



# Sefton School Mental Wellbeing and Resilience Survey 2021

Nadia Butler, Charley Wilson, Rebecca Bates, Zara Quigg, Emma Ashworth

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# **Executive summary**

Mental disorders are among the major causes of illness and disability in children and young people globally [1, 2]. Critically, untreated mental illness has adverse impacts on numerous domains of functioning, particularly those which cause issues in educational settings, including behavioural problems, school absence, exclusion and truancy [3, 4, 5], low academic achievement [6, 7], substance use [8, 9], violence [10, 11], and delinquency [12]. Thus, measuring levels of mental wellbeing amongst students and understanding associated risk factors for poor mental health is crucial to inform targeting of mental health support and promotion and prevention programmes in schools. In 2019, Sefton Council commissioned LJMU to conduct a survey measuring levels of mental wellbeing and resilience in Sefton school students and staff. Findings from the survey informed local provision and Sefton Council successfully bid for funding for school mental health support teams and mental wellbeing promotion training for school staff. Following COVID-19 and associated lockdowns and school closures there was a need to repeat the survey in the 2021/22 school year to determine current levels of wellbeing across the area and explore the potential impact of COVID-19. Approximately 100 staff from across 12 schools (10 primary schools) participated in the staff survey. Almost 1,000 students took part from eleven primary schools and approximately 300 students from one secondary school.

#### Staff current mental wellbeing and stress during COVID-19

The average score for staff on the mental wellbeing measure was slightly higher than the average wellbeing score for the English population [13], suggesting better mental wellbeing amongst staff. Compared to the 2019 survey wave, prevalence of high mental wellbeing was lower amongst staff in the 2021 survey. Rates of low mental wellbeing were significantly greater amongst male staff compared to female staff, and amongst secondary staff compared to primary staff. Levels of resilience were relatively high amongst staff, with three quarters having high resilience and just 5.4% with low resilience. Relatively few staff had a high level of stress during COVID-19, with approximately seven in ten experiencing moderate stress. The average score amongst staff on the stress measure was similar to the average score in a global study conducted across 41 countries during March 2020 [14]. This score is considered a moderate score, however it is significantly higher than reported in other general population studies done in the US and European countries prior to the pandemic, suggesting it was a more stressful period than usual circumstances [15, 16, 17]. Furthermore, approximately one quarter of staff reported their experience as bad, hard, and boring, whilst three in ten staff reported their experience of teaching online as bad, hard, and boring. Overall, the majority of staff were satisfied with their school's provision of wellbeing activities for students, although satisfaction with provision for staff was lower and almost all staff agreed they would be interested in wellbeing or support services for staff being offered in their school.

#### Student current mental wellbeing and stress during COVID-19

After categorising scores as high, moderate, or low mental wellbeing, 17.4% of primary students had high mental wellbeing, 67.0% had moderate wellbeing, and 15.6% had low mental wellbeing. Overall, 14.8% of secondary school students had high mental wellbeing,

71.4% had moderate mental wellbeing, and 13.8% had low mental wellbeing. Compared to the 2019 survey wave, prevalence of high mental wellbeing had fallen amongst primary and secondary students in the 2021 survey. A higher proportion of primary students in the 2021 survey had moderate wellbeing compared to the 2019 wave, whilst the prevalence of low mental wellbeing was approximately equal. The prevalence of moderate mental wellbeing was also higher amongst secondary school students in 2021 compared to 2019, and fewer students had low mental wellbeing in 2021 compared to 2019.

A range of sociodemographics were identified as risk factors for low mental wellbeing amongst students. Study findings showed age and gender differences amongst primary school students, with a greater prevalence of low mental wellbeing in females and amongst students in the older year groups. There was a significant association between mental wellbeing and disability for both primary and secondary students, with a greater prevalence of low mental wellbeing amongst those with a long-standing illness, disability or difficulty with learning. Mental wellbeing was also associated with the primary caregiver(s) for both primary and secondary students wellbeing lowest amongst students who were looked after by both parents compared to those with a single parent or students who were being cared for by another family member or someone else. Further, these demographic relationships with wellbeing held at the other end of the spectrum when considering which groups had greater prevalence of high mental wellbeing (i.e. males, years 3/4, no disability, two parents at home).

Relatively few primary school students had a high level of stress during COVID-19, whilst approximately half were categorised as experiencing moderate stress. However, the average score amongst primary school students was higher than the sample of US students used in the original scale development study, and was closer to the score of the clinical sample used in the study, suggesting that, on average, stress during COVID-19 may have been higher than in normal circumstances [18]. One in ten secondary school students had a high level of stress during COVID-19 whilst a further seven in ten experienced moderate stress. The average score for perceived stress was higher than the overall average score from a global study conducted in March 2020 [14]. Crucially, there was a significant association between level of stress experienced during COVID-19 and current mental wellbeing, with higher levels of stress associated with lower current wellbeing. Critically, no students who reported high stress during COVID-19 had a current high level of mental wellbeing.

#### Protective factors against low mental wellbeing

Key protective factors against low mental wellbeing were also identified in the current study. Individual resilience characteristics such as self-esteem, empathy, problem solving skills, and goals and aspirations were all significantly associated with mental wellbeing. In addition to individual resilience characteristics the importance of good relationships at family, school, community, and peer levels were also highlighted as crucial to mental wellbeing. In general, there was a graded relationship between each resilience characteristic and wellbeing, with prevalence of low mental wellbeing greatest amongst students with a low level of each characteristic, lowest amongst those with high resilience characteristics, and in between for those with moderate levels of each resilience characteristic. Schools are considered crucial settings for developing individual resilience characteristics through, for example, promoting mental health literacy, social and emotional wellbeing, and coping skills [19]. Critically, individual resilience characteristics can also be developed through positive and supportive relationships [20, 21]. Previous research has suggested that safe, secure, and supportive home and school environments are both required for children and adolescents to develop and thrive (WHO, 2018). Data from the 2019 survey demonstrated that having a high level of family support, school adult support, and school peer support was associated with the lowest level of low mental wellbeing, and there was a graded protective effect between the number of sources of support and odds of low mental wellbeing [22]. Whilst all three types of supportive relationships was best, it was not vital and findings showed a protective effect of school sources of support (teacher and peer) against low mental wellbeing for children with low family support. This highlights the critical context schools provide in fostering positive peer relationships and supportive teacher-student relationships to promote mental health and resilience for all children, including both those with and without supportive home environments [22]. Many school-based mental health prevention and promotion (P&P) programmes exist, and have a well-established evidence base that demonstrates their success in improving outcomes for children. Specifically, universal interventions (i.e., aimed at all children) have gained in popularity in recent years. In particular, social and emotional learning (SEL) interventions are a type of P&P programme that aims to promote strength-based skills and, when implemented well, are associated with improvements in a range of personal, social, and health-related outcomes, both in the short- (e.g., reductions in emotional distress) and long- (e.g., reductions in adult mental health difficulties) term [23]. Peer support programmes offer an alternative method of promoting positive relationships in school. They can be universal or targeted in nature and involve young people helping and supporting each other in a planned and structured way [24].

#### **Considerations for future surveys**

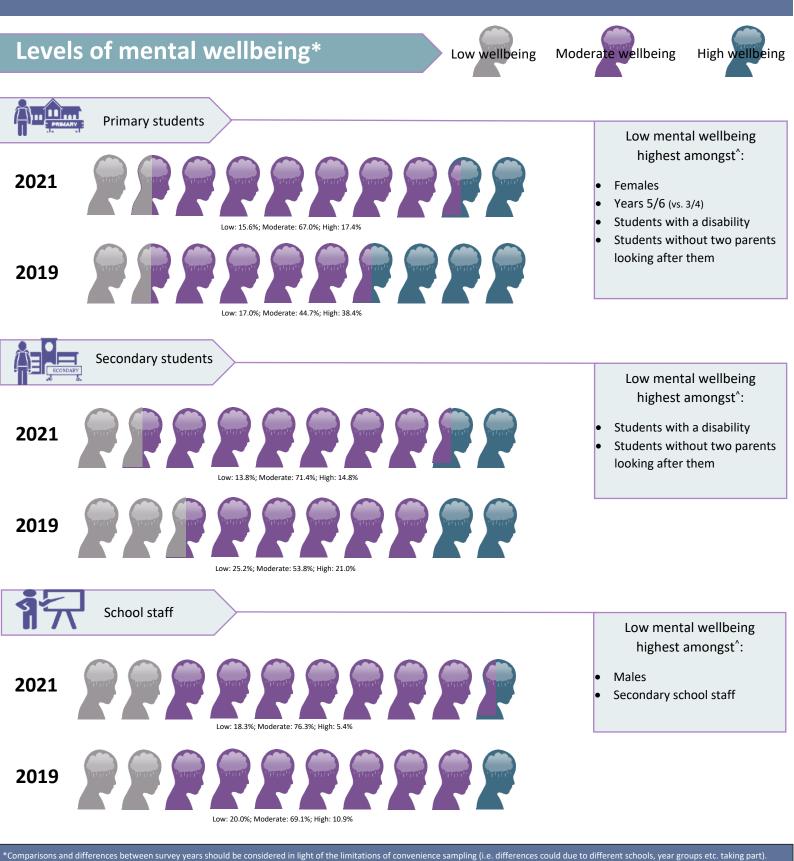
Whilst the 2021 survey provided an important snapshot of mental wellbeing across Sefton's school staff and students, it was limited by a lower uptake in participation than the 2019 survey wave. Particularly problematic was the completion of the survey by only one secondary school, which prevented a comprehensive understanding of wellbeing amongst secondary school students across Sefton. Furthermore, uptake amongst staff was lower than in 2019 and this prevented a full analysis exploring associations between different measures and sociodemographics. Local insight and good data is crucial to identifying levels of need and risk and protective factors specific to local populations. This data facilitates the use of targeted, evidence driven intelligence to develop local joint strategic needs assessments and the commissioning, targeting and evaluation of interventions which improve the mental wellbeing of children and young people [25]. Schools are ideal settings for collecting such data, and whilst 2021 may have been exceptional in circumstances with school closures and an emphasis on 'catching up' impacting on levels of participation, schools may still require encouragement and support in any future survey waves to ensure sample sizes are adequate to inform local needs and targeting of interventions.

#### Recommendations

- Schools are a critical setting to foster positive peer relationships and supportive teacher-student relationships to promote mental health and resilience for all children, including both those with and without supportive home environment. Consider implementation of universal, evidence-based mental health prevention and promotion programmes in schools, such as social and emotional learning interventions and peer support programmes, which foster these relationships and develop resilience. Ensure schools and staff are aware of the importance of such relationships to improve student wellbeing and thus reduce subsequent associated school issues such as absenteeism, truancy, poor academic performance and exclusions.
- Identify and support young people who experienced a difficult lockdown and/or have poor current mental wellbeing through targeted support programmes.
- Given better teacher wellbeing is associated with higher student wellbeing and with lower student psychological problems consider what programmes can be put in place to ensure staff are adequately supported.
- Schools are ideal settings for collecting data on levels of mental wellbeing to monitor trends across time and evaluate the effectiveness of policy and programmes. Consult with schools about how best they can be supported to implement any future survey waves to ensure sample sizes are adequate to inform local needs and targeting of interventions.

# Sefton School Mental Wellbeing and Resilience Survey 2021

In 2019, Sefton Council commissioned LJMU to conduct a survey measuring levels of mental wellbeing and resilience in Sefton school students and staff. Following COVID-19 and associated lockdowns and school closures there was a need to repeat the survey in the 2021/22 school year to determine current levels of wellbeing across the area and explore the potential impact of COVID-19. Almost 1,000 students took part from eleven primary schools and approximately 300 students from one secondary school. Approximately 100 staff from across 12 schools (10 primary schools) participated in the staff survey.

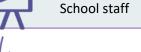


Significant at p<0.05. The report presenting the full methodology and results is available at <u>www.in</u>

#### Levels of resilience ate level leve **Primary students** Secondary students \*\*\*\*\*\* Self-esteem **. . . .** . . Low: 6.9%; Moderate: 21.2%; High: 71.9% **A** n **A** n **A** n **A** n Empathy Low: 2 9%: Moderate: 19.6%; High: 77.5% Low: 10 8%: Moderate \*\*\*\*\*\* Problem solving Moderate: 24.4%; High: 64.6% Goals and aspirations 1 n A n A n %; Moderate: 22.1%; High: 70.4% Low: 7.8%; Moderate: 26.1%; High: 66.1% Family connection N M ЧZ 9.6%: High: 89.2% Low: 1.3%: Moderate: 9.3%: High: 89.4% \*\*\*\*\*\* Family participation ۱. %; Moderate: 41.2%; High: 49.7% Low: 13.5%: Moderate: 44.1%: High: 42.4% At+ ++++++++ Community connection Low: 1.7%; Moderate: 10.1%; High: 88.2% **. . . . .** . MARA 1 derate: 7.3%; High: 91.3% /♥\ ●/♥\ ● /♥\ ●/♥\ ●/ 个 **A**AAAAA Community participation w: 16.0%; Moderate: 19.3%; High: 64.7% Low: 23.1%; Moderate: 19.7%; High: 57.3% School connection Moderate: 13.5%; High: 83.6% School participation . Low: 46.2%; Moderate: 38.8%; High: 15.1% <u>\*\*\*\*\*\*\*\*\*</u>\* Low: 8.8%; Moderate: 26.7%; High: 64.5% Peer support

# Levels of resilience significantly associated with level of mental wellbeing

Resilience Wellbeing In general, there was a significant graded relationship between each resilience characteristic and wellbeing, with prevalence of low mental wellbeing greatest amongst students with a low level of each characteristic, lowest amongst those with high resilience characteristics, and in between for those with moderate levels of each resilience characteristic.

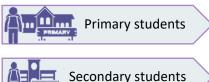


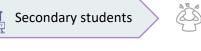
**Overall resilience** 

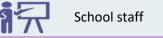
Low: 6.2%: Moderate: 14.3%: High: 79.5%



# Perceived stress during COVID-19

















Vellbeing Level of stress significantly associated with level of mental wellbeing

There was a significant graded relationship stress during COVID-19 and wellbeing, with prevalence of low mental wellbeing greatest amongst students who experienced a high level of stress, lowest for those who had low stress, and in between for those with moderate levels stress.

# 1. Introduction

Mental disorders, such as depression, anxiety, and behavioural disorders are among the major causes of illness and disability in young people globally, with one in seven young people experiencing a mental disorder in a given year [1, 2, 26]. In England, for the year 2021, one in six children aged 6-19 years old had a probable mental disorder, and there has been an increase in the prevalence of disorders since 2017 [27]. Whilst rates of mental illness amongst young people have been increasing over the past two decades [28], several studies have found that the impact of COVID-19 and associated lockdowns and school closures had a serious negative impact on young people's mental health [27, 29, 30]. Untreated mental illness in childhood causes issues in many areas of young people's functioning, and in particular is associated with low academic achievement [6, 7], behavioural problems [31], school absence, exclusion and truancy [3, 4, 5], substance use [8, 9], violence [10, 11], and delinquency [12]. Mental illness in childhood also has implications across the lifecourse and is one of the strongest predictors of psychiatric difficulties in adulthood [32, 33, 34].

Sociodemographic factors have previously been found to be associated with children's mental health, with wellbeing declining with age and lower in females, children with a disability, children with a single parent, and children with no family adult in paid work [35]. However, childhood resilience has been found to be associated with less mental illness across the lifecourse in both those with and without childhood adversity and is thus a key protective characteristic against low mental wellbeing [36, 22]. Key factors that infer resilience include positive individual characteristics (such as self-esteem, empathy, problem solving and goals and aspirations), functional family relationships, and a supportive environment outside the family (e.g. teacher-student relationships, and positive peer relationships). A good understanding of the risk and protective factors associated with poor mental health is vital to informing effective mental health promotion and prevention activities and policies.

In 2019, Sefton Council commissioned LJMU to conduct a survey measuring levels of resilience and mental wellbeing in Sefton primary, secondary and special educational needs (SEN) students and staff, as part of a broader piece of work examining resilience and wellbeing provision in schools [37]. The survey was designed to identify needs or strengths of staff and students in participating schools to inform intervention work in schools across Sefton. In total, 2309 students from 29 schools and 312 staff from 22 schools took part in the survey. Findings from the study showed key age and gender differences in levels of mental wellbeing amongst students, with female students and secondary and SEN students having lower wellbeing than male students and primary students respectively. The majority of staff had high or moderate levels of wellbeing, however secondary and SEN staff were more likely to have low wellbeing than primary school staff. There were gender differences amongst students in key sources of resilience, with girls having higher levels of empathy, family connection, and peer connection, whilst boys had higher levels of self-esteem. Critically, low mental wellbeing was significantly associated with low levels of resilience for both students and staff. As a result of these findings Sefton Council successfully bid for national funding to support mental health team provision across Sefton schools, in addition to provision of mental wellbeing promotion training for school staff.

In 2021, LJMU were commissioned to repeat the survey measuring mental wellbeing and resilience in a wider cohort of schools and year groups than those included in the 2019 survey wave. Further, to address the gap in understanding of the impact of COVID-19 and associated school closures, the survey also measured a number of factors associated with lockdown and examined their association with mental wellbeing. Thus, the study comprised the following aims:

- 1. Identify current levels of mental wellbeing and resilience amongst students and staff across schools in Sefton.
- 2. Explore risk and protective factors associated with low mental wellbeing.
- 3. Identify levels of perceived stress amongst staff and students during the COVID-19 pandemic and associated school closures, in addition to other COVID-19 related experiences.

# 2. Methods

# 2.1 Study design and procedure

The study used a cross-sectional non-probability sampling design with all primary, secondary and SEN schools and colleges in Sefton invited to take part. Schools were free to choose which year groups to implement the survey with (as long as children were aged 8+ years). Participating children completed a developmentally appropriate questionnaire. This method is considered appropriate for this age group in line with the general consensus from the literature that children and young people with average cognitive development will feasibly be able to take part in questionnaires with carefully adapted questions by age seven [5, 6]. Thus, the study included three different survey versions measuring the same concepts but using age appropriate measures; primary and SEN student survey, secondary school and college student survey, and school staff survey. Surveys were available in English and completed online. The methodology closely followed Public Health England guidance on measuring health and wellbeing in schools [1].

# 2.2 Measures

The current study primarily used the same measures implemented in the previous phase for comparability and acceptability purposes. The measures have all been deemed suitable for use by children and young people; are considered feasible to use in school settings (i.e. not too long or requiring specific equipment); are not unduly burdensome in terms of time taken to administer; and, include items measuring positive wellbeing (as opposed to only mental ill health or emotional/behavioural difficulties). The mental wellbeing and resilience measures and questions have also been previously presented, edited and agreed on at several meetings and events with key stakeholders including: a stakeholder event hosted by Sefton Council, which included representation from over 80 schools across Sefton; heads of primary and heads of secondary school meeting; email distributed to all schools; and, Sefton Public Engagement and Consultation Panel.

#### 2.2.1 Sociodemographics

Questions on sociodemographics in the student survey included sex, ethnicity<sup>1</sup>, sexuality<sup>1</sup>, and disability. School information included school name, year group and eligibility for free school meals. A family-related questions was also included which asked about family structure<sup>1</sup> (i.e. who is looking after you... one parent, two parents, other family etc.).

Questions on sociodemographics in the staff survey included age, sex, ethnicity, and sexuality. School information included school name, type, staff role, length of time in current school and length of time in the education sector.

#### 2.2.2 Mental wellbeing

**The Stirling Children's Well-being Scale (SCWBS)**: is a positively worded measure of emotional and psychological wellbeing in children aged between 8-15 years. It is based on the same constructs as WEMWBS, making it an age appropriate comparable measure. It contains

<sup>&</sup>lt;sup>1</sup> Secondary school survey only.

2 subscales measuring positive emotional state and positive outlook [1, 2]. SCWBS is a 12item scale with five response categories (*never, not much of the time, some of the time, quite a lot of the time, all of the time*), summed to provide an overall score ranging from 12-60. Total scores were categorised into low ( $\leq$ 37), moderate (38-49), and high ( $\geq$ 50) with higher scores indicating higher levels of wellbeing. This measure was used in the primary and SEN student survey.

**The Short Warwick Edinburgh Mental Well-being Scale (SWEMWEBS):** measures positive mental wellbeing in the general population. SWEMWBS includes seven of the 14 items about thoughts and feelings included in the full version WEMWBS. It has been validated with students in secondary schools and adults in the general population [38, 13]. Each item is scored from 1 to 5, and total scores range from 7 to 35, with higher scores indicating higher positive mental wellbeing. Total scores on SWEMWBS were categorised to define low or high mental wellbeing as >1 standard deviation (5.12) below or above the mean (24.39) respectively, with moderate wellbeing falling between these ranges. This measure was used in the secondary school and college student survey and the school staff survey.

All three survey versions included a question about how likely (on a 6-point scale from extremely likely to extremely unlikely) they were to seek help from a variety of people (e.g. friends, family, professionals, online sources). The school staff survey also included questions on satisfaction with mental wellbeing resilience building activity provision in schools for staff and for students and if they were interested in wellbeing or support services for staff being offered in their school.

#### 2.2.3 Resilience

**The Student Resilience Survey (SRS):** measures students' perceptions of their individual characteristics as well as protective factors in their environment from their family, school, and community. The SRS is comprised of 11 subscales which measure different sources of resilience including: family connection; school connection; community connection; participation in home life; participation in school life; participation in community life; peer support<sup>2</sup>; self-esteem; empathy; problem solving; and, goals and aspirations. Responses on each item were dichotomised into positive (*all of the time, often*) and negative responses (*none of the time, rarely, some of the time*) for each item. Total scores for each source of resilience were calculated by averaging participant's scores on each question related to that construct (e.g. family connection). Students' scores on each resilience construct were then categorised as high (3.6-5), moderate (2.5-3.5) and low (1-2.3). It is appropriate for children aged 7+ years [4]. This measure was used in the primary and SEN student survey and the secondary school and college student survey.

**The Resilience Research Centre Adult Resilience Measure (RRC-ARM):** is a self-report measure of social-ecological resilience across different domains including individual, relational, communal and cultural [39]. Higher scores indicate higher levels of characteristics associated with resilience. Response options included: *not at all, a little, somewhat, quite a* 

<sup>&</sup>lt;sup>2</sup> Following feedback from schools two items were removed from the peer support scale to lessen the impact on children who do not have many friends and who may have to tick 'never' to the majority of these items.

*bit, a lot.* Responses on each item were dichotomised into positive (*quite a bit, a lot*) and negative responses (*not at all, a little, somewhat*) for each item. Similar to practice elsewhere [27], to provide an overall measure of resilience, a count was created of the number of items a participant responded positively to. Participants were then grouped into three categories: low resilience resources (<7 positive items); moderate resilience resources (7-9 positive items); and high resilience resources (10-12 positive items). The short 12-item version [40] was used in the school staff survey.

#### 2.2.4 Experience during COVID-19 school closures and lockdown

**Perceived Stress Scale – Children (PSS-C):** is a 13-item scale measuring perceptions of stress in the past week. For the purposes of the current study students were asked to consider each item during COVID-19 (e.g. whilst they were at home during lockdown or when school was closed). It is appropriate for children aged 5-18 years [18]. The scale includes 10 items, and total scores range from 0 to 39, with higher scores indicating higher levels of perceived stress. Total scores were categorised into low ( $\leq$ 13), moderate (14-26), and high ( $\geq$ 27) with higher scores indicating higher levels of perceived stress. This measure was used in the primary and SEN student survey.

**Perceived Stress Scale (PSS):** measures perceptions of stress during the past month [41]. It has been validated in both adolescent (aged 12+ years) and adult's populations [42, 43]. For the purposes of the current study students and staff were asked to consider each item during COVID-19 (e.g. whilst they were at home during lockdown or when school was closed). The scale includes 10 items, and total scores range from 0 to 40, with higher scores indicating higher levels of perceived stress. Total scores were categorised into low ( $\leq$ 13), moderate (14-26), and high ( $\geq$ 27) with higher scores indicating higher levels of perceived stress. This measure was used in the secondary school and college student survey and the school staff survey.

The secondary school and college student survey included three additional questions around experience during COVID-19 including: how students kept in touch with family and friends outside of the household during lockdown (e.g. telephone, text, video calls, social media); knowledge of COVID-19 and likelihood to have the vaccine if offered it.

The school staff survey included additional questions around experience during COVID-19 and school closures including: knowledge of COVID-19; vaccine uptake; experience of lockdown and experience of teaching online while schools were closed; and, means of keeping in contact with family and friends outside of the household.

# 2.3 Data analyses

Quantitative analyses were undertaken in SPSS (v27) using descriptive statistics. Chi-square for independence was used to identify associations between sociodemographics, mental wellbeing, resilience and stress during COVID-19.

#### 2.4 Ethical permissions

Ethical approval was obtained from Liverpool John Moores Research Ethics Committee (REC no. 19/PHI/018), and the study adhered to the Declaration of Helsinki.

# 3. Findings from the primary school survey

A total of 998 primary school students participated in the survey across 11 different schools. No SEN schools took part in the survey. There was approximately equal proportions of males and females in the sample, and two thirds of the students were in Year 5 or 6 (65.8%; n=656). Approximately one in six (15.6%; n=121) primary school students received free school meals and almost one in five (17.8%; 137) had a long-standing illness, disability or difficulty with learning. The majority (84.3%; n=804) of students lived with both parents (Table A1).

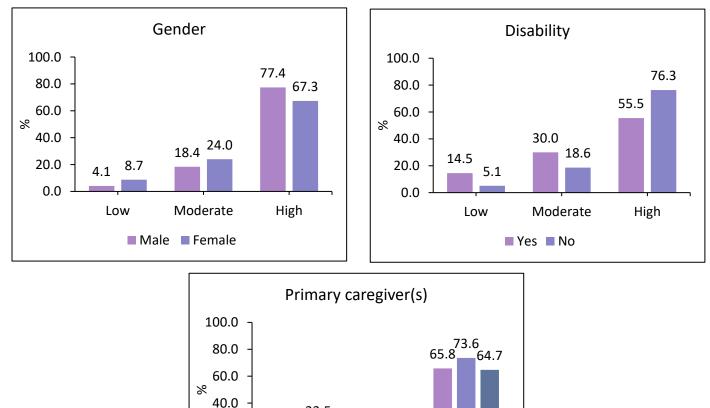
3.1. Individual level resilience resources

#### 3.1.1 Self-esteem

Items measuring self-esteem included for example 'I can do most things if I try'.

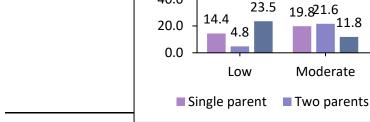
The mean score for self-esteem was 3.84<sup>3</sup> (*SD*=0.95). 71.9% (n=636) of primary school students had high scores, 21.2% (n=187) had moderate scores, and 6.9% (n=61) had low scores. Self-esteem was significantly associated with gender (p<0.01), disability status (p<0.001), and, primary caregiver(s) (p<0.001; Figure 1; Table A2).





High

Other



<sup>3</sup> Score range 1 to 5.



# 3.1.2 Empathy

Items measuring empathy included for example 'I feel bad when someone gets their feelings hurt'.

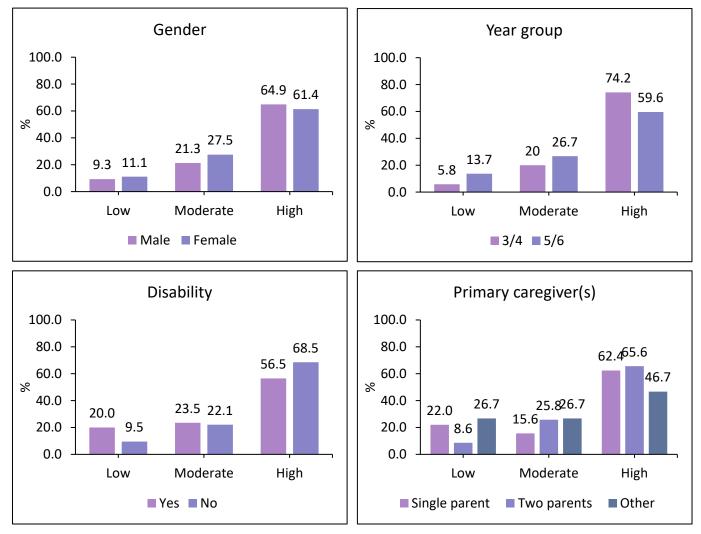
The mean score for empathy was  $4.31^3$  (*SD*=0.83). Nearly eight in ten (77.5%; n=731) students had high scores, 19.6% (n=185) had moderate scores, and 2.9% (n=27) had low scores. There were no significant associations between empathy and sociodemographics (Table A2).



# 3.1.3 Problem solving

Items measuring problem solving included for example 'I know where to go for help when I have a problem'.

The mean score for problem solving was  $3.65^3$  (*SD*=1.07). Nearly two thirds (64.6%; n=558) of primary school students had high scores, 24.4% (n=211) had moderate scores, and 11.0% (n=95) had low scores. Problem solving was significantly associated with gender (p<0.05), year group (p<0.001), disability status (p<0.01), and, primary caregiver(s) (p<0.001; Figure 2; Table A2).



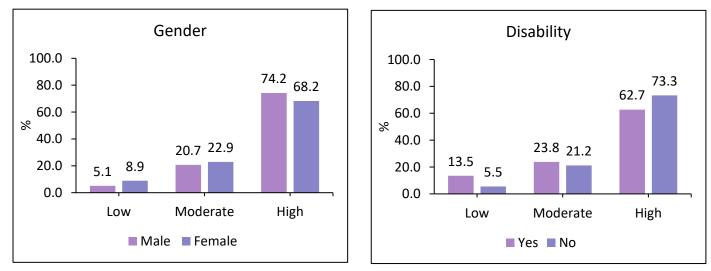
#### Figure 2: Significant associations between problem solving and sociodemographics

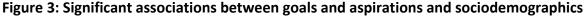
# 3.1.4 Goals and aspirations

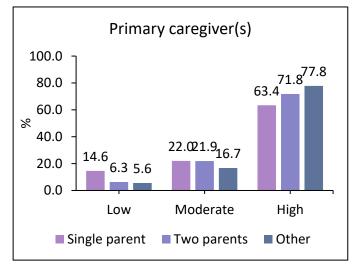


Items measuring goals and aspirations included for example 'I think I will be successful when I grow up'.

The mean score for goals and aspirations was 4.10<sup>3</sup> (*SD*=1.06). Seven in ten (70.4%; n=648) of primary school students had high scores, 22.1% (n=203) had moderate scores, and 7.5% (n=69) had low scores. Goals and aspirations was significantly associated with gender (p<0.05), disability status (p<0.01), and, primary caregiver(s) (p<0.05; Figure 3; Table A2).







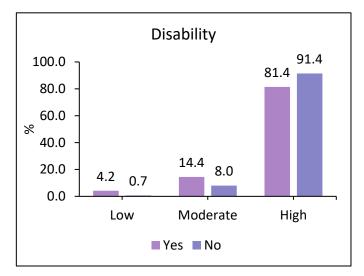
# 3.2 Relationship level resilience resources



#### 3.2.1 Family connection

Items measuring family connection included for example 'at home, there is an adult who believes I will be a success'.

The mean score for family connection was 4.45<sup>3</sup> (*SD*=0.65). The majority (89.2%; n=809) of primary school students had high scores, 9.6% (n=87) had moderate scores, and 1.2% (n=11) had low scores. Family connection was significantly associated with disability status (p<0.001; Figure 4; Table A3).



#### Figure 4: Significant associations between family connection and sociodemographics

#### 3.2.2 Family participation



Items measuring family participation included for example 'I help my family make decisions'.

The mean score for family participation was 3.66<sup>3</sup> (*SD*=0.99). Approximately half (49.7%; n=449) of primary school students had high scores, 41.2% (n=372) had moderate scores, and 9.1% (n=82) had low scores. Family participation was significantly associated with gender (p<0.05; Figure 5; Table A3).

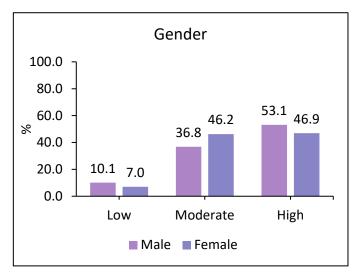


Figure 5: Significant associations between family participation and sociodemographics

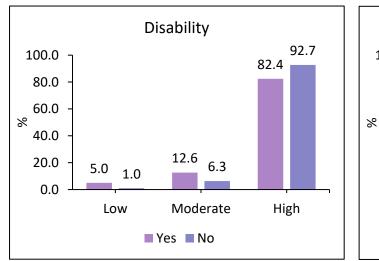


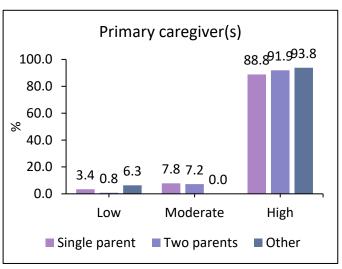
#### 3.2.3 Community connection

Items measuring community connection included for example 'away from school, there is an adult who really cares about me'.

The mean score for community connection was  $4.56^3$  (*SD*=0.67). The majority (91.3%; n=826) of primary school students had high scores, 7.3% (n=66) had moderate scores, and 1.4% (n=13) had low scores. Community connection was significantly associated with disability status (p<0.001) and, primary caregiver(s) (p<0.05; Figure 6; Table A3).







# 3.2.4 Community participation

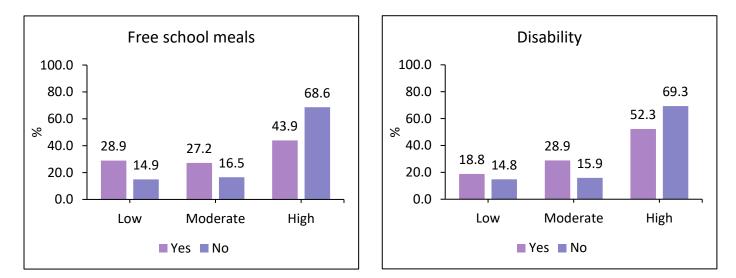


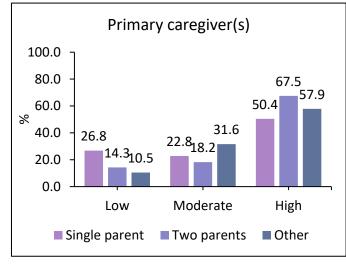
Items measuring community participation included for example 'I am a member of a club, sports team, church group or other group'.

The mean score for community participation was  $3.91^3$  (*SD*=1.38). Approximately two thirds (64.7%; n=605) of primary school students had high

scores, 19.3% (n=180) had moderate scores, and 16.0% (n=150) had low scores. Community participation was significantly associated with free school meals (p<0.001), disability status (p<0.001) and, primary caregiver(s) (p<0.01; Figure 7; Table A3).

#### Figure 7: Significant associations between community participation and sociodemographics







#### 3.2.5 School connection

Items measuring school connection included for example 'at school, there is an adult who listens to me when I have something to say'.

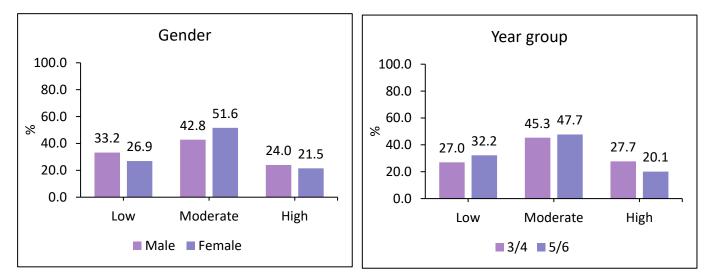
The mean score for school connection was  $4.30^3$  (*SD*=0.74). The majority (83.6%; n=729) of students had high scores, 13.5% (n=118) had moderate scores, and 2.9% (n=25) had low scores. There were no significant associations between school connection and sociodemographics (Table A4).



# 3.2.6 School participation

Items measuring school participation included for example 'I do things at my school that make a difference'.

The mean score for school participation was  $2.90^3$  (*SD*=1.11). Nearly half (46.9%; n=424) of primary school students had moderate scores, 30.4% (n=275) had low scores, and 22.7% (n=205) had high scores. School participation was significantly associated with gender (p<0.05) and, year group (p<0.05; Figure 8; Table A4).



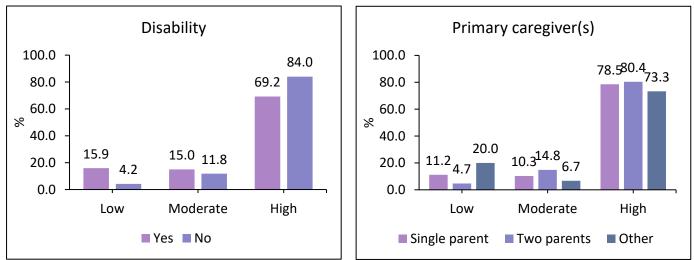
#### Figure 8: Significant associations between school participation and sociodemographics

# 3. Ite

#### 3.2.7 Peer support at school

Items measuring peer support at school included for example 'there are children in my school who would miss me if I wasn't in school'.

The mean score for peer support at school was  $4.08^3$  (*SD*=0.85). Nearly eight in ten (79.5%; n=669) primary students had high scores, 14.3% (n=120) had moderate scores, and 6.2% (n=52) had low scores. Peer support at school was significantly associated with disability status (p<0.001) and, primary caregivers(s) (p<0.01; Figure 9; Table A4).



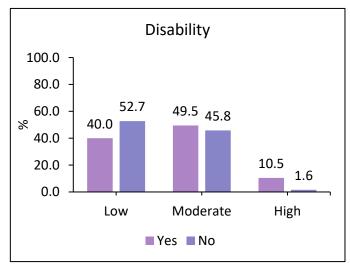


# 3.3 Stress during COVID-19



The mean perceived stress score for primary school students was 14.18 (*SD*=5.71). Overall, less than one in twenty (3.1%; n=23) students had a high level of stress during COVID-19, 48.7% (n=358) had a moderate level of stress, and 48.2% (n=354) had a low level of stress. Stress during COVID-19 was significantly associated with status (n < 0.001). Figure 10: Table 45)

disability status (p<0.001; Figure 10; Table A5).



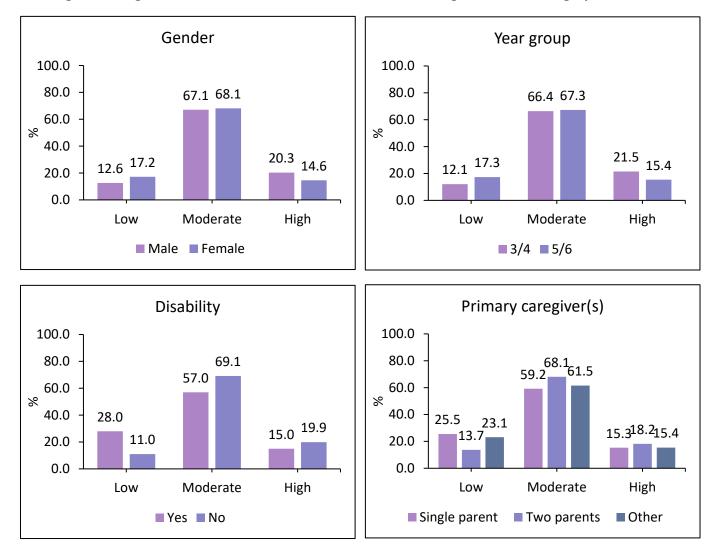
# Figure 10: Significant associations between stress during COVID-19 and sociodemographics

# 3.4 Mental wellbeing



The mean score for primary school students on SCWBS was 44.95 (*SD*=8.96). Overall, 17.4% (n=138) of primary school students had high mental wellbeing, over two thirds (67.0%; n=533) had moderate mental wellbeing, and 15.6% (n=124) had low mental wellbeing. Mental wellbeing was significantly associated with gender

(p<0.05), year group (p<0.05), disability status (p<0.001), and, primary caregiver(s) (p<0.05; Figure 11; Table A6).



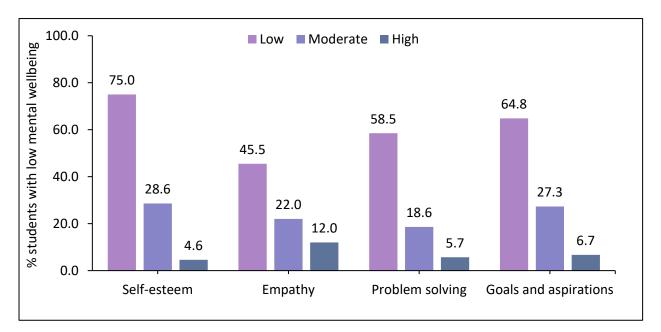
#### Figure 11: Significant associations between mental wellbeing and sociodemographics

#### 3.4.1 Impact of resilience on mental wellbeing

There was a significant association between mental wellbeing and all resilience factors (p<0.001; Table A7 & A8). There was a graded relationship between levels of each resilience factor and level of mental wellbeing, i.e., prevalence of low mental wellbeing was highest amongst students with low levels of each resilience characteristic, lowest amongst those with high levels of each resilience characteristic and in between for those with moderate levels of each resilience characteristic (Figures 12 & 13).

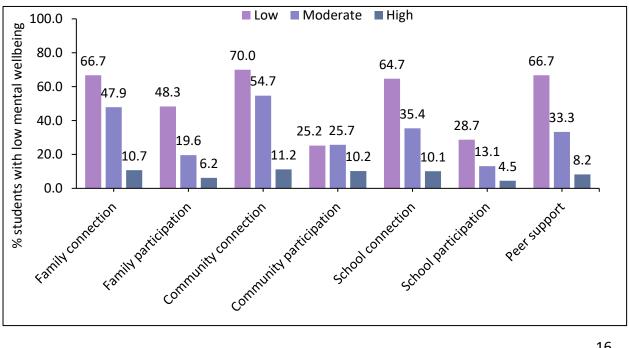
- Of students with high self-esteem, only 4.6% (n=25) had low mental wellbeing, compared to 28.6% (n=42) of those with moderate self-esteem, and 75.0% (n=33) of those with low self-esteem (Figure 12; Table A7).
- Of students with high empathy, only 12.0% (n=71) had low mental wellbeing, compared to 22.9% (n=35) of those with moderate level of empathy, and 45.5% (n=10) of those with low self-esteem (Figure 12; Table A7).
- Of students who had a high level of problem solving skills, only 5.7% (n=27) had low mental wellbeing, compared to 18.6% (n=32) of those with moderate level of empathy, and 58.5% (n=48) of those with low self-esteem (Figure 12; Table A7).
- Of students who had a high level of goals and aspirations, less than one in ten (6.7%; n=37) had low mental wellbeing, compared to 27.3% (n=44) of those with moderate goals and aspirations, and 64.8% (n=35) of those with low goals and aspirations (Figure 12; Table A7)

# Figure 12: Proportion of students with low mental wellbeing by individual sources of resilience



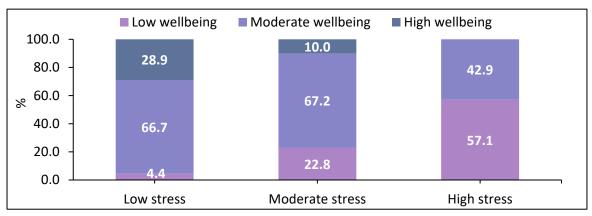
- Of students with high family connection, one in ten (10.7%; n=73) had low mental ٠ wellbeing, compared to 47.9% (n=34) of those with moderate family connection and 66.7% (n=6) with low family connection (Figure 13; Table A8).
- Of students who had a high level of family participation, only 6.2% (n=23) had low • mental wellbeing, compared to 19.6% (n=63) of those with moderate family participation, and 48.3% (n=28) of those with low family participation (Figure 13; Table A8).
- Of students who had a high level of community connection, only 11.2% (n=78) had low • mental wellbeing, compared to 54.7% (n=29) of those with moderate community connection, and 70.0% (n=7) of those with low community connection (Figure 13; Table A8).
- Of students who had a high level of community participation, only 10.2% (n=51) had • low mental wellbeing, compared to 25.7% (n=38) of those with moderate community participation, and 25.2% (n=30) of those with low community participation (Figure 13; Table A8).
- Of students who had a high level of school connection, only 10.1% (n=62) had low mental wellbeing, compared to 35.4% (n=35) of those with moderate school connection, and 64.7% (n=11) of those with low school connection (Figure 13; Table A8).
- Of students who had a high level of school participation, only 4.5% (n=8) had low mental wellbeing, compared to 13.1% (n=47) of those with moderate school participation, and 28.7% (n=62) of those with low school participation (Figure 13; Table A8).
- Of students with high school peer support, less than one in ten (8.2%; n=48) had low mental wellbeing, compared to 33.3% (n=32) of those with moderate peer support and 66.7% (n=30) with low peer support (Figure 13; Table A8).

Figure 13: Proportion of students with low mental wellbeing by relationship sources of resilience



# 3.4.2 Impact of stress during COVID-19 on mental wellbeing

There was a significant association between stress during COVID-19 and current mental wellbeing. Almost six in ten (57.1%; n=12) students who reported high levels of stress during COVID-19 had low current wellbeing, compared to 22.8% (n=71) of those who had experienced moderate stress, and just 4.4% (n=14) of those who had experienced low stress (Figure 14; Table A9). No students who reported high stress during COVID-19 had a current high level of mental wellbeing (Figure 14; Table A9).





# 3.4.3 Help seeking behaviour for mental health problems

Students were provided with a list of people or places and asked how likely or unlikely they would be to seek help from each of these for a mental health problem. The top source of help which students reported they were likely<sup>4</sup> to go to for a mental health problem was a parent (90.3%; n=868), followed by other family member (74.5%; n=709), and friend (71.8%; n=684). Students were less likely to seek support from services or individuals outside of their family and friends (Figure 15). One quarter (25.1%; n=228) of students reported they would not seek help for a mental health problem from anyone on the list.

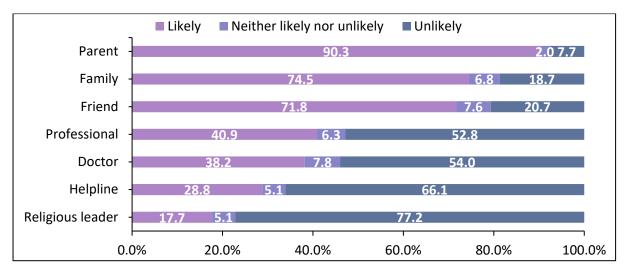


Figure 15: Sources of support students would seek help from for a mental health problem

<sup>&</sup>lt;sup>4</sup> Including likely, very likely and extremely likely.

# 4. Findings from the secondary school survey

A total of 307 secondary school students participated in the survey, however these students all attended the same secondary school. To protect the anonymity of the school some demographics are not presented here. The majority (82.1%; n=252) of students were in the younger year groups; 7, 8 or 9. The majority (93.5%; n=272) identified as heterosexual and White British (83.9%; n=239). Over one fifth (21.9%; n=55) had a long-standing illness, disability or difficulty with learning and over three quarters (78.7%; n=236) lived with both parents (Table A10).

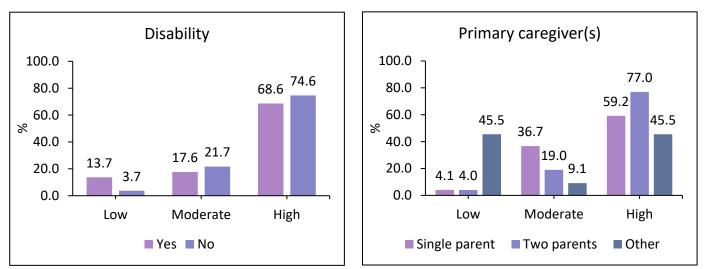
# 4.1. Individual level resilience resources

#### 4.1.1 Self-esteem

Items measuring self-esteem included for example 'I can do most things if I try'.

The mean score for self-esteem was  $3.90^3$  (*SD*=0.93). Three quarters (72.5%; n=211) of secondary school students had high scores, 22.0% (n=64) had moderate

scores, and 5.5% (n=16) had low scores. Self-esteem was significantly associated with disability status (p<0.05), and primary caregiver(s) (p<0.001; Figure 16; Table A11).



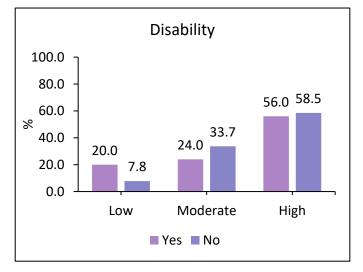
#### Figure 16: Significant associations between self-esteem and sociodemographics

# 4.1.2 Empathy



Items measuring empathy included for example 'I feel bad when someone gets their feelings hurt'.

The mean score for empathy was  $3.75^3$  (*SD*=1.06). Over half (56.8%; n=168) of students had high scores, 32.4% (n=96) had moderate scores, and 10.8% (n=32) had low scores. Empathy was significantly associated with disability status (p<0.05; Figure 17; Table A11).



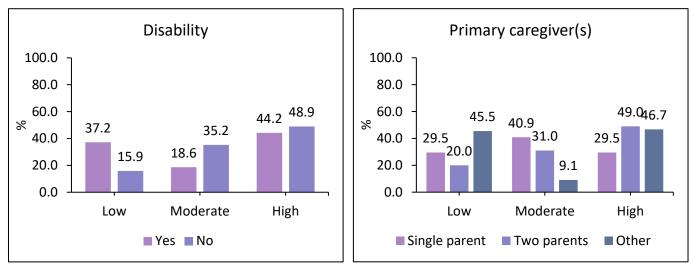
#### Figure 17: Significant associations between empathy and sociodemographics



#### 4.1.3 Problem solving

Items measuring problem solving included for example 'I know where to go for help when I have a problem'.

The mean score for problem solving was  $3.22^3$  (*SD*=1.12). Approximately four in ten (46.1%; n=124) secondary school students had high scores, 31.2% (n=84) had moderate scores, and 22.7% (n=61) had low scores. Problem solving was significantly associated with disability status (p<0.01) and primary caregiver(s) (p<0.05; Figure 18; Table A11).





# \* 4.1.4 Goals and aspirations

Items measuring goals and aspirations included for example 'I think I will be successful when I grow up'. The mean score for goals and aspirations was  $3.99^3$  (*SD*=1.05). Two thirds (66.1%; n=195) of secondary school students had high scores, 26.1% (n=77) had moderate scores, and 7.8% (n=23) had low scores.

Goals and aspirations was significantly associated with sexuality (p<0.05) and disability status (p<0.05; Figure 19; Table A11).

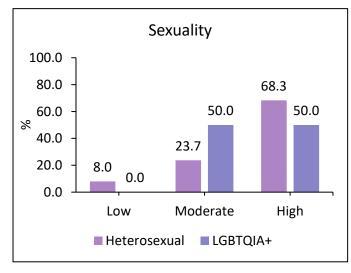
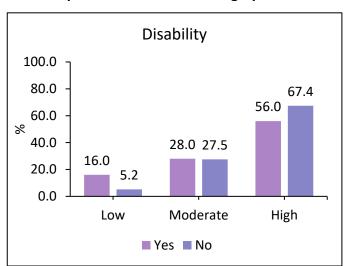


Figure 19: Significant associations between goals and aspirations and sociodemographics



#### 4.2 Relationship level resilience resources

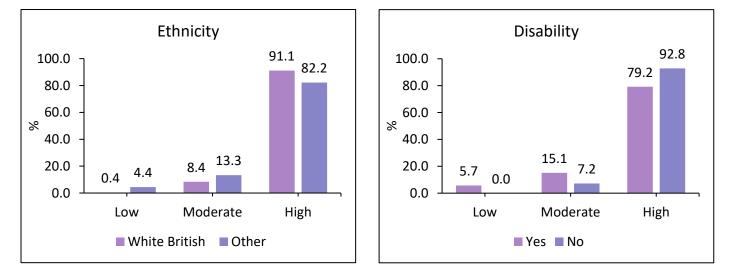


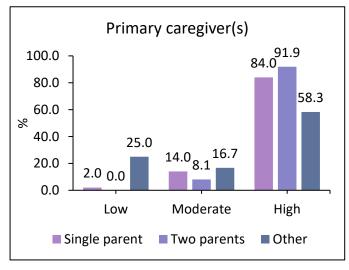
#### 4.2.1 Family connection

Items measuring family connection included for example 'at home, there is an adult who believes I will be a success'.

The mean score for family connection was 4.52<sup>3</sup> (*SD*=0.69). The majority (89.4%; n=270) of secondary school students had high scores, 9.3% (n=28) had moderate scores, and 1.3% (n=4) had low scores. Family connection was significantly associated with ethnicity (p<0.05), disability status (p<0.001), and primary caregiver(s) (p<0.001; Figure 20; Table A12).

#### Figure 20: Significant associations between family connection and sociodemographics



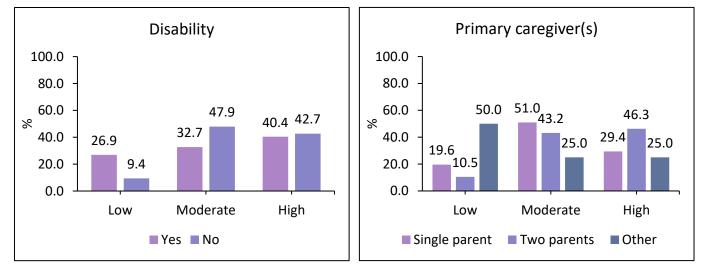


#### 4.2.2 Family participation



Items measuring family participation included for example 'I help my family make decisions'.

The mean score for family participation was 3.44<sup>3</sup> (*SD*=1.07). Approximately four in ten (42.4%; n=126) secondary school students had high scores, 44.1% (n=131) had moderate scores, and 13.5% (n=40) had low scores. Family participation was significantly associated with disability status (p<0.01) and primary caregiver(s) (p<0.001; Figure 21; Table A12).



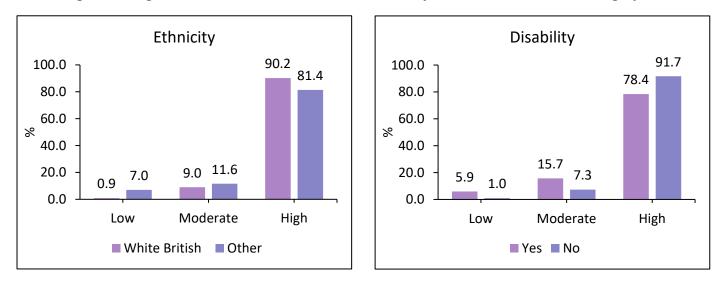
#### Figure 21: Significant associations between family participation and sociodemographics

### 4.2.3 Community connection

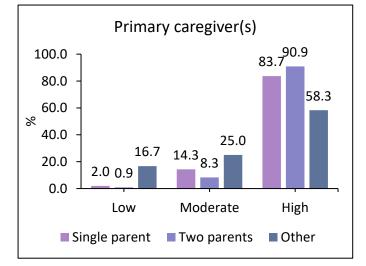
Items measuring community connection included for example 'away from school, there is an adult who really cares about me'.

The mean score for community connection was  $4.49^3$  (*SD*=0.75). The majority (88.2%; n=261) of secondary school students had high scores, 10.1% (n=30) had

moderate scores, and 1.7% (n=5) had low scores. Community connection was significantly associated with ethnicity (p<0.05), disability status (p<0.05) and, primary caregiver(s) (p<0.001; Figure 22; Table A12).







#### 4.2.4 Community participation

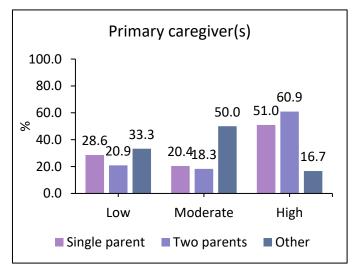


Items measuring community participation included for example 'I am a member of a club, sports team, church group or other group'.

The mean score for community participation was  $3.66^3$  (*SD*=1.50). Approximately six in ten (57.3%; n=169) of secondary school students had high

scores, 19.7% (n=58) had moderate scores, and 23.1% (n=68) had low scores. Community participation was significantly associated with primary caregiver(s) (p<0.05; Figure 23; Table A12).

Figure 23: Significant associations between community participation and sociodemographics

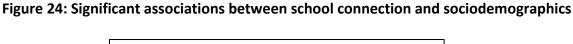


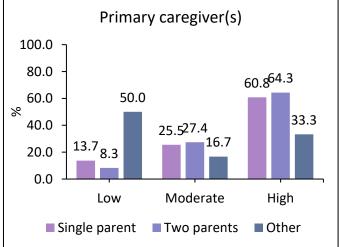


# 4.2.5 School connection

Items measuring school connection included for example 'at school, there is an adult who listens to me when I have something to say'.

The mean score for school connection was  $3.87^3$  (*SD*=1.05). Six in ten students (62.4%; n=186) had high scores, 26.8% (n=80) had moderate scores, and 10.7% (n=32) had low scores. School connection was significantly associated with primary caregiver(s) (p<0.001; Figure 24; Table A13).





#### 

# 4.2.6 School participation

Items measuring school participation included for example 'I do things at my school that make a difference'.

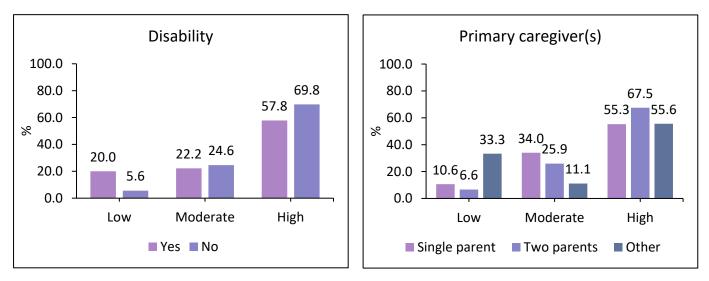
The mean score for school participation was 2.46<sup>3</sup> (*SD*=1.14). Nearly half (46.2%; n=138) of secondary school students had low scores, 38.8% (n=116) had moderate scores, and 15.1% (n=45) had high scores. School participation was not significantly associated with any sociodemographics (Table A13).



# 4.2.7 Peer support at school

Items measuring peer support included for example 'there are children in my school who would miss me if I wasn't in school'.

The mean score for peer support at school was  $3.79^3$  (*SD*=0.93). Nearly two thirds (64.5%; n=176) of secondary school students had high scores, 26.7% (n=73) had moderate scores, and 8.8% (n=24) had low scores. Peer support at school was significantly associated with disability status (p<0.01) and, primary caregivers(s) (p<0.05; Figure 25; Table A13).



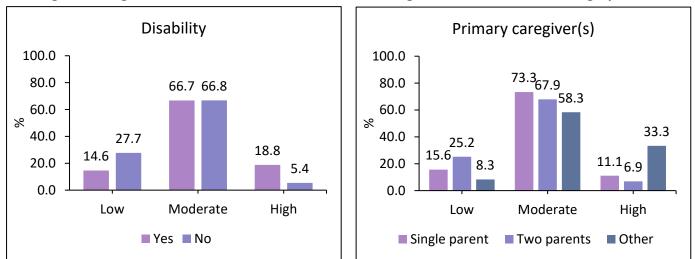
#### Figure 25: Significant associations between peer support at school and sociodemographics

# 4.3 Stress and other factors related to COVID-19 and lockdown



The mean perceived stress score for secondary school students was 17.77 (*SD*=6.86). Overall, almost one in ten (8.6%; n=24) students had a high level of stress during COVID-19, 68.8% (n=192) had a moderate level of stress, and 22.6% (n=63) had a low level of stress. Stress during COVID-19 was significantly associated with

disability status (p<0.01) and primary caregiver(s) (p<0.05; Figure 26; Table A14).





Over two thirds (67.7%; n=201) of secondary school students rated their knowledge level of COVID-19 as good or very good. Six in ten (60.0%; n=175) students reported that they were likely or very likely to have the COVID-19 vaccine if they were offered it. Students were provided with a list of ways they kept in touch with family and friends outside of their household during lockdown. The top means of keeping in touch was via text/Whatsapp (77.5%; n=238), followed by video calls (e.g. Facetime, Zoom; 58.3%; n=179), phone (48.5%; n=149), and Snapchat (44.3%; n=136; Figure 27). Relatively few (2.9%; n=9) students reported having no way to keep in touch with family and friends.

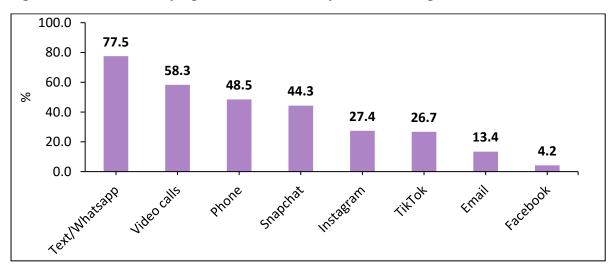
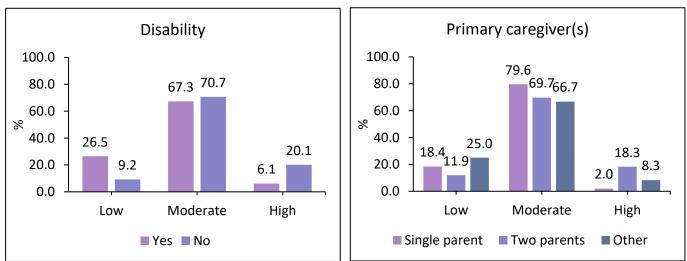


Figure 27: Means of keeping in touch with family/friends during lockdown

# 4.4 Mental wellbeing

The mean score for secondary school students on SWEMWBS was 24.39 (SD=5.12). Overall, 14.8% (n=42) of secondary school students had high mental wellbeing, seven in ten (71.4%; n=202) had moderate mental wellbeing, and 13.8% (n=39) had low mental wellbeing. Mental wellbeing was significantly associated with disability

status (p<0.001) and primary caregiver(s) (p<0.05; Figure 28; Table A15).





#### 4.4.1 Impact of resilience on mental wellbeing

There was a significant association between mental wellbeing and all resilience factors (Table A16 & A17). There was a graded relationship between levels of each resilience factor and level of mental wellbeing, i.e., prevalence of low mental wellbeing was generally highest amongst students with low levels of each resilience characteristic, lowest amongst those with high levels of each resilience characteristic and in between for those with moderate levels of each resilience characteristic (Figures 29 & 30).

- Of students with high self-esteem, only 6.5% (n=13) had low mental wellbeing, compared to 26.7% (n=16) of those with moderate self-esteem, and 57.1% (n=8) of those with low self-esteem (Figure 29; Table A16).
- Of students with high empathy, only 10.7% (n=17) had low mental wellbeing, compared to 10.9% (n=10) of those with moderate level of empathy, and 40.7% (n=11) of those with low empathy (Figure 29; Table A16).
- Of students who had a high level of problem solving skills, only 6.0% (n=7) had low mental wellbeing, compared to 12.3% (n=10) of those with moderate level of problem solving skills, and 29.1% (n=16) of those with low problem solving skills (Figure 29; Table A16).
- Of students who had a high level of goals and aspirations, less than one in ten (7.6%; n=14) had low mental wellbeing, compared to 20.8% (n=15) of those with moderate goals and aspirations, and 47.4% (n=9) of those with low goals and aspirations (Figure 29; Table A16).

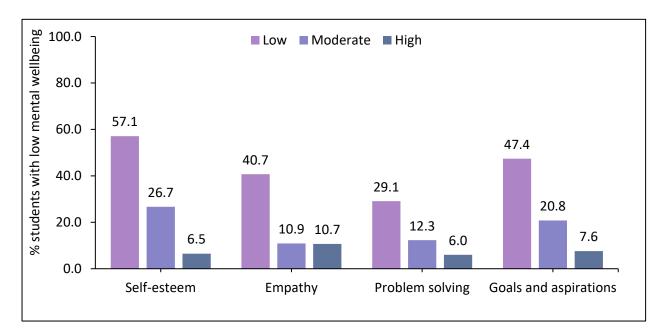


Figure 29: Proportion of students with low mental wellbeing by individual sources of resilience

- Of students with high family connection, one in ten (10.4%; n=26) had low mental wellbeing, compared to 33.3% (n=9) of those with moderate family connection and 66.7% (n=2) with low family connection (Figure 30; Table 17).
- Of students who had a high level of family participation, only 5.0% (n=6) had low mental wellbeing, compared to 15.4% (n=19) of those with moderate family participation, and 32.4% (n=12) of those with low family participation (Figure 30; Table A17).
- Of students who had a high level of community connection, only 11.5% (n=28) had low mental wellbeing, compared to 25.0% (n=7) of those with moderate community connection, and 40.0% (n=2) of those with low community connection (Figure 30; Table A17).
- Of students who had a high level of community participation, only 13.1% (n=21) had low mental wellbeing, compared to 12.7% (n=7) of those with moderate community participation, and 16.1% (n=10) of those with low community participation (Figure 30; Table A17).
- Of students who had a high level of school connection, only 7.5% (n=13) had low mental wellbeing, compared to 15.4% (n=12) of those with moderate school connection, and 46.4% (n=13) of those with low school connection (Figure 30; Table A17).
- Of students who had a high level of school participation, no students had low mental wellbeing, compared to 10.2% (n=11) of those with moderate school participation, and 21.1% (n=27) of those with low school participation (Figure 30; Table A17).
- Of students with high school peer support, less than one in ten (8.3%; n=14) had low mental wellbeing, compared to 21.7% (n=15) of those with moderate peer support and 38.1% (n=8) with low peer support (Figure 30; Table A17).

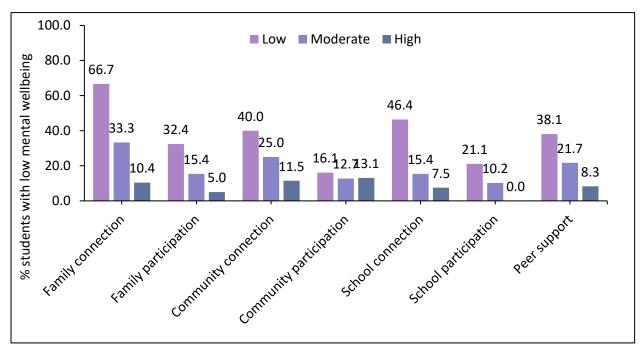


Figure 30: Proportion of students with low mental wellbeing by relationship sources of resilience

### 4.4.2 Impact of stress during COVID-19 on mental wellbeing

There was a significant association between stress during COVID-19 and current mental wellbeing (p<0.001). Almost one third (33.3%; n=8) of students who reported high levels of stress during COVID-19 had low current wellbeing, compared to 13.6% (n=25) of those who had experienced moderate stress, and, just 3.4% (n=2) of those who had experienced low stress (Figure 31; Table A18). No students who reported high stress during COVID-19 had a current high level of mental wellbeing (Figure 31; Table A18).

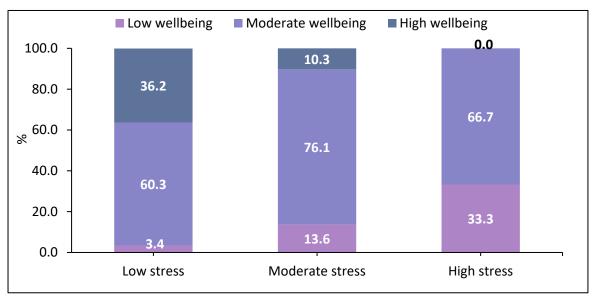
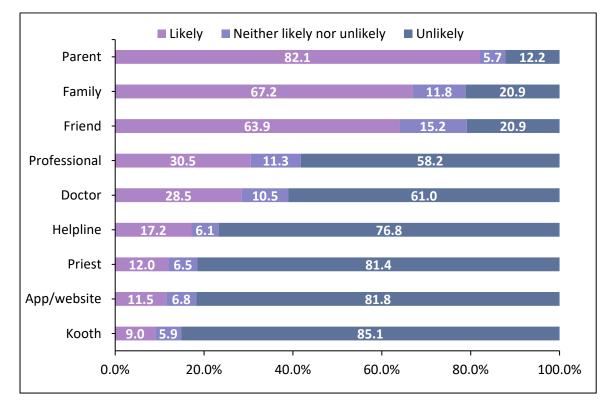


Figure 31: Association between stress during COVID-19 and current mental wellbeing

#### 4.4.3 Help seeking behaviour for mental health problems

Students were provided with a list of people or places and asked how likely or unlikely they would be to seek help from each of these for a mental health problem. The top source of help which secondary school students reported they were likely<sup>4</sup> to go to for a mental health problem was a parent (82.1%; n=243), followed by other family member (67.2%; n=199), and a friend (63.9%; n=189). Students were less likely to seek support from services or individuals outside of their family and friends (Figure 32). Over one fifth (22.2%; n=65) of students reported they would not seek help for a mental health problem from anyone on the list.





# 5. Findings from the staff survey

A total of 93 staff participated in the survey across 12 schools, including 10 primary schools (77.4% of all participating staff; n=72) and 2 secondary schools. Three quarters (74.7%; n=68) were teaching staff and the average time working at their current school was 11.3 years, whilst the average time in the education sector in total was 16.3 years. The majority (88.2%; n=82) of staff were female and over half (61.3%; n=57) were aged between 30 and 49 years. The majority (96.7%; n=88) identified as heterosexual and White British (96.8%; n=90; Table A19).

### 5.1. Resilience

Almost three quarters (73.1%; n=68) of staff who took part in the survey had high resilience, whilst over two in ten (21.5%; n=20) had moderate resilience, and 5.4% (n=5) had low resilience.

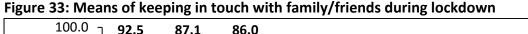
### 5.2 Experience of lockdown during COVID-19

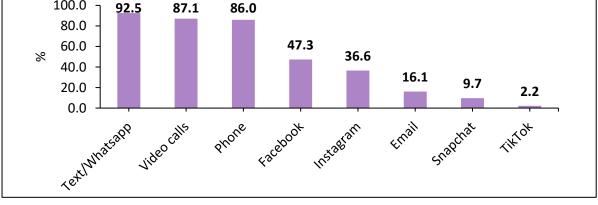


The mean perceived stress score for staff was 17.50 (*SD*=6.64). Overall, almost one in ten (7.6%; n=7) staff had a high level of stress during COVID-19, 69.6% (n=64) had a moderate level of stress, and 22.8% (n=21) had a low level of stress.

The majority (89.2%; n=83) of staff rated their knowledge level of COVID-19 as good or very good and 97.8% (n=90) stated that they have had the COVID-19 vaccine.

Approximately one quarter of staff reported their experience of lockdown as bad or very bad  $(23.7\%; n=22)^5$ , and hard or very hard (24.7%; n=23), and boring or very boring (23.7%; n=22). Approximately three in ten staff reported their experience of teaching online during lockdown as bad or very bad  $(29.1\%; n=23)^5$ , and hard or very hard (38.8%; n=31), and boring or very boring (31.6%; n=25). Staff were provided with a list of ways they kept in touch with family and friends outside of their household during lockdown. The top means of keeping in touch was via text/Whatsapp (92.5%; n=86), followed by video calls (e.g. Facetime, Zoom; 87.1%; n=81), phone (86.0%; n=80), and Facebook (47.3%; n=44; Figure 33).





<sup>5</sup> On a scale of very bad to very good.

The mean score for staff on SWEMWBS was 24.97 (*SD*=4.64). Overall, 5.4% (n=5) of staff had high mental wellbeing; the majority (76.3%; n=71) had moderate mental wellbeing, and 18.3% (n=17) had low mental wellbeing. Mental wellbeing was significantly associated with gender and school type, with a significantly higher prevalence of low mental wellbeing amongst male (54.5%; n=6) compared to female (13.4%; n=11) staff, and amongst secondary (42.9%; n=9) compared to primary (11.1%; n=8) staff (Table A20).

5.3 Mental wellbeing

Staff were provided with a list of people or places and asked how likely or unlikely they would be to seek help from each of these for a mental health problem. The top source of help which staff reported they were likely<sup>4</sup> to go to for a mental health problem was a partner (85.7%; n=78), followed by a friend (81.7%; n=76), parent (75.8%; n=69) or other family member (69.9%; n=65). Staff were less likely to seek support from services or individuals outside of their family and friends (Figure 34). Over one in ten (12.0%; n=11) staff reported they would not seek help for a mental health problem from anyone on the list.

Staff were asked to rate on a scale of 1 (very unsatisfied) to 10 (very satisfied) how satisfied they were with the provision of resilience building or emotional health and mental wellbeing activities for students and for staff at their school. Over three quarters (78.3%; n=72) of staff were satisfied<sup>6</sup> with the provision for students, and almost seven in ten (68.8%; n=64) were satisfied with the provision for staff at their school. The majority (93.8%; n=61) of staff reported they would be interested in wellbeing or support services for staff being offered in their school.

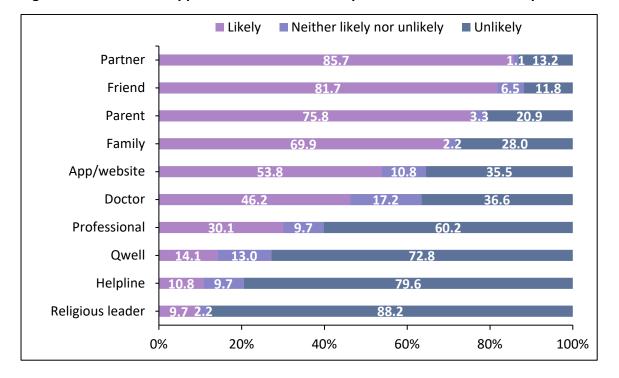


Figure 34: Sources of support staff would seek help from for a mental health problem

<sup>&</sup>lt;sup>6</sup> Score of 6-10.

#### 6. Discussion

Mental disorders are among the major causes of illness and disability in children and young people globally [1, 2]. Critically, untreated mental illness has adverse impacts on numerous domains of functioning, particularly those which cause issues in educational settings, including behavioural problems, school absence, exclusion and truancy [3, 4, 5], low academic achievement [6, 7], substance use [8, 9], violence [10, 11], and delinquency [12]. Thus, measuring levels of mental wellbeing amongst students and understanding associated risk factors for poor mental health is crucial to inform targeting of mental health support and promotion and prevention programmes in schools. In 2019, Sefton Council commissioned LJMU to conduct a survey measuring levels of mental wellbeing and resilience in Sefton school students and staff. As a result of these findings Sefton Council successfully bid for funding for school mental health support teams and mental wellbeing promotion training for school staff. Following COVID-19 and associated lockdowns and school closures there was a need to repeat the survey to determine current levels of wellbeing across the area and explore the potential impact of COVID-19. Approximately 100 staff from across 12 schools (10 primary schools) participated in the staff survey. Almost 1,000 students took part from eleven primary schools; however, participation from secondary schools was low and only one school took part, with approximately 300 students participating. To protect the anonymity and confidentiality of the school and students not all demographic information was presented in this report.

The average score for primary school students on the mental wellbeing measure was 44.95, which is higher than the average score in a sample of Scottish children (43.51), suggesting better wellbeing amongst Sefton students [44]. However it was lower than the average score in the 2019 Sefton school survey (45.85), suggesting level of wellbeing has declined over the past two years. After categorising scores as high, moderate, or low mental wellbeing, 17.4% of primary students had high mental wellbeing, 67.0% had moderate wellbeing, and 15.6% had low mental wellbeing. The average score for secondary school students on the mental wellbeing measure was 24.39, which is higher than the average score (23.57) in an English population sample aged 16-24 years [13], suggesting better wellbeing. Overall, 14.8% of secondary school students had high mental wellbeing, 71.4% had moderate mental wellbeing, and 13.8% had low mental wellbeing. Compared to the 2019 survey wave, prevalence of high mental wellbeing had fallen amongst primary (38.4% vs. 17.4%) and secondary students (21.0% vs. 14.8%) in the 2021 survey. A higher proportion of primary students in the 2021 survey had moderate wellbeing (67.0%) compared to the 2019 wave (44.7%), whilst the prevalence of low mental wellbeing was approximately equal (2019: 17.0%; 2021: 15.6%). The prevalence of moderate mental wellbeing was also higher amongst secondary school students in 2021 (71.4%) compared to 2019 (53.8%) and fewer students had low mental wellbeing in 2021 (13.8%) compared to 2019 (25.2%). However, such differences should be considered in light of the limitations around convenience sampling (i.e. differences could be due to different schools, years etc. taking part).

A range of sociodemographics were identified as risk factors for low mental wellbeing amongst students. Mental wellbeing was significantly associated with gender amongst primary school students, with a greater prevalence of low mental wellbeing in females (17.2%) compared to males (12.6%). It was also significantly associated with year group for primary students, with the prevalence of low mental wellbeing greater amongst primary students in the older year groups (years 5/6, 17.3%), compared to students in younger year groups (years 3/4, 12.1%). There was a significant association between mental wellbeing and disability for both primary and secondary students, with a greater prevalence of low mental wellbeing amongst those with a long-standing illness, disability or difficulty with learning (primary, 28.0%; secondary, 26.5%), compared to students without a disability (primary, 11.0%; secondary, 9.2%). Mental wellbeing was also associated with the primary caregiver(s) for both primary and secondary students. Prevalence of low mental wellbeing was lowest amongst students with both parents looking after them (primary, 13.7%; secondary, 11.9%), compared to those with a single parent (primary, 25.5%; secondary, 18.4%) or students who were being cared for by another family member or someone else (primary, 23.1%; secondary, 25.0%). Further, these demographic relationships with wellbeing held at the other end of the spectrum when considering which groups had greater prevalence of high mental wellbeing (i.e. males, years 3/4, no disability, two parents at home). Research suggests that it is not just the absence of poor health (i.e. low mental wellbeing) but also the presence of good health (high mental wellbeing) which is important for optimal emotional, physical and social wellbeing [25, 13].

Relatively few primary school students had a high level of stress during COVID-19, whilst approximately half were categorised as experiencing moderate stress. The average score amongst primary school students (14.18) was higher than the sample of US students used in the original scale development study (11.24), and was closer to the score of the clinical sample (15.44) used in the study, suggesting that, on average, stress during COVID-19 may have been higher than in normal circumstances [18]. One in ten secondary school students had a high level of stress during COVID-19 whilst a further 68.8% experienced moderate stress. Further, the average score for perceived stress was 17.77, which is higher than the overall average score from a global study conducted in March 2020 [14] however it is lower than the average score for students in the study sample (20.6). Crucially, there was a significant association between level of stress experienced during COVID-19 and current mental wellbeing. No primary or secondary students who reported high stress during COVID-19 had a current high level of mental wellbeing. Almost six in ten (57.1%) primary students and one third (33.3%) of secondary students who reported high levels of stress during COVID-19 had low current wellbeing, compared to 22.8% of primary and 13.% of secondary students who had experienced moderate stress, and just 4.4% of primary and 3.4% of secondary students who had experienced low stress. Whilst causality cannot be established (i.e. those with current low mental wellbeing may have had so prior to the pandemic contributing to level of stress), it does demonstrate that those who experienced high stress during the pandemic are continuing to experience mental health difficulties post-pandemic. This provides evidence that moving forward it is vital that young people who experienced a difficult lockdown and who have poor current mental wellbeing are identified and receive appropriate support and intervention [45, 46].

Key protective factors against low mental wellbeing were also identified in the current study. Individual resilience characteristics such as self-esteem, empathy, problem solving skills, and goals and aspirations were all significantly associated with mental wellbeing. In addition to individual resilience characteristics the importance of good relationships at family, school, community, and peer levels were also highlighted as crucial to mental wellbeing. In general, there was a graded relationship between each resilience characteristic and wellbeing, with prevalence of low mental wellbeing greatest amongst students with a low level of each resilience characteristic, lowest amongst those with high resilience characteristics, and in between for those with moderate levels of each resilience characteristic. Schools are considered crucial settings for developing individual resilience characteristics through, for example, promoting mental health literacy, social and emotional wellbeing, and coping skills [19]. Critically, individual resilience characteristics can also be developed through positive and supportive relationships [20, 21]. Previous research has suggested that safe, secure, and supportive home and school environments are both required for children and adolescents to develop and thrive (WHO, 2018). Data from the 2019 survey demonstrated that having a high level of family support, school adult support, and school peer support was associated with the lowest level of low mental wellbeing, and there was a graded protective effect between the number of sources of support and odds of low mental wellbeing [22]. Whilst all three types of supportive relationships was best, it was not vital and findings showed a protective effect of school sources of support (teacher and peer) against low mental wellbeing for children with low family support. This highlights the critical context schools provide in fostering positive peer relationships and supportive teacher-student relationships to promote mental health and resilience for all children, including both those with and without supportive home environments [22].

Many school-based mental health prevention and promotion (P&P) programmes exist and have a well-established evidence base that demonstrates their success in improving outcomes for children. Specifically, universal interventions (i.e., aimed at all children) have gained in popularity in recent years. As well as avoiding the stigma associated with targeted interventions (i.e., those for young people already deemed to be at-risk; [47]), this approach is intended to have an "immunisation" quality, preventing the onset of negative outcomes in the general population through the promotion of adaptive behaviours and resilience characteristics [48, 49]. In particular, social and emotional learning (SEL) interventions are a type of P&P programme that aim to promote strength-based skills and, when implemented well, they are associated with improvements in a range of personal, social, and health-related outcomes, both in the short- (e.g., reductions in emotional distress) and long- (e.g., reductions in adult mental health difficulties) term [23]. According to the Collaborative for Academic, Social, and Emotional Learning [50], SEL interventions promote five key inter and intra cognitive, social, and emotional skills: self-awareness, self-management, social awareness, relationship skills, and responsible decision making. Thus, SEL interventions help children to both establish and maintain healthy relationships, a crucial source of support and a protective factor for mental wellbeing. Typically, SEL interventions develop these skills through the promotion of empathy, emotional recognition and vocabulary, overcoming communication barriers, appropriate social behaviours, and acceptance of diversity. A variety of strategies for this exist within SEL programmes, including role-play, building and modelling schemas, discussion of scenario-based stories, and problem-solving activities. Some SEL programmes also adopt a 'school ethos' or 'school climate' component, promoting a positive culture throughout the whole school, often integrating aspects of SEL into the school rules (see [51] for an overview of SEL components). Conversely, peer support programmes offer an alternative method of promoting positive relationships in school. 'Peer support' is an umbrella term that encompasses a variety of intervention types, including tutoring, mentoring, befriending, and buddying. They can be universal or targeted in nature and involve young people helping and supporting each other in a planned and structured way [24]. For instance, a recent evaluation [52] of the Anna Freud Centre's Peer Support for Mental Health and Wellbeing programme evidenced improvements in community connection and the majority of pupils felt that the pilot helped with their understanding of mental health issues in children.

The average score for staff on the mental wellbeing measure was 24.97. This is slightly higher than the average wellbeing score for the English population (23.5) [13]. After categorising scores as high, moderate, or low mental wellbeing, 5.4% of staff had high mental wellbeing, 76.3% had moderate wellbeing, and 18.3% had low mental wellbeing. Compared to the 2019 survey wave, prevalence of high mental wellbeing was lower amongst staff in the 2021 survey (10.9% vs. 5.4%). However, such differences should be considered in light of the limitations around convenience sampling and use of different measures (the full WEMWBS measure was used in 2019). Rates of low mental wellbeing were significantly greater amongst male staff compared to female staff, and amongst secondary staff compared to primary staff. Levels of resilience were relatively high amongst staff, with three quarters having high resilience and just 5.4% with low resilience. Relatively few staff had a high level of stress during COVID-19, with approximately seven in ten experiencing moderate stress. The average score amongst staff (17.50) on the stress measure was similar to the average score (17.4) in a global study conducted across 41 countries during March 2020 [14]. This score is considered a moderate score, however it is significantly higher than reported in other general population studies done in the US and European countries prior to the pandemic, suggesting it was a more stressful period than usual circumstances [15, 16, 17]. Furthermore, approximately one quarter of staff reported their experience as bad, hard, and boring, whilst three in ten staff reported their experience of teaching online as bad, hard, and boring. Overall, the majority of staff were satisfied with their school's provision of wellbeing activities for students, although satisfaction with provision for staff was lower and almost all staff agreed they would be interested in wellbeing or support services for staff being offered in their school. Such provision is important given research shows that better teacher wellbeing is associated with higher student wellbeing and with lower student psychological problems [53]

Whilst the 2021 survey provided an important snapshot of mental wellbeing across Sefton's school staff and students, it was limited by a lower uptake in participation than the 2019 survey wave. Particularly problematic was the completion of the survey by only one secondary school, which prevented a comprehensive understanding of wellbeing amongst secondary school students across Sefton. Furthermore, uptake amongst staff was lower than in 2019 and this prevented a full analysis exploring associations between different measures and sociodemographics. Local insight and good data is crucial to identifying levels of need and risk and protective factors specific to local populations. This data facilitates the use of

targeted, evidence driven intelligence to develop local joint strategic needs assessments and the commissioning, targeting and evaluation of interventions which improve the mental wellbeing of children and young people [25]. Schools are ideal settings for collecting such data, and whilst 2021 may have been exceptional in circumstances with school closures and an emphasis on 'catching up' impacting on levels of participation, schools may still require encouragement and support in any future survey waves to ensure sample sizes are adequate to inform local needs and targeting of interventions.

#### Recommendations

- Schools are a critical setting to foster positive peer relationships and supportive teacher-student relationships to promote mental health and resilience for all children, including both those with and without supportive home environment. Consider implementation of universal, evidence-based mental health prevention and promotion programmes in schools, such as social and emotional learning interventions and peer support programmes, which foster these relationships and develop resilience. Ensure schools and staff are aware of the importance of such relationships to improve student wellbeing and thus reduce subsequent associated school issues such as absenteeism, truancy, poor academic performance and exclusions.
- Identify and support young people who experienced a difficult lockdown and/or have poor current mental wellbeing through targeted support programmes.
- Given better teacher wellbeing is associated with higher student wellbeing and with lower student psychological problems consider what programmes can be put in place to ensure staff are adequately supported.
- Schools are ideal settings for collecting data on levels of mental wellbeing to monitor trends across time and evaluate the effectiveness of policy and programmes. Consult with schools about how best they can be supported to implement any future survey waves to ensure sample sizes are adequate to inform local needs and targeting of interventions.

### 7. References

- [1] F. M. Gore, P. J. N. Bloem, G. C. Patton, J. Ferguson, V. Joseph, C. Coffey and et al., "Global burden of disease in young people aged 10-24 years: a systematic analysis," *The Lancet*, vol. 377, no. 9783, pp. 2093-2102, 2011.
- [2] Institute for Health Metrics and Evaluation, "2019 Global Burden of Disease (GBD)study," University of Washington, 2022. [Online]. [Accessed 03 August 2022].
- [3] T. Ford, C. Parker, J. Salim, R. Goodman, S. Logan and W. Henley, "The realtionship between exclusion from school and mental health: a secondary analysis of the British Child and Adolescent Mental Health Survey 2004 and 2007," *Psychological Medicine*, vol. 48, pp. 629-641, 2018.
- [4] J. J. Wood, D. S. Lynne-Landsman, D. A. Langer, P. A. Wood, S. L. Clark, J. M. Eddy and et al., "School attendance problems and youth psychopathology: structural cross-lagged regression models in three longitudinal data sets," *Child Development*, vol. 83, pp. 351-366, 2012.
- [5] H. L. Egger, E. J. Costello and A. Angold, "School refusal and psychiatric disorders: a community study," *Journal of the American Academy of Child and Adolescent Psychiatry*, vol. 42, pp. 797-807, 2003.
- [6] J. D. McLeod, R. Uemura and S. Rohrman, "Adolescent mental health, behavior problems, and academic achievement," *Journal of Health and Social Behavior*, vol. 53, no. 4, pp. 482-497, 2012.
- [7] J. Deighton, N. Humphrey, J. Belsky, J. Boehnke, P. Vostanis and P. Patalay, "Longitudinal pathways between mental health difficulties and academic performance during middle childhood and early adolescence," *British Journal of Developmental Psychology*, vol. 36, pp. 110-126, 2018.
- [8] D. B. Kandel, J. G. Johnson, H. R. Bird, G. Canino, S. H. Goodman, B. B. Lahey, D. A. Regier and M. Schwab-Stone, "Psychiatric disorders associated with substance use among children and adolescents: findings from the Methods for the Epidemiology of Child and Adolescent Mental Disorders (MECA) Study," *Journal of Abnormal Child Psychology*, vol. 25, no. 2, pp. 121-132, 1997.
- [9] R. D. Goodwin, D. M. Fergusson and J. L. Horwood, "Association between anxiety disorders and substance use disorders among young persons: results of a 21-year longitudinal study," *Journal of Psychiatric Research*, vol. 38, no. 3, pp. 295-304, 2004.
- [10] E. B. Elborgen and S. C. Johnson, "The intricate link between violence and mental disorder: results from the National Epidemiologica Survey on alcohol and Related Conditions," *Archives of General Psychiatry*, vol. 66, no. 2, pp. 152-161, 2009.
- [11] L. Arseneault, T. E. Moffitt, A. Caspi, P. J. Taylor and P. A. Silva, "Mental disorders and violence in a total birth cohort: results from the Dunedin Study," *Archives of General Psychiatry*, vol. 57, no. 10, pp. 979-986, 2000.
- [12] M. H. Sibley, W. E. Pelham, B. S. Molina, E. M. Gnagy, D. A. Waschbusch, A. Biswas, M. G. MacLean, D. E. Babinski and K. M. Karch, "The delinquency outcomes of boys with ADHD with and without comorbidity," *Journal of Abnormal Child Psychology*, vol. 39, no. 1, pp. 21-32, 2011.
- [13] L. Ng Fat, S. Scholes, S. Boniface, J. Mindell and S. Stewart-Brown, "Evaluating and establishing the national norms for mental well-being using the short Warwick-Edinburgh Mental Well-being Scale (SWEMWBS): findings from the Health Survey for England," *Quality of Life Research*, vol. 26, no. 5, pp. 1129-1144, 2017.
- [14] S. Gamonai-Limacaoco, E. Montero-Mateos, M. T. Lozano-Lopez, A. Macia-Casas, J. M. Fernandez and C. Roncero, "Perceived stress in different countries at the beinning of the coronavirus pandemic," *The International Journal of Psychiatry in Medicine*, vol. 57, no. 4, 2021.
- [15] S. Cohen, "Perceived stress in a probability sample of the United States," in *The social psychology of health*, Sage Publications, 1988, pp. 31-67.
- [16] M. Nordin and S. Nordin, "Psychometric evaluation and normative data of the Swedish version of the 10item perceived stress scale," Scand J Psychol, vol. 54, pp. 502-507, 2013.

- [17] E. M. Klein, E. Brahler, M. Dreier and et al., "The German version of the Perceived Stress Scale psychometric characteristics in a representive German community sample," *BMC Psychiatry*, vol. 16, pp. 1-10, 2016.
- [18] B. P. White, "The Perceived Stress Scale for Children: A pilot study in a sample of 153 children," International Journal of Pediatrics and Child Health, vol. 2, no. 1, pp. 1-8, 2014.
- [19] W. Caan, J. Cassidy, G. Coverdale, M. A. Ha, W. Nicholson and M. Rao, "The value of using schools as community assests for health," *Public Health*, vol. 129, no. 1, pp. 3-16, 2015.
- [20] G. Morrison and M. Allen, "Promoting student resilience in school contexts," *Theory into Practice*, vol. 46, no. 2, pp. 162-169, 2007.
- [21] J. D. Sharkey, S. You and K. Schnoebelen, "relations among school assests, individual resilience, and student engagement for youth grouped by level of family functioning," *Psychology in the School*, vol. 45, no. 5, pp. 402-418, 2008.
- [22] N. Butler, Z. Quigg, R. Bates, L. Jones, E. Ashworth, S. Gowland and M. Jones, "The contributing role of family, school and peer resilience resources in protecting children and adolescents' mental wellbeing," *School Mental Health*, submitted.
- [23] M. Wigelsworth, L. Verity, C. Mason, P. Qualter and N. Humphrey, "Social and emotional learning in primary schools: A review of the current state of evidence," *British Journal of Educational Psychology*, vol. 92, pp. 898-924, 2022.
- [24] Anna Freud National Centre for Children and Families, "Peer support for children and young people's mental health and emotional wellbeing: Programme facilitator toolkit," Anna Freud National Centre for Children and Families, London, 2018.
- [25] Public Health England, "Measuring mental wellbeing in children and young people," Public Health England, London, 2015.
- [26] World Health Organization, "Adolescent mental health," World Health Organization, 17 November 2021.
   [Online]. Available: https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health.
   [Accessed 03 August 2022].
- [27] T. Newlove-Delgado, T. Williams, K. Robertson, S. McManus, K. Sadler, T. Vizard, C. Cartwright, F. Mathews, S. Norman, F. Marcheselli and T. Ford, "Mental Health of Children and Young People in England 2021," NHS Digital, Leeds, 2021.
- [28] J. Pitchforth, K. Fahy, T. Ford, M. Wolpert, R. M. Viner and D. S. Hargreaves, "Mental health and wellbeing trends among children and young people in the UK, 1995-2014: analysis of repeated cross-sectional national health surveys," *Psychological Medicine*, pp. 1-11, 2018.
- [29] NSPCC, "Statistics briefing: the impact of coronavirus," NSPCC, 2022.
- [30] P. Idele, "Children and youth mental health under COVID-19," UNICEF Office of Research Innocenti, 2021.
- [31] L. Vorhaus and J. Vorhaus, "The impact of pupil behaviour and wellbeing on educational outcomes," Department for Education, London, 2012.
- [32] E. Fombonne, G. Wostear, V. Cooper, R. Harrington and M. Rutter, "The Maudsley long-term follow-up of child and adolescent depression. 1. psychiatric outcomes in adulthood," *British Journal of Psychiatry*, vol. 179, pp. 210-217, 2001.
- [33] J. Reef, S. Diamantopoulou, I. van Meurs, F. C. Verhulst and J. van der Ende, "Developmental trajectories of child to adolescent externalizing behaviour and adult DSM-IV disorder: results of a 24-year longitudinal study," *Social Psychiatry and Psychiatric Epidemiology*, vol. 46, no. 12, pp. 1233-1241, 2011.
- [34] World Health Organization Regional Office for Europe, "Adolescent mental health in the European Region," World Health Organization Regional Office for Europe, Copenhagen, 2018.
- [35] G. Rees, J. Bradshaw, H. Goswami and A. Keung, "Understanding children's well-being: a national survey of young people's well-beng," The Children's Society, London, 2010.
- [36] K. Hughes, K. Ford, A. R. Davies, L. Homolova and M. A. Bellis, "Sources of resilience and their moderating relationships with harms from adverse childhood experiences," Public Health Wales, Wrexham, 2018.

- [37] L. Jones, N. Butler, K. Ross-Houle, Z. Quigg, E. McCoy, R. Harrison, R. Bates, C. Bigland, J. Ubido and L. Porcellato, "Supporting young people's emotional health and wellbeing in Sefton: final report," Public Health Institute, Liverpool John Moores University, Liverpool, 2019.
- [38] M. T. McKay and J. R. Andretta, "Evidene for the psychometric validity, internal consistency and measurement invariance of Warwick Edinburgh Mental Well-being Scale scores in Scottish and Irish Adolescents," *Psychiatry Research*, vol. 255, pp. 382-386, 2017.
- [39] Resilience Research Centre, "CYRM and ARM user manual," Resilience Research Centre, Dalhousie University, Halifax, NS, 2018.
- [40] Resilience Research Centre, "The Resilience Research Centre Adult Resilience Measure (RRC-ARM): User's manual," Resilience Research Centre, Halifax, NS, 2016.
- [41] S. Cohen, T. Kamarck and R. Mermelstein, "A global measure of perceived stress," *Journal of Health and Social Behavior*, vol. 24, no. 4, pp. 385-396, 1983.
- [42] E. H. Lee, "Review of the psychometric evidence of the Perceived Stress Scale," *Asian Nursing Research*, vol. 6, no. 4, pp. 121-127, 2012.
- [43] A. Kechter, D. S. Black, N. R. Riggs, C. M. Warren, A. Ritt-Olsen, C. P. Chou and M. A. Pentz, "Factors in the Perceived Stress Scale differentially associate with mindfulness disposition and executive function among early adolescents," *Journal of Child and Family Studies*, vol. 28, no. 3, pp. 814-821, 2019.
- [44] I. Liddle and G. F. A. Carter, "Emotional and psychological well-being in children: the development and validation of the Stirling Children's Well-being Scale," *Educational Psychology in Practice*, vol. 31, no. 2, pp. 174-185, 2015.
- [45] M. Ungar, "Community resilience for youth and families: facilitative physical and social capitals in contexts of adversity," *Child Youth Service Review*, vol. 33, no. 9, pp. 1742-1748, 2011.
- [46] E. Ashworth, D. W. Putwain, S. McLoughlin, P. Saini, J. Chopra, B. Rosser and C. Eames, "Ordinary magic in extraordinary circumstances: factors associated with positive mental health outcomes for early adolescents during the COVID-19 pandemic," *Advers Resil Sci*, vol. 3, no. 1, pp. 65-79, 2022.
- [47] J. Poduska, S. Kellam, W. Wang, C. Brown, N. Ialongo and P. Toyinbo, "Impact of the good behavior game, a universal classroom-based behavior intervention, on young adult service use for problems with emotions, behavior, or drugs or alcohol," *Drug and Alcohol Dependence*, vol. 95S, pp. S29-S44, 2008.
- [48] D. D. Embry, "Community-based prevention using simple, low-cost, evidence-based kernels and behavior vaccines," *Journal of Community Psychology*, vol. 32, pp. 575-591, 2004.
- [49] A. Lendrum and M. Wigelsworth, "The evaluation of school-based social and emotional learning interventions: Current issues and future directions," *The Psychology of Education Review*, vol. 37, pp. 7-74, 2013.
- [50] Collaborative for Academic, Social, and Emotional Learning (CASEL), "Effective social and emotional learning programs: Preschool and elementary school edition. CASEL Guide 2013," Collaborative for Academic, Social, and Emotional Learning (CASEL), Chicago, 2012.
- [51] M. Wigelsworth, L. Verity, C. Mason, N. Humphrey, P. Qualter and P. Troncoso, "Primary social and emotional learning: Evidence review," Education Endowment Foundation, London, 2019.
- [52] L. Day, D. Campbell-Jack and E. Bertolotto, "Evaluation of the peer support for mental health and wellbeing pilots," Department for Education, London, 2020.
- [53] S. Harding, R. Morris, D. Gunnell, T. Ford, W. Hollingworth, K. Tilling, R. Evans, S. Bell, J. Grey, R. Brockman, R. Campbell, R. Araya, S. Murphy and J. Kidger, "Is teachers' mental health and wellbeing associated with students' mental health and wellbeing," *Journal of Affective Disorders*, vol. 253, pp. 460-466, 2018.

## 8. Data Annex

8.1 Primary school student survey data tables

		%	n
Gender	Male	50.9	483
	Female	49.1	466
Year group	3	0.3	3
	4	34.0	339
	5	26.0	259
	6	39.8	397
Free school meals	Yes	15.6	121
	No	84.4	654
Disability	Yes	17.8	137
	No	82.2	634
Primary caregiver(s)	Single parent	13.6	130
	Two parents	84.3	804
	Other	2.1	20

### Table A1: Primary school students' sociodemographics

			Self-este	em			Empat	hy			Problem s	solving			Goals & aspirations			
		Low	Moderate	High		Low	Moderate	High		Low	Moderate	High		Low	Moderate	High		
All		6.9	21.2	71.9		2.9	19.6	77.5		11.0	24.4	64.6		7.5	22.1	70.4		
Gender	Male	4.1	18.4	77.4		3.8	20.4	75.9		9.3	21.3	64.9		5.1	20.7	74.2		
	Female	8.7	24.0	67.3		1.6	17.6	80.8		11.1	27.5	61.4		8.9	22.9	68.2		
	χ2				12.938				5.649				6.019				6.230	
	р				<0.01				NS				<0.05				<0.05	
Year group	3/4	5.7	17.5	76.8		1.5	19.8	78.7		5.8	20.0	74.2		5.9	20.5	73.6		
	5/6	7.5	23.0	69.5		3.6	19.5	76.9		13.7	26.7	59.6		8.3	22.9	68.9		
	χ2				5.153				3.098				21.204				2.633	
	р				NS				NS				<0.001				NS	
Free school	Yes	7.9	16.8	75.2		2.7	19.6	77.7		10.1	22.2	67.7		11.1	20.4	68.5		
meals	No	5.6	22.2	72.2		3.3	20.2	76.5		11.5	26.7	61.9		6.8	22.9	70.3		
	χ2				2.097				0.160				1.234				2.627	
	Р				NS				NS				NS				NS	
Disability	Yes	14.5	30.0	55.5		4.0	19.2	76.8		20.0	23.5	56.5		13.5	23.8	62.7		
	No	5.1	18.6	76.3		2.3	18.4	79.3		9.5	22.1	68.5		5.5	21.2	73.3		
	χ2				24.091				1.314				11.623				11.641	
	р				<0.001				NS				<0.01				<0.01	
Primary	Single	14.4	19.8	65.8		1.6	19.7	78.7		22.0	15.6	62.4		14.6	22.0	63.4		
caregiver(s)	parent																	
	Two	4.8	21.6	73.6		2.7	19.1	78.1		8.6	25.8	65.6		6.3	21.9	71.8		
	parents															6		
	Other	23.5	11.8	64.7		6.3	25.0	68.8		26.7	26.7	46.7		5.6	16.7	77.8		
	χ2				23.448				1.846				24.751				11.274	
	р				<0.001				NS				<0.001				<0.05	

 Table A2: Individual sources of resilience in primary school students by sociodemographics

			Family cor	nnection	1		Family parti	cipatio	n	(	Community o	connect	ion	C	ommunity pa	articipa	tion
		Low	Moderate	High		Low	Moderate	High		Low	Moderate	High		Low	Moderate	High	
All		1.2	9.6	89.2		9.1	41.2	49.7		1.4	7.3	91.3		16.0	19.3	64.7	
Gender	Male	0.9	10.0	89.1		10.1	36.8	53.1		1.6	6.5	91.9		15.2	19.3	65.5	
	Female	1.6	8.4	89.9		7.0	46.2	46.9		1.2	7.5	91.3		17.2	19.0	63.9	
	χ2				1.488				8.608				0.589				0.658
	р				NS				<0.05				NS				NS
Year group	3/4	2.3	9.8	87.9		9.2	38.8	52.0		2.0	6.5	91.5		15.0	18.4	66.6	
	5/6	0.7	9.5	89.8		9.0	42.4	48.6		1.2	7.7	91.2		16.6	19.7	63.7	
	χ2				4.456				1.106				1.251				0.756
	р				NS				NS				NS				NS
Free school	Yes	0.9	12.6	86.5		13.2	32.1	54.7		0.9	4.5	94.6		28.9	27.2	43.9	
meals	No	1.1	9.0	89.8		8.2	41.8	50.0		1.5	7.6	90.9		14.9	16.5	68.6	
	χ2				1.439				5.050				1.715				26.299
	р				NS				NS				NS				< 0.001
Disability	Yes	4.2	14.4	81.4		10.8	41.7	47.5		5.0	12.6	82.4		18.8	28.9	52.3	
	No	0.7	8.0	91.4		7.8	39.8	52.4		1.0	6.3	92.7		14.8	15.9	69.3	
	χ2				15.700				1.701				16.181				15.553
	р				<0.001				NS				<0.001				<0.001
Primary	Single	2.6	15.4	82.1		11.4	36.0	52.6		3.4	7.8	88.8		26.8	22.8	50.4	
caregiver(s)	parent																
	Two	0.9	8.6	90.5		8.4	41.6	50.1		0.8	7.2	91.9		14.3	18.2	67.5	
	parents																
	Other	0.0	6.3	93.8		22.2	50.0	27.8		6.3	0.0	93.8		10.5	31.6	57.9	
	χ2				8.572				7.587				10.157				18.375
	р				NS				NS				<0.05				<0.01

 Table A3: Family and community sources of resilience in primary school students by sociodemographics

			School con	nection			School partic	ipation			Peer sup	port	
		Low	Moderate	High		Low	Moderate	High		Low	Moderate	High	
All		2.9	13.5	83.6		30.4	46.9	22.7		6.2	14.3	79.5	
Gender	Male	3.4	14.4	82.2		33.2	42.8	24.0		6.7	15.9	77.4	
	Female	1.7	11.8	86.6		26.9	51.6	21.5		4.4	12.9	82.7	
	χ2				3.956				7.060				3.958
	р				NS				<0.05				NS
Year group	3/4	2.9	10.3	86.8		27.0	45.3	27.7		4.2	12.2	83.6	
	5/6	2.9	15.3	81.8		32.2	47.7	20.1		7.2	15.3	77.4	
	χ2				4.356				7.159				5.047
	p				NS				<0.05				NS
Free school	Yes	2.7	12.7	84.5		26.4	51.9	21.7		9.9	15.8	74.3	
meals	No	3.4	14.0	82.6		30.7	47.4	22.0		4.9	14.7	80.4	
	χ2				0.290				0.926				4.242
	р				NS				NS				NS
Disability	Yes	5.4	17.1	77.5		33.6	45.4	21.0		15.9	15.0	69.2	
	No	2.2	12.2	85.6		27.5	49.2	23.3		4.2	11.8	84.0	
	χ2				5.880				1.831				23.477
	р				NS				NS				<0.001
Primary	Single	4.5	11.8	83.6		33.3	42.1	24.6		11.2	10.3	78.5	
caregiver(s)	parent												
	Two parents	2.1	13.7	84.2		28.4	48.9	22.6		4.7	14.8	80.4	
	Other	0.0	17.6	82.4		52.9	23.5	23.5		20.0	6.7	73.3	
	χ2				3.281				7.241				13.872
	р				NS				NS				<0.01

Table A4: School and peer sources of resilience in primary school students by sociodemographics

			Stress during	COVID-1	9
		Low	Moderate	High	
All		48.2	48.7	3.1	
Gender	Male	50.7	47.3	2.0	
	Female	46.8	49.9	3.4	
	χ2				2.034
	p				NS
Year group	3/4	47.5	49.2	3.3	
	5/6	48.5	48.5	3.1	
	χ2				0.072
	p				NS
Free school meals	Yes	50.0	47.7	2.3	
	No	47.6	49.6	2.8	
	χ2				0.204
	p				NS
Disability	Yes	40.0	49.5	10.5	
	No	52.7	45.8	1.6	
	χ2				24.197
	p				<0.001
Primary caregiver(s)	Single parent	39.8	53.8	6.5	
	Two parents	48.9	48.5	2.6	
	Other	75.0	25.0	0.0	
	χ2				9.391
	p				NS

#### Table A5: Stress during COVID-19 in primary school students by sociodemographics

			Mental we	ellbeing	
		Low	Moderate	High	
All		15.6	67.0	17.4	
Gender	Male	12.6	67.1	20.3	
	Female	17.2	68.1	14.6	
	χ2				6.216
	p				<0.05
Year group	3/4	12.1	66.4	21.5	
	5/6	17.3	67.3	15.4	
	χ2				6.671
	p				<0.05
Free school meals	Yes	17.0	59.6	23.4	
	No	14.1	68.8	17.1	
	χ2				3.228
	p				NS
Disability	Yes	28.0	57.0	15.0	
	No	11.0	69.1	19.9	
	χ2				21.864
	p				<0.001
Primary caregiver(s)	Single parent	25.5	59.2	15.3	
	Two parents	13.7	68.1	18.2	
	Other	23.1	61.5	15.4	
	χ2				9.826
	p				<0.05

#### Table A6: Mental wellbeing in primary school students by sociodemographics

Table A7. Wental wenbeing i			Mental we		
		Low	Moderate	High	
Self-esteem	Low	75.0	22.7	2.3	
	Moderate	28.6	70.1	1.4	
	High	4.6	71.4	24.0	
	χ2				232.665
	p				<0.001
Empathy	Low	45.5	50.0	4.5	
	Moderate	22.9	67.3	9.8	
	High	12.0	67.8	20.2	
	χ2				34.125
	p				<0.001
Problem solving	Low	58.5	39.0	2.4	
	Moderate	18.6	75.0	6.4	
	High	5.7	68.0	26.3	
	χ2				185.491
	p				<0.001
Goals and aspirations	Low	64.8	35.2	0.0	
	Moderate	27.3	65.2	7.5	
	High	6.7	70.7	22.5	
	χ2				164.973
	р				<0.001

#### Table A7: Mental wellbeing in primary school students by individual sources of resilience

Table A8: Mental Wellbeing In	<b>p</b>	Mental wellbeing Low Moderate High								
		Low	Moderate	High						
Family connection	Low	66.7	33.3	0.0						
	Moderate	47.9	50.7	1.4						
	High	10.7	69.5	19.8						
	χ2				95.201					
	р				<0.001					
Family participation	Low	48.3	48.3	3.4						
	Moderate	19.6	71.0	9.3						
	High	6.2	66.0	27.9						
	χ2				110.187					
	р				<0.001					
Community	Low	70.0	20.0	10.0						
connection	Moderate	54.7	43.4	1.9						
	High	11.2	69.4	19.4						
	χ2				99.508					
	р			_	<0.001					
Community	Low	25.2	61.3	13.4						
participation	Moderate	25.7	62.8	11.5						
	High	10.2	69.3	20.6						
	χ2				34.372					
	p	647	20.4	5.0	<0.001					
School connection	Low	64.7	29.4	5.9						
	Moderate	35.4	59.6	5.1						
	High	10.1	69.2	20.6	02 227					
	χ2				83.227					
School participation	p	28.7	62.0	8.3	<0.001					
School participation	Low Moderate	28.7 13.1	63.0 71.9							
		4.5	60.8	15.0 34.7						
	High	4.5	00.8	54.7	82.833					
	χ2				82.833 <0.001					
Peer support	р Low	66.7	33.3	0.0	<0.001					
	Moderate	33.3	62.5	4.2						
	High	8.2	70.9	20.9						
	riigi χ2	0.2	70.3	20.5	148.869					
	χ2 ρ				<0.001					
	p				<b>\U.UU1</b>					

			Mental we	ellbeing	
		Low	Moderate	High	
Stress during COVID-19	Low	4.4			
	Moderate	22.8	67.2	10.0	
	High	57.1	42.9	0.0	
	χ2				97.469
	p				<0.001

## Table A9: Mental wellbeing in primary school students by stress during COVID-19

# 8.2 Secondary school student survey data tables

		%	n
Year group	7	21.2	65
	8	31.9	98
	9	29.0	89
	10	2.9	9
	11	15.0	46
Ethnicity	White British	83.9	239
	Other	16.1	46
Sexuality	Heterosexual	93.5	272
	LGBTQIA+	6.5	19
Disability	Yes	21.9	55
	No	78.1	196
Primary caregiver(s)	Single parent	17.0	51
	Two parents	78.7	236
	Other	4.3	13

# Table A10: Secondary school students' sociodemographics

			Self-est	eem			Empat	hy			Problem	solving			Goals & asp	iration	s
		Low	Moderate	High		Low	Moderate	High		Low	Moderate	High		Low	Moderate	High	
All		5.5	22.0	72.5		10.8	32.4	56.8		22.7	31.2	46.1		7.8	26.1	66.1	
Year group	7/8/9	5.8	22.5	71.7		9.9	32.6	57.4		22.5	31.5	45.9		7.4	27.6	65.0	
	10/11	3.9	19.6	76.5		14.8	31.5	53.7		23.4	29.8	46.8		9.6	19.2	71.2	
	χ2				0.573				1.106				0.057				1.653
	р				NS				NS				NS				NS
Ethnicity	White British	5.2	23.5	71.3		11.1	32.1	56.8		21.5	31.3	47.2		7.2	27.7	65.1	
	Other	9.1	13.6	77.3		11.4	31.8	56.8		28.2	33.3	38.5		9.8	14.6	75.6	
	χ2				2.765				0.003				1.251				3.172
	р				NS				NS				NS				NS
Sexuality	Heterosexual	5.0	21.2	73.7		10.3	34.2	55.5		22.6	31.8	45.6		8.0	23.7	68.3	
	LGBTQIA+	5.6	27.8	66.7		15.8	21.4	63.2		12.5	25.0	62.5		0.0	50.0	50.0	
	χ2				0.457				1.615				1.834				6.892
	р				NS				NS				NS				<0.05
Disability	Yes	13.7	17.6	68.6		20.0	24.0	56.0		37.2	18.6	44.2		16.0	28.0	56.0	
	No	3.7	21.7	74.6		7.8	33.7	58.5		15.9	35.2	48.9		5.2	27.5	67.4	
	χ2				7.426				6.990				10.949				7.067
D.1	p		267	50.0	<0.05	110	26.0	50.0	<0.05	20 5	40.0	20 5	<0.01	10.0	25.5	62.0	<0.05
Primary caregiver(s)	Single parent	4.1	36.7	59.2		14.0	36.0	50.0		29.5	40.9	29.5		10.6	25.5	63.8	
	Two parents	4.0	19.0	77.0		9.6	30.1	60.3		20.0	31.0	49.0		6.5	26.4	67.1	
	Other	45.5	9.1	45.5		25.0	50.0	25.0		45.5	9.1	45.5		16.7	25.0	58.3	
	χ2				42.078				7.680				10.120				2.444
	р				<0.001				NS				<0.05				0.655

## Table A11: Individual sources of resilience in secondary school students by sociodemographics

		Family connection		Family participation		Community connection			Community participation								
		Low	Moderate	High		Low	Moderate	High		Low	Moderate	High		Low	Moderate	High	
All		1.3	9.3	89.4		13.5	44.1	42.4		1.7	10.1	88.2		23.1	19.7	57.3	
Year group	7/8/9	1.2	9.7	89.1		12.3	45.3	42.4		1.6	10.7	87.7		23.0	17.7	59.3	
	10/11	1.9	7.4	90.7		18.5	38.9	42.6		1.9	7.7	90.4		23.1	28.8	48.1	
	χ2 p				0.398 NS				1.658 NS				0.427 NS				3.644 NS
Ethnicity	White British	0.4	8.4	91.1		13.2	44.4	42.3		0.9	9.0	90.2	110	20.3	19.8	59.9	110
	<b>Other</b> χ2 p	4.4	13.3	82.2	7.070 <0.05	17.8	33.3	48.9	2.023 NS	7.0	11.6	81.4	8.130 <0.05	25.0	20.5	54.5	0.583 NS
Sexuality	Heterosexual LGBTQIA+ χ2 p	1.1 0.0	9.7 5.3	89.2 94.7	0.645 NS	13.3 11.1	42.8 61.1	43.9 27.8	2.369 NS	1.5 0.0	10.3 10.5	88.2 89.5	0.293 NS	21.2 23.5	20.1 23.5	58.7 52.9	0.225 NS
Disability	Yes No χ2 p	5.7 0.0	15.1 7.2	79.2 92.8	14.835 <0.001	26.9 9.4	32.7 47.9	40.4 42.7	11.783 <0.01	5.9 1.0	15.7 7.3	78.4 91.7	8.520 <0.05	21.6 26.2	29.4 15.7	49.0 58.1	4.998 NS
Primary caregiver(s)	Single parent	2.0	14.0	84.0		19.6	51.0	29.4		2.0	14.3	83.7		28.6	20.4	51.0	
2 ()	Two parents Other	0.0 25.0	8.1 16.7	91.9 58.3		10.5 50.0	43.2 25.0	46.3 25.0		0.9 16.7	8.3 25.0	90.9 58.3		20.9 33.3	18.3 50.0	60.9 16.7	
	χ2 p	20.0	10.7	50.5	56.795 <0.001	50.0	23.0	23.0	19.856 <0.001	10.7	23.0	50.5	22.421 <0.001	55.5	50.0	10.7	11.753 <0.05

## Table A12: Family and community sources of resilience in secondary school students by sociodemographics

			School con	nection			School partion	ipation			Peer sup	port	
		Low	Moderate	High		Low	Moderate	High		Low	Moderate	High	
All		10.7	26.8	62.4		46.2	38.8	15.1		8.8	26.7	64.5	
Year group	7/8/9	10.7	26.6	62.7		45.7	38.8	15.5		8.1	27.0	64.9	
	10/11	11.1	27.8	61.1		48.1	38.9	13.0		11.8	25.5	62.7	
	χ2				0.048				0.248				0.696
	р				NS				NS				NS
Ethnicity	White British	9.3	26.2	64.6		43.9	40.9	15.2		6.8	26.7	66.5	
	Other	15.9	34.1	50.0		48.9	33.3	17.8		13.2	23.7	63.2	
	χ2				3.693				0.924				1.872
	р				NS				NS				NS
Sexuality	Heterosexual	9.8	27.1	63.2		45.3	38.1	16.6		7.7	27.0	65.3	
	LGBTQIA+	15.8	15.8	68.4		42.1	57.9	0.0		6.3	25.0	68.8	
	χ2				1.565				4.954				0.089
	р				NS				NS				NS
Disability	Yes	15.7	15.7	68.6		42.3	38.5	19.2		20.0	22.2	57.8	
	No	8.8	26.8	64.4		44.6	40.9	14.5		5.6	24.6	69.8	
	χ2				4.044				0.698				9.666
	р				NS				NS				<0.01
Primary caregiver(s)	Single parent	13.7	25.5	60.8		56.9	35.3	7.8		10.6	34.0	55.3	
	Two parents	8.3	27.4	64.3		44.0	38.8	17.2		6.6	25.9	67.5	
	Other	50.0	16.7	33.3		41.7	50.0	8.3		33.3	11.1	55.6	
	χ2				20.944				4.925				10.722
	р				<0.001				NS				<0.05

## Table A13: School and peer sources of resilience in secondary school students by sociodemographics

			Stress during	COVID-1	.9
		Low	Moderate	High	
All		22.6	68.8	8.6	
Year group	7/8/9	22.1	68.6	9.3	
	10/11	24.5	69.8	5.7	
	χ2				0.778
	p				NS
Ethnicity	White British	20.5	70.5	8.9	
	Other	31.7	61.0	7.3	
	χ2				2.505
	p				NS
Sexuality	Heterosexual	22.5	70.3	7.2	
	LGBTQIA+	16.7	72.2	11.1	
	χ2				0.604
	p				NS
Disability	Yes	14.6	66.7	18.8	
	No	27.7	66.8	5.4	
	χ2				10.868
	p				<0.01
Primary caregiver(s)	Single parent	15.6	73.3	11.1	
	Two parents	25.2	67.9	6.9	
	Other	8.3	58.3	33.3	
	χ2				12.503
	р				<0.05

 Table A14: Stress during COVID-19 in secondary school students by sociodemographics

			Mental wellbeing		
		Low	Moderate	High	
All		13.8	71.4	14.8	
Year group	7/8/9	14.2	70.3	15.5	
	10/11	11.8	76.5	11.8	
	χ2				0.806
	p				NS
Ethnicity	White British	13.7	70.4	15.9	
	Other	11.6	74.4	14.0	
	χ2				0.292
	p				NS
Sexuality	Heterosexual	13.0	71.3	15.7	
	LGBTQIA+	23.5	70.6	5.9	
	χ2				2.322
	p				NS
Disability	Yes	26.5	67.3	6.1	
	No	9.2	70.7	20.1	
	χ2				13.455
	p				<0.001
Primary caregiver(s)	Single parent	18.4	79.6	2.0	
	Two parents	11.9	69.7	18.3	
	Other	25.0	66.7	8.3	
	χ2				10.439
	p				<0.05

 Table A15: Mental wellbeing in secondary school students by sociodemographics

Table A16: Mental wellbeing in secondary school students by individual sources of resilience

			Mental we	llbeing	
		Low	Moderate	High	
Self-esteem	Low	57.1	42.9	0.0	
	Moderate	26.7	68.3	5.0	
	High	6.5	74.0	19.5	
	χ2				45.169
	р				<0.001
Empathy	Low	40.7	59.3	0.0	
	Moderate	10.9	82.6	6.5	
	High	10.7	66.7	22.6	
	χ2				33.257
	p				<0.001
Problem solving	Low	29.1	69.1	1.8	
	Moderate	12.3	75.3	12.3	
	High	6.0	69.0	25.0	
	χ2				29.072
	p				<0.001
Goals and	Low	47.4	47.4	5.3	
aspirations	Moderate	20.8	72.2	6.9	
	High	7.6	72.8	19.6	
	χ2				31.510
	p				<0.001

Table A17: Mental wellbeing in secondary school students by relationship sources of resilience

-			Mental we	llbeing	
		Low	Moderate	High	
Family connection	Low	66.7	33.3	0.0	
	Moderate	33.3	66.7	0.0	
	High	10.4	72.9	16.7	
	χ2				22.143
	р				<0.001
Family participation	Low	32.4	64.9	2.7	
	Moderate	15.4	73.2	11.4	
	High	5.0	72.5	22.5	
	χ2				26.525
•	p		<b>CO O</b>		<0.001
Community	Low	40.0	60.0	0.0	
connection	Moderate	25.0	75.0	0.0	
	High	11.5	71.3	17.2	11.000
	χ2				11.968
Community	p	16.1		6.5	<0.05
Community participation	Low Moderate	16.1 12.7	77.4 80.0	6.5 7.3	
participation	High	12.7	66.3	20.6	
	_	15.1	00.5	20.0	10.512
	χ2 p				< 0.05
School connection	Low	46.4	50.0	3.6	<b>NO.05</b>
	Moderate	15.4	76.9	7.7	
	High	7.5	72.4	20.1	
	χ2	, 10	/	2012	37.637
	<u>р</u>				< 0.001
School participation	Low	21.1	73.4	5.5	
	Moderate	10.2	72.2	17.6	
	High	0.0	63.6	36.4	
	χ2				34.301
	р				<0.001
Peer support	Low	38.1	61.9	0.0	
	Moderate	21.7	73.9	4.3	
	High	8.3	69.2	22.5	
	χ2				29.439
	р				< 0.001

		Mental wellbeing			
		Low	Moderate	High	
Stress during COVID-19	Low	3.4	60.3	36.2	
	Moderate	13.6	76.1	10.3	
	High	33.3	66.7	0.0	
	χ2				36.835
	р				<0.001

 Table A18: Mental wellbeing in secondary school students by stress during COVID-19

## 8.3 Staff survey data tables

		%	n
Gender	Male	11.8	11
	Female	88.2	82
Sexuality	Heterosexual	96.7	88
	LGBTQIA+	3.3	3
Ethnicity	White British	96.8	88
	Other	3.3	3
Age group (years)	20-29	6.5	6
	30-39	25.8	24
	40-49	35.5	33
	50-59	28.0	26
	60+	4.3	4
School type	Primary	77.4	72
	Secondary	22.6	21
Role	Teaching staff	74.7	68
	Non-teaching staff	25.3	23
		Mean	SD
Time in current school (	Time in current school (years)		7.5
Time in education sector	or (years)	16.34	7.6

### Table A19: Staff sociodemographics

#### Table A20: Low mental wellbeing amongst staff by sociodemographics

		Low mental wellbeing		
Gender	Male	54.5		
	Female	13.4		
	χ2		10.984	
	p		<0.001	
Age group (years)	20-39	13.3		
	40+	20.6		
	χ2		0.725	
	p		NS	
School type	Primary	11.1		
	Secondary	42.9		
	χ2		10.969	
	p		<0.001	
Role	Teaching staff	17.6		
	Non-teaching staff	17.4		
	χ2		0.001	
	p		NS	



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