

# Secondary school-aged pupils in Scotland: Mental wellbeing, relationships and social media



## **HEALTH AND SOCIAL CARE**



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## **Executive summary**

### **Background**

This report outlines findings from Ipsos MORI's Young People in Scotland (YPIS) 2021 survey. In total, 1,361 pupils from 50 secondary local authority schools in Scotland (S1 to S6) completed the survey between 8th February and 2nd April 2021.

#### **Key findings**

Overall findings for the whole sample are as follows:

- The mean mental wellbeing score for the whole sample was 44.9, which is at the lower end of a range of scores (45-59) used to indicate average mental wellbeing. When compared with mean scores from previous surveys, pupils appeared to report poorer mental wellbeing in early 2021 than before the COVID-19 pandemic. However, as the current and previous surveys differ in methodology, the observed difference in scores should be treated with caution.
- Pupils were most likely to report 'Sometimes' feeling lonely (42%), with the remainder more likely to report 'Hardly ever or never' feeling lonely (33%) than 'Often' (20%).
- Over half (55%) of the pupils felt optimistic.
- On average, the pupils reported having 7.5 hours of sleep on the night before completing the survey.
- About three-quarters of participants felt that they had family (74%) and/or friends (74%) to whom they could talk about their problems, and enjoyed spending time with their family (78%).
- 13% of the sample were found to show signs of problematic social media use, which was determined if a participant agreed with five or more statements (out of nine) about their social media use.
- Over half (55%) of the pupils felt that social media made them feel closer to their friends.

Key findings relating to pupils with different demographic characteristics are as follows:

- Gender identity. Compared with male pupils, female pupils reported poorer mental wellbeing, reported feeling lonely more often, and were less likely to report feeling optimistic. Female pupils were also less likely to report having family to talk to about their problems, and were more likely to have problematic social media use. Additionally, female pupils were more likely to report that social media made them feel closer to their friends.
- School year. Compared with younger pupils, older pupils reported poorer mental wellbeing and feeling lonely more often, and were less likely to report having family to talk to about their problems.

- Physical or mental health condition. Compared with pupils without a physical
  or mental health condition, pupils with such a condition reported poorer
  mental wellbeing, feeling lonely more often and getting less sleep, and were
  less likely to report feeling optimistic. Pupils with a condition were also less
  likely to report having family with whom they talked about their problems, or
  enjoyed spending time.
- Urban/Rural. Pupils living in rural settings were less likely to report having friends to whom they could talk about their problems than pupils living in urban settings.
- Caring responsibilities. Pupils with caring responsibilities were more likely to have problematic social media use than pupils without such responsibilities.
- No statistically significant differences were found between pupils falling in different bands of the Scottish Index of Multiple Deprivation.
- Due to small sample sizes, it was not possible to undertake analyses that
  included people who identified their gender in a way other than female or
  male, or to compare pupils from different ethnic and religious backgrounds.
  Additionally, the survey did not include measures of other factors that are
  known to influence children and young people's mental wellbeing (e.g.,
  receiving additional learning support, sexual orientation, experience of
  violence and abuse).

## 1. Background

In response to COVID-19 and its impact on the population's mental health, the Scottish Government laid out its 'COVID-19: Mental Health – Transition and Recovery Plan' [1]. The mental health of children, young people and families is a central focus of this plan, which places importance on how good mental wellbeing is supported for these people, and how the correct help and support is provided to them. Emphasis is also put on understanding how wider factors, such as screen time and relationship issues, might affect the mental health of children, young people and families. The emphasis on children, young people and families in this plan reflects a similar focus on these people in the Scottish Government's 'Mental Health Strategy: 2017-2027' [2].

Before the COVID-19 pandemic, the Scottish Schools Adolescent Lifestyle and Substance Use Survey [SALSUS; 3] provided insights into the mental wellbeing of Scottish secondary school-aged pupils in 2018. The findings from this survey were compared with findings from the SALSUS conducted in 2015, which indicated that the mean mental wellbeing of these pupils was lower in 2018 than in 2015 (i.e., had decreased over time). A higher proportion of these pupils were also found to report emotional and behavioural problems in 2018 than in 2015.

Both the SALSUS and Health Behaviours in School-Aged Children [HBSC; 4] surveys conducted in 2018 enabled comparisons of Scottish secondary schoolaged pupils to be made based on different characteristics. While the findings between these surveys were inconsistent, pupils who indicated poorer mental wellbeing and related factors (e.g., happiness, mood, confidence) were typically found to: be female (compared with male); older (pupils in S4 compared with S2); from more deprived backgrounds; had a physical or mental health condition; and had caring responsibilities.

During the COVID-19 pandemic, a survey of secondary school-aged pupils in Scotland found that, overall, pupils saw mitigation measures (e.g., physical distancing) as negatively impacting their mental health and relationships with family and friends [5]. In line with the pupils identified in the SALSUS and HBSC 2018 surveys as being most at risk of poor mental wellbeing, pupils who were most likely to report this perceived negative impact of the mitigation measures: were female; were older; and had a physical or mental health condition. As these findings indicate a potentially large impact of COVID-19 on pupils' mental wellbeing, as well as their relationships, it is important to understand more about pupils' experiences of these issues during the pandemic.

Other surveys concerning the mental health and wellbeing of Scottish secondary school-aged pupils have been conducted during the COVID-19 pandemic [6, 7]. However, these surveys have not used nationally representative samples or standard measures of mental health outcomes, which limits the strength of their conclusions. While this limitation should be kept in mind, the findings have tended to be similar to before the pandemic. Specifically, female and older participants tended to report poorer mental health outcomes (e.g., low mood or depression)

compared with male and younger participants, respectively. Poorer mental health outcomes were also indicated for participants with a long-term illness or disability, with caring responsibilities, or who identified their gender as non-binary or in a different way.

#### Aims of study

The aim of the study reported here was to understand more about Scottish secondary school-aged pupils (11 to 18 years-old) in terms of their mental wellbeing and related issues (relationships and social media) during the COVID-19 pandemic in early 2021. The study also aimed to identify demographic differences between pupils in terms of their mental wellbeing, relationships and social media use.

#### Structure of report

Section 2 details the methodology used in the reported study, with the subsequent sections presenting the overall findings (section 3), and findings by demographic characteristics (section 4). Section 5 then outlines the conclusions drawn from this study.

# 2. Methodology

To achieve the aim of this study, the Scottish Government added questions to Ipsos MORI's Young People in Scotland (YPIS) survey<sup>1</sup>. YPIS is an omnibus survey, which means that it contains questions on a broad range of topics, and its content is provided by multiple clients. Findings based on other questions in the survey that relate to the mental wellbeing impact of COVID-19 mitigation measures (e.g., physical distancing) have previously been published [5], and were briefly summarised in the previous section.

### Sample and procedure

The 2021 YPIS survey recruited a sample of 1,361 pupils from 50 Scottish local authority secondary schools (i.e., pupils aged between 11 and 18 years-old)<sup>2</sup>. Pupils participating in the 2021 YPIS survey completed it online between 8<sup>th</sup> February and 2<sup>nd</sup> April 2021, with 75% (1016) of pupils completing it at home, and 25% (334) completing it at school<sup>3</sup>.

<sup>&</sup>lt;sup>1</sup> Young People in Scotland Survey | Ipsos MORI

<sup>&</sup>lt;sup>2</sup> While pupils in school years S1 to S6 (inclusive) completed the YPIS survey, the previous SALSUS and HBSC surveys only recruited samples of pupils in S2 (roughly 13 years old) and S4 (roughly 15 years old). As such, only the S2 and S4 participants in the YPIS survey are considered when comparing the survey's findings with the findings from the SALSUS and HBSC surveys.

<sup>&</sup>lt;sup>3</sup> 1% (n=11) of pupils did not indicate where they completed the survey

A breakdown of the sample by demographic characteristics<sup>4</sup> is presented in Table 1. As shown in the table, due to categories of the characteristics being under-or over-sampled, the sample sizes for each category were weighted statistically before conducting analyses so that the sample was (statistically) representative of the Scottish population. The statistical weighting was based on gender identity, school year, urban or rural, and Scottish Index of Multiple Deprivation (SIMD) quintile<sup>5</sup>. By recruiting and statistically weighting the sample in this way, the current study addressed limitations of other research conducted during the COVID-19 pandemic, as the sample can be treated as being nationally representative of Scottish secondary school-aged pupils.

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<sup>&</sup>lt;sup>4</sup> The majority of participants who indicated their ethnic background selected 'White – Scottish', and the majority of participants indicating their religious background selected 'None'. Due to the small sample sizes in the remaining ethnic and religious background categories presented in the survey, and problems involved in meaningfully grouping ethnic and religious backgrounds, the findings relating to ethnic and religious background are not presented in this report.

<sup>&</sup>lt;sup>5</sup> The SALSUS and HBSC survey samples were statistically weighted in a similar way to the YPIS survey. However, slightly different factors were used for the weighting (e.g., SALSUS also weighted for school sector), which affects the comparability of the results across these surveys.

Table 1. Characteristics of 2021 YPIS survey sample

Characteristic	Category	Unweighted sample size	Weighted sample size
Gender identity <sup>6</sup>	Female	698	650
	Male	610	658
Age	12 or under	178	206
	13	259	247
	14	189	249
	15	269	232
	16	160	218
	17 and over	263	161
School year	S1	220	255
	S2	276	253
	S3	162	245
	S4	307	237
	S5	124	208
	S6	255	146
Physical or mental health condition <sup>7</sup>	Yes	241	249
	No	818	800
Urban or rural	Urban	873	1104
	Rural	488	257
Scottish Index of Multiple Deprivation	1 (most deprived)	146	293
	2	208	264
	3	436	254
	4	294	277
	5 (least deprived)	277	272
Caring responsibilities	Yes	166	179
	No	1104	1090

## **Description of survey questions**

As previously stated, the YPIS survey contains questions on a broad range of topics. The findings presented in this report focus specifically on questions relating to mental wellbeing, relationships, and social media. The specific questions are detailed below:

 Mental wellbeing. Mental wellbeing was assessed with the Warwick-Edinburgh Mental Wellbeing Scale [WEMWBS; 8], which comprises 14 items,

<sup>6</sup> Participants were able to indicate their gender identity in a way other than female or male. However, due to the small number of participants selecting this option (n=36), findings for this group are not presented in this report.

<sup>&</sup>lt;sup>7</sup> Participants reported whether or not they had 'a physical or mental health condition, illness or disability lasting or expected to last 12 months or more'.

and is a commonly used measure of mental wellbeing. For each item, participants indicate how often over the last two weeks a statement (e.g., 'I've been feeling relaxed') has applied to them, ranging from 'None of the time' (scored as 1) to 'All of the time' (scored as 5). The scores for all the items are then summed to give each participant a total score from 14 (lowest mental wellbeing) to 70 (highest mental wellbeing).

- The interpretation of WEMWBS scores can be guided using the following values<sup>8</sup>: 40 or less, probable depression; 41-44, possible depression; 45-59, average mental wellbeing; and 60 or more, high mental wellbeing. However, it should be noted that alternative thresholds have been used, and that these values are used in this report as an approximate guide to assist the interpretation of the findings.
- After the weighting of the sample, participants who had not completed all WEMWBS items (n=346 unweighted, 25%) were removed from analyses of data collected using this scale. Information about how these omissions affected the weighted sample is reported in Annex 1.
- Loneliness. Loneliness was assessed by asking 'How often do you feel lonely?', with participants able to indicate 'Hardly ever or never', 'Sometimes', or 'Often or always'.
- Optimism. Optimism was assessed by asking participants to indicate the
  extent of their agreement with the following statement "Even if I am having a
  difficult time, I feel like I will be OK" ('Agree', 'Neither agree nor disagree',
  'Disagree').
- Sleep (quantity). Participants were asked to indicate how much sleep (hours) they had had the previous night. If they could not provide an estimate to the nearest hour, they were asked to indicate an approximate amount from a list of three-hour ranges (e.g., 'Less than 3 hours', '3-5 hours', '6-8 hours').
- Family to talk to about problems. Participants were asked to indicate the
  extent of their agreement with the following statement "I have family
  members who I can talk to about my problems" ('Agree', 'Neither agree nor
  disagree', 'Disagree').
- Enjoyment of spending time with family. Participants were asked to indicate the extent of their agreement with the following statement "In general, I enjoy spending time with my family" ('Agree', 'Neither agree nor disagree', 'Disagree').
- Friends to talk to about problems. Participants were asked to indicate the extent of their agreement with the following statement "I have friends I can talk to about my problems" ('Agree', 'Neither agree nor disagree', 'Disagree').
- Problematic social media use. The Social Media Disorder Scale [SMDS; 8], which comprises nine items, was used to assess problematic use of social media. Participants were asked to indicate 'Yes' or 'No' in response to each item (e.g., 'During the past year, have you tried to spend less time on social media, but failed?'). If the participants answered 'Yes' to five or more questions, this was interpreted as them indicating problematic social media use.

<sup>&</sup>lt;sup>8</sup> Collect, score, analyse and interpret WEMWBS (warwick.ac.uk)

- After the weighting of the sample, participants who had not completed all SMDS items (n=551 unweighted, 40%) were removed from analyses of data collected using this scale. Information about how these omissions affected the weighted sample is reported in Annex 2.
- Social media and closeness to friends. Participants were also asked 'Does
  using social media make you feel closer to your friends, less close, or does it
  make no difference?'.

Participants were able to choose not to answer any of the questions above. As such, where proportions presented in figures do not total 100%, this is due to some participants choosing not to answer the question.

## Limitations of the methodology

As the survey relies on self-report questions, the findings presented in this report are subject to limitations common across surveys. Such limitations include not knowing how accurately the pupils' responses reflect their actual experiences, and pupils who volunteer to complete the surveys potentially differing from those who choose not to complete it. Unfortunately, these caveats are common to almost all self-report surveys, and are, therefore, issues that should just be kept in mind.

A more specific limitation is that, due to the methodologies used in YPIS, SALSUS and HBSC differing (e.g., how the samples are statistically weighted), it is not possible to robustly compare the findings from these surveys. As such, while the average scores from the surveys can be compared, the conclusions drawn from such comparisons should be treated with caution.

# 3. Overall findings

This section presents the findings for the whole sample.

The mean WEMWBS score for the sample was 44.9, which represents average mental wellbeing – i.e., not high, but not indicating possible or probable depression. However, this score is at the lower end of the 45 to 59 'average mental wellbeing' score range described in the previous section.

Bearing in mind the caveat detailed in section 2 about making comparisons across YPIS, SALSUS and HBSC surveys, as shown in Figure 1, the mean mental wellbeing reported by female and male pupils in S2 and S4 was slightly lower in 2021 compared with 2015 and 2018<sup>9</sup>. As such, the comparison across surveys suggests that pupils' mental wellbeing was lower in early 2021 than before COVID-19. However, as these findings are from different surveys it is not possible to determine the statistical significance of this pattern of results, so firm conclusions cannot be drawn.

<sup>&</sup>lt;sup>9</sup> The mean WEMWBS score reported in HBSC 2018 (47.1) was highly comparable to the score reported in SALSUS 2018 (46.9). To be consistent with 2015, the SALSUS 2018 score is used for the comparison presented.

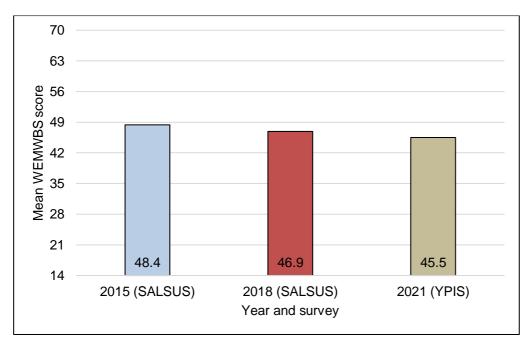


Figure 1. Mean overall WEMWBS scores for female and male pupils in S2 and S4 by survey

Regarding the participants' loneliness, the participants were most likely to report 'Sometimes' feeling lonely (42%), followed by 'Hardly ever or never' feeling lonely (33%) and 'Often or always' (20%; see Figure 2). This corresponds to the findings of the second TeenCovidLife survey [7], in which 20% of the sample reported feeling lonely 'Most of the time' or 'All of the time'. Pupils completing the TeenCovidLife survey also reported feeling lonelier at two points during the pandemic (July and October 2020) than before it.

Over half of the participants indicated feeling optimistic, with 55% agreeing with the statement 'Even if I am having a difficult time, I feel like I will be OK' (see Figure 3). Although optimism was captured as an item within WEMWBS in SALSUS [3] and HBSC [4], no findings relating specifically to this factor were reported.

On average, the participants reported having 7.5 hours' sleep on the night before completing the survey. While sleep duration was also reported for HBSC [4], this was estimated in a different way to YPIS (i.e., calculated from pupils' reports of when they typically went to bed and woke up) and so cannot be used for comparison.

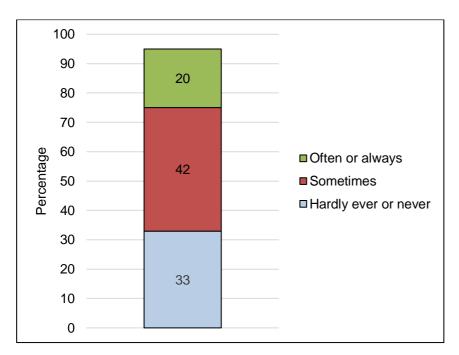


Figure 2. Frequency of experiencing loneliness for whole sample

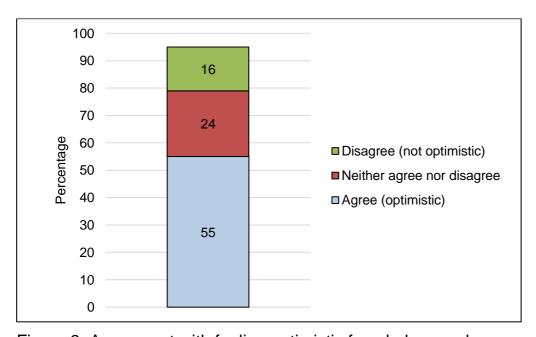


Figure 3. Agreement with feeling optimistic for whole sample

The majority of participants reported having family and friends with whom they could talk about their problems (74% for both family and friends; see Figure 4), and reported enjoying spending time with their family (78%; see Figure 4). While these statistics are not directly comparable to other surveys, these findings are in line with small proportions of respondents in the TeenCovidLife survey [7] reporting low satisfaction with family and friends (9% and 17%, respectively) during the pandemic.

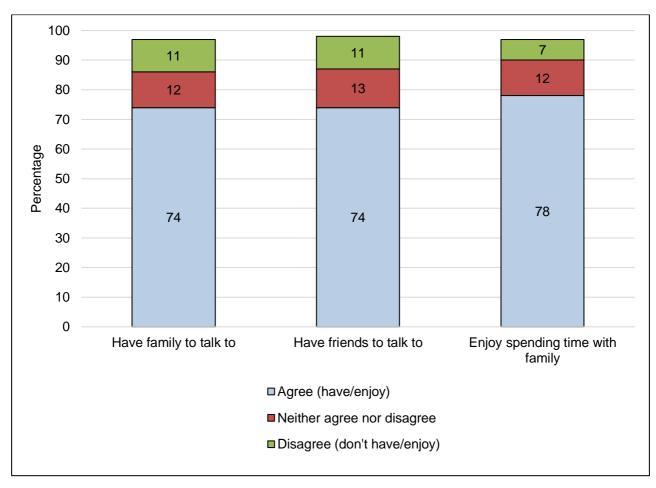


Figure 4. Agreement with statements about family and friends for whole sample

Overall, 13% of the participants agreed with five or more of nine statements about their social media use, which was the threshold used to identify problematic social media use. As shown in Figure 5 and Table 2, almost half (47%) of the whole sample indicated that they use social media to escape negative feelings, with roughly a third (33%) trying but failing to spend less time on social media.

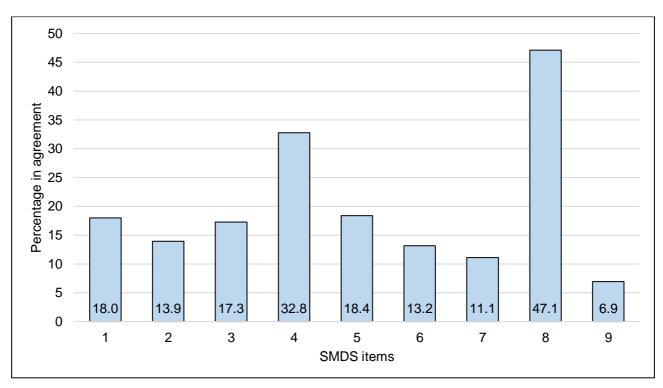


Figure 5. Agreement with SMDS items (Table 2) for whole sample

Table 2. SMDS items

SMDS item	SMDS item wording
1	Cannot think of anything else but using social media again
2	Feel dissatisfied because want to spend more time on social media
3	Feel bad when cannot use social media
4	Try but fail to spend less time on social media
5	Neglect other activities because want to use social media
6	Had arguments with others because of social media use
7	Lied to parents/friends about amount of time spent on social media
8	Use social media to escape negative feelings
9	Had serious conflict with parent(s)/sibling(s) because of social media use

The majority of participants (55%) also reported that social media made them feel closer to their friends (see Figure 6).

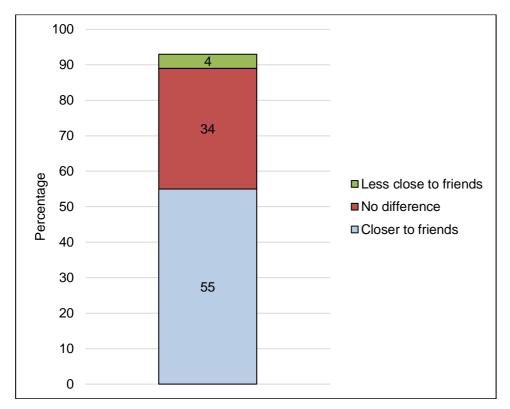


Figure 6. Impact of social media on closeness to friends for whole sample

# 4. Findings by demographic characteristics

This section presents findings from comparisons of the responses from pupils with different demographic characteristics. The findings are presented in turn for the following demographic characteristics:

- Gender identity: female, male
- School year<sup>10</sup>: S1, S2, S3, S4, S5, S6
- Physical or mental health condition: yes, no
- Urban or rural: urban, rural
- SIMD quintile: SIMD1 (most deprived), SIMD2, SIMD3, SIMD4, SIMD5 (least deprived)
- Caring responsibilities: yes, no

Please note that only statistically significant<sup>11</sup> findings are reported in this section.

## **Gender identity**

Overall, compared with male pupils, female pupils reported lower mental wellbeing and more often feeling lonely, and were less likely to report feeling optimistic.

<sup>&</sup>lt;sup>10</sup> Due to overlap between the school year and age characteristics, the findings are only presented for school year.

<sup>&</sup>lt;sup>11</sup> Differences presented in this report are statistically significant at a 95% confidence level. Statistical significance is not intended to imply substantive importance.

Female pupils were also less likely than male pupils to report having family members with whom they could talk about their problems, and were more likely to meet the threshold for problematic social media use, and to report that social media made them feel closer to their friends.

More detailed findings regarding differences between female and male pupils are presented below:

- Mental wellbeing. Female pupils reported lower mean mental wellbeing than male pupils (WEMWBS scores of 42.7 and 48.0, respectively). For female pupils, their mean score is within a suggested range that indicates possible depression (i.e., 41-44). Similarly, the Lockdown Lowdown survey [6] found that female respondents were less likely to report feeling good about their mental wellbeing than male respondents. Before the pandemic, female pupils were also found to have lower WEMWBS scores than male pupils in HBSC in 2018 [4], and the SALSUS surveys in 2015 and 2018 [3], although these differences were either not statistically significant (HBSC) or the statistical significance was not reported (SALSUS). In further analyses of YPIS, the pattern of female pupils reporting lower mental wellbeing than male pupils was observed in each school year included in this study (S1 to S6).
- Loneliness. Female pupils reported feeling lonely more often than male pupils. 72% of female pupils indicated 'Sometimes' or 'Often or always' feeling lonely compared with 50% of male pupils (see Figure 7).

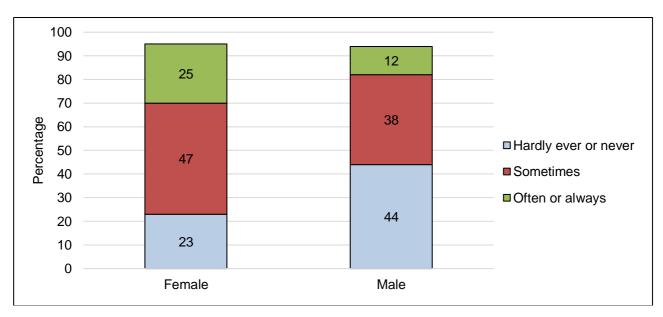


Figure 7. Frequency of experiencing loneliness by gender identity

 Optimism. Female pupils were less likely to agree with the statement 'Even if I am having a difficult time, I feel like I will be OK' than male pupils – 50% of females agreed compared with 62% of males (see Figure 8).

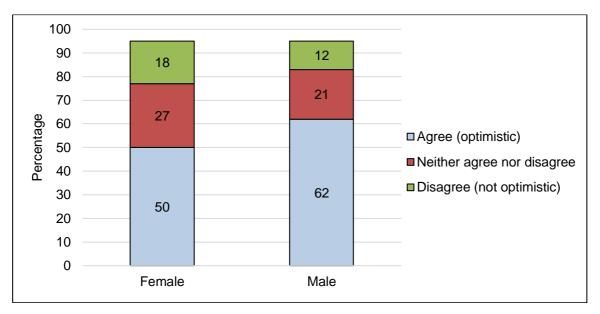


Figure 8. Agreement with feeling optimistic by gender identity

• Family to talk to about problems. Fewer female than male pupils reported having family members with whom they could talk about their problems (70% and 80%, respectively; see Figure 9). Relatedly, female respondents in the Lockdown Lowdown survey [6] were less likely to report having a good relationship with their family than male respondents. Regarding mental wellbeing, pupils who were 'very' or 'fairly' likely to talk to their family were found to report higher mental wellbeing in SALSUS [3]. This finding from SALSUS could therefore partly explain the lower mental wellbeing of female pupils found in YPIS, as they are also less likely to report having family to talk to.

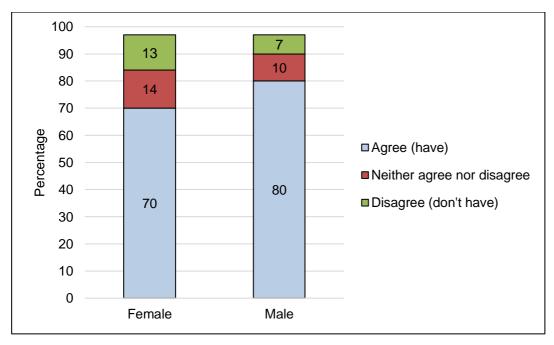


Figure 9. Agreement with having family to talk to by gender identity

- Problematic social media use. A smaller proportion of male pupils (7%) met the threshold for problematic social media use than female pupils (17%).
- Social media and closeness to friends. Female pupils were more likely than male pupils to report that social media made them feel closer to their friends (59% and 51%, respectively; see Figure 10).

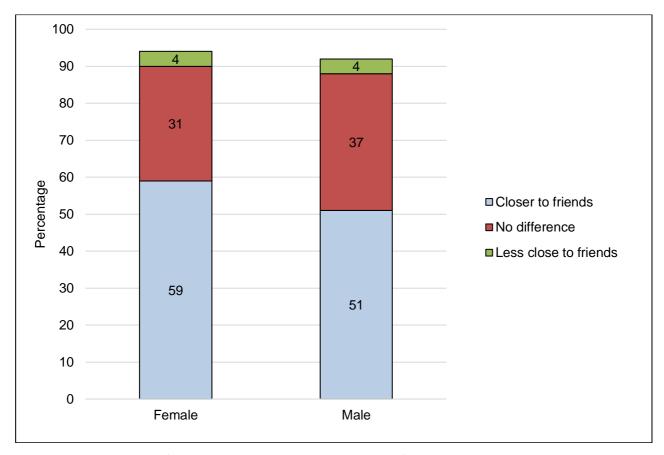


Figure 10. Impact of social media on closeness to friends by gender identity

### **School year**

Overall, compared with younger pupils, older pupils reported experiencing poorer mental wellbeing and more often feeling lonely, and were less likely to report having family to talk to about their problems. The youngest pupils (S1) also reported having more sleep than pupils in the other school years.

More detailed findings are presented below:

• Mental wellbeing. Older pupils reported lower mean mental wellbeing than younger pupils (WEMWBS scores of 42.3 and 43.2 for S5 and S6 pupils, respectively, and 46.9 and 46.7 respectively for S1 and S2 pupils; see Figure 11). Older pupils' mean scores were within a suggested range that indicates possible depression (i.e., 41-44). A similar pattern of results was reported in the Lockdown Lowdown survey [6], which found that older respondents were less likely to report feeling good about their mental wellbeing than younger respondents. Before the pandemic, older pupils also appeared to have lower

WEMWBS scores than younger pupils in HBSC in 2018 [4], and the SALSUS surveys in 2015 and 2018 [3], although these differences were either not statistically significant (HBSC) or the statistical significance was not reported (SALSUS).

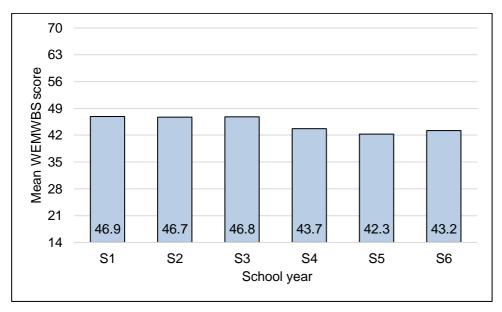


Figure 11. Mean mental wellbeing scores by school year

• Loneliness. Older pupils reported feeling lonely more often than younger pupils. 69% of S5 pupils and 79% of S6 pupils indicated 'Sometimes' or 'Often or always' feeling lonely compared with 48% of S1 pupils and 58% of S2 pupils (see Figure 12).

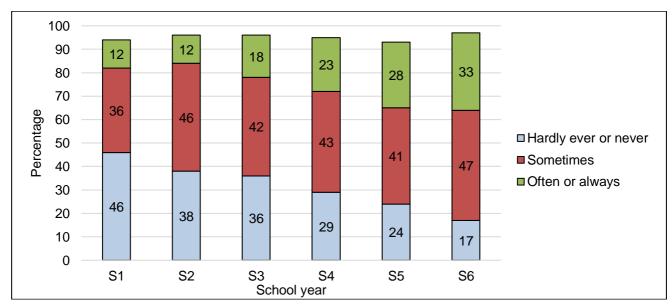


Figure 12. Frequency of experiencing loneliness by school year

• Sleep (quantity). The amount of sleep pupils across school years S2 to S6 reported did not differ significantly, ranging from a mean of 7.0 to 7.6 hours of sleep the night before completing the survey. However, S1 pupils reported having more sleep, with a mean of 8.1 hours. While the surveys used

- different methods to estimate duration of sleep, HBSC [4] reported a similar pattern of results i.e., younger pupils slept longer on weekday nights than older pupils.
- Family to talk to about problems. Younger pupils were more likely to report having family members with whom they could talk about their problems (82% of S1 and 79% of S2 pupils, and 67% of S5 and 64% of S6 pupils, respectively; see Figure 13). Similarly, older respondents in the Lockdown Lowdown survey [6] were less likely to report having a good relationship with their family than younger respondents. A similar finding was found before the pandemic in the HBSC survey [4], which found that younger pupils found it easier to talk to their parents than older pupils. Additionally, SALSUS [3] found that having family to talk to is associated with higher mental wellbeing, which could partly explain why older pupils reported lower mental wellbeing in YPIS, as they were also less likely to report having family to talk to.

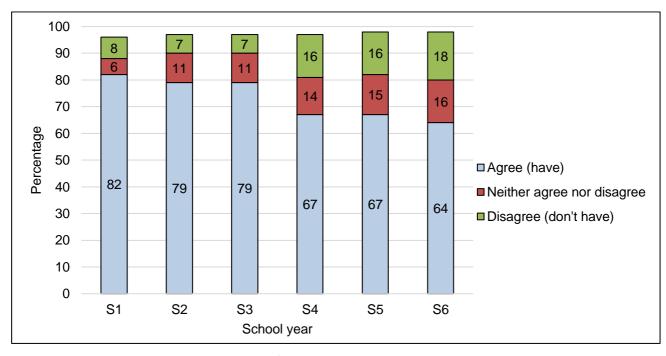


Figure 13. Agreement with having family to talk to by school year

### Physical or mental health condition

Overall, pupils with a physical or mental health condition, compared with those without, reported experiencing poorer mental wellbeing and more often feeling lonely, were less likely to report feeling optimistic, and reported getting less sleep. Pupils with a physical or mental health condition were also less likely to report having family with whom they talked about their problems, or enjoyed spending time.

More detailed findings are presented below:

 Mental wellbeing. Pupils with a physical or mental health condition reported lower mean mental wellbeing than pupils without such a condition (WEMWBS scores of 41.4 and 48.4, respectively). For pupils with a condition, their mean score is within a suggested range that indicates possible depression (i.e., 41-44). The Lockdown Lowdown survey [6], conducted during the pandemic in autumn 2020, supported the YPIS finding, as young people with long-term health conditions reported feeling less good about their mental wellbeing. A similar pattern of results was also found before the pandemic in the SALSUS survey in 2018 [3], as pupils with a physical or mental health condition had a lower WEMWBS mean score than those without such conditions.

Loneliness. Pupils with a physical or mental health condition reported feeling lonely more often than pupils without such a condition. 71% of pupils with a condition indicated 'Sometimes' or 'Often or always' feeling lonely compared with 54% of pupils without (see Figure 14). In the Lockdown Lowdown survey [6], young people with a long-term health condition were also more likely to report a negative impact of the pandemic on their feelings of loneliness than those without such a condition.

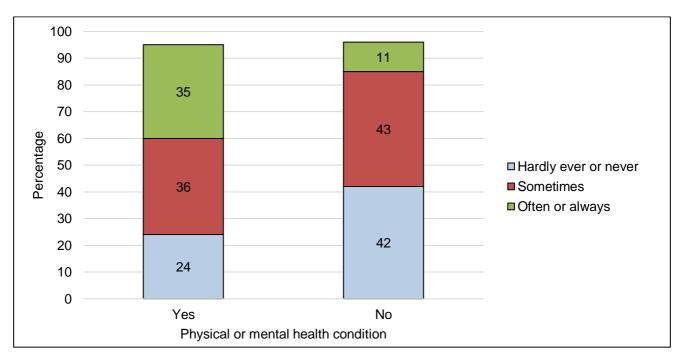


Figure 14. Frequency of experiencing loneliness by physical or mental health condition

 Optimism. Pupils with a physical or mental health condition were less likely to agree with the statement 'Even if I am having a difficult time, I feel like I will be OK' than pupils without such a condition – 48% of pupils with a condition agreed compared with 68% of pupils without a condition (see Figure 15).

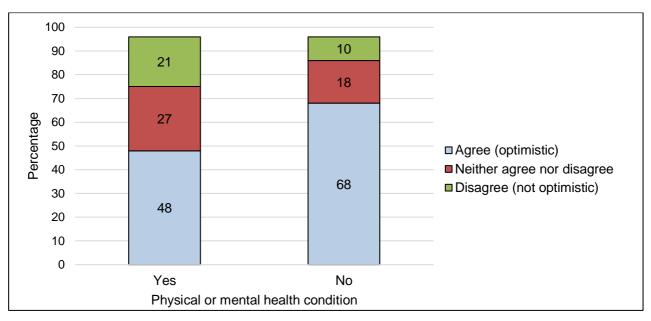


Figure 15. Agreement with feeling optimistic by physical or mental health condition

- Sleep (quantity). On average, pupils with a physical or mental health condition reported having significantly less sleep the night before completing the survey compared with pupils without such a condition (7.0 and 7.9 hours, respectively).
- Family to talk to about problems. Pupils with a physical or mental health condition were less likely to report having family members with whom they could talk about their problems than pupils with no such condition (73% and 81%, respectively; see Figure 16). In line with this finding, in the Lockdown Lowdown survey [6], young people with a long-term health condition were less likely to report having a good relationship with their family than those without such a condition. As discussed in relation to gender and age, the SALSUS [3] finding that having family to talk to is associated with higher mental wellbeing could partly explain why pupils with a health condition tend to report lower mental wellbeing than those without such a condition.

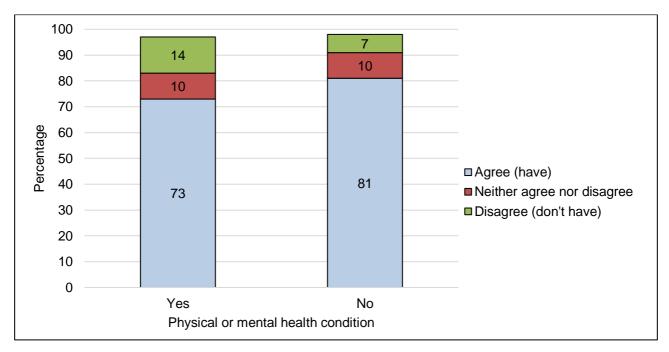


Figure 16. Agreement with having family to talk to by physical or mental health condition

 Enjoyment of spending time with family. Pupils with a physical or mental health condition were less likely to report enjoy spending time with their family than pupils with no such condition (73% and 85%, respectively; see Figure 17).

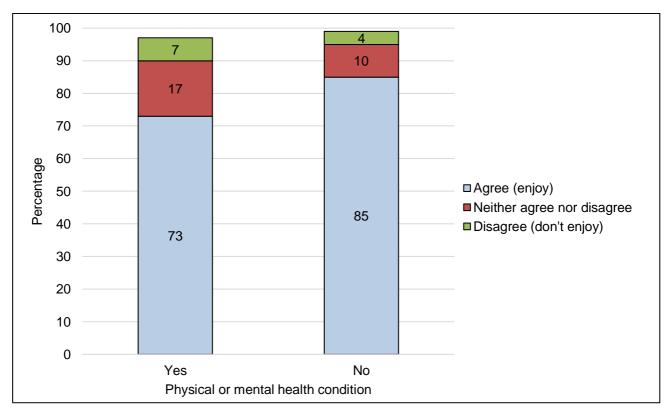


Figure 17. Agreement with enjoying spending time with family by physical or mental health condition

#### **Urban/Rural**

The only statistically significant difference found in the survey between pupils living in urban and rural settings was that pupils living in rural settings were less likely to report having friends with whom they could talk about their problems than pupils living in urban settings (68% and 75%, respectively; see Figure 18).

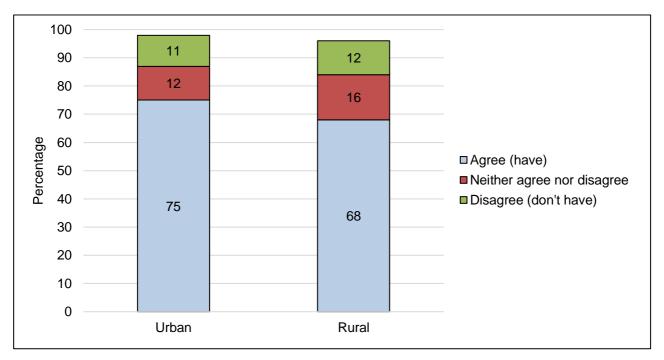


Figure 18. Agreement with having friends to talk to by urban/rural

## **Scottish Index of Multiple Deprivation**

No statistically significant differences were found between pupils across the different SIMD quintiles for any questions in the survey. Similarly, the Lockdown Lowdown survey [6] did not report any differences in the responses to questions about mental wellbeing and relationships for young people from different SIMD quintiles. In contrast, before the pandemic, the SALSUS survey [3] found that pupils from more deprived backgrounds reported lower mental wellbeing than pupils from less deprived backgrounds. In line with the SALSUS finding, the HBSC survey in 2018 [4], using a measure of family affluence rather than SIMD, also found that pupils from less affluent families reported lower mental wellbeing.

## Caring responsibilities<sup>12</sup>

The only statistically significant difference found in the survey between pupils with and without caring responsibilities was that a larger proportion of pupils with caring responsibilities (27%) met the threshold used to identify problematic social media

<sup>&</sup>lt;sup>12</sup> Data limitations meant that it was not possible to compare those pupils with and without caring responsibilities regarding the quantity of sleep they reported.

use than pupils without caring responsibilities (10%). In contrast, the Lockdown Lowdown survey [6] reported that, during the pandemic, young people with caring responsibilities were less likely to report having a good relationship with family and friends, and were less likely to feel good about their mental wellbeing. Pupils with caring responsibilities were also found to have poorer mental wellbeing before the pandemic in the SALSUS survey [3].

## 5. Conclusions

This report presented findings relating to the mental wellbeing, relationships and social media use of 1,361 pupils from secondary local authority schools in Scotland (S1 to S6) in early 2021 (during the COVID-19 pandemic). While, on average, these pupils reported having reasonable outcomes related to mental wellbeing, relationships and social media, certain characteristics were associated with poorer outcomes. Specifically, pupils who appeared to be most at risk of a range of poor outcomes: were female, were older; and had a physical or mental health condition. Pupils living in rural (compared with urban) settings and with a physical or mental health condition (compared with those without such a condition) were also found to experience specific poor outcomes. In contrast to surveys conducted before the COVID-19 pandemic, no differences for any of the mental wellbeing, relationship and social media related outcomes were observed between the SIMD quintiles. As such, further research is warranted to investigate the inconsistency in these findings before and after the pandemic. Further research is also needed to examine the importance of other characteristics for which findings were not generated in this study, either due to sample sizes being too small (e.g., pupils identifying in a way other than female or male, pupils' ethnic and religious backgrounds) or measures not being included (e.g., sexual orientation, experience of violence or abuse). As such, caution should be taken not to neglect these groups when developing and implementing interventions in the future until a clearer understanding is available.

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Annex 1
Weighted sample characteristics before and after excluding incomplete WEMWBS responses

Characteristic	Category	Weighted sample before exclusion	Weighted sample after exclusion
Gender identity	Female	48%	48%
	Male	48%	48%
School year	S1	19%	14%
	S2	19%	18%
	S3	18%	18%
	S4	17%	18%
	S5	15%	17%
	S6	11%	14%
Gender identity and school year	Female S1	8%	6%
	Male S1	10%	7%
	Female S2	8%	7%
	Male S2	10%	10%
	Female S3	8%	9%
	Male S3	9%	9%
	Female S4	9%	10%
	Male S4	8%	8%
	Female S5	9%	10%
	Male S5	6%	7%
	Female S6	6%	8%
	Male S6	4%	5%
Physical or mental health condition	Yes	18%	19%
	No	59%	59%
Urban or rural	Urban	81%	80%
	Rural	19%	20%
Scottish Index of Multiple Deprivation	1 (most deprived)	22%	19%
	2	19%	19%
	3	19%	18%
	4	20%	22%
	5 (least deprived)	20%	22%
Caring responsibilities	Yes	13%	12%
	No	80%	83%

Annex 2
Weighted sample characteristics before and after excluding incomplete SMDS responses

Characteristic	Category	Weighted sample before exclusion	Weighted sample after exclusion
Gender identity	Female	48%	46%
	Male	48%	50%
School year	S1	19%	15%
	S2	19%	17%
	S3	18%	18%
	S4	17%	19%
	S5	15%	17%
	S6	11%	14%
Gender identity and school year	Female S1	8%	5%
	Male S1	10%	9%
	Female S2	8%	6%
	Male S2	10%	10%
	Female S3	8%	8%
	Male S3	9%	10%
	Female S4	9%	9%
	Male S4	8%	10%
	Female S5	9%	10%
	Male S5	6%	5%
	Female S6	6%	8%
	Male S6	4%	6%
Physical or mental health condition	Yes	18%	21%
	No	59%	62%
Urban or rural	Urban	81%	80%
	Rural	19%	20%
Scottish Index of Multiple Deprivation	1 (most deprived)	22%	19%
	2	19%	19%
	3	19%	19%
	4	20%	20%
	5 (least deprived)	20%	23%
Caring responsibilities	Yes	13%	13%
	No	80%	80%

How to access background or source data
The data collected for this social research publication:
$\square$ are available in more detail through Scottish Neighbourhood Statistics
☐ are available via an alternative route
$\hfill\Box$ cannot be made available by Scottish Government for further analysis as Scottish Government is not the data controller.



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