredibly helpful, such as by offering extensions, which proved useful.

#### Caregivers

Almost a quarter of respondents had at least one dependent. A third of those with dependents felt concerned about loved ones' well-being nearly every day during the two weeks prior to taking the survey. The majority of respondents who qualitatively described their experiences as a caregiver (for both children and older family members) were women. These women identified an increased burden of work impacting their time, as well as limited access to supports or resources, forcing some to put their career/work on hold. Interestingly, self-reported clinically significant depression symptoms (32%), anxiety symptoms (49%) and thoughts of self-harm or suicide (11%) are slightly lower among those with dependents compared to those without (39%, 55%, and 15%, respectively); however, these proportions are still high. Further concerns for caregivers who were frontline essential workers included fears of bringing COVID-19 home to family members.

## **Additional social contexts**

In relation to social identities, respondents spoke about not having a stable relationship or family situation. Living alone or with roommates created further stressors for respondents around government COVID-19 related policies regarding "household bubbles" as well as working from home in tight quarters. An inability to easily continue to date or meet new people was also acknowledged as a challenge, increasing feelings of isolation. There are also further stressors that participants may not want to share in this forum, as was the case from one respondent, *"I have had recent challenges but do not feel safe sharing."* 

Unfortunately, due to small sample sizes, we are unable to report quantitative estimates across intersecting identities.



All race and ethnicity minority groups experienced racism and/or discrimination



International students worried about being unable to return to their country of origin



Students with dependents had limited access to supports or resources

# WELL-BEING & RESPONSE TO THE COVID-19 PANDEMIC

The COVID-19 pandemic has substantially impacted our daily lives, restricting the ways in which students interact with the world outside of their academic studies, as well as opening new opportunities for communication and connection.

# This section explores the ways in which the COVID-19 pandemic has impacted respondents' well-being and behaviours.

Maintaining well-being and healthy behaviours during the pandemic has been a struggle for many, with every respondent (100%) reporting some change in their behaviours since the onset of the pandemic. Many described feelings of apathy and low motivation, which subsequently impacted their ability to engage in physical activity and maintain a work-life balance (**Box 2**). The majority of student respondents (88%) felt they were unable to separate work from life at some point during the two weeks prior to the survey, while 42% of respondents felt this every day. A student described their balance was "*all over the place*" as they attempted to engage in work, school and social activities via technology from their homes.



The range of respondent open-text responses to coping with the pandemic and school stress was broad. Some respondents struggled more at the beginning of the pandemic due to feelings of isolation and not having adequate coping strategies. However, throughout the pandemic, some students moved in with family or found new routines and strategies to cope with the remote and isolating challenges of everyday life. Some reported spending *more time* on activities they enjoy since the onset of the pandemic, including 43% on hobbies (e.g., baking, reading, puzzles), 25% on meditation, prayer or mindfulness, and 24% engaging in physical activity. With an increase of time for some, while not for others, most respondents reported trying to find a balance, yet found it challenging. A PhD student articulated competing feelings well: "I've had more time to develop personal hobbies and more time to dedicate to exercise, while also becoming more and more sad/unmotivated, so both are happening at once, and trying to stay motivated and keep distracting myself." Regardless of their ability to find hobbies or other activities, respondents report that "it simply does take a toll on our health." While some engaged more in these activities, the majority of respondents (58%) reported that they were less physically active compared to prior to the pandemic, a quarter spent less time on hobbies, and one in five spent less time engaging in meditation, prayer or mindfulness activities (Figure 4).





One substantial factor impacting respondent well-being is time spent on screens, with almost three quarters (72%) of respondents reporting that they had engaged in more non-work-related screen time compared to before the pandemic (**Box 2**; **Figure 4**). With less time commuting, socializing or engaging in other non-screen activities, people turned to their phones, TVs and computers. Some found themselves consumed by, often COVID-related, news and social media content

that negatively impacted their mental health and well-being, while others watched more TV for exactly that reason – they could control the content.

Another change echoing through student responses related to sleep patterns. In total 43% of respondents reported sleeping more during the pandemic, while 22% reported sleeping less. Some reported having trouble falling asleep and being kept up by anxious thoughts. Feeling little motivation or apathy, respondents spent more time trying to sleep, with some having more success than others. With a new sedentary life and difficulty concentrating on school, respondents would fall asleep during the day and often find themselves less able to maintain a regular sleep schedule.



Financial challenges and lack of financial independence are common sources of stress among students<sup>(9)</sup>. Prior studies have documented the pressure to take on additional projects and responsibilities, often un- or under-paid, in order to gain a competitive advantage after graduation<sup>(10)</sup>. Although prior literature reviews have summarized doctoral students' well-being, including dimensions related to financial stress, we sought to examine these aspects among everyone in the DLSPH student community.

# This section broadly reports on aspects of financial well-being and stress overall and within select student populations.

Financial stress was common among respondents, with a quarter expressing concerns about affording food and almost 40% being concerned about affording housing (Figure 5). One respondent noted that "*the cost of food has skyrocketed, and it is difficult to make healthy choices with the costs of food.*" Others identified financial issues due to housing, such as those who have tried to rent or sublet spaces in order to save money or support family members.

Respondents supporting family members (e.g., older parents, siblings, partners and children) identified additional costs due to lending money, paying for personal protective equipment (PPE), services for older family members, as well as childcare costs (e.g., in-home nanny). Financial struggles spanned from loss of potential income due to the cancellation of scholarship programs, ineligibility for Canada Emergency Response Benefit (CERB) or other grant programs, decreased Ontario Student Assistance Program (OSAP), personal job loss and other household members' job loss (e.g., partners, parents).



# Figure 5. Proportion of respondents with <u>at least some concern</u> affording food, housing, tuition, bills, and recreational activities overall and stratified by degree type

In addition to these more basic needs, over half of respondents were concerned about affording recreational activities. Indeed, among students who reported concerns affording recreational activities, 61% self-reported clinically significant anxiety symptoms and 44% self-reported clinically significant depression symptoms. Perhaps unsurprisingly, anxiety and depression were even more commonly reported among respondents who expressed concerns affording food (anxiety: 69%; depression: 58%) and housing (anxiety: 61%; depression: 51%).

#### Income

The COVID-19 pandemic has also had a non-trivial impact on students' income, with 33% of all respondents reporting a *decrease* in their income as a result of the pandemic. Despite several emergency sources of funding being made available to Ontarians and students, a majority of respondents reported being ineligible for or unaware of these programs - 49% of all respondents reported being ineligible for the School of Graduate Studies' emergency loan or emergency grant programs, while 38% of all respondents reported being unaware of these programs reported being unaware of these resources prior to the survey.

While some respondents reported feeling financially stable or having had increased income due to added work hours (e.g., essential workers), many were concerned about their expenses - especially those currently living in Toronto. Those who felt financially secure identified that past (e.g., savings) or current work, reduced expenditures (e.g., eating out less) and access to Canada Emergency Response Benefit and Canada Emergency Student Benefit helped them to feel more secure, although unforeseen potential expenses perpetuated continued worry. Some respondents further acknowledged support offered to them by parents, both in terms of financial support and living situations (e.g., moving back home). Conversely, those who were unable to secure employment or lost a job due to the pandemic felt financial repercussions deeply, with many having to access their savings. University expenses, such as "paying for library access, gvm access. Hart House via tuition and fees when access to these services is greatly reduced if not prohibited" caused frustration due to a "reduced value." Additionally, those who had to delay their graduation due to pandemic related challenges identified a loss of income (due to no work) and increased costs (due to further tuition expenses).

## The future of work

Financial concerns were also expressed through worry about future employment, although many respondents felt they would be entering a more secure work environment due to their public health training. For those who felt concerned, they identified a lack of career mentorship, inability to network, and decreased practicum, internship, research assistantship and volunteer opportunities.

Additional caregiving duties appeared to impact many respondents, reducing their capability to take on activities such as research or teaching positions in which to further develop their credentials and experience. Respondents were additionally worried about the state of the current job market and lack of funding in specific areas, many of which have been rerouted to COVID-19 funds. Respondents reported fears of a general recession, struggling businesses, and faculty hiring freezes and cuts. As one student put it, "*I am very concerned that if organizations cannot afford to pay practicum students, they will certainly not be able to pay to hire full-time staff when we graduate - likely no jobs in the field.*" However, other respondents felt the reverse and that there would likely be many positions available in public health, especially healthcare workers and epidemiologists, who would likely "*be in high demand for the next few years.*" Others also noted they had developed new skills during the pandemic, including further independence and recognition for their work.

"It is challenging to network and meet people when working from home. During classes you can meet other peers, professors and develop organic relationships that can lead to possible employment opportunities. It is much harder to do this from home." -DLSPH Student

## Living situation

Having to move also had financial implications. For some respondents moving was the result of being in an unsafe environment, including roommates or family members that were essential healthcare workers or unwilling to abide by government policies. Other respondents felt a desire to be closer to family or a partner they had been separated from previously, especially to prevent feelings of isolation and loneliness and to access emotional support. This included moving back in with parents or to places that were closer to family members. Further reasons for moving included a desire to save money (due to the cost of living in Toronto), with all courses online, as well as lower rates of COVID-19 transmission in other provinces. Others felt the need to move due to a lack of space with the need to work from home, as well as a desire for being closer to nature and outdoor spaces that were less crowded. Many of these qualitative findings were echoed in the quantitative results, with 25% of respondents indicating that they had moved since the onset of the pandemic, due to the cost of rent (27%), to take care of a family member (14%) or obtain access to resources like healthcare and food (16%).

The remainder of this section presents a series of tables to report on the financial experience of equity-seeking groups (e.g., Black, South Asian, East Asian and sexual minority respondents), international students and those with a chronic or intermittent disability or condition.

#### Table 1. Financial stress by race and ethnicity

At least some concern	White	Black	South Asian	East Asian
affording:	n=168	n=23	n=52	n=68
Food	17%	36%	30%	23%
Housing	35%	32%	43%	38%
Tuition	42%	50%	57%	40%
Bills	42%	65%	58%	49%
Recreation	47%	64%	48%	52%

Sample sizes for Indigenous, Latina/o/x and Middle Eastern respondents were <6 and thus suppressed from this table for privacy and confidentiality. Note that students could identify and be present in more than one group.

#### Table 2. Financial stress by students identifying as a sexual minority

At locat come concern offerding:	Non-LGB+	LGB+
At least some concern anording.	n=282	n=54
Food	24%	25%
Housing	35%	53%
Tuition	43%	43%
Bills	47%	57%
Recreation	50%	56%
LGB+=lesbian, gay, bisexual and other non-heterosexual sexual identities		

# Table 3. Financial stress by students who identified as having a chronic illness or intermittent disability

At least some concern affording:	No disability or condition n=273	Disability or condition n=60
Food	22%	37%
Housing	35%	50%
Tuition	42%	48%
Bills	46%	58%
Recreation	48%	64%

Additional costs have also been incurred due to the need for better equipment for a home office, including for those with accessibility needs. One respondent reported an "*inability to pay for the required equipment to meet my accessibility needs*." Other respondents identified having to buy all new equipment due to the sudden building closure and an inability to access resources left at offices within the school.

At losst some concern affording:	Non-international	International
Acteast some concern anoruling.	n=307	n=32
Food	23%	39%
Housing	36%	55%
Tuition	44%	39%
Bills	47%	63%
Recreation	50%	69%

#### Table 4. Financial stress by international and non-international students

For international students who responded, moving to Canada was identified as having a significant financial impact, compounded by trying to help family members find work during the pandemic. Other international students had an inability to travel to Canada and struggled with purely online classes, especially due to the time differences.

When international students were further stratified by master's and PhD students, slightly different patterns were observed. Among international PhD students who responded (n=18), 28% had at least some concerns affording food, whereas 54% of international master's students who responded had at least some concerns affording food (n=14). The other apparent difference between international master's and PhD students pertained to concerns about affording tuition: 33% of international PhD and 46% of international master's students who responded had at least some concern affording tuition. More than half of both international PhD and master's students who responded had at least some concern affording tuition. More than half of both international PhD and master's students who responded had at least some concern about affording housing. Taken together, in this sample, master's students demonstrated, on average, a greater degree of financial stress compared to PhD students; however, as with poor mental health, financial stress was concerningly high among all respondents.

# IMPACT OF COVID-19 ON STUDENTS' ACADEMIC EXPERIENCE

The COVID-19 pandemic has impacted academic learning and research at DLSPH in a variety of ways. Students have had to adapt quickly to remote learning and cope with research disruptions. For some students this is compounded by increased household and caregiving responsibilities with little external support. Given DLSPH's central role in the COVID-19 response, the pandemic has also created new opportunities for student involvement in COVID-19 related work.

# This section explores the ways in which COVID-19 has both positively and negatively impacted students' academic experiences.

The vast majority (93%) of respondents reported that COVID-19 had an impact on their academic studies, with 38% identifying the impact as moderate to severe (**Box 3**). Among PhD students who responded, 88% reported that the pandemic had impacted their ability to complete their doctoral research, of whom over half (57%) rated this impact as moderate to severe. PhD students described feeling disconnected from academic work, their supervisors, and school supports, identifying that remote learning has been extremely taxing. They felt unable to fully engage in their scholarly work given feelings of exhaustion. For many, working from home and not having adequate structure between physical workspace and living space has made it challenging to focus and get work done.



The added stressors of the current times, such as caring for children at home or older parents, worrying about the pandemic more generally and a lack of

motivation has led to the inability to engage with complex topics needed to succeed on a qualifying exam or to make progress on one's dissertation. Around 86% of the 73 respondents who had not completed their doctoral candidacy requirements reported that the pandemic had impacted their ability to do so, and over half of this group (53%) rated this impact as moderate to severe. Moreover, students have had difficulty accessing datasets or encountered uncertainty around their dissertation due COVID-19 impacts, which has also delayed their progress. Contrarily, others managed to spend more time on their dissertations or moved into a COVID-19 related dissertation allowing them to continue their scholarly work.

## PhD students

PhD students who responded reported that the quality of online teaching was worse than in person, and that the online format resulted in a lack of access to professors, such as an inability for more informal communication (e.g., visiting their office, asking questions before and after class). Many PhD students expressed challenges with connecting with their supervisors, as supervisors' responsibilities had increased due to the pandemic, leaving them with less time for students. Additional reasons for reduced learning noted by students were having constant interruptions by children, family responsibilities and not having designated workspace.

Of the 34 doctoral student respondents who expected to graduate within a year of the survey, almost half (47%) anticipated their defense would be delayed due to the pandemic, and only 15% were certain there would be no delay.

## Master's students

Master's students faced similar and unique concerns about the impact of COVID-19 on their academic experience. A large majority (85%) of master's students who responded reported that the pandemic had impacted their ability to meet their coursework requirements – including desired courses not being offered and an inability to collaborate in person with colleagues. Overall, in this sample, master's students felt the consequences of the pandemic negatively impacted their learning experience. Students expressed challenges with online learning and difficulty staying motivated and not getting distracted. Overall, many respondents found it challenging to complete their schoolwork, related to not being in an optimal mental headspace to engage with learning. Students were concerned that they have had fewer opportunities and their academic performance has suffered.

Among respondents with a practicum requirement, three quarters (75%) reported that the pandemic had an impact on their ability to meet this requirement, of whom 61% identified this impact as moderate to severe. In open-text answers, practicums were discussed by several students, who expressed concern over the quality of their learning due to virtual practicums. Students worried they will be

underprepared for the workplace upon graduation, due to not having truly experienced a workplace setting. One student reported that their performance was negatively impacted, with an inability to balance their commitments adequately, impacting their mental health further.

Among respondents with a thesis requirement in their program, over half (56%) reported that the pandemic impacted their ability to complete their thesis, with 61% of this group rating the impact as moderate to severe. Furthermore, many master's students shared that they are working additional hours in clinical/healthcare settings and finding it challenging to engage in their schoolwork/research after long days (this was also true for many PhD students). This, in combination with delayed access to data, have resulted in students reporting graduation delays. However, other students reported no delays due to having previously finishing their practicum or not having a thesis. Several students further expressed an ability to complete their work and keep competitive grades. Nevertheless, even those who reported no delays reported challenges due to feeling isolated.

## Future & COVID-19-related work

Among all respondents, 16% believed that their chances of gaining postgraduation employment increased, 20% believed it had not changed, 21% believed it decreased, while 42% were unsure of the impact on their postgraduation employment opportunities.

Many respondents had become active in new work, with 43% reporting involvement in new work related to the COVID-19 response. Of these students, just over two thirds (68%) received some payment for that work, with just under a third (32%) working on a volunteer basis. Among master's students who reported COVID-19 related work, just under one third (31%) completed this work as part of a practicum placement. Among all students, including those who had reported new COVID-19 related work, just over half (52%) reported that they would like to be involved, or more involved in the COVID-19 response.

# Impact of COVID-19 on ability to plan for or complete...





# **Practicum Requirements**



# **Master's Thesis**



# **CONNECTION & COMMUNICATION**

This section explores students' attitudes about their connection to other students and the university, as well as the university communication and support received regarding the impact of COVID-19 on their studies. Among PhD students, we also discuss the degree of satisfaction with their primary doctoral supervisors when discussing the impact of COVID-19 on their work. Last, we report on students' willingness to return to campus.

## Connection

One-hundred and fifty respondents articulated their feelings about connection to the DLSPH community through written responses. The overwhelming majority spoke about feelings of disconnection from their peers and faculty. Although they connected in classes or for webinars and events, students shared that they have not developed a sense of genuine connection with their classmates, particularly those who began their programs virtually. Those who have had a year or two in person have been better able to maintain some valuable connections with their cohorts.

Moreover, it has been a challenge for many to engage in what was described as the "additional work" of engaging online, particularly for those who do not know anyone. Respondents felt like they just did not have the energy to tune in virtually for social connection after long days of screen-time. However, some students developed regular check-ins with their peers, engaging in weekly working sessions over Zoom, creating WhatsApp groups for their cohort and communities, as well as using typical social media platforms to stay connected.

## Communication

Satisfaction with the university's communication was generally mixed, with a very small proportion reporting being very satisfied (**Figure 6**).



Figure 6. Satisfaction with the communication from the University

Some respondents identified that while a lot of communication was received from the university and DLSPH, it often felt overwhelming. Moreover, there was much frustration due to the sudden and prolonged nature of moving from in-person to online curriculum, especially in relation to the costs, and thus expectations, associated with a DLSPH program. Respondents further identified a need for flexible deadlines, increased accommodations, and shorter online classes. Additionally, those who have had to increase caregiving responsibilities felt that it was "*unrealistic to expect people with caregiving responsibilities to be held to timelines from pre-pandemic times*," requesting the ability to switch to parttime or be given an extra year to complete their work.

In contrast to respondents' generally mixed satisfaction with the university, a majority of PhD student respondents were satisfied or very satisfied with their supervisor's communication regarding the COVID-19 pandemic's impact on their studies (**Figure 7**).





While frustrations did exist, many PhD students felt that "the majority of instructors and program director have been incredibly supportive of students' challenges coping with the pandemic." PhD student respondents often identified feeling deeply supported by their supervisors, with some exceptions. They also acknowledged an attempt by the school, such as sending out suggested supports within emails; however, many acknowledged a lack of tangible supports (e.g., financial, emotional) and that the concern for students' "mental health doesn't feel very personable...I feel like a number on a sheet." While international students who responded felt supported by program directors, they also identified a need for more workshops or information on how to deal with time zones.

Overwhelmingly, PhD student respondents reported deep frustrations with current financial stress due to the programs new restructuring to the funding package and a lack of offering funding or deadline extensions due to the pandemic.

"Initially, there was a guarantee of funding for 5 years and then it was changed to 4 years without consultation or notification. Considering financial support has become even more precarious for many students, the stress and worry caused by these actions can contribute to their poor mental health. The insult to injury is that many students' research has been impacted by the pandemic meaning that they are now behind and may take more time to graduate. If the mental health and well-being of students is being taken seriously, this particular change in the administering of funds should be addressed in a way that supports rather than punishes students who do not move through the program in a way that is assumed to be 'productive'." – DLSPH Student

Meeting milestones and school deadlines (e.g., candidacy, graduation) caused further stress in the context of the pandemic. As one respondent reported, "*I just don't understand how you expect students to carry on doing their work when every resource, infrastructure, and connecting to colleagues and peers is stripped away from them.*"

## **Returning to campus**

#### 23% 5% 34% 17% 80% 0% 10% 20% 30% 40% 50% 60% 70% 90% 100% Not at all safe Not very safe Neither safe nor unsafe Safe Verv safe

#### Figure 8. Attitudes about returning to campus

Contextually, respondents answered the survey question about returning to campus in February 2021, prior to many knowing when they would be eligible for a vaccine or having sufficient knowledge of how effective vaccines would be for new COVID-19 variants. However, at that time, a majority of respondents did not feel safe to return to campus (55%), with only 21% reporting feeling safe or very safe to return. Overall, respondents acknowledged concern for personal and familial safety, especially for those who have long public transit commutes. Respondents indicated concern about current case counts and new variants: "Until there is herd immunity, I won't feel safe." Additionally, respondents

primarily attending courses with physicians and other healthcare professionals felt reticent to return to in-person courses and activities. Others added that they may feel safer once the case counts diminished and people were able to be fully vaccinated.

Some of those who have already been fully vaccinated felt safe, as long as things such as masks, physical distancing, and sanitization continued to be practiced. Of note, some respondents who indicated not feeling concerned about a return to campus, indicated this was due to the fact that they did not have a need to return (e.g., doctoral candidates) and would continue supervisorial meetings online. While some respondents acknowledged a need to return to campus for research, they indicated that they were still wary of participating in things, such as courses or large gatherings (e.g., convocation): "everyone will need to be fully vaccinated before I feel safe returning to campus." Furthermore, respondents identified the mental health benefits of having a quiet place to study with reliable internet, including library access and spaces such as the gym and pool to reduce stress. Other students requested that future options include more opportunities to work from home for things such as research assistantship positions and meetings when possible.



# RECOMMENDATIONS

# 1. Structural change: "DLSPH and UofT should be willing to make big changes to support students"

Structural change is needed to address the upstream factors impacting students' mental health and well-being. These structures are in large part economic and relate to the academic culture and the lack of access to mental health care supports. While workshops, information, hotlines, and virtual socials are good and useful for some, students requested policy and structural changes that make life easier for students. There is too much focus on a downstream approach without acknowledging and addressing why students may struggle with their mental health. Primary factors impacting student mental health and wellbeing were economic, the academic culture, and a lack of access to mental health care.

## 2. Financial support: "Provide adequate funding"

Funding was a pressing concern across all students. PhD students shared frustrations about unclear messaging in the funding package (e.g., \$15 500 rather than \$19 500), not being able to afford expenses on less than \$20 000 a year plus working the 10h/week maximum that is suggested (as the PhD is considered full-time work by DLSPH), and the uncertainty of accessing an additional year of funding (generally and due to COVID-19-related delays). Students need additional financial support, a root cause of graduate student stress.

## 3. Access to mental health supports: "...more support for counselling and therapy services for graduate students is key!"

Related to financial support, was a need for increased access to mental health supports. Students shared that the \$500 offered toward professional services was insufficient, only covering 2-5 therapy sessions. Some students are paying out-of-pocket for therapy that they cannot afford, and others are not able to afford the support they need to manage.

# 4. Change the culture: "...the culture at DLSPH and academia in Toronto needs to shift..."

Students reported conflicting messages: that they are to balance their work and life, take time for self-care, and attend workshops or events to improve their wellbeing, while simultaneously being told to publish, meet tight deadlines, and maintain productivity despite financial insecurity, poor mental health, inadequate supports, and various pandemics (e.g., anti-Black racism and COVID-19). Students explained that this type of messaging "...feels insensitive and tone-deaf."

# 5. A need for ongoing monitoring

There is a need for DLSPH to conduct ongoing monitoring of student mental health and well-being, regardless of the COVID-19 pandemic, to ensure the school is responding to the shifting needs of the students in a well-rounded way. Despite not being able to conduct intersectional analyses, inequities among social groups were identified in our survey. It remains critically important for DLSPH to acknowledge intersectionality and integrate an intersectional framework into its future monitoring and programming.

#### **APPENDIX A**

#### Survey design

Two unique cross-sectional surveys with overlapping content were developed for currently enrolled master's and PhD students at the Dalla Lana School of Public Health (DLSPH). The survey tools were created through several collaborative working groups comprised of PhD students and experts in student mental health and equity, diversity and inclusion.

Data were collected using both quantitative and qualitative methods, including several free-text fields to allow respondents to share beyond the restrictions of a predefined quantitative selection. Validated scales for anxiety (Generalized Anxiety Disorder-2 [GAD2]<sup>(11)</sup>) and depression (Patient Health Questionnaire [PHQ2]<sup>(12)</sup>) were used to assess the current burden of mental health symptoms. Structured and free-text fields were used to ask participants questions related to their well-being and behaviors (e.g., substance use and sleeping patterns). Questions related to well-being were drawn from the Canadian Campus Wellbeing Survey (CCWS) in order to align with ongoing student mental health research initiatives in Canada. Demographic questions (e.g., gender, ethnicity and international student status) were included to describe the participant sample, characterize the mental health well-being of specific student subgroups, and communicate results back to administrators and students. Respondents were asked if and how COVID-19 has impacted their academic and research milestones, access to new opportunities and financial stability and concerns.

Once the surveys were drafted, they were piloted via four cognitive interviews among members of the student body from different DLSPH divisions and both master's and PhD levels, to ensure clarity of wording and that the survey questions asked about the constructs of interest.

#### Participants

All students actively enrolled in graduate-level programs at DLSPH at the time of the survey (Winter semester of 2020/21 academic year), were eligible to participate in the survey (N=1,250). Emails of participants were provided by department administrators for Public Health Sciences and the Institute of Health Policy, Management and Evaluation using the listserv for all current students.

#### **Data collection**

The anonymous survey was designed and deployed using REDCap (Research Electronic Data Capture) software<sup>(13)</sup>. Invitations to participate in the survey were sent by email on February 8, 2021. The survey took approximately 25 minutes to complete and was open until March 1, 2021, with reminders sent via email at one week and two days prior to the survey closing. Written consent to use survey data for the creation of aggregate reports was obtained within the online survey. All students who completed the survey were entered into a raffle to win 1 of 60 \$50 gift cards. A donation to a local charity was also used to incentive participation,

where every 250 survey responses corresponded to a \$500 donation (up to \$2,000).

#### Data analysis

Univariable and bivariable statistics were used to summarize respondents' demographics; health; physical, mental and mental financial well-being; and impact of the COVID-19 pandemic on academic and research activities. Aligning with validated criteria, scores of  $\geq 3$  on GAD2 and PHQ2 were classified as clinically significant symptoms of anxiety and depression, respectively. Race and ethnicity were captured using existing CIHI standards for race-based health reporting and combined into recommended groupings<sup>(14)</sup>. Categories for race and ethnicity were not mutually exclusive (i.e., a respondent could select more than one identity). Based on conversations with the Equity, Diversity and Inclusion Working Group at DLSPH, we reported results that had a sufficient sample size to protect respondent confidentiality ( $\geq$  5 respondents within a specific strata).

Thematic analysis of free-text responses was used to identify themes among student experiences and provide narrative insight into students' mental health and well-being. Anonymized, illustrative quotes were selected and included in the report to provide context for the results and illustrate specific points.

Ethical approval was granted by the University of Toronto Research Ethics Board (Human Protocol ref # 3991).

#### APPENDIX B

#### Surveys

Copies of the PhD- and Master's-specific surveys can be found at this link: <u>https://drive.google.com/drive/folders/1\_FuNewuXvuo4IMuRnz\_wfqsXqr2Iuek2?</u> <u>usp=sharing</u>

#### APPENDIX C

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