



## Wave 2 Initial Findings – Briefing No. 1

# Mental and physical health

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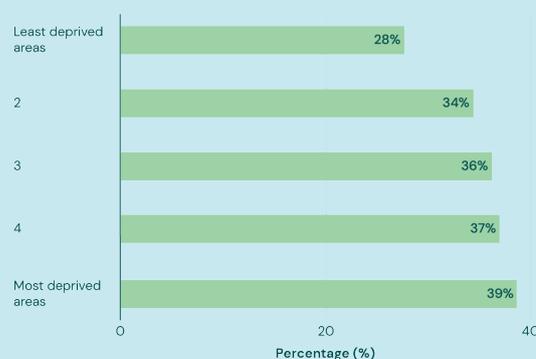
### Highlights

- 44% of young people in Year 13 (aged between 17 and 18) were classified as experiencing high psychological distress, the same proportion as in wave 1 of the COSMO study (where participants were aged 16 to 17).
- A quarter of young people had sought some form of mental health support over the previous 12 months. Of those, 35% said they are either on a waiting list or have not received some of the support they have sought.
- Those in the most deprived parts of the country were 11 percentage points more likely to say they are still waiting or have not received the support they applied for, at 39% compared to 28% of those in the most affluent areas. Looking at CAMHS and other specialist services specifically, those in the most deprived areas were more than twice as likely to have not received support as the most affluent.
- When looking at differences by sexual orientation, LGBQ+ young people were more likely to indicate signs of poor mental health. For instance, 47% of bisexual young people, 37% of gay/lesbian young people, and 44% of those with other sexualities reported having self-harmed, compared to 9% of heterosexuals.
- Just over a third (33%) of young people said that the COVID-19 pandemic was still having a

negative impact on their education. 31% say it was still negatively affecting their mental wellbeing.

- Those who reported having long COVID were more likely to be classed as experiencing high psychological distress (58%) compared to those who have never had long COVID (43%) or COVID at all (37%). 13% of young people said they had or have now recovered from long COVID – 3% say they had long COVID that severely limited daily life.
- 17% of young people reported having a long-term illness that limits their daily activity.
- Just under 1 in 5 (18%) young people said they have not yet had the COVID-19 vaccination. This was highest in the most deprived areas of the country (25%, compared to 6% of those in the most affluent areas).

### Proportion who sought mental health support and were still waiting/never got support by neighbourhood deprivation



Notes: N=2,623. Analysis is weighted for survey design and young person non-response.

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## Context

The increasing prevalence of high psychological distress amongst young people found in the first wave of the COVID Social Mobility and Opportunities (COSMO) study was striking.<sup>1</sup> Over 2 in 5 (44%) of 16–17-year-olds in England were classified as having high psychological distress in 2021, compared to 35% for the 'Our Future' cohort in 2017, and 23% for the 'Next Steps' cohort in 2007. For the COSMO cohort, high levels of psychological distress were also seen at higher rates for young carers, sufferers of long COVID and those identifying as 'non-binary+'.<sup>1</sup>

*Even though many areas of life have largely returned to normal following the pandemic, the long-term trend of worsening mental health and wellbeing of young people is an ongoing issue.*

Mental health conditions are one of the most common long-term health conditions and illnesses affecting young people today – other common problems include Asthma, Autism and learning disabilities.<sup>2</sup> Additionally, since the COVID-19 pandemic began, long COVID (continuing to experience COVID-19 symptoms more than 4 weeks after first having the virus, not explained by another condition) has been an emerging phenomenon – analysis of COSMO wave 1 data collected during the 2021/22 school year found that nearly 1 in 10 (9%) students reported having experienced the condition, with those in more deprived areas more likely to report symptoms.<sup>3</sup>

Even though many areas of life have largely returned to normal following the pandemic, the long-term trend of worsening mental health and wellbeing of young people is an ongoing issue. This research briefing examines this using data from wave 2 of the COSMO study, collected when participants were aged between 17 and 18. Symptoms of psychological distress – as measured by the General Health Questionnaire (GHQ-12) – are considered,<sup>4</sup> as well as other aspects of wellbeing like bullying and harassment. Use of mental health support services and satisfaction with school support are also analysed.

Additionally, indicators of physical health are presented, including self-reported general health, long-term illness, and incidence of long COVID.

In the mental health section of this briefing, we highlight the experiences of young people who report a gender identity other than male or female ('non-binary+' – 3% of participants),<sup>5</sup> given previous evidence of increased psychological distress for this group.<sup>6</sup> We also present differences by sexual orientation (newly available in COSMO wave 2; 17% of participants report a sexual orientation that is not heterosexual, thus LGBQ+),<sup>7</sup> given previous evidence suggesting mental health problems are more likely for LGBQ+ individuals.<sup>8</sup> The scale of the COSMO study, combined with the increasing reported prevalence of non-binary identities and LGBQ+ sexualities,<sup>9</sup> provides sufficient sample sizes to look at these groups whose experiences are often not possible to report in smaller studies. More detail on this can be found in the sample and methods section.

## Mental health of the COSMO cohort

### High psychological distress

This briefing focuses on the GHQ-12 as our primary measure of interest, as it is widely used as a screener for general mental ill health. The average GHQ score across all respondents is 3.90 – just below the clinically-defined threshold for 'probable mental ill health' of 4.<sup>10</sup> The difference is negligible compared to the average score from COSMO wave 1, when participants were in Year 12 (aged between 16 and 17), of 3.92.

Further analysis of GHQ-12 scores in this briefing is simplified by focusing on proportions at a threshold value of 4 and above. Given the non-clinical context in which this measure is being used, we do not refer to this as indicating 'probable mental ill health' (as per its description above), but rather scores above this threshold are interpreted as an indicator of 'high psychological distress' at the time of being surveyed.<sup>11</sup>

44% of young people in Year 13 (aged between 17 and 18) can be classified as having experienced high psychological distress, the same proportion as in wave 1 of the study. Scores for other measures of wellbeing, such as life satisfaction, can be found in Table 4 on page 15.

As discussed in the research briefing on mental wellbeing using COSMO wave 1 data,<sup>12</sup> there is an alarming trend that the mental health of the current generation is worse than that of generations before. The proportion of young people classified as experiencing high psychological distress in both COSMO waves is considerably higher than the 35% with high psychological distress at age 17-18 in the Our Future cohort study (2017) and the 23% at age 16-17 in the Next Steps cohort study (2007).<sup>13</sup>

In wave 2, whilst the GHQ score has not changed on average, this does not mean that scores have stayed the same for every person. 11% have seen a reliable increase in their score, thus increased risk of psychological distress, and 12% have seen a reliable decrease.<sup>14</sup>

15% of those who reported having been bullied over the past year have reported a reliable increase in their GHQ score between waves 1 and 2, compared to 9% who do not report bullying. 14% reporting harassment also have a reliable increase in GHQ compared to wave 1, whilst 9% of those not reporting any harassment do. (More details on bullying and harassment are outlined below).

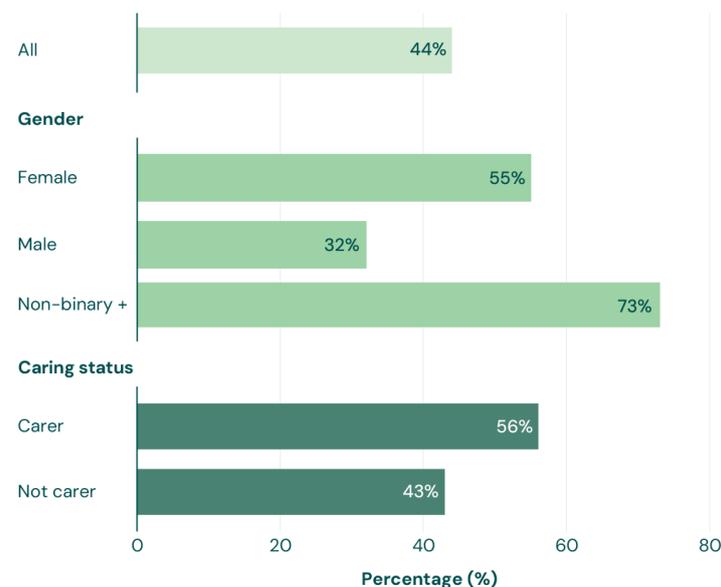
Those who rated their school's mental health support as 'not at all good' (19%) and 'not very good' (14%) were more likely to have a reliable increase in their GHQ score this wave compared to those rating their school's support 'fairly good' (9%) and 'very good' (6%). (More details on this measure are outlined below).

Interestingly, whilst 15% who have self-harmed and 15% who have attempted suicide over the past year have seen a reliable increase in their GHQ-12 score, thus increased risk of psychological distress, (compared to 9% and 10% who have not respectively), both groups are also more likely to report a reliable decrease in their score compared to those who have not self-harmed or attempted suicide (13% vs 11% for self-harm and 13% vs 11% for suicide). This may be because some individuals reporting self-harm and/or suicide may have reported no change in their distress levels in wave 2 compared to wave 1. It may also be because those who have self-harmed or attempted to end their life over the past year have since sought help, thus they have seen an improvement in their distress levels since harming themselves.

Other trends in self-harm and suicide are discussed in a later section.

As with COSMO wave 1, those identifying as female or non-binary+ are more likely to be classified as having high psychological distress, at 56% and 74% respectively compared to 32% of males (Figure 1). Figures have stayed at similar levels for these groups between waves 1 and 2.

**Figure 1: Percentage classified with high psychological distress by gender and caring status**



Notes: N=10,090. Sample restricted to only those who reported gender and caring status. Analysis is weighted for survey design and young person non-response. Those with GHQ-12 scores greater than or equal to 4 are classified as experiencing 'high psychological distress'. Sample Ns: Female=5241, Male=4553, non-binary+=296, carer=1045.

56% of young carers are classified as experiencing high psychological distress compared to 43% who are not a carer. There was not a statistically significant difference when comparing to wave 1.

67% of both bisexual and gay/lesbian young people are classified as experiencing high psychological distress, as are 71% of those with other sexual orientations, compared to 39% of heterosexuals (Table 1). No notable patterns were identified by socio-economic status or ethnicity.

**Table 1: Percentage classified with high psychological distress by sexual orientation**

Sexual orientation	High psychological stress (%)	
	No	Yes
Heterosexual	61	39
Gay/Lesbian	33	67
Bisexual	33	67
Other	29	71
All	56	44

Notes: N=10,126. Analysis is weighted for survey design and young person non-response. Those with GHQ-12 scores greater than or equal to 4 are classified as experiencing 'high psychological distress'.

### Self-harm and attempted suicide

15% of respondents reported that they had self-harmed in the last year – this is 3 percentage points lower than the 18% reporting this in COSMO wave 1. As in wave 1, non-binary+ young people were the most likely to say they have self-harmed (57%) compared to both females (20%) and males (9%) (figures were down for all genders by similar proportions when compared to wave 1). Respondents who are White (17%) and those of mixed/other ethnicities (16%) were more likely to report self-harm over the past year compared to Black (8%) and Asian (7%) respondents.

Over a quarter (28%) of those classified as experiencing high psychological distress say they have self-harmed in the past year, compared to 6% of others.

When considering differences by sexual orientation, LGBTQ+ young people were also more likely to report having self-harmed over the past year: almost half (47%) of bisexuals, 37% of gay/lesbians and 44% of those with sexualities classed as 'other' report self-harm compared to 9% of heterosexuals. These trends mirror those seen in findings from the age 17 sweep of the Millennium Cohort Study in 2018, where LGBTQ+ respondents were more likely to report both self-harm and suicide compared to their heterosexual peers.<sup>15</sup>

9% said that at some point in their life, they had attempted to hurt themselves on purpose in an attempt to end their life. Again, non-binary+ young people were the most likely to report this, at 37%. 11% of females report this, as do 6% of males. There were no statistically significant differences compared to wave 1.

16% of those classified as experiencing high psychological distress said that they have hurt themselves in an attempt to end their life compared to 4% of other young people.

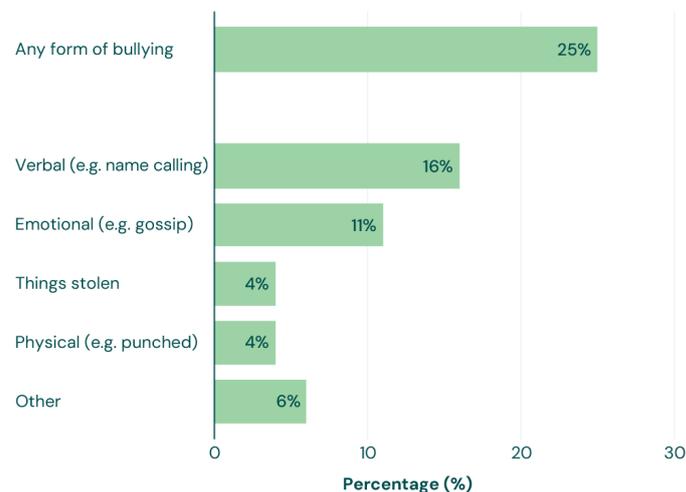
Those who are White (10%) and those of the mixed/other ethnicities (also 10%) were more likely to report having hurt themselves in an attempt to end their life than Black (6%) and Asian (4%) young people.

Looking by sexual orientation, LGBTQ+ individuals were also more likely to report self-harming in an attempt to end their life. 27% of bisexuals, 23% of gay/lesbians and 29% of those with other sexualities reported this, compared to 6% of heterosexuals.

### Bullying

25% of young people reported experiencing some kind of bullying in the 12 months prior to answering the COSMO survey (Figure 2).<sup>16</sup> The most prevalent type of bullying was verbal abuse including name calling and being the butt of jokes, with 16% of young people saying this had happened to them. 11% had suffered emotional abuse including being gossiped about, having hurtful pictures or videos sent about them, being ignored, or harassed.

**Figure 2: Proportion reporting types of bullying over past 12 months**



Notes: N=10,636. Analysis is weighted for survey design and young person non-response.

While there was a 4 percentage point difference when comparing figures for bullying reported by females (26%) compared to males (22%), non-binary+ respondents were far more likely to report bullying at 49%.

There were also differences by sexual orientation, with those who are gay/lesbian the most likely to report bullying, at 44%. 41% of those with 'other' sexual orientations and 40% of bisexuals reported bullying, compared to 22% of heterosexuals.

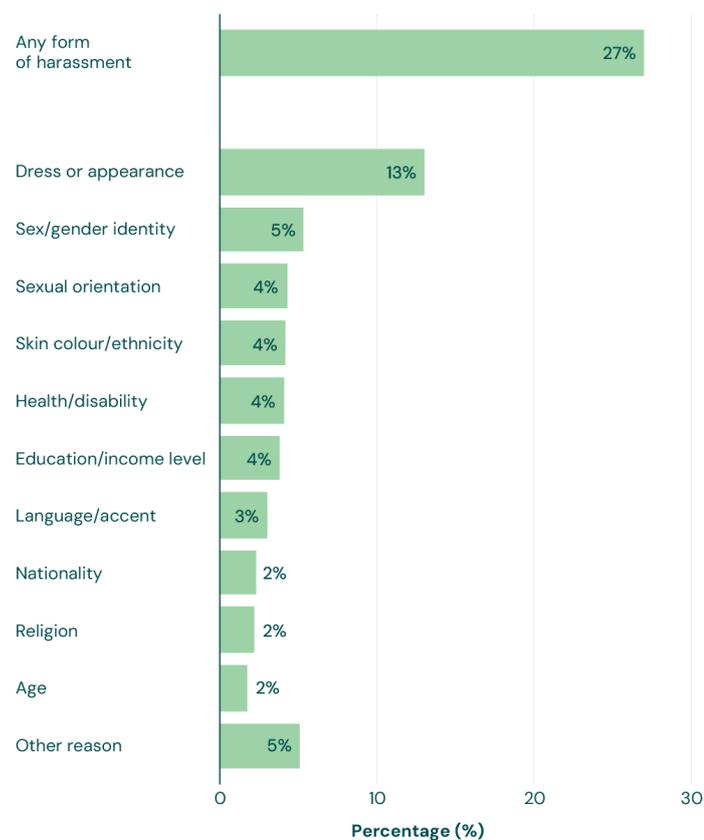
Those who were classified as experiencing high psychological distress were over twice as likely to say they had been bullied, at 36% compared to 14% of those with GHQ scores below the threshold of 4.

## Harassment

As well as being asked about bullying, the cohort were also asked whether they had experienced harassment (insulted, called names, threatened, or shouted at) for a range of reasons, such as their nationality, accent or appearance.

27% reported having experienced harassment in the 12 months prior to answering the COSMO survey (Figure 3).<sup>17</sup>

**Figure 3: Proportion reporting types of harassment over past 12 months**



Notes: N=10,641. Analysis is weighted for survey design and young person non-response.

Nearly three quarters (70%) of non-binary+ young people said they have experienced some form of harassment in the last 12 months, compared to 29% of females and 23% of males. Also, when considering sexual orientation, LGBQ+ young people were more likely to report having at least one form of harassment (57% of gay/lesbians, 48% of bisexuals, and 55% of those with other sexualities) compared to 23% of heterosexuals.

40% of those classified as experiencing high psychological distress reported experiencing harassment of some kind, compared to 17% of those with GHQ scores below the threshold of 4.

5% of respondents said they have been harassed about their sex, gender, or gender identity but, unsurprisingly, this is highly unequally distributed within the sample. The figure is slightly higher for females (6%) than for males (3%), but in sharp contrast, just over 2 in 5 (44%) for non-binary+ young people. Similarly, among trans males and trans females, i.e., those who identify as a different gender than the one they were assigned a birth, 45% report experiencing this type of harassment compared to 4% of those identifying with the same gender they were assigned at birth.<sup>18</sup>

13% have experienced harassment regarding their dress or appearance, with 43% of non-binary+ respondents reporting this harassment compared to 15% of females and 10% of males.

Across the whole sample, 4% reported harassment regarding their skin colour or ethnicity. Black respondents were the most likely to report harassment of this kind, at 16%, followed by those of mixed/other (15%) and Asian (11%) ethnicities, while those of White ethnicity were very unlikely (1%) to experience such harassment.

Out of those who said they have a religion (N=5,075), 5% said they have been harassed about their religion: those who are Jewish (29%), Sikh (10%) or Muslim (9%) were the most likely to report harassment of this kind. 8% of Asian participants reported this compared to 6% of students of mixed/other ethnicities, 4% of Black participants and 3% of White participants.

3% have experienced harassment regarding their language or accent, with those living in the most deprived parts of the country twice as likely to experience this compared to those in the most affluent parts, at 4% compared to 2% respectively.

*Just over a third (33%) of young people said that the COVID-19 pandemic was still having a negative impact on their education.*

4% reported harassment regarding their sexual orientation. LGBTQ+ young people were the most likely to report this: harassment of this kind was reported by 35% of gay/lesbians, 17% of bisexuals and 24% of those with other sexualities, compared to just 1% of heterosexuals.

### Ongoing impact of the pandemic

The cohort were asked whether the COVID-19 pandemic is still having an effect on any areas of their life, whether positive or negative.

31% reported that the COVID-19 pandemic was still having a negative impact on their mental wellbeing, whilst 13% reported a continued negative impact on their physical wellbeing. 23% said there was still a negative impact on their social life.

Just over a third (33%) of young people said that the COVID-19 pandemic was still having a negative impact on their education. Those classified as experiencing high psychological distress were 21 percentage points more likely to report this negative impact, at 46% compared to 25% of others. Students at sixth form colleges (41%) and state secondary schools (37%) were more likely to report a continued negative impact compared to those at private schools (33%) and Further Education colleges (30%).

Looking more closely at those who indicated a negative impact on their mental wellbeing, those who identify as non-binary+ were the most likely to report this impact (55% compared to 38% of females and 23% of males shown on Figure 4). 40% of young carers reported this impact compared to 32% of those who were not a carer. 52% of bisexuals, 49% of gay/lesbians and 53% of those with other sexualities reported this, compared to 27% of heterosexuals. Other research which has also found increased psychosocial distress for LGBTQ+ young people due to the pandemic found this was related to reasons such as isolation from peers, and feeling uncomfortable at home.<sup>19</sup>

**Figure 4: Percentage reporting COVID-19 pandemic still impacts mental wellbeing by gender**



Notes: N=11,089. Analysis is weighted for survey design and young person non-response.

## Mental health support

### Sources of support

Participants were asked whether they had tried to seek help from a range of sources for a personal or emotional problem. 25% said that in the past 12 months they have sought mental health support.<sup>20</sup>

Non-binary+ young people (67%) and females (33%) were more likely to report seeking support with their mental health compared to males (15%). When restricting this analysis only to those classified as experiencing high psychological distress, patterns by gender remain (27% male, 41% female, and 74% non-binary+) and there are also differences by ethnicity: Asian (25%) and Black (30%) respondents classified with experiencing high psychological distress were less likely to report seeking mental health support compared to those of mixed/other ethnicities (39%) and White (40%) respondents.

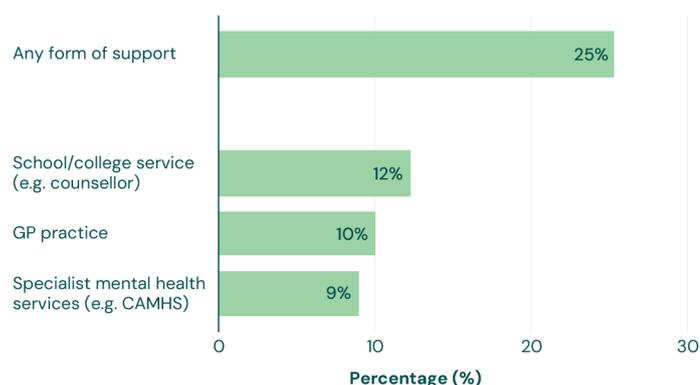
Those classified as experiencing high psychological distress were the most likely to seek support for their mental health, but the majority said they had not sought any support; 39% classified with distress said they had sought mental health support, but 61% had not. This suggests that perhaps many young people experiencing psychological distress do not know where to go for support, or do not feel comfortable seeking help. It may also suggest they do not have confidence that the right support will be available even if they do ask for it.

35% who have sought some form of mental health support said they are either on a waiting list or have not received support from at least one of the sources they sought it from. Those in the most deprived parts of the country were 11 percentage points more likely to report still waiting or having not received the support they applied for, at 39% compared to 28% of those in the most affluent areas.

Among those classified as experiencing high psychological distress, 2 in 5 (40%) of those who have sought support said they were either on a waiting list or had not received support with their mental health from at least one source.

The most common form of support sought was from school/college counsellors or other school/college support services, at 12% (Figure 5). 78% of young people seeking help of this kind were supported with 41% saying that this support was beneficial and 37% not (Figure 6). Private school students were the most likely to seek support from school counsellors or support services, at 16%, compared to 14% of sixth form college students, 14% of state school students, and 12% of Further Education students.

**Figure 5: Proportion of young people seeking support with mental health from school, specialist services or a GP**



Notes: N=10,644. Analysis is weighted for survey design and young person non-response.

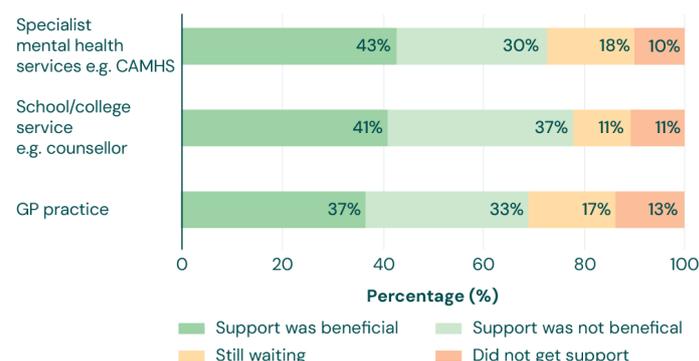
10% have sought mental health support from their GP. 37% of this group said they received beneficial support whilst 33% received support that was not beneficial (again shown on Figure 6). 17% said they were still waiting and a further 13% said they never received any support of this kind.

Almost 1 in 10 young people (9%) have sought specialist mental health services such as NHS Child and Adolescent Mental Health Services (CAMHS). 73% received this support – 43% seeking this support said they received beneficial support, but 30% said the support was not beneficial (also shown on Figure 6). 18% said they were still waiting for this support and 10% said they never received the support that they sought. Those in the most deprived parts of the country were more likely to have said they had not received support from specialist services: 25% said they were still waiting and 15% said they never

received support, compared to 9% still waiting and 9% who never got the support in the most affluent areas.

Those classified as experiencing high psychological distress were most likely to turn to school/college services (20%), GP practices (15%) and specialist mental health services such as NHS Child and Adolescent Mental Health Services (CAMHS) (15%). This group were more likely to have said that the support from these services was not beneficial and that they were still waiting/never received the support they sought compared to those not classified as experiencing distress. Those classified as experiencing distress who had a parent working in a routine/manual occupation (or who had never worked) were 8 percentage points more likely to say that had not yet received the support they had sought compared to those with a parent working in a higher managerial/professional occupation, at 44% and 36% respectively.

**Figure 6: Whether support was received by those seeking mental health support from school, specialist services or a GP**



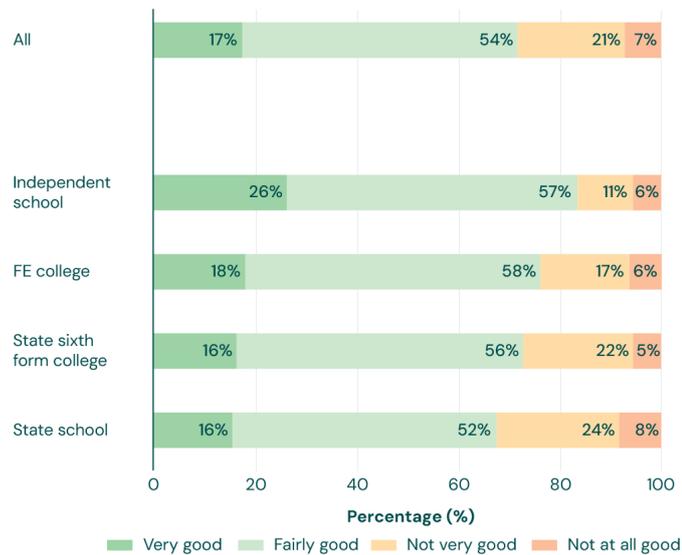
Notes: N=941 for specialist services, N=1,058 for GP practice and N=1,402 for school services. Labels may not add to 100% due to rounding. Analysis is weighted for survey design and young person non-response.

## Support from school or college

In wave 2, over a quarter (28%) of students in a school or college said their mental health support was not good enough (with 21% saying it was 'not very good' and 7% saying it was 'not at all good'). This is 3 percentage points lower compared to wave 1, where 31% were not satisfied with their school's support (in wave 1, students were asked to think about the support from their school in year 11, thus the wave 2 responses for some students will apply to a different institution if they have changed school or college). In wave 2, 18% of young people said that their school's mental health support was very good and another 54% rated it fairly good.

Almost a third (32%) of state school students said their school's support was not good enough and were twice as likely than private school students to say so (16%) (Figure 7). 27% of sixth form college students and 24% of Further Education college students said their college's support was not very good/not at all good.

**Figure 7: Students' rating of school/college mental health support by school/college type**



Notes: N=8,079. Bar for those in special schools has not been shown due to small sample size. Labels may not add to 100% due to rounding. Analysis is weighted for survey design and young person non-response.

42% of those classified as experiencing high psychological distress said that their school's mental health support was not good, compared to 16% of others. This may be because these students were more likely to have sought specific support from their school for a particular mental health condition which they did not find beneficial, whilst those with GHQ scores below the threshold may have been thinking about more general mental health advice from their school when thinking about this question.

### Ongoing prevalence of COVID-19

Whilst national restrictions over daily life relating to COVID-19 were over when respondents answered wave 2 of the COSMO survey, the novel coronavirus that caused the pandemic was (and still is) in circulation. The following questions consider long COVID, how this limits daily life and uptake of the COVID-19 vaccine.

### Long COVID

Of those who said they have had COVID-19 at some point since the pandemic began (N=7,588, 68% of sample), 19% said they currently had or had now recovered from long COVID (experiencing symptoms more than 4 weeks after first having COVID-19, that are not explained by something else). This equates to 13% of the sample overall.<sup>21</sup> This figure has risen by 4 percentage points from the 9% reported in COSMO wave 1. 2% of the sample population overall reported currently having long COVID – this is similar to the ONS estimate of 1.5% for 17–24-year-olds.<sup>22</sup>

Considering the whole sample population, 16% of females said they have had (or are still experiencing) long COVID, compared to a lower proportion (10%) of males (Table 2).<sup>23</sup> 14% of those in the most deprived parts of the country (by IDACI quintile) reported having or having recovered from long COVID, compared to 11% of those in the most affluent areas. When restricting the sample just to those who said they have had COVID-19, long COVID was 8 percentage points more likely for those in the most deprived parts of the country at 23% compared to 15% of those in the least deprived areas.

**Table 2: Percentage reporting long COVID by gender**

Gender	Long COVID (%)	
	No	Yes
Female	84	16
Male	90	10
All	87	13

Notes: N=10,944. Analysis is weighted for survey design and young person non-response.

Similarly, 14% with parents in a routine/manual occupation (or who had never worked) reported having or that they have had long COVID, compared to 12% of those with a parent in a high managerial/professional occupation.

*13% of young people said they have or have had long COVID.*

Restricting the sample only to those who said they have had COVID-19, 22% with parents in a routine/manual occupation (or who had never worked) reported also getting long COVID, compared to 15% of those with a parent in a higher managerial/ professional occupation.

Of those reporting that they currently had long COVID in wave 2, 30% said the same when asked in wave 1. 12% said in wave 1 that they had previously had the condition but had recovered, indicating that for some young people their long COVID symptoms have re-emerged. 27% of young people had reported having the initial COVID-19 infection in wave 1, but not having long COVID before. The remaining 31% had not reported having COVID-19 until wave 2, where they also reported experiencing long COVID.

Research into the causes and symptoms of long COVID is ongoing. Differences in long COVID prevalence may be due to differing overall pre-infection health levels between groups.<sup>24</sup> For example, an increased risk of long COVID for those with a high body mass index (i.e. obesity) has been identified,<sup>25</sup> while obesity is more common among those from lower socioeconomic backgrounds.<sup>26</sup>

### Severity of long COVID

Of those who said they have, or have previously had, long COVID, just over a quarter (26%) said that it limits/limited their daily activities a lot ('severe' long COVID). 49% said their ability is/was reduced a little ('bad' long COVID), and 25% said their ability is/was not reduced ('mild' long COVID).

This equates to 3% of the sample population overall reporting that they have (or have had) severe long COVID that is limiting their daily life.<sup>27</sup> Our estimate of 26% with 'severe' long COVID is slightly smaller than an ONS estimate that 30% of 17-24-year-olds with long COVID say it limits their daily activity a lot.<sup>28</sup>

Those who reported having or having had long COVID were also more likely to be classified as experiencing high psychological distress, at 58% compared to 37% of those in the cohort who have not had COVID-19 (Table 3). Notably, 69% of those with severe long COVID also were classified as experiencing high psychological distress, compared to 56% of those with bad long COVID and 50% of those with mild long COVID.

**Table 3: percentage classified as experiencing high psychological distress by long COVID status**

Has/Had Long COVID	High psychological distress (%)	
	No	Yes
No	63	37
No (but has had COVID-19)	57	43
Yes - mild	50	50
Yes - bad	44	56
Yes - severe	31	69
Yes (overall)	42	58

Notes: N=10,336. For those who have said they have/have had long COVID, N= 1,382. Analysis is weighted for survey design and young person non-response. Those with GHQ-12 scores greater than or equal to 4 are classified as experiencing 'high psychological distress'.

Those who reported having, or having previously had, long COVID were also more likely to have a parent who had experienced or was still experiencing long COVID. They were also more likely to have a parent with (or previously affected by) severe long COVID: 50% of those reporting severe long COVID have a parent reporting the same, compared to 48% of those with bad long COVID and 22% of those with mild long COVID.

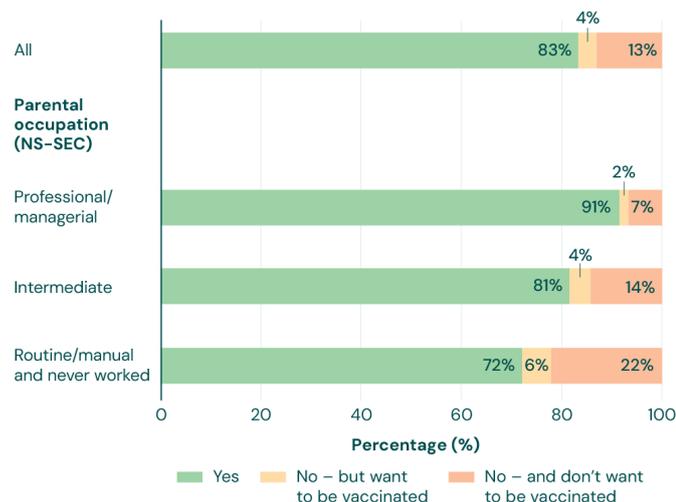
### COVID-19 vaccination

Just under 1 in 5 (18%) of young people said they have not yet had the COVID-19 vaccination – 14% said they do not wish to have the vaccine (78% of those who have not been vaccinated), whilst 4% said they want to but have not yet managed to have one (22% of those who have not yet been vaccinated).

A quarter of young people from the most deprived parts of the country said they have not yet had a COVID-19 vaccine and do not intend to – they were just over four times more likely to have said so than those in the most affluent parts of the country (6% said they didn't intend to be vaccinated). As shown on Figure 8, just over 1 in 5 (22%) of those with a parent working in a routine/manual occupation (or who had never worked) said they do not want to be vaccinated compared to 7% of those with a parent in a higher managerial/professional occupation. Those without a degree-educated parent/guardian were more than twice as likely to have said they didn't intend to have the vaccine compared to those with a degree-educated parent, at 17% compared to 7% respectively.

## Young people from socio-economically disadvantaged backgrounds were also more likely to report having not been vaccinated.

**Figure 8: Whether participant has had the COVID-19 vaccine by parental occupation**



Notes: N=8,094. Bar for those in special schools has not been shown due to small sample size. Labels may not add to 100% due to rounding. Analysis is weighted for survey design and young person as well as main-parent non-response.

Young people from socio-economically disadvantaged backgrounds were also more likely to report having not been vaccinated, but that they wanted to be. 7% of those in the most deprived parts of the country reported this compared to 2% of those in the most affluent areas. 6% of those with a parent working in a routine/manual occupation (or had never worked) also reported wanting to have a COVID-19 vaccine but not being able to have one, compared to 2% of those with a parent working in a higher managerial/professional role. One possible explanation is that parents may not have been able to afford to, or had the time to, take their child to be vaccinated due to work or childcare commitments.

Those from a Black or mixed/other ethnic background were also more likely to report that they had not yet had a COVID-19 vaccine, and do not intend to: 31% of Black respondents and 23% of those with mixed/other ethnicities reported this, compared to 15% of Asian participants and 11% of White participants.

Vaccine uptake amongst parents was higher than for their children: 94% reported having had

at least one vaccine. Of the vaccinated parents, most (73%) had received at least three doses (including boosters), 25% had received two doses and only 3% had received just one dose.

Just under 6% of parents reported that they had not yet had a COVID-19 vaccination and did not intend to have one.

7% of non-degree educated parents reported this compared to 2% of those with a degree. 10% of those working in route/manual occupations (or who had never worked) also reported this, compared to 2% of those working in higher managerial/professional occupations. Furthermore, parents working in routine/manual occupations and those without a degree were also less likely to have completed the recommended full course of three COVID-19 vaccinations.

We presented participating parents with a range of potential reasons for not getting the COVID-19 vaccination. The most common reasons that they agreed with were believing that the vaccine was not safely proven (45% of those not wanting to be vaccinated), that the effectiveness of the vaccine was not sufficiently proven (29%), and feeling distrust towards the individuals who set up the vaccination programme (22%). 73% of parents who have not been vaccinated for COVID-19 and do not want to be also have a child who said the same. 30% of young people who do not want the COVID-19 vaccine have a parent who said the same.

## General health

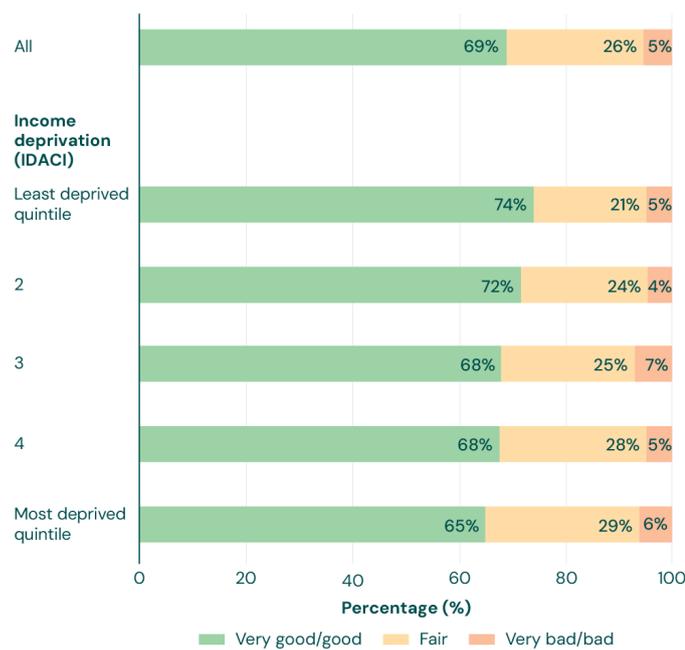
### Self-reported health

Participants were asked how their health is in general, on a five-point scale from 'very good' to 'very bad'.<sup>29</sup> Young people participating in the study generally thought of themselves as healthy, with 69% saying they thought their general health was either 'good' (44%) or 'very good' (25%), while 26% said their general health was 'fair' and only 5% said their health was either 'bad' or 'very bad'.

Nevertheless, these figures are different than those for 15 to 19 year-olds in the 2021 Census, in which 70% report their health is 'very good', 24% said 'good', 5% say fair, 1% said 'bad' and less than 1% said 'very bad'.<sup>30</sup> This may be related to differences in interpretation of the question between a social survey and the Census, and the time at which young people were asked.

Those living in the most deprived parts of the country were 11 percentage points less likely to say that their general health is very good/good, at 65% compared to 74% of those from more affluent areas (Figure 9). This pattern is also seen in the 2021 Census.<sup>31</sup> Those with a parent working in a routine/manual occupation (or who had never worked) were six percentage points less likely to rate their health as very good/good compared to those with a parent in a higher managerial/professional occupation, at 67% and 73% respectively.

**Figure 9: Participant self-reported health by neighbourhood deprivation**



Notes: N=10,549. Bar for those in special schools has not been shown due to small sample size. Labels may not add to 100% due to rounding. Analysis is weighted for survey design and young person non-response.

Young people who said their health is bad or very bad were more likely to have a parent saying the same, at 21% compared to 8% of young people with very good/good self-reported health.

Young people who reported they had (or previously had) long COVID were just over twice as likely to rate their health as 'bad' or 'very bad', at 11%, compared to 5% of those who have not had long COVID.

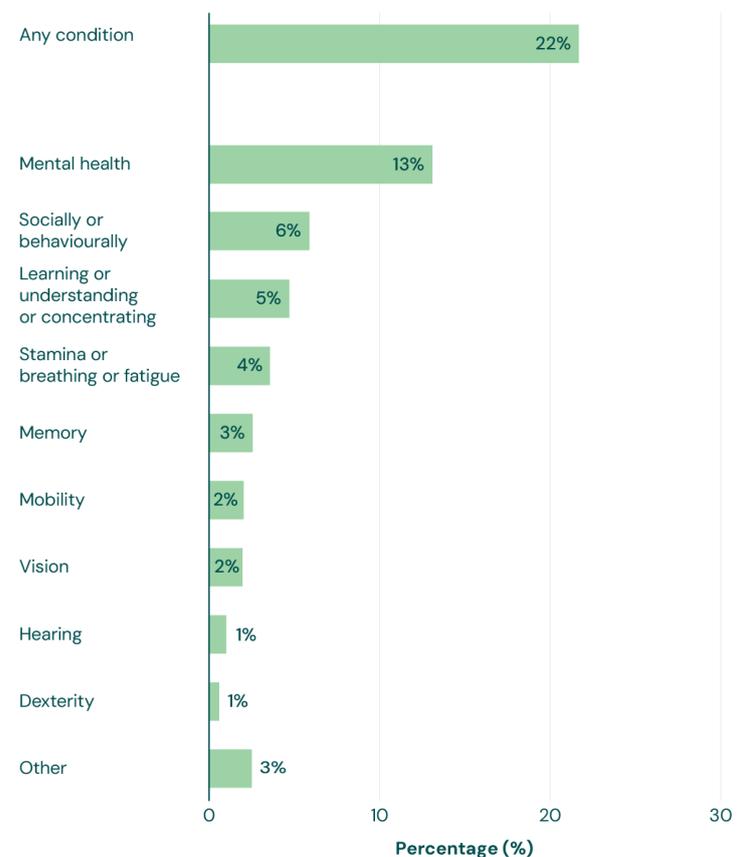
### Long-term health issues and disability

22% reported having a physical or mental health condition (s) or illness(es) lasting or expected to last 12 months or more (described here as a 'long-term health condition') (Figure 10).

28% of females reported a long-term health condition, 12 percentage points more than the 16% of males reporting this. 24% of White participants and 21% of participants of a mixed/other ethnicity reported a long-term health problem, compared to 13% of both Black and Asian participants.

The most common problems linked to participants' long-term health conditions were related to mental health problems (13%), social or behavioural disorders (6%), problems learning or understanding or concentrating (5%), and issues with stamina or breathing or fatigue (4%) (also on Figure 10).

**Figure 10: Proportion reporting a long-term health problem**



Notes: N=9,284. Bar for those in special schools has not been shown due to small sample size. Analysis is weighted for survey design and young person non-response.

78% of those with a long-term illness said that it limits their daily activity – this equates to 17% of the sample population overall who indicated whether they had a long-term health problem.<sup>32</sup> This figure can be used to estimate that 17% of the sample have a disability.<sup>33</sup> 23% said that their daily activity is limited a lot (5% of the sample population overall).

Although there were no socio-economic differences in the prevalence of long-term health conditions, those in the most deprived parts of the country were 7 percentage points more likely to report that their condition limited their ability to carry out their daily activities a lot, at 25% of those with a long-term condition, compared to those in more affluent areas (18%).

Those reporting that their long-term health condition affects their mobility (90%), memory (89%) and social/behavioural abilities (89%) were the most likely to report that their condition limits their daily life.

## Policy implications

### Mental wellbeing

- Over 2 in 5 young people were classified as experiencing high psychological distress, with significant numbers saying they have not yet received support they have sought for their mental wellbeing. There is no indication that there has been an improvement since wave 1 of the study, indicating this is a significant ongoing problem for this generation of young people. This is a worrying trend which should continue to be monitored.
- There is a clear need for sustainable and well-funded support for young people experiencing mental health issues, including preventative and early intervention services to prevent future cohorts from experiencing such issues. This should recognise and deal with the continuing impact of the COVID-19 pandemic on mental wellbeing identified in this study, such as having long COVID. Resources and services for parents, guardians and education professionals should also be easily accessible so these groups are able to support young people. Young people should be consulted when designing services to guarantee these are accessible and meet their needs. Given the inequalities in accessing support seen in this briefing, improvements to services in disadvantaged areas is particularly vital.

*More tailored mental health support for non-binary+ and trans young people is required.*

- As with the initial analysis of COSMO wave 1, our findings indicate poorer mental health and wellbeing for those identifying outside the gender binary. Support for those who are struggling to talk about their gender and those who are experiencing discrimination regarding gender, as well as for parents and schools, should be easily accessible.<sup>34</sup> More tailored support for non-binary+ and trans young people is required, and it should be delivered by professionals who have been trained to understand the needs of these young people. Targeted support should also be accessible for the LGBTQ+ community. Furthermore, measures to reduce the risks faced by these groups should be included in both new national self-harm and suicide prevention plans as well as local plans, with a national framework setting out how to do so.
- This briefing finds that bullying and harassment specifically related to an individual's identity are more common for those from marginalised groups, including those of an ethnic minority (15% of Black participants have been harassed regarding their skin colour or ethnicity) and those outside the gender binary (44% non-binary+ students have been harassed about their sex, gender or gender identity). Local and national strategies continue to be needed to tackle this, and all schools should implement a well-evidenced anti-bullying programme, with bullying training offered to teachers, senior leaders and mental health practitioners who work in a school.<sup>35</sup> Such strategies and programmes should recognise the heightened experiences of bullying and harassment identified here for marginalised groups and adapt plans accordingly.<sup>36</sup>

## Physical health

- Participants living in the most deprived parts of England were more likely to report their general health as 'bad'. They are also more likely to say that a long-term illness is significantly limiting their ability to carry out daily activities. Other research has indicated that a range of health issues and long-term conditions, from dental problems to childhood obesity, are more prevalent in disadvantaged areas.<sup>37</sup> However, allocation of public health funding does not reflect this, with greater cuts to the public health grant happening in more deprived areas.<sup>38</sup> Public health funding should match the higher levels of need in poorer areas, and should be delivered through a well-evidenced, cross-governmental strategy that covers all elements of public health. This should have pots ringfenced specifically for young people, covering youth services and sports.
- 13% of participants reported either suffering or having recovered from long COVID over the past year, with a small but significant 3% of the sample reporting that this severely limited their daily activities. 2% said they still have long COVID. High psychological distress is also more likely for those with long COVID, and those with long COVID are more likely to have a parent also with the condition. Funding should continue to go to both national and local long COVID services,<sup>39</sup> so that young people with suspected long COVID can be accurately assessed and referred to specialist services as soon as possible. Such services should include rehabilitation programmes to mitigate long COVID's impact on their ability to carry out daily activities, notably engaging with education and activities when starting university. Academic research should also continue to bring more understanding to long COVID symptoms and to identify how the lives of those suffering with the condition can be improved.<sup>40</sup> Understanding more about the incidence and impacts of long COVID should also be covered in the UK COVID-19 Inquiry.

## About The COVID Social Mobility and Opportunities (COSMO) study

The COVID Social Mobility & Opportunities (COSMO) study is a new national cohort study generating high-quality evidence about how the COVID-19 pandemic has affected socio-economic inequalities in life chances, both in terms of short- and long-term effects on education, wellbeing, and career outcomes. A representative sample of young people in England who were in Year 11 in the 2020/2021 academic year were invited to take part in the survey, with the aim of following them as they progress through the final stages of education and into the labour market. A sample of more than 13,000 young people was recruited in Wave 1. All young people who took part in Wave 1 were invited to Wave 2 when they were in Year 13, and over 11,000 took part.

Both waves of COSMO were supported by UK Research and Innovation (UKRI), Wave 1 as part of their COVID-19 response fund [ES/W001756/1] and Wave 2 by their Economic and Social Research Council (ESRC) as part of its Data Infrastructure Programme [ES/X00015X/1]. COSMO is a collaboration between the UCL Centre for Education Policy & Equalising Opportunities (CEPEO), the Sutton Trust, and the UCL Centre for Longitudinal Studies (CLS). Our principal fieldwork partner for Waves 1 and 2 is Kantar Public.

Researchers can access data from Wave 1 of the study through the [UK Data Service](#).<sup>41</sup>

## Citing this briefing

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## Sample and methods

The data for this briefing come from Wave 2 of the COVID Social Mobility & Opportunities (COSMO) study. COSMO is based on a probability sample drawn from the Department for Education's (DfE) National Pupil Database (NPD) (plus additional recruitment from pupils at private schools), with clustering within schools (for practicality reasons) and oversampling of certain groups using stratification.

Our analysis in this briefing is primarily based on descriptive statistics reporting averages, distributions and differences between groups. Analyses use weights to account for the over-sampling inherent in the study design, initial non-response at Wave 1, and attrition between Waves 1 and 2 by young people and, where relevant, their parents. Differences are only highlighted where these are found to be statistically significant at the  $p < 0.05$  level. Any statistical inference testing reported also accounts for the clustering and stratification in the study design.

While our full sample of young people has  $N=11,523$ , the parents of participants were not as likely to respond. For analysis that relies upon a parental response to Wave 2, the maximum available sample of participating parents with a corresponding young person is  $N=10,204$ . For analyses that rely on the presence of a parent response from either Wave 1 or 2, the maximum available sample is  $N=10,787$ . As noted above, young person and parental non-response have been modelled separately, with different weights to ensure (insofar as is possible) representativeness of our analysis sample to the intended population. Item-level non-response also results in variation of the sample available for specific analyses; we seek to minimise this variation

within related analyses to ensure any differences in estimates are not caused by differences in sample. Analyses of some groups, for example those who attended special schools, have not been reported due to disclosure risk from small sample sizes.

The General Health Questionnaire (GHQ) includes 12 questions that indicate whether a person is experiencing psychological distress. Each question has a 4-point response scale, which are re-coded to 0 or 1. The resulting binary measure for each question is then used to calculate a total score out of 12. A threshold of 4 and above has been used to indicate high psychological distress.<sup>42</sup> Other measures of wellbeing available in the COSMO dataset are outlined in the table below.

Analysis of young people’s gender is based on a self-report of their identity, providing options of ‘male’ (N=5,233), ‘female’ (N=5,884), ‘non-binary’

or allowing respondents to choose to identify in another way. Transgender participants were included in their preferred gender category.

Statistical disclosure/identifiability risks are present when analysing small numbers of cases, meaning it is not always possible to safely report all groups. However, in order to balance this risk with seeking to report on all groups’ experiences in the mental health section of this briefing, young people who identified themselves as ‘non-binary’ or in another way have been grouped as ‘non-binary+’ (N=334), while recognising that this may not fully capture everyone’s preferred gender identity. This is also the reason that we are unable to report separate figures for those who identify as a gender different from how they were identified at birth (i.e., are trans). However, patterns for a combined trans and non-binary+ group are similar to just those who identify as non-binary+.

**Table 4: Wellbeing measures and means**

Measure	Range & cut offs	Mean	Proportion above threshold	Sample
<b>General Health Questionnaire – 12 (GHQ12)</b>	Range: 0-12 Threshold indicating “probable mental ill health”: 4+. <sup>43</sup>	3.90	44%	10,717
<b>Patient Health Questionnaire – 2 (PHQ2)</b>	Range 0-6 Threshold indicating “likely major depressive disorder”: 3+. <sup>44</sup>	1.81	30%	10,048
<b>Generalised Anxiety Disorder –2 (GAD-2)<sup>45</sup></b>	Range 0-6 Threshold indicating “likely generalised anxiety disorder”: 3 and above. <sup>46</sup>	2.12	34%	10,098
<b>Life satisfaction<sup>47</sup></b>	Range: 0 – “not at all”, 10 – “completely satisfied”	6.37	N/A	10,884

Notes: Analysis is weighted for survey design and young person non-response.

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- 4 The General Health Questionnaire (GHQ) involves 12 questions that indicate whether a person is experiencing psychological distress. More information about the measure can be found here: Goldberg, D. and Williams, P.A. (1998). *User Guide to the General Health Questionnaire*. NFER-Nelson, Windsor.
- 5 Young people who identified themselves as ‘non-binary’ or in another way have been grouped as ‘non-binary+’ (N=334), while recognising that this may not fully capture everyone’s preferred gender identity. More detail can be found in the ‘sample and methods’ section.
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13 Figure for the 'Next Steps' Cohort has been calculated by the authors (Wave 4 of the Longitudinal Study of Young People in England (LYSPE), conducted in 2007). Figure for the 'Our Future' Cohort (Wave 5 of the LSYPE cohort 2, conducted in 2017) is derived from: Department for Education. (2019). *State of the nation 2019: Children and Young People's Wellbeing*. Government Social Research. Available at: <https://www.gov.uk/government/publications/state-of-the-nation-2019-children-and-young-peoples-wellbeing>

14 The reliable change index has been used to determine whose scores have had a meaningful change, which is unlikely to be due to measurement error. The formula used is as follows:  $(\text{GHQ wave 2} - \text{GHQ wave 1}) / \text{Standard Error of GHQ means}$ . More information about his index can be found here: [https://lbecker.uccs.edu/clinsig#:~:text=A%20Reliable%20Change%20Index%20\(RCI,difference%20between%20the%20two%20scores](https://lbecker.uccs.edu/clinsig#:~:text=A%20Reliable%20Change%20Index%20(RCI,difference%20between%20the%20two%20scores)

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16 Those who answered "don't know" when asked about bullying are recorded as 'no'. Those who said 'prefer not to say' are treated as missing.

17 Those who answered "don't know" when asked about harassment are recorded as 'no'. Those who said 'prefer not to say' are treated as missing.

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20 Other sources of support listed which are not discussed in this briefing were: online specialist services such as Young Minds (6% of respondents sought this kind of support), telephone helpline support such as Samaritans (4%), and someone from social care such as a social worker (2%).

21 This figure only includes those who answered the question on COVID-19 infection.

22 Office for National Statistics. (2023). *Prevalence of ongoing symptoms following coronavirus (COVID-19) infection in the UK: 30 March 2023*. ONS. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/bulletins/prevalenceofongoingsymptomsfollowingcoronaviruscovid19infectionintheuk/30march2023>

23 In the physical health section of this briefing, only those identifying within the gender binary of male and female are considered. More information can be found in this briefing's methodology.

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- 29 Respondents were asked to rate their health on 5-point scale: very good, good, fair, bad, very bad. This is a common approach to measuring self-rated health, but this is a subjective measure that may not capture all those experiencing health problems. More information on the measures used can be found here: <https://academic.oup.com/ije/article/30/2/326/713791>
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- 31 Ibid.
- 32 N=9,283 where respondents either answered 'yes' or 'no' when asked if they have a long-term illness.
- 33 This calculation is based on those reporting a physical or mental health condition lasting/expecting to last 12 months or more, that has limited daily activity 'a lot' or 'a little'. This definition matches The Equality Act disability definition (EADD). More information on this definition of 'disability' can be found here: <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/disability/articles/measuringdisabilitycomparingapproaches/2019-08-06#the-equality-act-disability-definition-eadd>
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- 43 An average score of 4 or above on the GHQ-12 measure indicates ‘probable mental ill-health’. Elsewhere, this briefing uses the threshold of 4 as a cut off for indicating mental distress, and describes those meeting this threshold as experiencing ‘high psychological distress’. For more information on this measure, see: Goldberg, D. and Williams, P.A. (1998). *User Guide to the General Health Questionnaire*. NFER-Nelson, Windsor.
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- 45 The GAD-2 was based on the GAD-7, which was developed by Drs. Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke and colleagues, with an educational grant from Pfizer Inc.
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- 47 OECD Better Life Index. Retrieved 30 August 2022, from: <https://www.oecdbetterlifeindex.org/topics/life-satisfaction/>

# COSMO

COVID Social Mobility  
& Opportunities Study

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