Article

Coronavirus and the impact on students in higher education in England: September to December 2020

A summary of research into how the coronavirus (COVID-19) pandemic has affected students in higher education in England during the autumn term of 2020.

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1. Main points

- The coronavirus (COVID-19) pandemic and the various measures introduced to slow its spread have significantly affected the day-to-day lifestyle and mental well-being of the general public; however, many higher education students have found themselves in a unique situation, perhaps isolating in a household with others they do not know well.

- A range of research has been conducted into the particular impact of the pandemic on the well-being of students and their behaviours, including the Student Covid Insights Survey (SCIS) conducted by the Office for National Statistics (ONS), which collected information in three pilots during October and November.

- The SCIS shows that students follow coronavirus guidance in much the same way as the general public (as reported in the Opinions and Lifestyle Survey (OPN)); however, students were more likely not to have left their home or accommodation in the seven days prior to being surveyed (between 2 and 3 in 10) than the general public (less than 1 in 10).

- The most recent pilot of the SCIS showed that student experience has changed because of the coronavirus: considering academic experience, 29% of students reported being dissatisfied or very dissatisfied with their experience in the autumn term.

- Over half (53%) of students reported being dissatisfied or very dissatisfied with their social experience in the autumn term.

- Students responding to the SCIS reported lower levels of life satisfaction, life worthwhile and happiness, and higher levels of anxiety, compared with the general population through the OPN.

- Results from three different surveys conducted during November 2020 conclude that more than half of students report that their well-being and mental health has worsened as a result of the pandemic.

2. Overview

The coronavirus (COVID-19) pandemic has affected all our lives throughout 2020. As students returned to university in the autumn term, there was a focus on ensuring that they were able to continue with their studies safely during the pandemic. However, there are a number of questions about what impact the pandemic has had on students. These questions include understanding the prevalence of COVID-19 among students, factors that increase the risk of transmission and the impact of the pandemic on the well-being and mental health of students.

We have been working in partnership across the sector to help answer these questions. The article How has coronavirus (COVID-19) spread among students in England? shows the findings from our research into prevalence and transmission through a series of case studies. The following article shows how the coronavirus has affected the behaviour, plans and experiences of students over the last few months, and summarises a variety of research exploring the impact that the pandemic has had on the well-being and mental health of students.

3. Student behaviour

Since October 2020, we have been conducting a study analysing student behaviour during the coronavirus (COVID-19) pandemic. This survey is called the Student Covid Insights Survey (SCIS), and three pilots have been conducted:
The first two pilots were conducted at selected universities, while for the most recent pilot, 100,000 students from all universities across England were invited to participate in the online study via an email from the National Union of Students (NUS).

The results from each pilot have been weighted to be representative of all students included in the sample for each pilot. Pilot 2 also included Scotland, while Pilots 1 and 3 covered students in England only.

The survey questions have evolved over time to reflect changes in coronavirus restrictions and to be responsive to events and emerging new guidance affecting students on the run up to the winter break.

Some important findings from the three pilots include:

**Behaviour relating to coronavirus guidelines**

- In the 7 days prior to being surveyed in the two most recent pilots, 9 out of 10 students always or very frequently tried to keep a two-metre distance from people outside of their university household; this is consistent with findings from the Opinions and Lifestyle Survey (OPN) for the general population.

- Increasingly, students have avoided having guests come to their homes since the first pilot (rising from 72% of students in Pilot 1, to 91% in Pilot 3); it should be noted that the most recent pilot was during the national lockdown in England and for the second pilot, around 20% of responses were during the national lockdown, and the rest immediately before it, which may have affected these results.

- Consistently across all three pilots, 9 out of 10 students reported always or frequently thoroughly washing their hands or using hand sanitizer when leaving a shared space; this is consistent with findings from the OPN for the general population.

- 2 out of 10 students (increasing to 3 out of 10 students in Pilot 3) reported not having left their home or accommodation in the seven days prior to completing the survey; for those who had, the most common reasons reported were to buy groceries or visit the pharmacy, and to spend time outdoors for recreational purposes or exercise; this compares with less than 1 in 10 adults responding to the same question in the OPN over a similar period.

- In the latest pilot, when asked about how they thought consuming alcohol had affected how they followed guidance around COVID-19, around 88% of students reported that alcohol did not affect how they followed the guidance, or that they followed the guidance more closely.

**Intentions and views on coronavirus testing**
• Two-thirds of students have downloaded the NHS COVID-19 or Protect Scotland apps.

• When asked what actions they would take if they developed symptoms of COVID-19, most students reported that they would request a test (between 85% and 89% across the three pilots) or that they would stay home for 10 to 14 days (7 to 14 days in Pilot 1) (between 82% and 86% across the three pilots).

• For those students who said that they would not request a test, the most common reported reasons included only needing to self-isolate, wanting the test to go to someone else who needed it more or if their symptoms had only been mild or had improved.

• When asked if they would be willing to share details of people that they had most recently been in contact with, if contacted by their country’s contact tracing service, around 85% said they would be likely, or extremely likely to do so.

Plans over the winter break

• Around 6 out of 10 students reported that they intended to return home for the winter break (across all three pilots); during the latest pilot, 12% of students reported that they intended to stay in their university accommodation.

• Among those planning to return home for the winter break, around 6 out of 10 students expected to return home in their own car, or in a car with family, while 2 out of 10 expected to travel by train, tram or underground; in the latest pilot, 1 in 10 reported that they intended to fly internationally; these findings were consistent with the findings from the survey run by the University of Exeter, described in the next section.

• Across all three pilots, around half of students who usually live in term-time accommodation reported that they have been travelling between their home and term-time address regularly or occasionally during the autumn term.

• In the most recent pilot, 2 out of 10 students said that they might spend more than two nights away from where they expect to spend the majority of the winter break.

University of Exeter student intentions survey

As described in our article on how the coronavirus has spread among students in England, we have worked with the University of Exeter on a case study. At the end of November, the university surveyed their students to understand more about their travel plans and intentions for returning home over the winter break, and their views on COVID-19 testing. These questions were similar to those asked in the Office for National Statistics (ONS) Student Covid Insights Survey (SCIS). The following results relate to the responses from 2,100 students based on campuses in Exeter. This accounts for roughly 9% of the University of Exeter student population who are based on the same campuses.

The main findings showed that of the students who responded:
• 76% were planning to spend their winter break away from their term-time address; 14% planned to spend it at a mixture of both, while 8% planned to remain at their term-time address; 62% knew the exact date that they planned to leave their accommodation.

• 66% planned to be collected by private vehicle or travel in their own vehicle, while 33% expected to travel by train; while this might be explained by limitations of public transport in this region, these findings are broadly consistent with the findings from the Student Covid Insights Survey.

• 58% said that they would take a COVID-19 test before they left, but would travel if one was not available, while 26% said that they would only travel if they were tested and the result was negative; of the 16% who preferred not to test, the most common reasons for this were because they did not think the test would be of any use to them (31%), or they had already had COVID-19 so saw no reason to get tested (30%).

• When asked about taking a test on returning to university in the spring term, 87% said they would be happy to do so.

4. Student plans and experience

In the latest pilot of the Student Covid Insights Survey (SCIS), we asked questions about teaching hours and delivery mode, the impact of online learning, and student satisfaction since the start of the autumn term. These were the main findings:

Teaching hours and method of delivery (Pilot 3 only)

• From the most recent pilot, around 6 out of 10 students reported that their university studies mainly involve desk-based learning (for example, self-studies, or online learning with a tutor or lecturer); around a quarter reported that their university studies mainly involve class-based learning (for example, on campus in lecture halls, in classrooms or labs).

• In the last seven days from responding to the survey, 65% reported having attended no hours of in-person teaching, while 21% reported having attended between one and five hours in person; half of students reported having attended six or more hours of remote learning.

• For students whose main form of study is clinical learning or training, 46% reported receiving some training in community settings (for example, hospitals or training sessions outside campus); of these students, 71% had received 10 or more hours at clinical or vocational settings in the seven days before completing the survey.

Impact of online learning (Pilot 3 only)

• Universities were expected to stop face-to-face teaching on 9 December during this autumn term; when students were asked whether they felt equipped to engage with online learning, 16% of disagreed or strongly disagreed.

• When asked how likely they were to return to their student accommodation if all university teaching was online from January, 22% said that they would be unlikely or extremely unlikely to return; half of students reported that they would be likely or extremely likely to return to their student accommodation and half of students also reported that moving to online learning only would have a negative impact on their academic experience.

• When asked about their fees if all university teaching was online from January, half of students reported that they would be likely or extremely likely to request a refund for part, or all of their fees.

• 81% students reported that they would be likely, or extremely likely to continue with their studies if all university teaching was moved online in January.
Student satisfaction

- Half of students reported that they were satisfied, or very satisfied with their academic experience; this was slightly higher for first-year undergraduate students (55%) compared with other undergraduate students (44%).

- Of the 29% reporting to be dissatisfied or very dissatisfied with their academic experience, two-thirds reported that this was because of the quality of learning and learning delivery.

- When asked about how satisfied they were with their social experience, over half reported to be dissatisfied, or very dissatisfied; the main reasons were: limited opportunities for social or recreational activity (86%), limited opportunities to meet other students (84%) and limited access to sports and fitness facilities (52%).

Findings from the Opinions and Lifestyle Survey (OPN)

As part of the weekly Coronavirus and the Social Impacts on Great Britain bulletins, data have been collected on the Opinions and Lifestyle Survey (OPN) on the plans of students if their studies went online. This was asked to students themselves and to people who had students in their households. Because of the small number of students and households containing a student, we have pooled data which was collected on the OPN during November to increase sample sizes and quality of our estimates (weekly estimates can be found in Table 14 of the data downloads for each week in November).

Please note data collected on the OPN are not comparable with the SCIS because of differences in sample design and population coverage. The SCIS surveys students in England (apart from Pilot two, which also included Scotland), while the OPN surveys private households in Great Britain and therefore may not cover students living in halls.

These are the main findings from the OPN for those attending university this year:

- similar to the results from the SCIS, 27% report that their plans to live in university halls of residence, or shared houses or flats close to the university would be affected if universities started teaching online only; a higher percentage of men (30%) than women (24%) report that their plans would be affected.

- Of those whose accommodation plans would be affected, 65% would move back to their family home.

- 21% report that their plans to continue with their university course would be affected if universities started teaching online only.

Of those whose plans to continue their university course would be affected:

- 58% would defer attendance to another year
- 31% would drop out of the course
- 14% would attend a different university
- 20% would find a job

5. Personal well-being, loneliness and mental health
Over recent years, personal well-being of undergraduate students has declined (Student Academic Experience Survey, 2020 (PDF, 700KB)). On all four domains (life satisfaction, life worthwhile, happiness, low anxiety), undergraduate students report substantially lower levels of well-being compared with the general population aged 16 to 24 years (see Figure 1).

Figure 1: Personal well-being measures scoring "very high" have decreased over time for students and are lower than the general population aged 20 to 24 years

Personal well-being measures scoring “very high” for full-time undergraduate students and for young people aged 20 to 24 years, UK, 2016 to 2020

Source: Higher Education Policy Institute Student Academic Experience Survey; Office for National Statistics - Measuring National Well-being

Notes:
1. Percentages calculated from all students scoring 9 to 10 out of 10 for life satisfaction, life worthwhile, happiness; 0 to 1 out of 10 for anxiety.
2. Statistically significant difference.

The proportion of university students who report a mental health condition in Higher Education Statistics Agency (HESA) records has more than doubled between 2014 to 2015 and 2018 to 2019 from 1.8% (33,045 students) to 4.3% (81,960 students) of UK-domiciled students (UK-domiciled students account for approximately 80% of all students, the remaining 20% being international students). This does not necessarily imply an increase in prevalence, it could be because students are more prepared to disclose a mental health condition than previously, stemming from the sector’s efforts to address student mental health.
Personal well-being, loneliness and mental health - during the pandemic

Personal well-being

In the Student Academic Experience Survey (SAES), students surveyed after 16 March 2020 (when most universities stopped face-to-face teaching) reported significantly lower levels of happiness than those surveyed before that date. For the remaining three well-being measures (life satisfaction, life worthwhile, low anxiety) levels did not differ significantly (see Table 1).

Table 1: Comparison of responses to well-being questions scoring “very high” before and after 16 March 2020

<table>
<thead>
<tr>
<th></th>
<th>Pre 16 March interview date</th>
<th>Post 16 March interview date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life satisfaction (scoring 9-10 out of 10)</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>Life worthwhile (scoring 9-10)</td>
<td>16%</td>
<td>15%</td>
</tr>
<tr>
<td>Happiness (9-10)</td>
<td>16%²</td>
<td>12%</td>
</tr>
<tr>
<td>Anxiety (0-1)</td>
<td>18%</td>
<td>19%</td>
</tr>
</tbody>
</table>

Source: Student Academic Experience Survey (SAES) 2020

Notes

1. Percentages calculated from students with interview date before or from March 16 2020 onwards.
2. Statistically significant difference.

Loneliness

A survey by WONKHE and Trendence (PDF, 1.33MB) found that in October 2020, compared with May 2019, the proportion of students who felt lonely daily or weekly is much larger (50% compared with 39%), and a larger proportion of students do not feel part of the university community (50% compared with 40%). This is more likely for students living in halls (59%), and least likely for those living with their parents (44%) or in their own home (37%; this will likely comprise mature students).

It should be noted that these changes could partially be because of differences in the sample composition, where the 2020 sample has higher proportions of both LGBT+ (23% compared with 11% in 2019) and those declaring a disability (19% compared with 8% in 2019). The samples also differ from the UK student population overall, where the sample included an over-representation of international students and students identifying as LGBT+.

Loneliness has been tracked by the UCL COVID-19 Social Study in an online panel. Levels of loneliness among university students are broadly similar to those of the general population aged 18 to 29 years (see Figure 2c). It should be noted that for autumn 2020, the figures for students are based on small sample sizes and a definition taken in spring 2019. This means that some students identified then would no longer be a student in autumn 2020, and students who their undergraduate first year in autumn 2020 would not be included.
Bu and others (2020) compared factors affecting loneliness before and during the pandemic using the UK Household Longitudinal Survey and the UCL (University College London) COVID-19 Social Study data. The research found that the risk factors for loneliness in the general population before the pandemic and during the spring lockdown are mainly the same.

It also found that students are one of the few groups at higher risk of being lonely during the pandemic, compared with pre-pandemic (together with young people aged 18 to 29 years, people on low income and people living alone) although this is not statistically significant as confidence intervals overlap.

**Mental health**

For anxiety and depression, the UCL COVID-19 Social Study found that mean scores among university students are broadly similar to those of the general population aged 18 to 29 years throughout the study period from late March to November (see Figures 2a, 2b and 2c).

Two surveys run in November 2020 found that a majority of students reported that their mental health worsened. A survey of undergraduate students by the Higher Education Policy Institute (HEPI) (PDF, 373KB) asked respondents how the coronavirus (COVID-19) pandemic has affected their mental health. Of these, 58% said their mental health has become worse because of the pandemic, 14% say it is better and the remaining 28% say it is the same (see Figure 3).

Similarly, the Coronavirus Student Survey phase 3, a survey of students in higher and further education conducted by the National Union of Students (NUS) found that 52% of respondents describe their current mental health and well-being as worse (35% describe it as the same, 8% as better, 4% refused) compared with their life before the pandemic. Without comparable data for the general population, the results of these two surveys are difficult to interpret.

Our Student Covid Insight Survey (SCIS) pilots found similar results. In the latest pilot, 57% of students reported that their well-being and mental health had become slightly or much worse since the start of the autumn term. Further, students responding to the SCIS reported lower levels of life satisfaction, life worthwhile and happiness, and higher levels of anxiety, compared with the general population, as reported in the Opinion and Lifestyles Survey (OPN) at a similar point in time.
Figure 2a: Mean anxiety scores among university students are broadly similar to those of the general population aged 18 to 29 years in the study period, late March to October 2020

Source: University College London COVID-19 Social Study – Public Health England “Wider impacts of COVID” monitor

Notes:

1. As these results related to students identified at baseline in spring 2020, from October 2020 onwards, some of this group will no longer be students. The dotted line represents that these figures relate to a group that does not only contain students from this point onwards.
Figure 2b: Mean depression scores among university students are broadly similar to those of the general population aged 18 to 29 years in the study period, late March to October 2020

Mean depression scores (PHQ-9) for students, 18 to 29 years (including students and non-students) and general population, UK

Figure 2b: Mean depression scores among university students are broadly similar to those of the general population aged 18 to 29 years in the study period, late March to October 2020

Mean depression scores (PHQ-9) for students, 18 to 29 years (including students and non-students) and general population, UK

Source: University College London COVID-19 Social Study – Public Health England “Wider impacts of COVID” monitor

Notes:

1. As these results related to students identified at baseline in spring 2020, from October 2020 onwards, some of this group will no longer be students. The dotted line represents that these figures relate to a group that does not only contain students from this point onwards.
Figure 2c: Mean loneliness scores among university students are broadly similar to those of the general population aged 18 to 29 years in the study period, late March to October 2020

Mean loneliness scores for students, 18 to 29 years (including students and non-students) and general population, UK

Source: University College London COVID-19 Social Study – Public Health England “Wider impacts of COVID” monitor

Notes:
1. As these results related to students identified at baseline in spring 2020, from October 2020 onwards, some of this group will no longer be students. The dotted line represents that these figures relate to a group that does not only contain students from this point onwards.
Potential data sources for further analysis

During the scoping of this review, we found a number of studies that covered the impact of the pandemic on higher education students. These student-specific surveys are mainly based on non-probability samples, which increases potential for bias (especially if survey weights are not available).

Additionally, a limitation of using student-specific surveys for analysis is the lack of a non-student comparison group that include the same mental health measures. Differences in sampling procedures and questionnaire design can also lead to inaccurate conclusions when making comparisons between surveys.

Another potential source is the You-COPE panel survey, which follows a cohort of people aged 16 to 24 years and aims to understand how young people have been affected by the coronavirus pandemic. It cannot be fully evaluated in detail with the information currently available but is not nationally representative; the last data collection covers the early part of autumn term and at the time of writing, reports are only available for June and July 2020.

Given these limitations, we propose using general population surveys that allow identifying university students and then also provide a comparison group of non-students. A limitation of such surveys is that students living in communal establishments, including residence halls, can be underrepresented.
There are several nationally representative general population surveys that have been collecting data during the pandemic suitable to analyse mental health of university students. The two best options we identified are:

- **Annual Population Survey (APS):** continuing fieldwork covering all months, university students (including higher education colleges) identifiable; however, does not include mental health measures, only personal well-being.

- **CLS COVID-19 survey** of five cohort studies, which includes the Millennium Cohort Study whose cohort members are currently around 20 years old - university students can be easily identified; the second wave ran mid-September to mid-October 2020, that is, mainly just before the autumn term started, and the third wave is planned for late January 2021 (data are made available around two months later); it has good mental health measures (Kessler 6 (non-specific psychological distress), GAD-2, PHQ-2, WEMWBS (7-item), UCLA-3 loneliness) available.

In other surveys, university students could not be identified, are too small in sample size, or the fieldwork period does not cover university term time (especially not autumn 2020). The **UK Household Longitudinal Study (UKHLS) COVID panel** collects student status only for the sub-set of respondents who do not work and it refers to (UKHLS) COVID panel economic activity in January to February 2020.

In the UCL COVID-19 Social study, economic activity was only collected at baseline (spring 2020), therefore the student population in autumn term 2020 to 2021 cannot be identified with certainty.

**Notes for: Personal well-being, loneliness and mental health**

1. The SAES 2020 fieldwork ran from February to April 2020. Percentage respondents pre-March 16 with high levels of happiness 16%, post-March 16 12%.

2. It is possible that the student covariate picks up a non-linear effect of age that is masked because of the relatively wide age bracket of 18 to 29 years used in the model. According to personal communication with Feifei Bu, the "student" category contains a small proportion of respondents still at school.

3. Mean scores for GAD-7 and PHQ-9; figures for university students supplied by Dr Daisy Fancourt; general population figures taken from PHE Wider impacts of COVID monitor.

**6. Data sources and quality**

**Opinions and Lifestyle Survey**

The Opinions and Lifestyle Survey (OPN) is a monthly omnibus survey. In response to the coronavirus (COVID-19) pandemic, we have adapted the OPN to become a weekly survey used to collect data on the impact of the coronavirus on day-to-day life in Great Britain.

The survey results are weighted to be a nationally representative sample for Great Britain, and data are collected using an online self-completion questionnaire. Individuals who did not want to or were unable to complete the survey online had the opportunity to take part over the phone.

A sample of households was randomly selected from those that had previously completed the Labour Force Survey (LFS) or the Labour Market Survey (LMS). From each household, one adult was selected at random but with unequal probability. Younger people were given higher selection probability than other people because of under-representation in the sample available for the survey. The survey also includes a boosted sample for England, to allow more detailed analysis at a regional level, which are available in the datasets.
Survey weights were applied to make estimates representative of the population. Weights were first adjusted for non-response and attrition. Subsequently, the weights were calibrated to satisfy population distributions considering the following factors: sex by age, region, tenure, highest qualification and employment status.

For age, sex and region, population totals based on projections of mid-year population estimates for November 2020 were used. The resulting weighted sample is therefore representative of the Great Britain adult population by a number of socio-demographic factors and geography.

To enable more detailed analysis on the plans of students, four waves of the weekly OPN data have been pooled together and reweighted to create larger datasets. By pooling data, we improve the sample size available to create smaller breakdowns of individual questions at the expense of having to report on a wider time period (four weeks rather than one week). The pooled dataset contains 16,804 responses collected between the 5 and 29 November 2020, representing a 70% response rate. Only 2.5% of the response collected from the OPN are from students.

**Student Covid Insights Survey**

The Office for National Statistics (ONS) is conducting a pilot study analysing student behaviour during the coronavirus (COVID-19) pandemic. This survey is called the Student Covid Insights Survey. Data for all three pilots are published and links are available in the [Related links](#).

The first two pilots were conducted at selected universities, while for the most recent pilot, 100,000 students from all universities across England were invited by email (from the National Union of Students (NUS)) to participate in the online study. The results from each pilot have been weighted to be representative of all students included in the sample for each pilot. Pilot 2 also included Scotland, while Pilots 1 and 3 covered students in England only.

The survey questions have evolved over time to reflect changes in coronavirus restrictions and to be responsive to events and emerging new guidance affecting students on the run up to the winter break.
7. Related links

**Coronavirus (COVID-19) latest data and analysis**
Web page | Updated as and when data become available
Latest data and analysis on the coronavirus (COVID-19) in the UK and its effect on the economy and society.

**Coronavirus and higher education students: England, 20 November to 25 November 2020**
Bulletin | Released 9 December 2020

**Coronavirus and university students, 3 November to 8 November, Great Britain**
Dataset | Released 18 November 2020
Experimental statistics from a pilot of the Student Covid Insights Survey. Includes information on the behaviours and well-being of university students attending four British universities in the context of guidance on the coronavirus (COVID-19).

**Coronavirus and university students, 12 October to 18 October 2020, England**
Dataset | Released 5 November 2020
Experimental statistics from an initial pilot of the Student Covid Insights Survey. Includes information on the behaviours and well-being of university students attending three English universities in the context of guidance on the coronavirus (COVID-19).

**Coronavirus (COVID-19) roundup**
Article | Updated as and when data become available
Catch up on the latest data and analysis related to the coronavirus (COVID-19) pandemic.

**Coronavirus (COVID-19) latest insights**
Interactive tool | Updated as and when data become available
Explore the latest data and trends about the coronavirus (COVID-19) pandemic from the ONS and other official sources.

**Estimating suicide among higher education students, England and Wales: Experimental Statistics**
Article | 25 July 2018
Estimates of suicides among higher education students by sex, age and ethnicity. Analysis based on mortality records linked to Higher Education Statistics Agency (HESA) Student records.