



Canadian Campus  
Wellbeing Survey

Bien-être sur les  
campus canadiens

## Deployment of the Canadian Campus Wellbeing Survey (CCWS) in British Columbia - 2019-20

### Final Report for the Ministry of Advanced Skills, Education and Training

Technical Report Series

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# Introduction

Over two million young adults attend post-secondary institutions in Canada. This can be a time of great excitement, independence and growth – but students also face substantial increases in health-risk behaviour, including poor mental health, decreased physical activity, increased substance abuse, poor nutrition, and stress. Now more than ever, we are facing a mental health challenge on Canadian campuses. This is greatly amplified in the extraordinary times we are now living in during the COVID-19 pandemic. Like K-12 schools, the post-secondary setting should be considered critical for health promotion. There are subsidized facilities, programs and staffing commonly available to support students increasingly through online delivery. In other words, we can intervene.

To develop or evaluate interventions at the post-secondary level, a mechanism is first required to assess the health and wellbeing of students. Collected data can be used to guide decisions about where institutional priority should be placed in terms of programs and policies, and for ongoing evaluation of those decisions. This was the motivation for creating the Canadian health and wellbeing measurement system, known as the Canadian Campus Wellbeing Survey/le sondage Bien-être sur les Campus Canadiens (CCWS-BECC – [www.ccws-becc.ca](http://www.ccws-becc.ca); Faulkner et al., 2019).

The CCWS includes validated and reliable measures of positive mental health, and multiple risk and protective factors including school connectedness, social and emotional skills, academic performance, safety, sleep, exercise, food security and substance use. The student level survey is a modular design with a 20-minute core CCWS survey. A technical report describing the results of the development process and the survey itself (including the francophone version) is available at [www.ccws-becc.ca](http://www.ccws-becc.ca). The surveillance infrastructure is housed at the University of British Columbia in collaboration with the Student Experience Evaluation and Research Unit of the UBC Office of the Vice-President, Students. A vital feature of the CCWS is an improved feedback mechanism where institutions have timely access to visual representations of their data and normative references, and the capacity to customize analyses.

The CCWS supports implementation of the 2015 *Okanagan Charter: An International Charter for Health Promoting Universities and Colleges*, which calls on higher education to embed health into everyday operations, business practices and academic mandates, as well as to lead health promotion action and collaboration (Okanagan Charter, 2016). Prioritizing student health by establishing policies and programs based on evidence will assist in placing student wellbeing at the heart of the academic enterprise. Evidence based decisions need to be anchored in meaningful data. Having a Canadian mechanism for assessing the health and wellbeing of post-secondary students is now more important than ever – we need to be able to assess the impact of the disease and its likely long-term repercussions for mental health. Such data will be essential for informing decisions about how best to help our students.

With funding from the British Columbia Ministry of Advanced Education, Skills and Training, the CCWS was implemented at the majority of public post-secondary institutions across British Columbia in the spring of 2020. This report provides aggregated results from the provincial deployment of the CCWS in British Columbia. Institutions receive their own data and can compare to the consortium of BC institutions, without institutional identification. By transcending institutional boundaries in the name of student wellbeing, institutions will be supported in identifying programs, policies and practices that are effectively improving student wellbeing on one campus – and it provides the rationale and evidence to implement similar practices to other campus and community programs.

# Methods

## Recruitment

Two BC post-secondary institutions (PSIs) participated in the pilot of CCWS in the Fall of 2019. An invitation letter was sent to the president and dean of student affairs at the remaining BC PSIs (total n = 25). In total 18 out of 25 PSIs in British Columbia participated in the CCWS. Reasons for non-participation from the remaining institutions included limited resources (n=2), other commitments (n=2), no research ethics approval (n=1), and lack of time (n=1). There was no response from one institution.

## Data Collection

Institutions were able to deploy the survey during the Fall 2019 or Spring 2020 term. Two institutions deployed during the Fall term (deployment windows ranged from 04 Nov to 02 Dec 2019) and sixteen institutions deployed during the Spring term (deployment windows ranged from 20 Jan to 03 Apr 2020).

The CCWS is administered via the UBC Survey Tool, a cloud database service provisioned by Qualtrics. The steps involved in deployment process were adapted from the B.C. Student Housing Demand Survey. The institutions were given the choice to deploy the survey using one of the two options: 1) Proxy mail-out using aliased email addresses (institution creates aliased email addresses of students in their sample, and provides them to CCWS who sends out survey email invitations and reminders to students), or 2) self-managed mail-outs (CCWS provides unique survey links to the institutions based on their sample size and institution sends out the survey email invitations and reminders to the students). Both mail-out options ensure that the responses cannot be linked to the students' personal information by the institution or by CCWS. In BC, 5 (28%) of the participating institutions chose to deploy the CCWS using the aliased mail-out option, and the remainder chose the self-managed mail-outs option.

CCWS has provided recommendations for institutions to choose their desired sample size based on the size of the institution. Smaller institutions have been recommended to choose a relatively larger proportion of their student population to be surveyed. Most of the institutions chose a stratified random sample of their student population, with the average proportion of student enrolment being invited to participate in the sample being 46.5% (SD = 27.2%). Five out of 18 institutions chose to survey more than 70% of their student population.

Students selected to be invited to the survey were sent an information letter via email, with their unique survey link. The average length of the survey window across institutions was 23.3 days (SD = 6.9 days). Students were also sent reminder emails during their survey window, with the number of reminders being chosen by the institution. In participating BC institutions, the number of reminder emails sent ranged from 1 to 5, with the average number being 2.3 (SD = 1.1).

Across the 18 participating institutions, 121,657 students were invited to complete the online survey. A total of 17,235 of these students responded to the survey (14.2%). Out of 17,235 students who responded to the survey, 14,550 students completed the survey (reached the last page of the survey), and the remaining 2685 students partially completed the survey. Institutions who sent more reminder emails obtained a higher student response rate (see Table 1). Providing incentives to the students who complete CCWS is optional at an institutional level. Twelve institutions offered some kind of incentives to complete CCWS, and obtained a higher average response rate of 18.9%. Six institutions which did not offer any

incentive obtained an average response rate of 12.8%. This report includes data from both partial and fully completed surveys. These results are in line with CCWS recommendations of having at least three reminders and providing modest incentives (prize draw) for participation.

Table 1. Average response rate by number of email reminders

| Number of reminders sent | Number of Institutions | Average Response Rate |
|--------------------------|------------------------|-----------------------|
| 1                        | 5                      | 8.8%                  |
| 2                        | 5                      | 16.2%                 |
| 3 or more                | 8                      | 22.1%                 |

## Measures

### Institutional Cohort Variables

Institutions submitted institution-specific cohort variables that were linked to self-report survey responses, including: Subject of Studies, Domestic/International status, Credential Type, Program Start Date, New or returning student, Full-time/part-time status, Program and Faculty of study, Campus attended, Year standing, Cumulative grade point average, and Indigeneity. Some of these cohort variables were not applicable to some institutions.

### Student Self-Report Measures

The CCWS includes nine core measures: campus climate/student experience, mental health assets, mental health deficits, health service utilization and help-seeking, physical health/health behaviours, academic achievement, substance use, food security, and sexual health. The students also self-reported demographics. Each are described briefly below. For more details, the survey and development report can be found online (<https://www.ccws-becc.ca/resources>).

#### 1) Campus Climate and Student Experience

Eight items were used to assess campus climate and student experience (e.g., *'I feel that I belong at my institution.'*). Response options were on a 6-point likert-scale from 1 (strongly disagree) to 6 (strongly agree). Two items assessed feelings of safety on campus during the day and at night. The response options ranged from 1 (very safe) to 6 (very unsafe), and we included a 'Not applicable' and 'I don't know' option.

#### 2) Academic Achievement/Experience

Three items were used to assess institutional learning environment (e.g., *'My institution provides a supportive learning environment'*) and one item assessed confidence to overcome academic challenges (*'I am confident that I will be able to finish my degree no matter what challenges I may face'*), each on a 6-point likert-scale from Strongly disagree (1) to Strongly agree (6).

#### 3) Mental Health Assets

Emotional, social and psychological wellbeing were assessed using the Warwick-Edinburgh Mental Well-being Scale (WEMWBS; Tennant et al., 2007). The WEMWBS consists of 14-items that are all positively worded and relate to the main components (eudaimonic and hedonic) of mental wellbeing. The items are

summed to provide a single score ranging from 14 to 70 with higher scores reflecting greater wellbeing. Single scores can also be categorized into groups: low mental wellbeing (<40), average mental wellbeing (41-58), and high mental wellbeing (59-70).

Resilience (control and self-efficacy coping) to overcome challenges were measured using Canadian Community Health Survey (CCHS) questions, on a 5-point likert scale from 1 (poor) to 5 (excellent). Global self-rated mental and physical wellbeing from the CCHS were measured using the same scale.

#### 4) Mental Health Deficits

To measure symptomology of depression and anxiety, we used the 10-item Kessler Psychological Distress Scale (K10) to yield a global measure of distress that a person had experienced over the past month (Kessler et al., 2002). Higher scores are reflective of more mental distress. Summed scores are categorized into groups: little or no mental distress (<20), mild mental distress (20-24), moderate mental distress (25-29), and severe mental distress (30-50).

The sources of perceived stress and extent of impact on academic progress items are consistent with the 8-items in the 2017 National Survey of Student Experience (<http://nsse.indiana.edu/>), rated as 'as major obstacle' (1), 'a minor obstacle' (2), or 'not an obstacle' (3). Two items assessed suicidal ideation ('*have you ever seriously contemplated suicide?*') and planning ('*have you ever made a plan to seriously attempt suicide?*') over the past 12 months (Response options: yes (1), no (2), prefer not to answer (3)).

#### 5) Health Service Utilization and Help Seeking

Knowledge of mental health services and physical health services available on- and off-campus were measured in 4 items, with response options ranging from Strongly agree (1) to Strongly disagree (6). Perceptions of support systems on campus (response options from strongly agree (1) to strongly disagree (6)) and awareness of mental health outreach efforts on campus (Response options: No (0) and Yes (1)) were also asked. Student use of campus health services for primary care (such as routine check-ups with a doctor) was also assessed (Response options: Yes (1)/No (0)). One question assessed help-seeking intentions and we modified response options to include 'professional clinicians', 'I don't know anyone to talk to about this', and 'I prefer not to talk to anyone about this'.

#### 6) Physical Health/Health Behaviours

##### Sleep

Time to sleep and wake up on weekdays and weekends were assessed using drop-down response options at every half hour. Total sleep on weekdays and weekend days were calculated from these 4-items. Quality of sleep was assessed using 1-item ('*During the past week, how would you rate your sleep quality overall (how well you sleep)?*'), from Very good (1) to Very bad (4).

##### Physical Activity

Time spent in vigorous and moderate physical activity (average hours/week) were derived from the International Physical Activity Questionnaire (IPAQ; Murphy et al., 2017).

Participation in organized sport (varsity, club/community sports/intramurals/none) over the last year was assessed in 1-item.

## Sedentary Behaviour/Screen Time

Three individual questions assessed recreational screen use (watching TV, using computers during leisure), sedentary transportation, and total sitting time (in hours, minutes).

## 7) Substance Use

### Alcohol

Binge drinking over the last month was assessed using one question that asked students to report how many times over the past 30 days they consumed 4 or more (female sex) or 5 or more (male sex) drinks on one occasion. Response options ranged from Daily or almost daily (1) to Not in the past 30 days (6). There were also a 'I don't know' and 'I prefer not to answer' response options available.

### Tobacco Use

Tobacco-use (cigarette smoking and e-cigarette use) questions included 5-items from the Canadian Postsecondary Education Alcohol and Drug Use Survey 2018 (CPADS; courtesy of Health Canada).

### Cannabis

Previous year and previous month cannabis use were also from the CPADS.

### Other Drugs

Three items each assessed whether pain relievers and stimulants were used, prescribed and used for reasons other than their intended use over the past 12 months.

## 8) Food Security

Six items from the Canadian Community Health Survey (CCHS) Household Food Security Survey Module assessed food security (physical availability of food, economic and physical access to food, food utilization, and stability of these dimensions over time). 'I don't know' and 'I prefer not to answer' response options were included. The 6-items are scored and summed (lower scores indicate greater level of food insecurity), and categorized to determine the level of food insecurity: food secure (0-1), low food security (2-4), very low food security (5-6).

## 9) Sexual Health

Safe sex practice questions (ever and contraceptive use) were measured in two items. Sexual satisfaction was measured using a single item (rating from Never (1) to Always (5)). A 'prefer not to answer' option was available for all three sexual health questions.

## 10) Demographic Measures for the Questionnaire

Self-report demographic measures in the CCWS included: age (month and year of birth), ethnicity including Canadian Indigenous group), immigrant status, place of residence, mode and length of commute to campus, cumulative grade, hours of paid employment, gender identity, trans experience, sexual identity, relationship status, disabilities, parent education. Students were also asked if they were currently or recently had been participating in a co-op placement, practicum, residency, or study abroad term.



## Data Analysis

This report provides aggregated descriptive results of student self-report data. The Ministry of Advanced Skills, Education and Training were also provided access to a BC provincial Tableau dashboard whereby core measures could be further explored by institutional cohort and demographic variable filters.

# Results

## Participants

### Institutions

Of the 18 institutions that participated, 6 were universities, 10 were colleges, and 2 were classified as other. Total student enrolment at these institutions ranged from 1001-5000 students (n = 8), 10,001-20,000 students (n = 4), 20,001-40,000 students (n = 4), and 40,001+ students (n = 2).

### Students

Based on the cohort variables submitted by institutions, the majority of the students were domestic (70.7%), full-time (70.3%), returning (70.3%), non-indigenous (96.0%), and enrolled in a diploma, bachelors, or associate degree program (62.5%; see Table 2). The majority of students had first or second year standing (65.5%), however, not all institutions provided this information.

The sample of respondents was generally a good representation of the cohort of students who were invited to complete the survey (see Table 2). The sample was slightly over-representative of domestic students (cohort: 65.9%, sample: 70.7%), and under-representative of international students (cohort: 34.1%, sample: 29.3%). The students who are new to institutions are slightly over-represented in the sample (cohort: 26.6%, sample: 29.7%). The sample of respondents reflects the composition of the cohort well in terms of indigeneity. The sample was slightly over-representative of full-time students (cohort: 62.4%, sample: 70.3%), and under-representative of part-time students (cohort: 37.6%, sample: 29.7%). When looking at the credential type, the sample of respondents was an overall good representation of the cohort, with slight over-representation of students enrolled in diploma and associate degree programs, and a slight under-representation of students enrolled in bachelor's degree.

Table 2. Student demographic characteristics based on institutional cohort variables

|                                    | Cohort     | Sample    |                                 | Cohort     | Sample    |
|------------------------------------|------------|-----------|---------------------------------|------------|-----------|
| <b>Domestic/<br/>International</b> |            |           | <b>Full-Time/<br/>Part-Time</b> |            |           |
|                                    | N = 121657 | N = 17235 |                                 | N = 119336 | N = 16660 |
|                                    | %          | %         |                                 | %          | %         |
| Domestic                           | 65.9       | 70.7      | Full-Time                       | 62.4       | 70.3      |
| International                      | 34.1       | 29.3      | Part-Time                       | 37.6       | 29.7      |
| <b>New to<br/>Institution</b>      |            |           | <b>Credential Type</b>          |            |           |
|                                    | N = 95182  | N = 14561 |                                 | N = 121657 | N = 17235 |
|                                    | %          | %         |                                 | %          | %         |
| Yes                                | 26.6       | 29.7      | ADCT                            | 0.6        | 0.3       |
| No                                 | 73.4       | 70.3      | ADGR                            | 6.9        | 12.0      |
|                                    |            |           | ADIP                            | 0.9        | 1.4       |
|                                    |            |           | APPR                            | 3.3        | 1.2       |
|                                    |            |           | BACH                            | 33.0       | 29.3      |
| <b>Indigenous</b>                  |            |           | CERT                            | 9.3        | 8.7       |
|                                    | N = 110738 | N = 15702 | DEVL                            | 2.8        | 2.2       |
|                                    | %          | %         | DIPL                            | 17.6       | 21.2      |
| Yes                                | 3.7        | 4.0       | DOCT                            | 1.8        | 2.2       |
| No                                 | 96.3       | 96.0      | GRCT                            | 0.1        | 0.0       |
|                                    |            |           | GRDP                            | 0.2        | 0.2       |
|                                    |            |           | MAST                            | 3.9        | 4.3       |
|                                    |            |           | PDCT                            | 0.0        | 0.1       |
| <b>Year Standing</b>               |            |           | PDDP                            | 2.5        | 4.8       |
|                                    | N = 50433  | N = 5949  | PDEG                            | 1.2        | 0.8       |
|                                    | %          | %         | SCRT                            | 1.2        | 1.2       |
| 1                                  | 36.2       | 39.7      | OTHR                            | 7.6        | 4.1       |
| 2                                  | 24.4       | 25.8      | NONE                            | 7.0        | 5.9       |
| 3                                  | 18.4       | 16.7      |                                 |            |           |
| 4                                  | 19.8       | 16.6      |                                 |            |           |
| 5                                  | 1.1        | 1.2       |                                 |            |           |

The full list of self-report demographic characteristics for the 17,235 participating students can be found in Table 3. Student mean age was 25.2 years (SD= 8.5 years; median age = 22 years), with the majority of the survey respondents  $\leq 24$  years (63.4%). The majority of students identified as a woman (64.2%), followed by a man (33.0%), and non-binary (1.3%). A high percentage of students identified as heterosexual/straight (77.0%), and having no trans experience (95.4%). More students reported being single (49.1%) or in a relationship (32.0%). Forty-four percent of students identified their cultural background as White, followed by South Asian (19.4%), and Chinese (15.1%). Six hundred students (4.2%) self-reported as Indigenous (with 58.5% of those identifying as First Nations). Just over half of the respondents (53.6%) were Canadian born, and 45.6% were born outside of Canada.

Sixty-seven percent of students reported their parent(s)/guardian(s) having completed a college program or higher. Most students (88.2%) reported living off-campus and the most common mode of

transportation to commute to campus was public transit (56.6%) and alone by vehicle (27.2%), with half of those trips taking 30 mins or less. Half of students self-reported their average cumulative grade as A- or higher. A third of students did not have paid employment, and of those who did, the average number of hours they worked per week was 18.4 hours (SD=10.6). The majority of students (64.4%) reported having no disability or ongoing medical condition, and the most common disability reported was a mental health condition (17.7%).

Table 3. Student demographic characteristics based on self-report data

| <b>Age</b>                        |      | <b>Born in Canada</b>                             |      | <b>Residence</b>                     |      |
|-----------------------------------|------|---|------|--------------------------------------|------|
| N = 14476                         |      | N = 14557   |      | N = 14519                            |      |
|                                   | %    |   | %    |                                      | %    |
| Under 20                          | 23.7 | Yes   | 53.6 | University or college residence      | 7.2  |
| 20-24                             | 39.7 | No  | 45.6 | Other on-campus housing              | 2.0  |
| 25-29                             | 17.0 | I prefer not to answer                            | 0.8  | Off-campus                           | 88.2 |
| 30-34                             | 8.1  |   |      | I do not have stable housing         | 0.7  |
| 35-39                             | 4.6  |   |      | I prefer not to answer               | 1.9  |
| 40-44                             | 2.7  |   |      |                                      |      |
| Over 45                           | 4.3  |   |      |                                      |      |
|                                   |      | <b>Earliest School Year in Canada</b>             |      | <b>Commute</b>                       |      |
|                                   |      | N = 6137  |      | N = 13032                            |      |
|                                   |      |   | %    |                                      | %    |
|                                   |      | Kindergarten                                      | 10.5 | Vehicle (alone)                      | 27.1 |
|                                   |      | Grade 1-3   | 6.3  | Vehicle (with others/carpool)        | 6.3  |
|                                   |      | Grade 4-8   | 8.3  | Walk                                 | 6.0  |
|                                   |      | Grade 9-12  | 10.2 | Bicycle                              | 1.5  |
|                                   |      | Not applicable                                    | 64.7 | Public transit                       | 56.6 |
|                                   |      |   |      | Not applicable (distance ed., co-op) | 2.5  |
| <b>Ethnicity</b>                  |      | <b>Parents Born outside Canada</b>                |      | <b>Commute Time</b>                  |      |
| N = 14412                         |      | N = 14501   |      | N = 13026                            |      |
|                                   | %    |   | %    |                                      | %    |
| Indigenous peoples of Canada      | 2.1  | Yes   | 63.8 | 0-30 minutes                         | 50.1 |
| Indigenous (outside of Canada)    | 0.5  | No  | 34.5 | 31-60 minutes                        | 33.3 |
| Arab                              | 0.7  | I prefer not to answer                            | 1.7  | Over 60 minutes                      | 16.7 |
| Black                             | 1.4  |   |      |                                      |      |
| Chinese                           | 12.7 | <b>Parent(s)/Guardian(s) Education</b>            |      |                                      |      |
| Filipino                          | 4.2  | N = 14357   |      |                                      |      |
| Japanese                          | 1.0  |   | %    |                                      |      |
| Korean                            | 2.2  | High school or less                               | 24.8 |                                      |      |
| Latin, Central, or South American | 3.5  | Completed a college program                       | 21.5 |                                      |      |
| South Asian                       | 17.9 | Completed a university degree                     | 28.7 |                                      |      |
| Southeast Asian                   | 3.4  | Completed a graduate or other professional degree | 17.1 |                                      |      |
| West Asian                        | 1.9  | I don't know                                      | 3.8  |                                      |      |
| White                             | 36.5 | I prefer not to answer                            | 2.6  |                                      |      |
| Mixed Ethnicity                   | 11.6 | Not applicable                                    | 1.4  |                                      |      |
| Other                             | 0.7  |   |      |                                      |      |
| <b>Indigenous Group</b>           |      |   |      |                                      |      |
| N = 608                           |      |   |      |                                      |      |
|                                   | %    |   |      |                                      |      |
| First Nations                     | 58.6 |   |      |                                      |      |
| Metis                             | 34.5 |   |      |                                      |      |
| Inuit                             | 1.2  |   |      |                                      |      |
| I prefer not to answer            | 5.8  |   |      |                                      |      |

Table 3 cont. Student demographic characteristics based on self-report data

| <b>Gender</b>              |      | <b>Average Grade</b>             |      | <b>Disability Condition<sup>1</sup></b> |      |
|----------------------------|------|----------------------------------|------|---|------|
| N = 14450                  |      | N = 14475                        |      | N = 13280                               |      |
|                            | %    |                                  | %    |   | %    |
| Woman                      | 64.2 | 0-49%                            | 0.3  | Physical disability                     | 2.6  |
| Two-Spirit                 | 0.1  | 50-54% (D)                       | 0.4  | Blind/visually impaired                 | 1.4  |
| Non-binary                 | 1.3  | 55-59% (C-)                      | 1.2  | Deaf/hard of hearing                    | 1.1  |
| Man                        | 33.0 | 60-63% (C)                       | 2.5  | Mental health condition                 | 17.6 |
| I prefer not to answer     | 1.4  | 64-67% (C+)                      | 4.9  | Neurological (learning                  | 6.2  |
|                            |      | 68-71% (B-)                      | 7.4  | disability, ASD, Traumatic              |      |
|                            |      | 72-75% (B)                       | 11.9 | Brain Injury, ADHD, etc.)               |      |
|                            |      | 76-79% (B+)                      | 16.0 | Chronic health condition                | 2.9  |
| <b>Trans Experience</b>    |      | 80-84% (A-)                      | 19.6 | (Crohn's, HIV, etc.)                    |      |
| N = 14360                  |      | 85-89% (A)                       | 19.7 | Another condition not listed            | 6.5  |
|                            | %    | 90-100% (A+)                     | 11.9 | above                                   |      |
| Yes                        | 1.7  | I prefer not to answer           | 4.5  | I don't have a disability or            | 64.4 |
| No                         | 95.4 |                                  |      | ongoing medical condition               |      |
| I prefer not to answer     | 2.9  |                                  |      | I prefer not to answer                  | 6.6  |
|                            |      | <b>Off Campus</b>                |      |   |      |
|                            |      | <b>over the last month</b>       |      |   |      |
|                            |      | <b>in co-op, residency, etc.</b> |      |   |      |
| <b>Sexual Orientation</b>  |      | N = 14307                        |      | <b>Disability Accommodation</b>         |      |
| N = 13990                  |      |                                  |      | N = 3902                                |      |
|                            | %    |                                  | %    |   | %    |
| Heterosexual/Straight      | 77.0 | Yes                              | 11.9 | Yes                                     | 23.6 |
| Gay/Lesbian                | 2.7  | No                               | 88.2 | No                                      | 72.9 |
| Bisexual/Pansexual         | 8.4  |                                  |      | I prefer not to answer                  | 3.5  |
| Asexual                    | 1.2  |                                  |      |   |      |
| Queer                      | 1.4  |                                  |      |   |      |
| Questioning/Unsure         | 2.1  | <b>Work Hours per week</b>       |      |   |      |
| I prefer not to answer     | 7.3  | N = 13736                        |      |   |      |
|                            |      |                                  | %    |   |      |
|                            |      | 0                                | 32.5 |   |      |
| <b>Relationship Status</b> |      | 1-10 hours                       | 18.9 |   |      |
| N = 14203                  |      | 11-20 hours                      | 30.5 |   |      |
|                            | %    | 21-30 hours                      | 8.0  |   |      |
| Single                     | 49.1 | 31-40 hours                      | 10.1 |   |      |
| In a relationship          | 32.0 |                                  |      |   |      |
| Married, in a domestic     | 17.5 | <b>Financial Stress</b>          |      |   |      |
| partnership, or            |      | N = 14388                        |      |   |      |
| engaged                    |      |                                  | %    |   |      |
| Divorced or separated      | 1.2  | No financial stress at all       | 11.3 |   |      |
| Widowed                    | 0.2  | Very little financial stress     | 18.8 |   |      |
|                            |      | Some financial stress            | 29.8 |   |      |
|                            |      | Quite a bit of financial         | 20.2 |   |      |
|                            |      | stress                           |      |   |      |
|                            |      | A great deal of financial        | 20.0 |   |      |
|                            |      | stress                           |      |   |      |

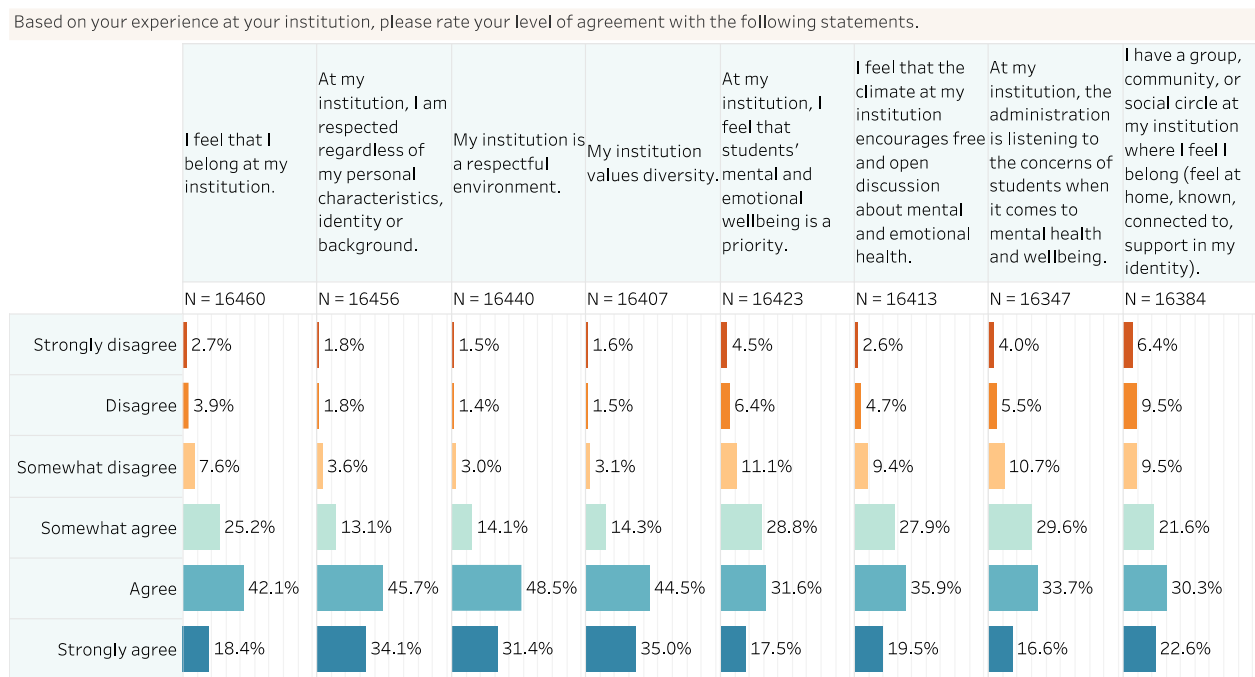
<sup>1</sup> A respondent may have more than one disability condition, so the percentages may not add up to 100%.

# Core Measures for the Questionnaire

## 1) Campus Climate and Student Experience

Frequency data for campus climate and student experience items can be found in Figure 1. The majority of students reported ‘somewhat agreement’ or higher to all 8-items. Only 2.0% of students reported feeling somewhat to very unsafe on campus during the day, compared to 14% at night.

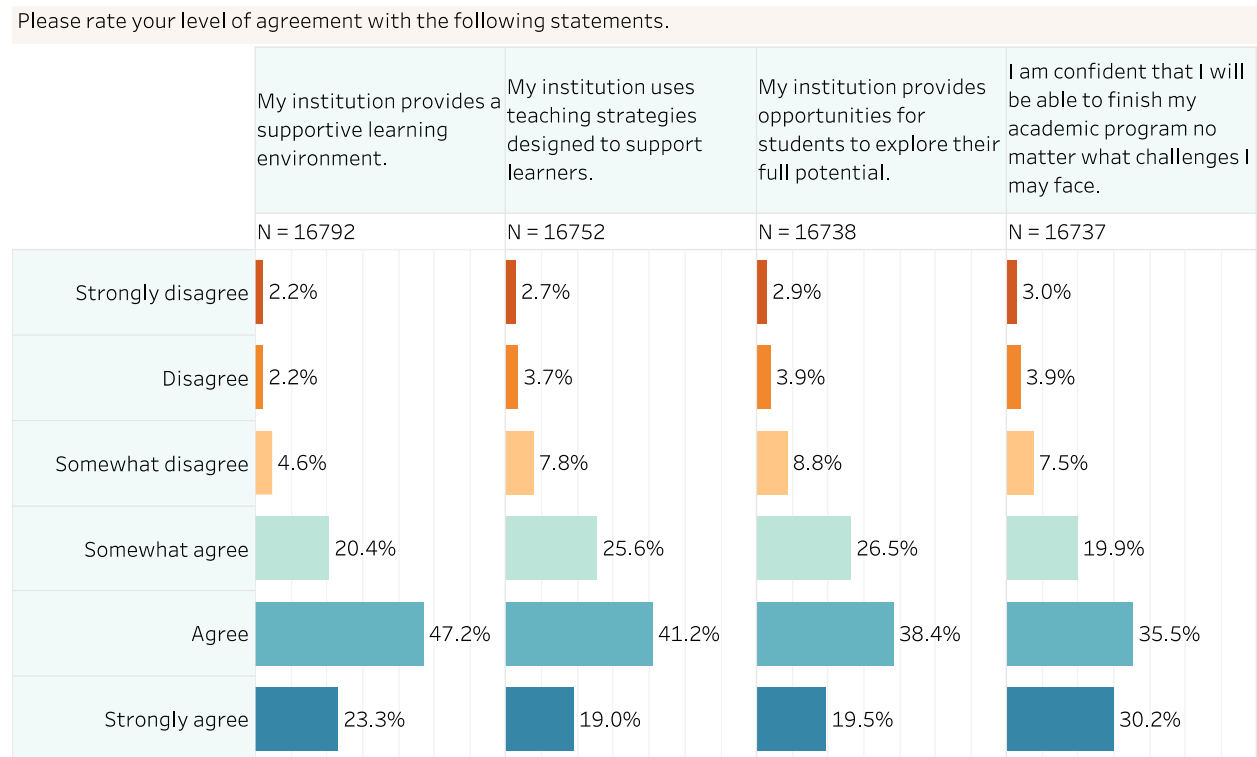
Figure 1. Response frequencies for campus climate and student experience items



## 2) Academic Achievement/Experience

Over half of the students agreed or strongly agreed with statements regarding their institution having a supportive learning environment (means ranged from 4.52 to 4.78 across the 4-items; see Figure 2).

Figure 2. Response frequencies for academic achievement and experience



## 3) Mental Health Assets

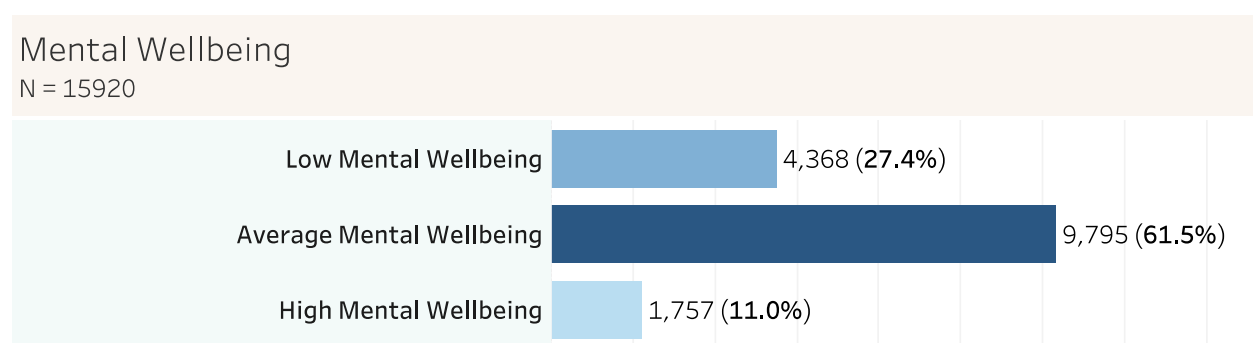
With regards to student resilience, the majority of students reported having a good to excellent ability to handle day-to-day demands (77.3%), and unexpected difficulties (71.8%).

Table 5 displays frequencies and means for all 14-items of the WEMWBS mental wellbeing measure. Students categorized as having high, average and low mental wellbeing were 11%, 62%, and 27%, respectively (see Figure 3).

Table 4. Descriptive statistics for mental wellbeing over than last 2 weeks (14-item Warwick-Edinburgh Mental Wellbeing Scale)

|   | N     | Mean | SD  | None of the time = 1 | Rarely = 2 | Some of the time = 3 | Often = 4 | All of the time = 5 |
|---|-------|------|-----|----------------------|------------|----------------------|-----------|---------------------|
| I've been feeling optimistic about the future.      | 16398 | 3.4  | 1.0 | 3.0%                 | 11.8%      | 36.9%                | 35.1%     | 13.2%               |
| I've been feeling useful.                           | 16342 | 3.4  | 1.0 | 3.0%                 | 13.3%      | 35.5%                | 35.4%     | 12.9%               |
| I've been feeling relaxed.                          | 16332 | 2.8  | 1.1 | 10.1%                | 29.7%      | 35.1%                | 18.3%     | 6.7%                |
| I've been feeling interested in other people.       | 16319 | 3.2  | 1.0 | 5.3%                 | 17.4%      | 35.5%                | 31.4%     | 10.5%               |
| I've had energy to spare.                           | 16327 | 2.8  | 1.1 | 11.9%                | 27.8%      | 33.7%                | 19.6%     | 7.0%                |
| I've been dealing with problems well.               | 16340 | 3.4  | 0.9 | 3.2%                 | 11.9%      | 39.3%                | 35.8%     | 9.9%                |
| I've been thinking clearly.                         | 16332 | 3.4  | 0.9 | 2.5%                 | 11.2%      | 37.2%                | 38.1%     | 11.0%               |
| I've been feeling good about myself.                | 16332 | 3.3  | 1.0 | 4.9%                 | 15.6%      | 34.3%                | 31.9%     | 13.3%               |
| I've been feeling close to other people.            | 16313 | 3.2  | 1.0 | 5.7%                 | 19.0%      | 35.4%                | 30.2%     | 9.7%                |
| I've been feeling confident.                        | 16329 | 3.3  | 1.0 | 4.4%                 | 15.3%      | 36.9%                | 31.0%     | 12.4%               |
| I've been able to make up my own mind about things. | 16318 | 3.7  | 0.9 | 1.9%                 | 8.2%       | 28.3%                | 43.5%     | 18.2%               |
| I've been feeling loved.                            | 16296 | 3.6  | 1.0 | 4.2%                 | 10.5%      | 29.2%                | 36.7%     | 19.4%               |
| I've been interested in new things.                 | 16298 | 3.5  | 1.1 | 3.6%                 | 13.1%      | 29.0%                | 34.6%     | 19.6%               |
| I've been feeling cheerful.                         | 16298 | 3.3  | 1.0 | 4.1%                 | 15.4%      | 38.6%                | 30.6%     | 11.4%               |

Figure 3. Proportion of students categorized as having high, average or low mental wellbeing (based on summed WEMWBS scores)



#### 4) Mental Health

Table 6 displays frequencies and means for all 10-items in the K10 mental wellbeing measure. Twenty-nine percent of students were classified as having either little or no mental distress, followed by mild mental distress (22%), and moderate mental distress (20%; see Figure 4).

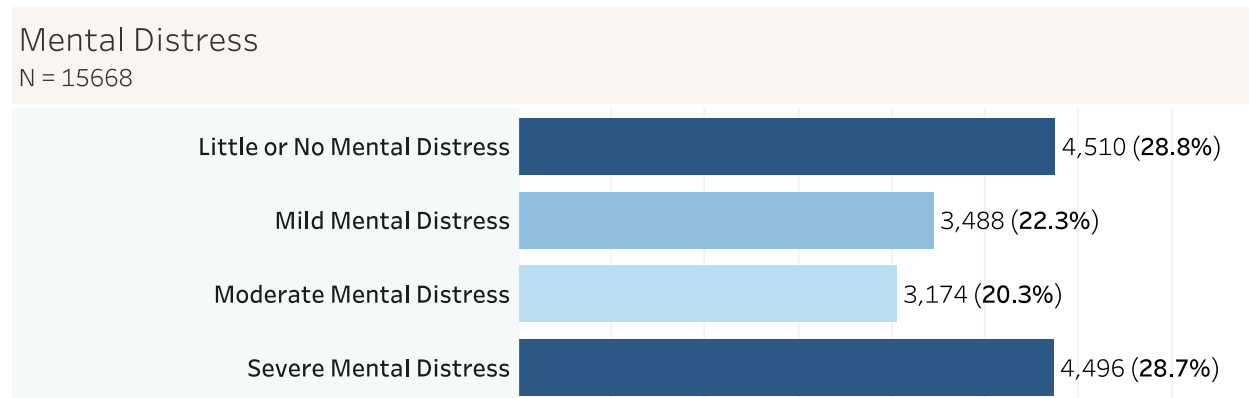
Nearly 29% of students self-reported severe mental distress. Institutional variability for severe mental distress category of students was 5.0%. That is, prevalence of severe mental distress varied between approximately 24% and 34%. There was some variation by type of institution: Rural Colleges (N = 6) - 25.5%; Urban Colleges (N = 4) - 30.4%; Universities and Institutes (N = 8) - 28.6%.

Table 5. Descriptive statistics for psychological distress over the last 30 days (10-item Kessler Psychological Distress Scale)

|   | <b>N</b> | <b>Mean</b> | <b>SD</b> | <b>None of<br/>the time<br/>= 1</b> | <b>A little of<br/>the time<br/>= 2</b> | <b>Some of<br/>the time<br/>= 3</b> | <b>Most of<br/>the time<br/>= 4</b> | <b>All of<br/>the time<br/>= 5</b> |
|---|----------|-------------|-----------|-------------------------------------|---|-------------------------------------|-------------------------------------|------------------------------------|
| How often did you feel tired out for no good reason?                | 15929    | 3.1         | 1.1       | 7.2%                                | 19.3%                                   | 36.6%                               | 26.3%                               | 10.5%                              |
| How often did you feel nervous?                                     | 15910    | 2.9         | 1.0       | 7.4%                                | 25.2%                                   | 39.8%                               | 20.7%                               | 6.9%                               |
| How often did you feel so nervous that nothing could calm you down? | 15909    | 2.1         | 1.1       | 36.2%                               | 29.8%                                   | 23.6%                               | 7.9%                                | 2.4%                               |
| How often did you feel hopeless?                                    | 15897    | 2.3         | 1.1       | 29.6%                               | 31.1%                                   | 25.9%                               | 9.5%                                | 3.9%                               |
| How often did you feel restless or fidgety?                         | 15896    | 2.7         | 1.1       | 14.2%                               | 28.2%                                   | 33.6%                               | 16.9%                               | 7.0%                               |
| How often did you feel so restless you could not sit still?         | 15894    | 2.2         | 1.1       | 34.7%                               | 29.4%                                   | 23.9%                               | 8.9%                                | 3.2%                               |
| How often did you feel depressed?                                   | 15891    | 2.5         | 1.1       | 23.6%                               | 31.2%                                   | 27.0%                               | 12.7%                               | 5.5%                               |
| How often did you feel that everything was an effort?               | 15868    | 2.9         | 1.1       | 11.0%                               | 25.3%                                   | 33.6%                               | 21.2%                               | 8.9%                               |
| How often did you feel so sad that nothing could cheer you up?      | 15894    | 2.1         | 1.1       | 35.8%                               | 29.9%                                   | 23.3%                               | 8.1%                                | 2.9%                               |
| How often did you feel worthless?                                   | 15864    | 2.1         | 1.2       | 41.2%                               | 25.9%                                   | 19.5%                               | 8.9%                                | 4.5%                               |

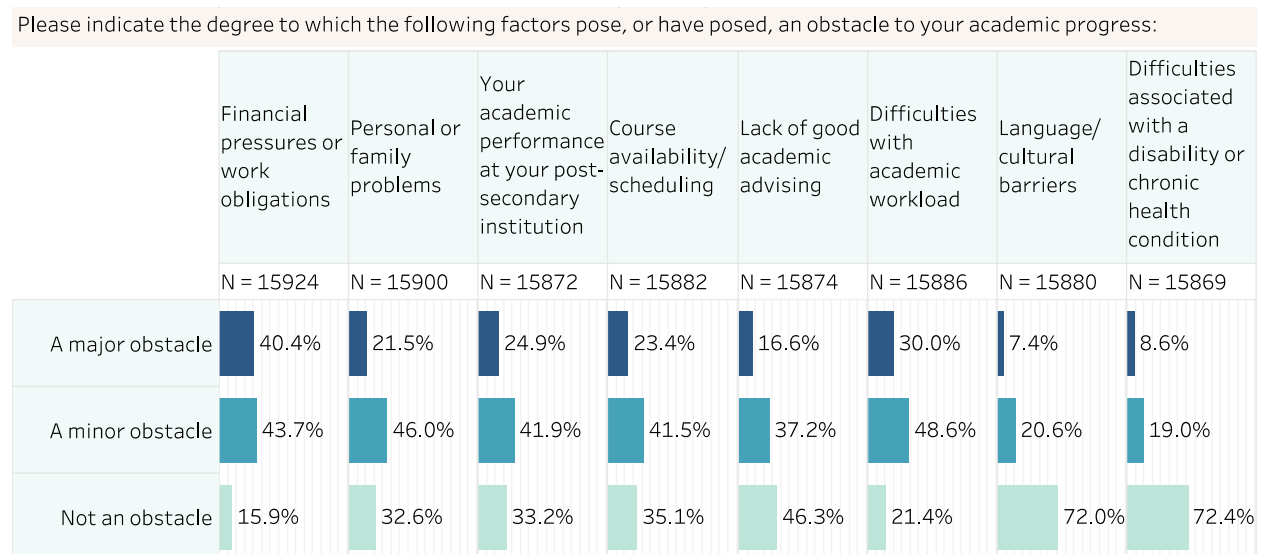


Figure 4. Proportion of students categorized as having severe, moderate, mild or little/no mental distress (based on summed K10 scores)



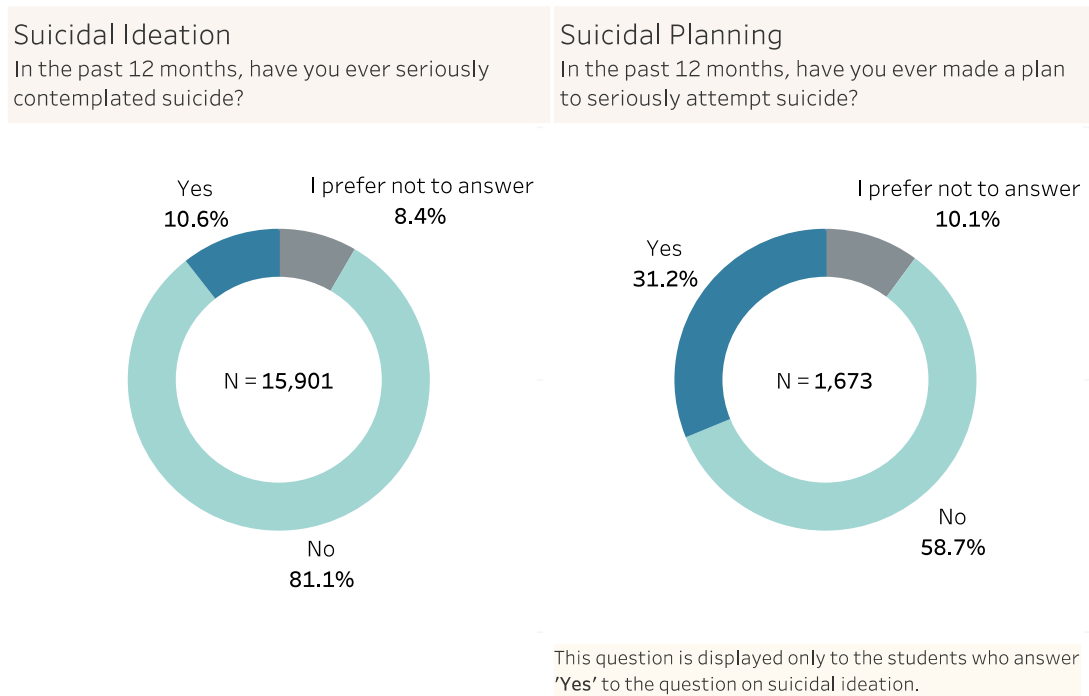
Sources of perceived stress and extent of impact on academic progress are displayed in Figure 5. The majority of students rated each source of stress as a minor obstacle or not an obstacle at all.

Figure 5. Response frequencies for sources of perceived stress items



Ten percent of students reported seriously contemplating suicide over the last 12 months, and 8% preferred not to answer. Of those who experienced suicidal ideation, just over 30% reported making a plan for committing suicide, and 10% preferred not to answer (see Figure 6).

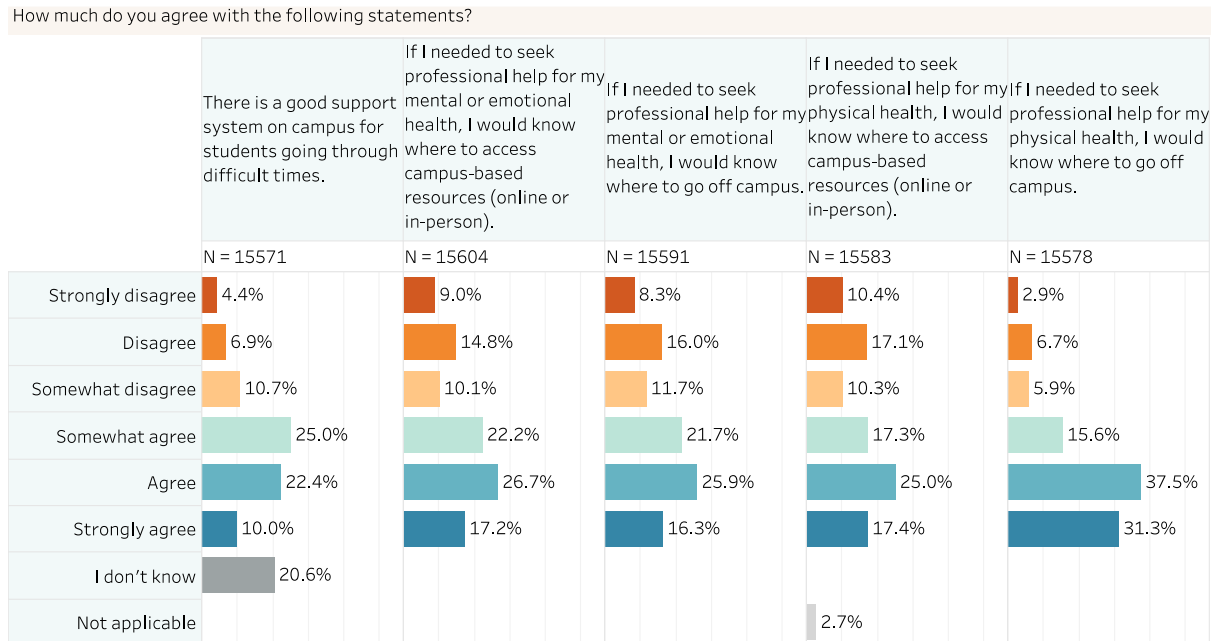
Figure 6. Proportion of students indicating suicidal ideation and planning over the past 12 months



## 5) Health Service Utilization and Help Seeking

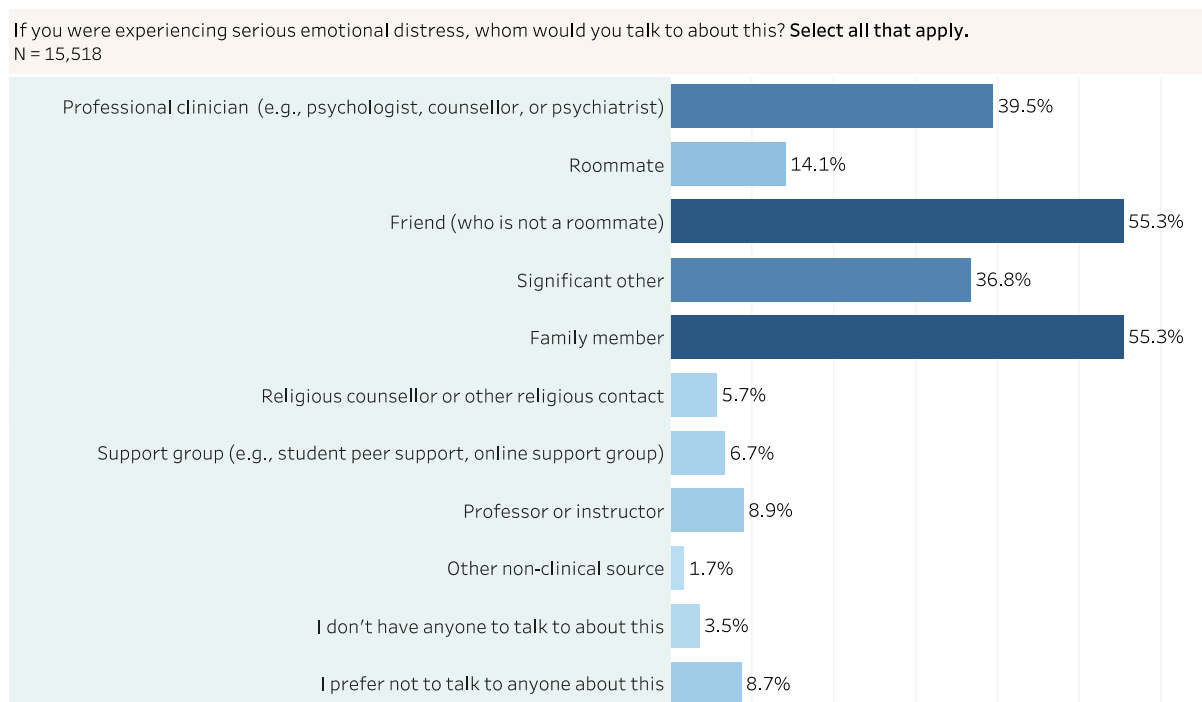
The majority of students somewhat or strongly agreed that they knew where to go both on-campus and off-campus for mental health services (66.1% and 63.9%, respectively), as well as for physical health services (61.3% and 84.4%, respectively). Over half of students (57.4%) somewhat to strongly agreed that there is a good support system on campus for students going through difficult times; however, 20.6% responded not knowing (see Figure 7). Fifty-percent of students reported they were aware of mental health outreach efforts on campus. When asked if they use campus health services for primary care, 15.9% reported yes.

Figure 7. Response frequencies for health service utilization and help-seeking knowledge on- and off-campus



The majority of respondents (55%) reported that they would talk to a family member or friend who is not a roommate if they were experiencing serious emotional distress, followed by a professional clinician (39%), significant other (37%), and roommate (14%). Nine percent of students would prefer not to talk to anyone, and 4% reported not having anyone to talk to (see Figure 8).

Figure 8. Proportion of students who would talk to others if experiencing serious emotional distress

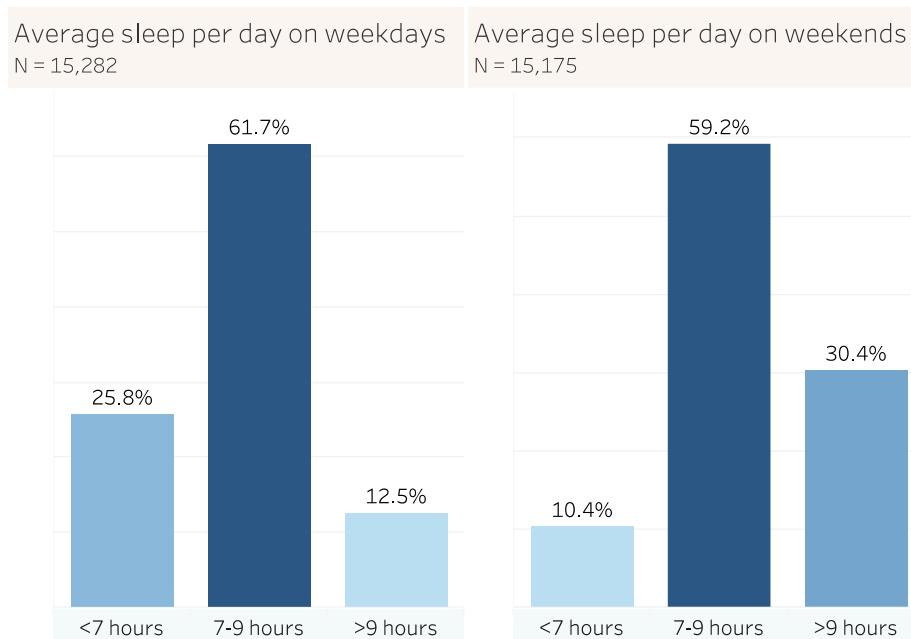


## 6) Physical Health/Health Behaviours

### Sleep

Over half of the students reported sleeping between 7 to 9 hours on weekdays (62%) and weekends (59%), compared to less than 7 hours (26% and 10%, respectively), and more than 9 hours (13% and 30%, respectively; see Figure 9). The average number of hours per day spent sleeping on weekdays and weekends was 7.62 (SD=1.56) and 8.57 (SD=1.55), respectively. Sixty-seven percent of the students rated their overall sleep quality as fairly good or very good.

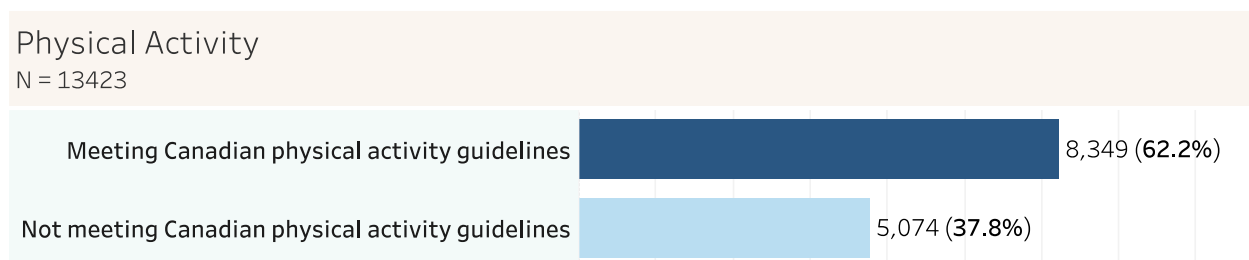
Figure 9. Proportion of students accumulating <7, 7-9, and >9 hours of sleep per night on weekdays and weekends



### Physical activity

Regarding physical activity, average time spent participating in moderate and vigorous physical activity per week was 4.86 hours (SD=4.41), and 62% of students were meeting the Canadian physical activity guidelines (see Figure 10). Eighty percent of students reported that they do not participate in any organized sports.

Figure 10. Proportion of students meeting and not meeting the Canadian Physical Activity Guidelines for Adults (18-64 Years)



## Sedentary Behaviour/Screen time

Average recreational screen time per day was 4.52 hours (SD=2.71), with about 40% of students reporting either 0-3 hours or 3-6 hours (see Figure 11). The average time spent sitting in a vehicle per day was 1.46 hours (SD=1.36), with more than half of students reporting sedentary transportation less than 1 hour (see Figure 12). Just over 60% of students reported total sitting time per day less than 8 hours (Mean = 7.65, SD=3.46).

Figure 11. Proportion of students accumulating 0-3, 3-6, 6-9, and >9 hours of recreational screen time per day

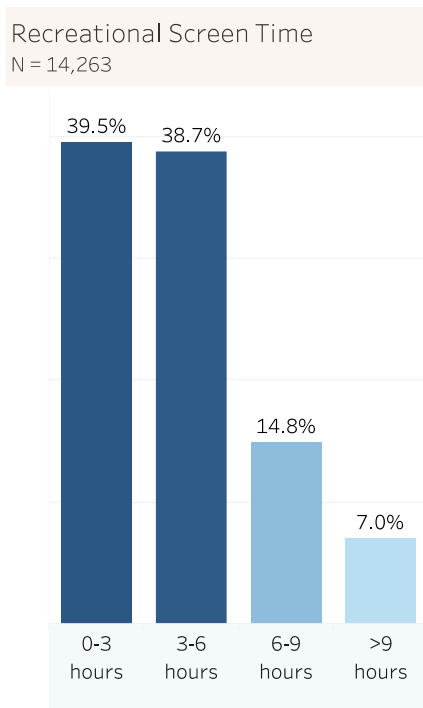
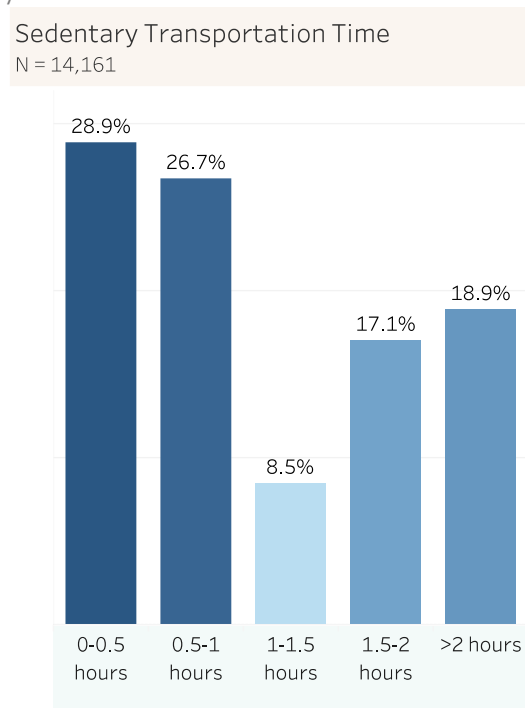


Figure 12. Figure 11. Proportion of students accumulating 0-0.5, 0.5-1, 1-1.5, 1.5-2 and >2 hours of sedentary transportation time per day



## 7) Substance Use

### Alcohol

Almost half of students (48.3%) reported not binge drinking in the past 30 days (see Figure 13).

### Tobacco Use

The majority of students reported never being a smoker (76.4%), or using an e-cigarette in the past 30 days (83.1%). Frequency of e-cigarette use type is provided in Table 7.

Figure 13. Frequency proportions of students' binge drinking over the past 30 days

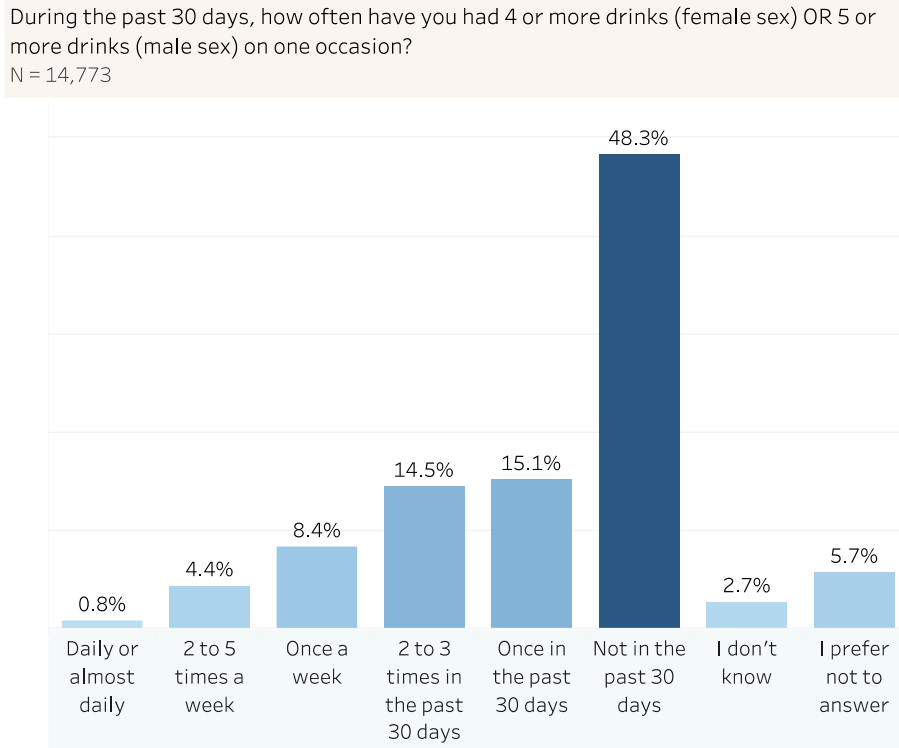


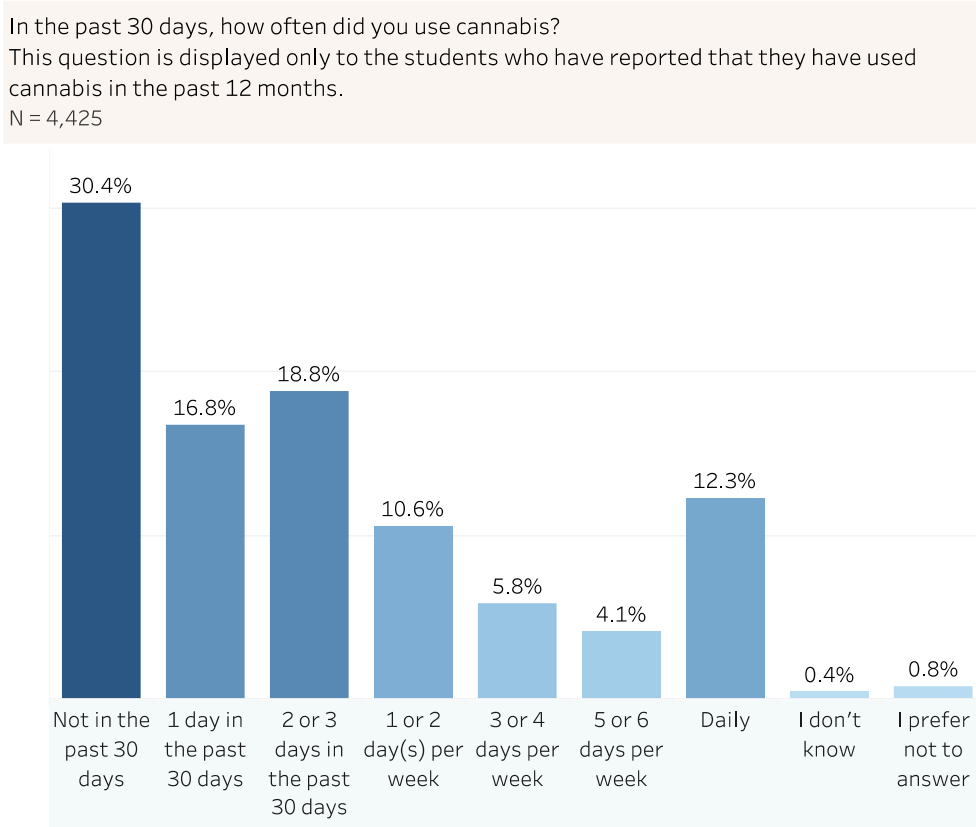
Table 6. Average number of days over the last 30 days a student has vaped by e-cigarette type

| E-Cigarette Type              | N    | Mean | SD   |
|-------------------------------|------|------|------|
| E-liquid with nicotine        | 1155 | 16.7 | 11.9 |
| Cannabis/marijuana            | 470  | 8.1  | 9.5  |
| Flavouring (without nicotine) | 252  | 5.3  | 7.3  |

### Cannabis

About 30% of students reported using cannabis in the past year, with more students reporting not at all in the past month (30.4%), 1 day in the past month (16.8%), and 2 or 3 days in the past month (18.8%). Twelve percent reported being daily users (see Figure 14).

Figure 14. Frequency proportions of students' using cannabis over the past 30 days



### Other drugs

Regarding pain reliever drug use, 29.1% of students reported use in the previous year. Eighteen percent of those who used pain relievers in the past year reported using them for reasons other than pain relief, and 50.2% indicated they were not prescribed (see Table 8).

Regarding stimulant use, only 5.2% of students reported using them in the past 12 months. About half of these students reported using them for reasons other than why they are recommended, and also that they were prescribed.

Table 7. Descriptive statistics for use, reason for use and prescription of pain relievers and stimulants

|   |  | Pain Relievers | Stimulants |
|---|--|----------------|------------|
| <b>Use</b> - In the past 12 months, have you used any pain relievers/stimulants?  |  | N = 14800      | N = 14788  |
|   | Yes                                      | 29.1%          | 5.2%       |
|   | No                                       | 67.6%          | 91.6%      |
|   | I don't know                             | 1.6%           | 1.5%       |
|   | I prefer not to answer                   | 1.7%           | 1.7%       |
| <b>Reason</b> - During the past 12 months, have you used pain relievers for reasons other than for pain relief/ did you use stimulants for reasons other than why they are recommended? |  | N = 4242       | N = 767    |
|   | Yes                                      | 18.3%          | 48.2%      |
|   | No                                       | 80.0%          | 49.7%      |
|   | I don't know                             | 1.3%           | 0.7%       |
|   | I prefer not to answer                   | 0.4%           | 1.4%       |
| <b>Prescription</b> - During the past 12 months, were the pain relievers/stimulants you have used prescribed for you?   |  | N = 4267       | N = 768    |
|   | Yes, they all were prescribed            | 32.2%          | 52.3%      |
|   | Some were prescribed and others were not | 12.5%          | 6.4%       |
|   | No, none were prescribed                 | 50.2%          | 36.6%      |
|   | I don't know                             | 3.2%           | 1.2%       |
|   | I prefer not to answer                   | 1.9%           | 3.5%       |

## 8) Food Security

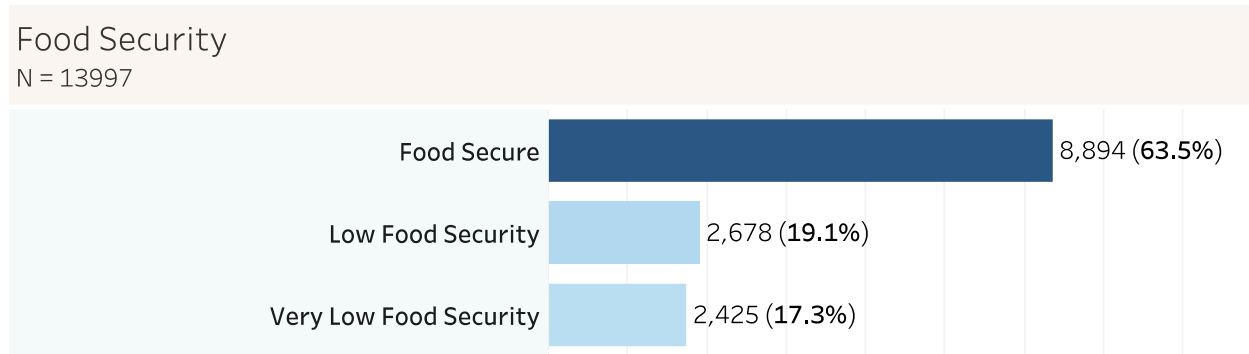
The majority of students reported it was never true that food did not last (62.8%), and that they couldn't afford to eat balanced meals (56.3%). Over 70% reported that they have not cut the size of or skipped meals because there wasn't enough money for food. Similarly, 68.5% reported no to eating less than they felt they should because there was no money for food, and 72.9% reported no to being hungry and not eating because they couldn't afford food (see Table 9). When summed together, 64% were categorized as food secure, 19% as having low food security, and 17% as having very low food security (see Figure 15).

Table 8. Frequencies for food security questions in the last 12 months (6-item US Household Food Security Survey)

|  | N     | Often true = 1     | Sometimes true = 2              | Never true = 3     | I don't know | I prefer not to answer |
|--|-------|--------------------|---------------------------------|--------------------|--------------|------------------------|
| The food that (I/we) bought just didn't last, and (I/we) didn't have money to get more.                | 14629 | 5.6%               | 22.1%                           | 62.8%              | 6.1%         | 3.3%                   |
| I couldn't afford to eat balanced meals.   | 14632 | 10.8%              | 27.6%                           | 56.3%              | 3.4%         | 1.8%                   |
|  | N     | Almost every month | Some months but not every month | Only 1 or 2 months | I don't know | No - I have not        |
| How often did you cut the size of your meals or skip meals because there wasn't enough money for food? | 14587 | 9.5%               | 10.5%                           | 5.6%               | 2.9%         | 71.4%                  |



Figure 15. Proportion of students categorized as having very low or low food security or being food security (based on summed 6-items)



### 9) Sexual Health

Over half of students reported ever having sexual intercourse (58.5%), 30.5% reported no, and 11.0% preferred not to answer. Of those who reported having sex, half used protection (see Figure 16). The majority of these students (73.5%) reported always or usually finding satisfaction in their sexual relationship(s) (see Figure 17).

Figure 16. Proportion of students indicating safe sex practices (ever and contraceptive use)

| Have you ever had sexual intercourse? | Do you or your partner(s) usually use a condom or other protective barrier (e.g., dam, glove) when you have sexual intercourse? |
|---------------------------------------|---|
|---------------------------------------|---|

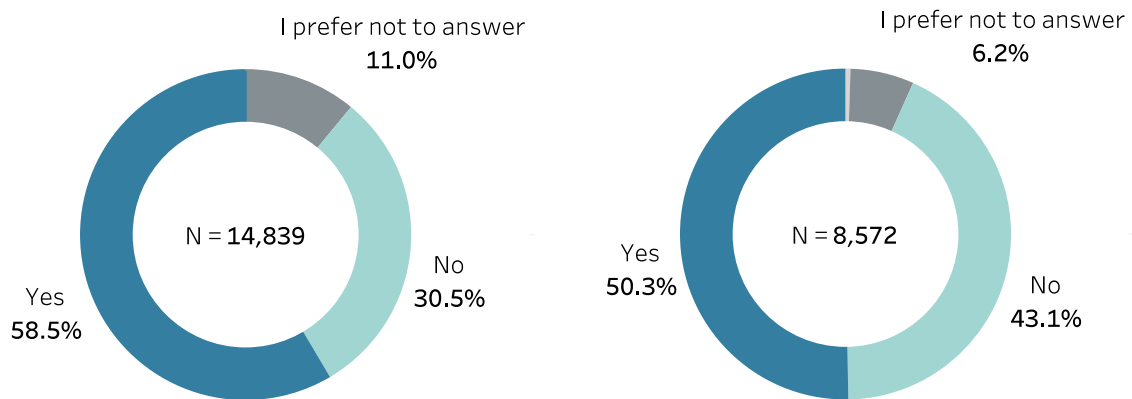
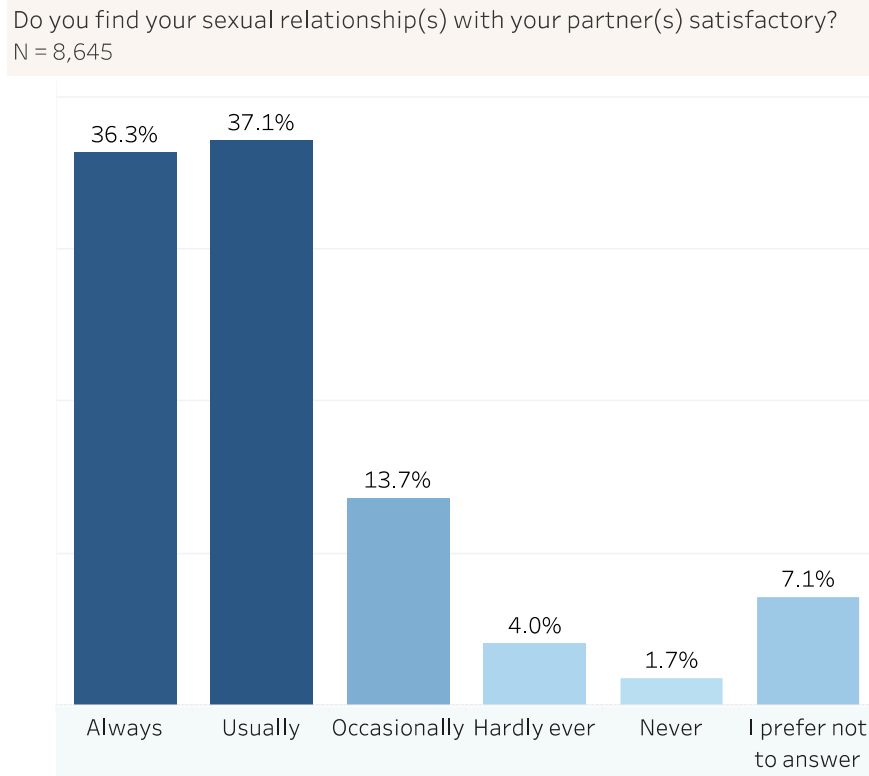


Figure 17. Frequency proportions of students' sexual satisfaction



## Discussion

This report presents aggregated results for the provincial deployment of the Canadian Campus Wellbeing Survey in the 2019-20 academic year at 18 BC post-secondary institutions in BC. Access to the provincial Tableau dashboard allows for additional exploration of the data. The data provides institutions and the province with a benchmark for assessing the health and wellbeing of their students in the future. An evaluation is planned in the fall of 2020 to explore how institutions are using the CCWS data, and how the data is informing policy and practice at each institution.

### Campus Climate and Learning Environment

In terms of aggregated results there are many positives to highlight. In general, the majority of post-secondary students in British Columbia report a safe and welcoming campus environment and positive academic experiences. This sample of BC post-secondary students feel a sense of belonging at their institution, and report that their place of study provides a respectful environment that values diversity. The majority of students agree that they know where to go both on-campus and off-campus for mental health support and services. Approximately 90% of students report their institution to be providing a supportive learning environment.

## Health Enhancing Behaviours

Students are also doing relatively well in terms of participation in health-enhancing behaviours when compared to representative national samples. The majority of students self-report meeting physical activity (62.2%) and sleep guidelines (approximately 60%). This is comparable to national self-reported data where nearly two-thirds of Canadian adults self-reported meeting physical activity guidelines in 2007. It is important to note that using device-based measures of physical activity, only 16% Canadian adults were meeting recommendations in 2017 (Clarke et al., 2019). Sixty-five percent of adults, 18–79 years of age, met sleep duration recommendations, with the average adult sleeping 7.2 hours per night (Chaput et al., 2017). Canadian adults, 18–79 years, are sedentary 9.6 hours per day (excluding sleep time) so total sitting time in the current sample is perhaps lower than expected (Centre for Surveillance and Applied Research, n.d.).

Roughly half of students reported binge drinking in the past month, which is comparatively lower than more than 60% of students who reported heavy drinking in the 2018 Canadian Post-secondary Education Alcohol and Drug use Survey pilot (CPADS; Health Canada, 2018). However, it is higher than the 28.7% of 18-34-year olds in Canada who reported heavy drinking at least once a month in the past year (Statistics Canada, n.d.), although these differences may be attributed to the different age range and different time periods referred to in the survey items.

Smoking behaviour and use of e-cigarettes was comparable to previous data. Rates of never smoking were similar for the CCWS (76.4%) and the National College Health Assessment (73.8%) – a research survey organized by the American College Health Association that was deployed to 58 Canadian post-secondary institutions in the spring of 2019 (American College of Health Association, 2019). Rates of e-cigarette use within the past 30 days were comparable between Canadians (81.4%; Reid et al., 2019) and students who completed the CCWS (83.1%).

There was a lower prevalence of cannabis use in the past year compared to CPADS pilot data (Health Canada, 2018b), but also a higher rate of daily use in the past month compared to NCHA results (ACHA, 2019). Fewer CCWS respondents (30%) than participants in the CPADS pilot (39%) reported using cannabis in the past year. Of CCWS participants who used cannabis in the past year, approximately 30% had not used it in the past month. In comparison, 19.7% of students who participated in the NCHA and ever used cannabis had not used it in the last 30 days. Daily use in the past month was higher for the CCWS (12%) than for the NCHA (3.9%), and for daily use in the past 3 months in the CPADS pilot (8%). The comparisons are limited by the different time frames and items used in different surveys.

## Mental Health

There does remain concern about the mental health of post-secondary students. Over a quarter of the sample reported severe mental distress (28%), and low mental wellbeing (27%). While alarming, this high prevalence is not uncommon on the basis of other national surveys with representative sampling. One out of five Canadians reported high psychological distress in 2010 with the highest prevalence of high psychological distress found among the youngest age group (15 to 24 years) at 29.2% (Caron & Liu, 2010). Going further back, using data based on a national probability sample of 7,800 Canadian undergraduate students from 16 universities, thirty percent of the students in the sample reported elevated psychological distress in 2001 (Adlaf et al., 2001). Ten percent of students reported seriously contemplating suicide over the last 12 months (an additional 8% preferred not to answer). This is slightly lower than the 13% reported in the 2019 NCHA survey in Canada.

This data confirms that poor mental health is highly prevalent during young adulthood and reinforces the important opportunity for post-secondary institutions to foster mental health and provide ongoing support and services for mental health. Nearly a third of students did not know where to access mental health support on campus (in person or online) and this might be an area for consideration.

Financial pressure remains the most common barrier to academic progress. Related to this, nearly 20% of students were categorized as having very low food security and another 20% as having low food security. This is consistent with findings from the UBC Undergraduate Experience Survey (UES) in 2019 that showed 37% of students at UBC Vancouver, and 42% at UBC Okanagan reported low to very low food security. In British Columbia, 8.5% of all households were food insecure, with 5.5% moderately food insecure and 3% severely food insecure (Government of Canada, 2020). Continued advocacy is required for increasing food security for the post-secondary community. The association between food insecurity and poor mental health is well established (Myers, 2020).

## Limitations

Caution is required when interpreting the data given the self-report nature of the CCWS and the final response rate. The majority of students completed the CCWS before COVID-19 related restrictions were put in place but this may have dampened the response rate at several institutions. There were no striking differences in primary outcomes when comparing results of students completing the survey before or after March 11, 2020. Overall, the sample of respondents was generally a good representation of the cohort of students who were invited to complete the survey. There is likely a greater proportion of female respondents in the CCWS cohort than at BC post-secondary institutions overall (64% versus 53% respectively) although average age is similar (25 versus 28 years, respectively; [http://www.aved.gov.bc.ca/interactive\\_reporting/welcome.htm](http://www.aved.gov.bc.ca/interactive_reporting/welcome.htm)). Finally, indicators assessed by the CCWS were generally in line with findings from comparable national datasets. These factors should be considered when considering the representativeness of the data. Our findings of greater response rate with at least three reminders and the use of incentives have important implications for future deployment of the CCWS.

## Conclusion

We have demonstrated the feasibility of implementing the CCWS at a provincial level and were encouraged by the interest and engagement of BC post-secondary institutions in participating in the CCWS. Data collected will serve as a foundation for future deployment and in tracking the health and wellbeing of students over time. Future research will examine how the data is used by institutions and how it informs their policy, programming and practice initiatives. In time, this will allow for identifying better practices in health promotion at the post-secondary level in British Columbia.

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