

# **Report 06: Changes in children and young people's mental health symptoms from March to October 2020**

**Date: 11 November 2020**

**Report Authors: Simona Skripkauskaitė,  
Samantha Pearcey, Jasmine Raw, Adrienne  
Shum, Polly Waite and Cathy Creswell**



# The Co-SPACE Study

## Background

COVID-19 has caused major disruptions to families' lives in many ways, including through social distancing, home learning requirements, and lockdown. This is also a rapidly changing situation where different pressures have arisen and continue to arise for children, young people and their families over time.

The Co-SPACE project is tracking the mental health of school-aged children and young people aged 4-16 years (at the beginning of the study) throughout the COVID-19 crisis. An online survey is sent out and completed on a monthly basis by parents/carers and young people (if aged 11-16 years at baseline) throughout the pandemic. The study has full ethical and data protection approval (ethical approval ref: R69060) and is fully GDPR compliant.

The findings will help identify what protects children and young people from deteriorating mental health over time, and at particular stress points. Findings are being shared directly with health and education services to inform the development and provision of effective support for children and families.

## Recruitment

The study sample has been recruited through a variety of means, including social media, distribution through partner organisations, networks and charities, the media and targeted online advertising. The self-selecting nature of recruitment means that *this will not be a nationally representative sample*. In the current report, 92.4 % of 7,192 participants included were female, presumably mothers. Furthermore, the majority of the sample was employed, either part-time (35.7 %) or full-time (36.7 %), had an average income of >16,000 (84.9 %), were white (93.2 %), and resided in Southern England (50.7 %). Further information about participants' characteristics can be found at the end of the report.

**We remain keen to recruit as many families as possible to the study. Parents/carers can sign up and take part at any point: <https://cospaceoxford.com/survey>**

## Further information

Please see <https://cospaceoxford.org/>

For further information or to request specific analyses, please contact the research team at [co-space@psy.ox.ac.uk](mailto:co-space@psy.ox.ac.uk)

# Focus of this report

In this report, we focus on parent/carer reports of their children's mental health symptoms at monthly intervals from March to October 2020 (by which time UK schools had reopened for the new academic year).

## Participants

To date, over 12,300 parents/carers and 1,300 adolescents have taken part in the Co-SPACE survey at baseline. We continue to collect data at baseline and on a monthly basis.

**This report provides an overview of monthly data from 7,192 parents/carers.** These participants completed<sup>1</sup> the survey at least once since the start of the UK lockdown (between 30/03/2020 and 31/10/2020). Further information about overall participant characteristics can be found at the end of the report (Appendix A).

Participants were able to join the study at any point since March. They then received each follow up questionnaire every month after completing the baseline survey. Of the overall sample, 1,262 (17.5 %) completed the questionnaire twice; while another 3,206 (44.6 %) completed it three times or more (up to seven times so far). Information on characteristics of participants included each month can also be seen at the end of the report (Appendix B and C). Each month represents the surveys completed at any point during that calendar month.

Please note that because this report is examining changes over time in children's mental health symptoms on a month-by-month basis, we have not included Co-SPACE participants residing in Scotland due to difficulties interpreting patterns across participants (The school year in Scotland usually begins in the second or third week of August, whereas in England, Wales and Northern Ireland, it starts at the beginning of September).

## Data analysed

**In this report, we focus on the following mental health outcomes as measured by the Strengths & Difficulties Questionnaire (SDQ):**

- 1. Behavioural difficulties** (conduct problems subscale): items relate to the child doing what they are asked, having tantrums, fighting, lying or stealing things (e.g. whether the child "of ten lies, or cheats", or is "generally obedient, usually does what adults request);

---

<sup>1</sup> 'Completion' of the survey is based on participants having completed items up to and including the pre-defined main outcome measure (the Strengths and Difficulties Questionnaire – parent reporting on child).

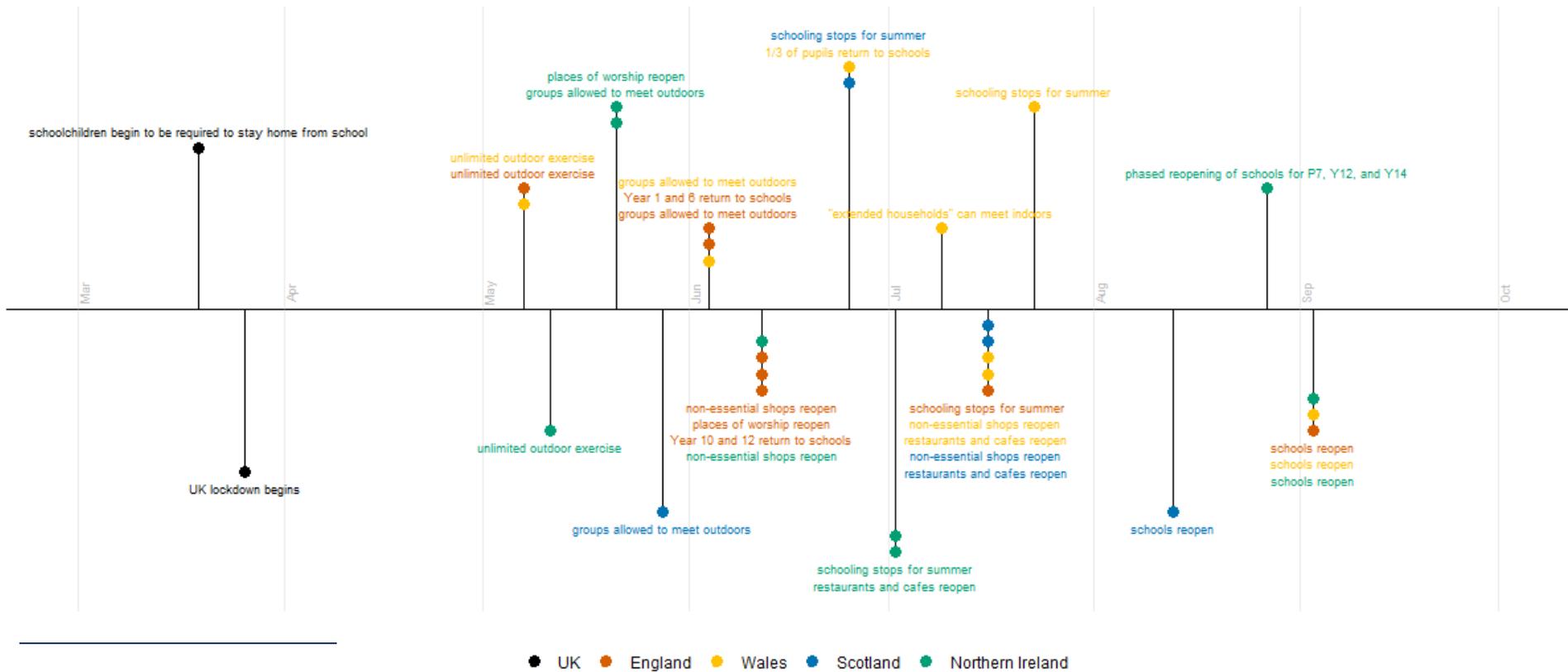
2. **Emotional difficulties** (emotional symptoms subscale): items relate to the child being worried, afraid, unhappy, clingy and having physical symptoms of anxiety (e.g. whether the child is “Of ten unhappy, down-hearted or tearful”, or has “many worries, often seems worried”);
3. **Restless/attentional difficulties** (hyperactivity/inattention subscale): items relate to the child being restless, fidgety, distractible, impulsive and having a good attention span (e.g. whether the child “sees tasks through to the end, good attention span”, or is “restless, overactive, cannot stay still for long”).

This is a well-validated behavioural screening questionnaire. It exists in several versions allowing both reporting by parents/carers (the focus of this report) and self-reporting by adolescents. Each subscale consists of 5 items which are summed to compute a total score, with a maximum score of 10 indicating the most severe difficulties.

**These outcomes were examined for:**

1. **The whole sample**
2. **Gender** (female or male);
3. **Age** (primary school aged [4-10 years] or secondary school aged [11-17 years]);
4. **Age and gender** (primary aged female or male and secondary aged female or male);
5. **Special educational needs and/or neurodevelopmental differences** (SEN/ND or no SEN/ND);
6. **Household income** (more or less than £16,000 per year, i.e., below the poverty line).

# Timeline of significant events



\* Due to difficulties interpreting patterns across different school reopening times, the report hereafter excludes data from participants residing in Scotland.

# Key findings

Based on average scores of parent/carer reports within the Co-SPACE sample:

- **Behavioural and restless/attentional difficulties** increased through the lockdown from March to June. This was especially the case in primary school aged children (4-10 years old).
- In secondary school aged children (11-17 year old), **emotional difficulties** slightly decreased at the beginning of the lockdown (March to April).
- **Behavioural, emotional, and restless/ attentional difficulties** appear to have decreased after the lockdown eased, from July, throughout the summer holidays, and through the opening of schools in September (especially in primary school aged children).
- Secondary school aged girls were reported to have higher levels of **emotional difficulties** than boys overall, with an increase at the end of the summer (July to August) before the reopening of schools.
- **Restless/attentional difficulties** in secondary school aged children (11-17 year old) decreased from August to September. Overall, they were higher in secondary school aged boys than girls, especially in June.
- Children with SEN/ND and those from lower income household (< £16,000 p.a.) had elevated and relatively stable levels of **behavioural, emotional, and restless/ attentional difficulties** throughout the whole period (March to October).

# Findings

## Notes for interpretation

In the figures, the dots represent the average SDQ scores for all surveys completed within that calendar month. As each follow-up survey asks to report on experiences in the past month, parents/carers will be partially reporting on some of the experiences of the previous month.

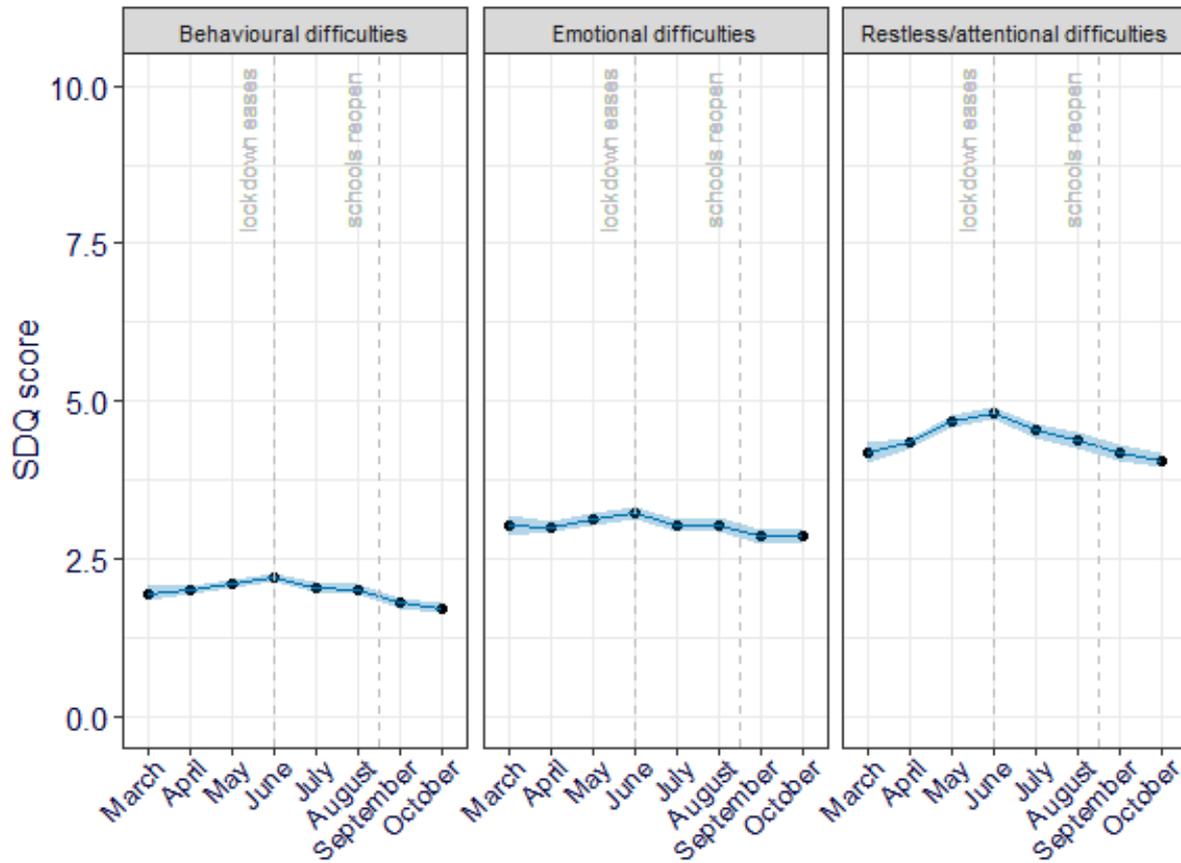
The shaded areas in the figures represent the confidence intervals (95% CI) around these scores, which indicate the range of values that the true population average score may fall in. As average scores are heavily affected by the variability in the data, a larger sample size will result in narrower and more accurate estimations of the population mean. This means that the true population mean is less accurately represented for the smaller groups (e.g. SEN/ND and <£16,000 household income groups in this report). Overlapping confidence intervals should be interpreted with caution.

The accompanying tables provide further information on the variability of the data by reporting means and standard deviations (SD) of parent reported difficulties. Standard deviation represents how spread out individual responses are around the average scores. A low standard deviation indicates that the values tend to be close to the average score, while a high standard deviation indicates that the values are spread out over a wider range. Changes in average scores with high SDs should also be interpreted cautiously.

Explanation of the findings is provided based on statistical analysis. Each analysis evaluated the effect of group and/or change from month to month. When possible, within family dependency over time was included in the analysis (i.e. over time scores from one family will be more similar than another).

# 1. The Whole Sample

Figure 1. Means and 95% CI's of parents/carers reported SDQ scores per month



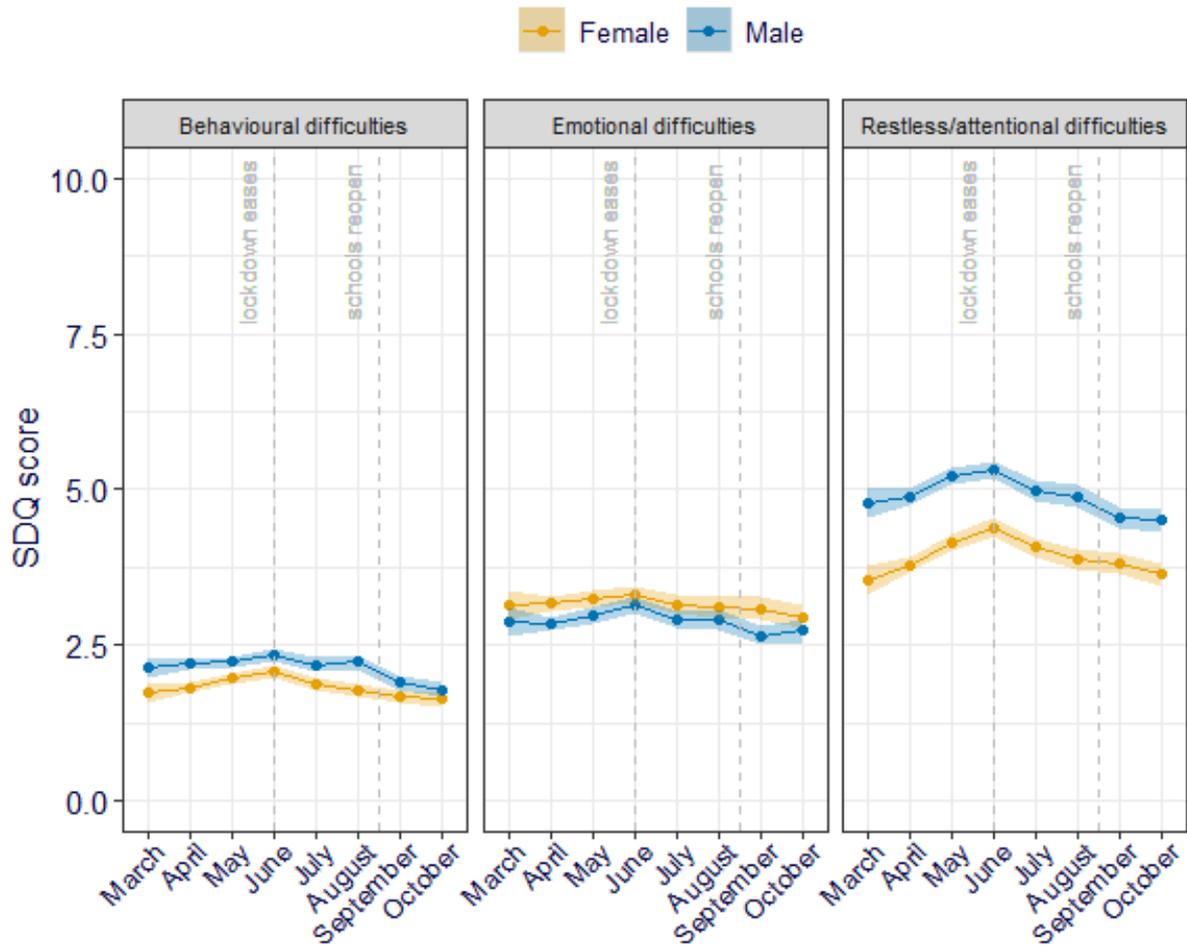
Overall, both parent/carer reported behavioural difficulties and restless/attentional difficulties consistently increased through March to June and have decreased since July. Reported emotional difficulties were relatively stable through March to June, but have also decreased over time after the lockdown was eased in June.

Table 1. Means and standard deviations (SD) of parent/carer reported SDQ scores per month

	March	April	May	June	July	August	September	October
Behavioural difficulties								
Mean	1.95	2.02	2.10	2.21	2.05	2.01	1.80	1.73
(SD)	(1.87)	(1.91)	(1.85)	(1.92)	(1.87)	(1.90)	(1.78)	(1.79)
Emotional difficulties								
Mean	3.03	3.01	3.13	3.22	3.03	3.04	2.86	2.85
(SD)	(2.67)	(2.55)	(2.64)	(2.66)	(2.60)	(2.63)	(2.68)	(2.69)
Restless/attention difficulties								
Mean	4.18	4.35	4.67	4.83	4.54	4.39	4.18	4.07
(SD)	(2.76)	(2.77)	(2.79)	(2.81)	(2.78)	(2.76)	(2.75)	(2.78)

## 2. Gender

Figure 2. Means and 95% CI's of parents/carers reported SDQ scores per month and gender



On average, parents/carers reported higher levels of behavioural and restless/attentional difficulties for boys than girls. However, they reported higher average emotional difficulties scores for girls than boys.

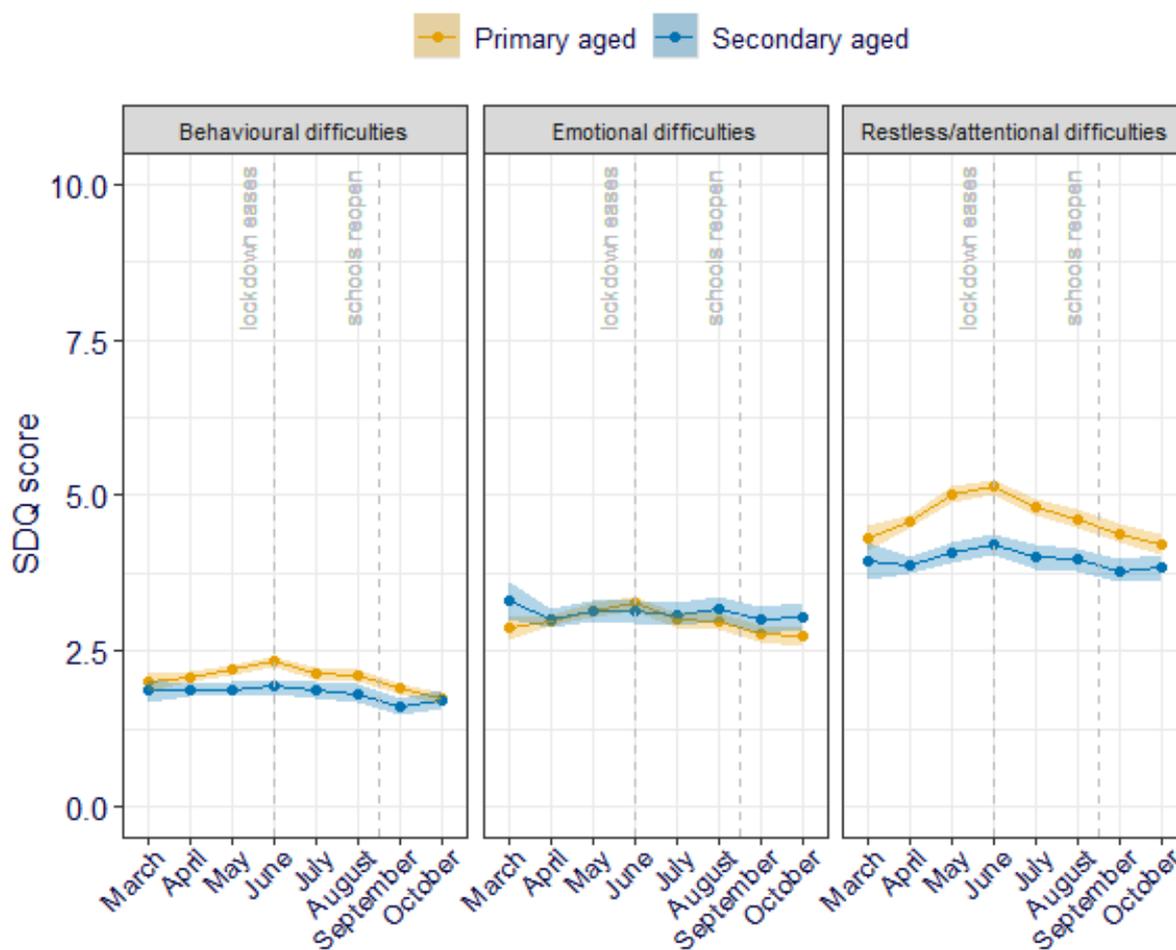
The patterns of parent/carer reported behavioural, emotional, and restless/attentional difficulties over time were relatively similar for boys and girls.

**Table 2. Means and standard deviations (SD) of parent/carer reported SDQ scores per month and gender**

	<b>March</b>	<b>April</b>	<b>May</b>	<b>June</b>	<b>July</b>	<b>August</b>	<b>September</b>	<b>October</b>
<b>Behavioural difficulties</b>								
Females								
Mean	1.73	1.83	1.97	2.09	1.89	1.78	1.68	1.64
(SD)	(1.68)	(1.83)	(1.81)	(1.88)	(1.80)	(1.77)	(1.73)	(1.72)
Males								
Mean	2.15	2.20	2.23	2.35	2.19	2.23	1.90	1.79
(SD)	(2.02)	(1.98)	(1.86)	(1.96)	(1.92)	(1.98)	(1.80)	(1.82)
<b>Emotional difficulties</b>								
Females								
Mean	3.13	3.17	3.26	3.32	3.15	3.12	3.09	2.96
(SD)	(2.66)	(2.62)	(2.72)	(2.71)	(2.64)	(2.65)	(2.81)	(2.72)
Males								
Mean	2.89	2.84	2.98	3.15	2.91	2.91	2.66	2.73
(SD)	(2.65)	(2.46)	(2.55)	(2.60)	(2.52)	(2.57)	(2.54)	(2.63)
<b>Restless/attention difficulties</b>								
Females								
Mean	3.55	3.79	4.15	4.39	4.07	3.88	3.82	3.64
(SD)	(2.57)	(2.54)	(2.67)	(2.73)	(2.69)	(2.58)	(2.68)	(2.74)
Males								
Mean	4.79	4.88	5.20	5.31	4.98	4.90	4.56	4.51
(SD)	(2.80)	(2.86)	(2.79)	(2.81)	(2.79)	(2.85)	(2.77)	(2.79)

### 3. Age

Figure 3. Means and 95% CI's of parents/carers reported SDQ scores per month and age



On average, parents/carers reported higher levels of behavioural and restless/attentional difficulties for primary than secondary school aged children. They reported similar levels of emotional difficulties for both groups.

Over the March to June (lockdown) period, there were increases in parents/carer reported behavioural, emotional, and restless/attentional difficulties for primary school aged children. From September to October (when most children and young people returned to school), reported behavioural difficulties decreased.

For secondary school aged children, there was a decrease in parent/carer reported emotional difficulties at the start of the lockdown (March-April) but patterns were relatively stable for behavioural and restless/attentional difficulties, over this time. There was a slight decrease in parents/carer reported restless/attentional difficulties for secondary school aged children from August to September, but relatively little change in behavioural and emotional difficulties.

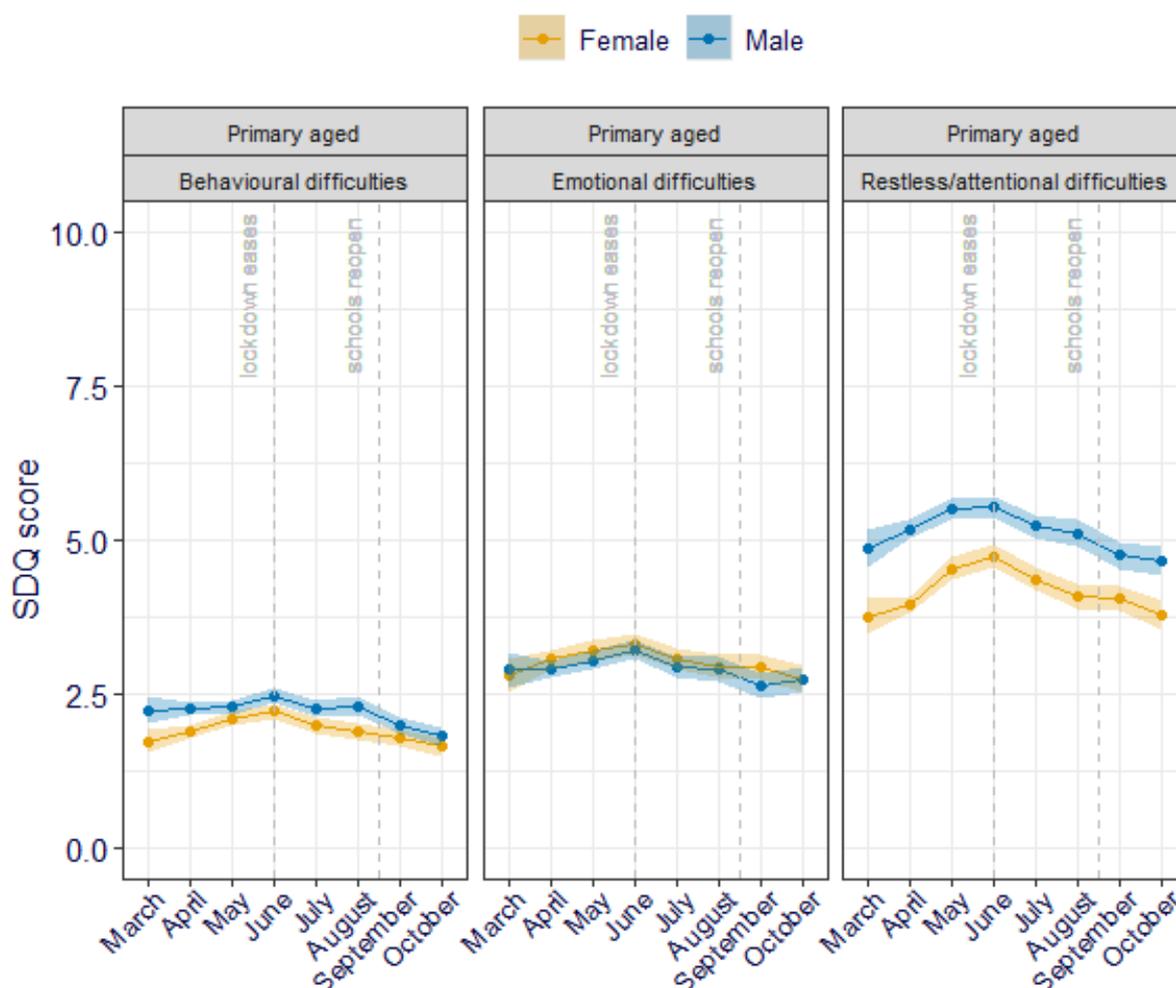
**Table 3. Means and standard deviations (SD) of parent/carer reported SDQ scores per month and age**

	<b>March</b>	<b>April</b>	<b>May</b>	<b>June</b>	<b>July</b>	<b>August</b>	<b>September</b>	<b>October</b>
Behavioural difficulties								
Primary aged								
Mean	2.00	2.09	2.21	2.34	2.14	2.12	1.90	1.73
(SD)	(1.84)	(1.86)	(1.81)	(1.89)	(1.84)	(1.87)	(1.77)	(1.71)
Secondary aged								
Mean	1.86	1.87	1.89	1.94	1.89	1.82	1.62	1.72
(SD)	(1.92)	(1.99)	(1.87)	(1.96)	(1.92)	(1.95)	(1.80)	(1.92)
Emotional difficulties								
Primary aged								
Mean	2.86	2.99	3.15	3.27	3.00	2.97	2.78	2.73
(SD)	(2.44)	(2.44)	(2.55)	(2.57)	(2.45)	(2.50)	(2.56)	(2.49)
Secondary aged								
Mean	3.31	3.02	3.15	3.13	3.09	3.17	3.00	3.06
(SD)	(3.00)	(2.70)	(2.81)	(2.84)	(2.85)	(2.84)	(2.88)	(3.00)
Restless/attention difficulties								
Primary aged								
Mean	4.32	4.59	5.02	5.14	4.82	4.62	4.40	4.21
(SD)	(2.69)	(2.74)	(2.73)	(2.78)	(2.74)	(2.76)	(2.78)	(2.79)
Secondary aged								
Mean	3.94	3.88	4.09	4.23	4.02	3.97	3.80	3.84
(SD)	(2.87)	(2.77)	(2.77)	(2.77)	(2.80)	(2.71)	(2.66)	(2.76)

## 4. Age and Gender

### (a) Primary aged by gender

Figure 4. Means and 95% CI's of primary school aged children's parents/carers reported SDQ scores per month and gender



On average, parents/carers reported higher levels of behavioural and restless/attentional difficulties for primary school aged boys than girls. They reported similar levels of emotional difficulties for both groups.

Over the March to June period, restless/attentional difficulties in primary school aged children were reported to increase earlier among boys (April) than girls (May). The patterns of behavioural and emotional difficulties over this time were relatively similar for primary school aged boys and girls.

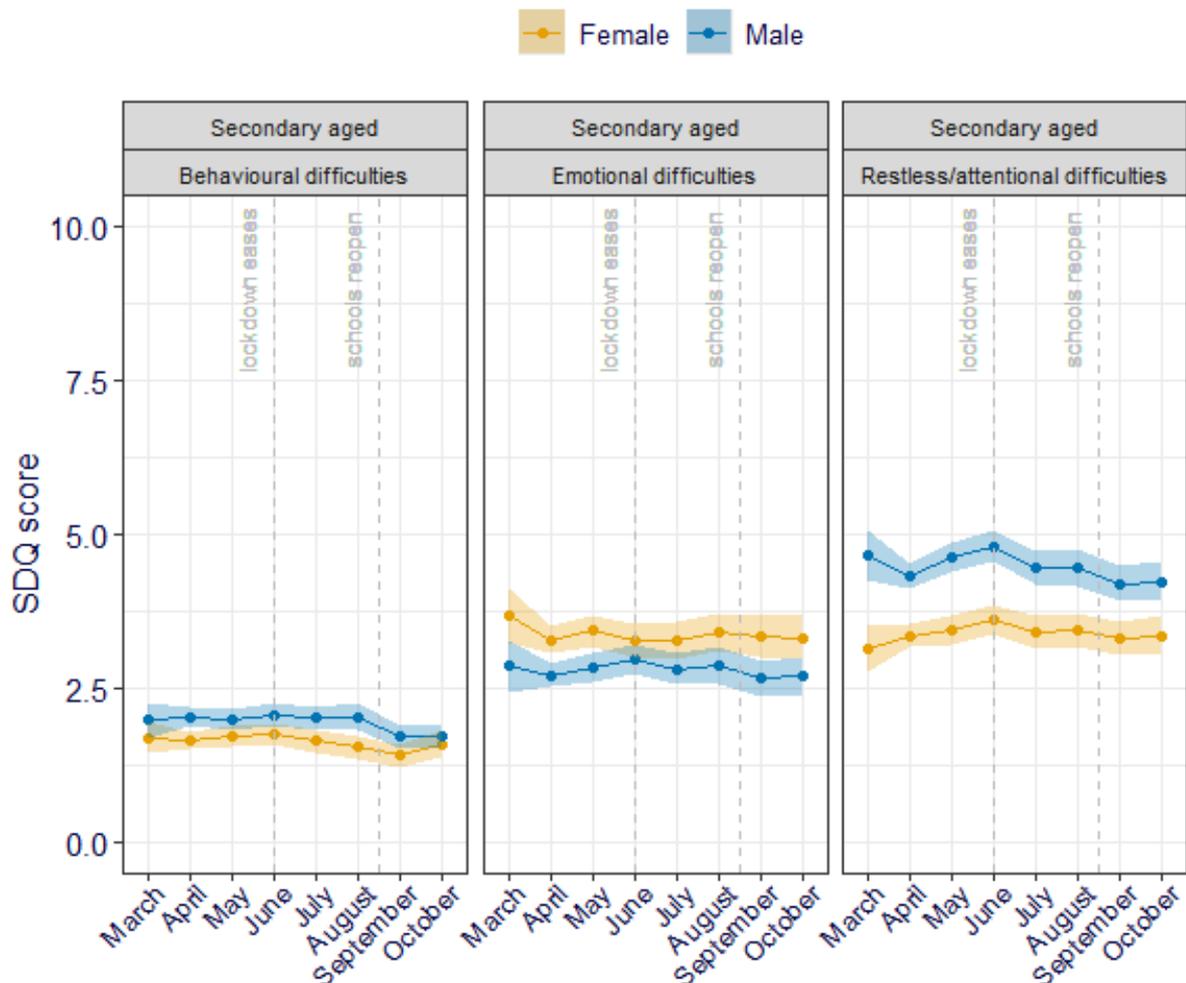
For both, boys and girls, behavioural difficulties increased through from April to June and decreased from July to October. Similarly, emotional difficulties increased between April and May, but decreased in July and September.

**Table 4. Means and standard deviations (SD) of primary school aged children’s parent/carer reported SDQ scores per month and gender**

	<b>March</b>	<b>April</b>	<b>May</b>	<b>June</b>	<b>July</b>	<b>August</b>	<b>September</b>	<b>October</b>
<b>Behavioural difficulties</b>								
Females								
Mean	1.74	1.89	2.12	2.23	2.00	1.90	1.81	1.65
(SD)	(1.64)	(1.81)	(1.85)	(1.88)	(1.80)	(1.77)	(1.74)	(1.65)
Males								
Mean	2.24	2.28	2.30	2.49	2.28	2.32	1.99	1.83
(SD)	(1.99)	(1.90)	(1.77)	(1.91)	(1.88)	(1.93)	(1.79)	(1.78)
<b>Emotional difficulties</b>								
Females								
Mean	2.81	3.07	3.23	3.33	3.09	2.96	2.95	2.76
(SD)	(2.40)	(2.52)	(2.64)	(2.64)	(2.51)	(2.54)	(2.68)	(2.51)
Males								
Mean	2.90	2.91	3.06	3.23	2.95	2.92	2.65	2.75
(SD)	(2.49)	(2.35)	(2.45)	(2.50)	(2.39)	(2.43)	(2.43)	(2.51)
<b>Restless/attention difficulties</b>								
Females								
Mean	3.78	3.97	4.55	4.75	4.38	4.10	4.06	3.79
(SD)	(2.52)	(2.53)	(2.69)	(2.73)	(2.70)	(2.62)	(2.74)	(2.78)
Males								
Mean	4.87	5.19	5.53	5.56	5.24	5.12	4.76	4.67
(SD)	(2.73)	(2.79)	(2.66)	(2.76)	(2.69)	(2.80)	(2.77)	(2.76)

## (b) Secondary aged by gender

Figure 5. Means and 95% CI's of secondary school aged children's parents/carers reported SDQ scores per month and gender



On average, parents/carers reported higher levels of behavioural and restless/attentional difficulties for secondary school aged boys than girls. They, however, reported higher levels of emotional difficulties for girls than boys in this age group.

Levels of behavioural difficulties have remained relatively stable since March and similar for both secondary school aged boys and girls.

Emotional difficulties have, however, been reported to slightly increase between July and August for the girls, but not the boys, in the secondary age group.

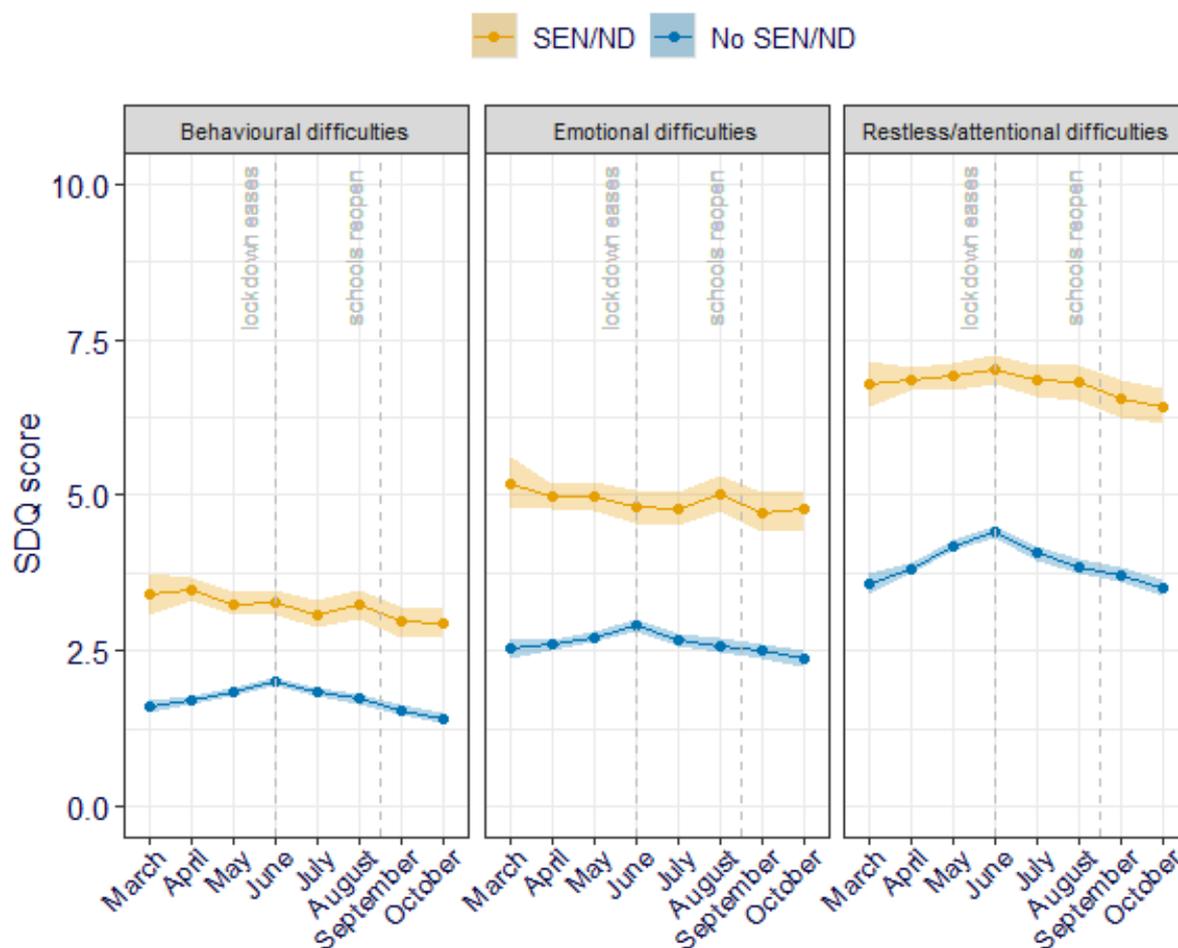
Conversely, restless/attentional difficulties have been reported to decrease more for secondary school aged boys than girls in June/July, but decrease similarly for both boys and girls in August/September.

**Table 5. Means and standard deviations (SD) of secondary school aged children’s parent/carer reported SDQ scores per month and gender**

	<b>March</b>	<b>April</b>	<b>May</b>	<b>June</b>	<b>July</b>	<b>August</b>	<b>September</b>	<b>October</b>
<b>Behavioural difficulties</b>								
Females								
Mean	1.71	1.67	1.73	1.78	1.65	1.55	1.43	1.61
(SD)	(1.75)	(1.84)	(1.79)	(1.86)	(1.78)	(1.76)	(1.68)	(1.84)
Males								
Mean	1.99	2.05	2.00	2.09	2.02	2.05	1.73	1.73
(SD)	(2.05)	(2.10)	(1.88)	(2.01)	(1.99)	(2.04)	(1.80)	(1.88)
<b>Emotional difficulties</b>								
Females								
Mean	3.70	3.30	3.45	3.29	3.28	3.43	3.35	3.33
(SD)	(2.98)	(2.75)	(2.85)	(2.85)	(2.90)	(2.82)	(3.03)	(3.06)
Males								
Mean	2.87	2.73	2.84	2.99	2.83	2.88	2.68	2.71
(SD)	(2.91)	(2.60)	(2.73)	(2.78)	(2.77)	(2.80)	(2.73)	(2.83)
<b>Restless/attention difficulties</b>								
Females								
Mean	3.15	3.36	3.45	3.62	3.42	3.46	3.33	3.37
(SD)	(2.61)	(2.51)	(2.52)	(2.57)	(2.55)	(2.45)	(2.48)	(2.65)
Males								
Mean	4.67	4.34	4.64	4.81	4.47	4.47	4.21	4.25
(SD)	(2.93)	(2.92)	(2.86)	(2.84)	(2.91)	(2.89)	(2.74)	(2.82)

## 5. Special Educational Needs and Neurodevelopmental Differences

Figure 6. Means and 95% CI's of parents/carers reported SDQ scores per month and Special Educational Needs (SEN) or Neurodevelopmental Differences (ND)



On average, parents/carers reported substantially higher levels of all behavioural, emotional, and restless/attentional difficulties for children with SEN/ND than children without SEN/ND.

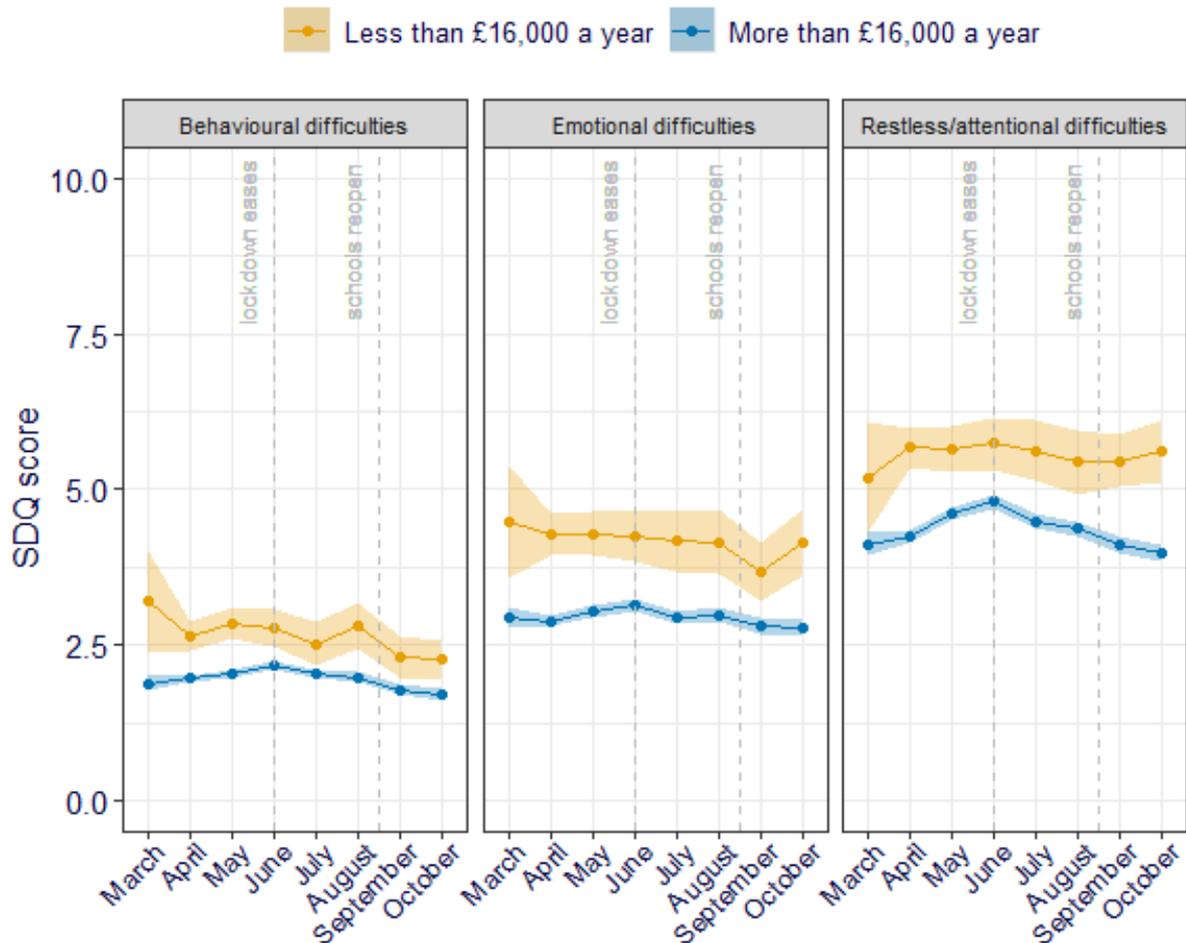
For children with SEN/ND, levels of behavioural, emotional, and restless/attentional difficulties remained relatively stable across the whole time period. However, for children without SEN/ND, reported behavioural, emotional, and restless/attentional difficulties increased from March to June and then decreased from July onwards.

**Table 6. Means and standard deviations (SD) of parent/carer reported SDQ scores per month and Special Educational Needs (SEN) or Neurodevelopmental Differences (ND)**

	<b>March</b>	<b>April</b>	<b>May</b>	<b>June</b>	<b>July</b>	<b>August</b>	<b>September</b>	<b>October</b>
<b>Behavioural difficulties</b>								
SEN/ND								
Mean	3.41	3.49	3.26	3.28	3.09	3.25	2.96	2.94
(SD)	(2.35)	(2.41)	(2.19)	(2.22)	(2.20)	(2.33)	(2.18)	(2.18)
No SEN/ND								
Mean	1.61	1.71	1.85	2.01	1.84	1.73	1.55	1.42
(SD)	(1.56)	(1.63)	(1.65)	(1.78)	(1.72)	(1.66)	(1.57)	(1.51)
<b>Emotional difficulties</b>								
SEN/ND								
Mean	5.20	4.97	4.98	4.82	4.78	5.03	4.73	4.78
(SD)	(2.87)	(2.73)	(2.90)	(2.92)	(2.82)	(2.87)	(2.97)	(2.93)
No SEN/ND								
Mean	2.53	2.60	2.72	2.92	2.68	2.59	2.50	2.39
(SD)	(2.35)	(2.31)	(2.40)	(2.49)	(2.39)	(2.34)	(2.46)	(2.40)
<b>Restless/attention difficulties</b>								
SEN/ND								
Mean	6.79	6.86	6.92	7.03	6.84	6.80	6.55	6.43
(SD)	(2.65)	(2.67)	(2.68)	(2.60)	(2.65)	(2.67)	(2.70)	(2.68)
No SEN/ND								
Mean	3.58	3.82	4.20	4.42	4.07	3.86	3.72	3.51
(SD)	(2.41)	(2.48)	(2.55)	(2.64)	(2.57)	(2.49)	(2.50)	(2.51)

## 6. Household Income

Figure 7. Means and 95% CI's of parents/carers reported SDQ scores per month and household income



On average, parents/carers from households with lower annual income (< £16,000 p.a.) reported higher levels of all behavioural, emotional, and restless/attentional difficulties than parents/carers from households with higher annual income (> £16,000 p.a.).

Increases in behavioural difficulties were reported from July to August by parents/carers with an annual household income under £16,000, but not those with annual income over £16,000.

Reported restless/attentional difficulties, however, were relatively stable, albeit higher, for the children from lower income households, whereas for children from higher income households restless/attentional difficulties peaked in July.

In both household income groups, the pattern of emotional difficulties was reported to be relatively stable overtime, with a slight decrease in September.

**Table 7. Means and standard deviations (SD) of parent/carer reported SDQ scores per month and household income**

	<b>March</b>	<b>April</b>	<b>May</b>	<b>June</b>	<b>July</b>	<b>August</b>	<b>September</b>	<b>October</b>
<b>Behavioural difficulties</b>								
<b>&lt; £16,000 p.a.</b>								
Mean	3.21	2.66	2.85	2.79	2.52	2.81	2.30	2.27
(SD)	(2.83)	(2.04)	(2.08)	(2.11)	(2.03)	(2.18)	(1.96)	(1.79)
<b>&gt; £16,000 p.a.</b>								
Mean	1.88	1.96	2.05	2.18	2.04	1.98	1.78	1.70
(SD)	(1.77)	(1.89)	(1.81)	(1.91)	(1.86)	(1.86)	(1.76)	(1.79)
<b>Emotional difficulties</b>								
<b>&lt; £16,000 p.a.</b>								
Mean	4.48	4.27	4.30	4.26	4.16	4.15	3.68	4.15
(SD)	(3.09)	(2.85)	(2.80)	(2.99)	(2.85)	(3.04)	(2.78)	(2.89)
<b>&gt; £16,000 p.a.</b>								
Mean	2.95	2.89	3.04	3.14	2.95	2.98	2.81	2.77
(SD)	(2.64)	(2.49)	(2.60)	(2.62)	(2.56)	(2.59)	(2.65)	(2.64)
<b>Restless/attention difficulties</b>								
<b>&lt; £16,000 p.a.</b>								
Mean	5.19	5.67	5.65	5.74	5.63	5.44	5.46	5.62
(SD)	(3.05)	(2.73)	(2.97)	(2.86)	(2.86)	(3.03)	(2.60)	(2.80)
<b>&gt; £16,000 p.a.</b>								
Mean	4.13	4.25	4.61	4.80	4.50	4.37	4.10	3.98
(SD)	(2.74)	(2.74)	(2.75)	(2.81)	(2.78)	(2.73)	(2.73)	(2.75)

# Appendix A

## Participants' demographics overall:

	<i>Overall</i>
	<b>(N=7192)</b>
<i>Location</i>	
Greater London	789 (11.0%)
Northern England	1473 (20.5%)
Northern Ireland	109 (1.5%)
Southern England	3648 (50.7%)
the Midlands	877 (12.2%)
Wales	296 (4.1%)
<i>Parent Gender</i>	
Female	6648 (92.4%)
Male	496 (6.9%)
Missing	48 (0.7%)
<i>Employment Status</i>	
Self employed	784 (10.9%)
Unemployed/Other	1197 (16.6%)
Working full time	2641 (36.7%)
Working part time	2570 (35.7%)
<i>Household Income (per year)</i>	
< £16,000	558 (7.8%)
> £16,000	6109 (84.9%)
Missing	525 (7.3%)
<i>Parent Ethnicity</i>	
BAME	307 (4.3%)
White	6700 (93.2%)
Missing	185 (2.6%)
<i>Child Gender</i>	
Female	3480 (48.4%)
Male	3666 (51.0%)
Missing	46 (0.6%)
<i>Child Age</i>	
Adolescent (11-17 years)	2607 (36.2%)
Child (4-10 years)	4585 (63.8%)
<i>SEN/ND Status</i>	
No SEN/ND	5917 (82.3%)
SEN/ND	1275 (17.7%)
<i>Child Mental Health</i>	
Depression, anxiety, or other	423 (5.9%)
No	6769 (94.1%)

# Appendix B

## Participants' demographics per month: March to June

	March (N=1027)	April (N=4176)	May (N=3450)	June (N=3051)
<i>Location</i>				
Greater London	103 (10.0%)	463 (11.1%)	364 (10.6%)	322 (10.6%)
Northern England	173 (16.8%)	832 (19.9%)	733 (21.2%)	605 (19.8%)
Northern Ireland	9 (0.9%)	61 (1.5%)	41 (1.2%)	33 (1.1%)
Southern England	601 (58.5%)	2167 (51.9%)	1747 (50.6%)	1603 (52.5%)
the Midlands	93 (9.1%)	487 (11.7%)	439 (12.7%)	384 (12.6%)
Wales	48 (4.7%)	166 (4.0%)	126 (3.7%)	104 (3.4%)
<i>Parent Gender</i>				
Female	944 (91.9%)	3872 (92.7%)	3235 (93.8%)	2860 (93.7%)
Male	75 (7.3%)	291 (7.0%)	197 (5.7%)	178 (5.8%)
Missing	8 (0.8%)	13 (0.3%)	18 (0.5%)	13 (0.4%)
<i>Employment Status</i>				
Self employed	108 (10.5%)	464 (11.1%)	351 (10.2%)	322 (10.6%)
Unemployed/Other	130 (12.7%)	675 (16.2%)	560 (16.2%)	490 (16.1%)
Working full time	394 (38.4%)	1538 (36.8%)	1242 (36.0%)	1050 (34.4%)
Working part time	395 (38.5%)	1499 (35.9%)	1297 (37.6%)	1189 (39.0%)
<i>Household Income (per year)</i>				
< £16,000	48 (4.7%)	282 (6.8%)	269 (7.8%)	188 (6.2%)
> £16,000	908 (88.4%)	3588 (85.9%)	2927 (84.8%)	2640 (86.5%)
Missing	71 (6.9%)	306 (7.3%)	254 (7.4%)	223 (7.3%)
<i>Parent Ethnicity</i>				
BAME	44 (4.3%)	142 (3.4%)	109 (3.2%)	99 (3.2%)
White	960 (93.5%)	3937 (94.3%)	3270 (94.8%)	2881 (94.4%)
Missing	23 (2.2%)	97 (2.3%)	71 (2.1%)	71 (2.3%)
<i>Child Gender</i>				
Female	504 (49.1%)	2023 (48.4%)	1596 (46.3%)	1408 (46.1%)
Male	515 (50.1%)	2127 (50.9%)	1716 (49.7%)	1507 (49.4%)
Missing	8 (0.8%)	26 (0.6%)	138 (4.0%)	136 (4.5%)
<i>Child Age</i>				
Adolescent (11-17 years)	378 (36.8%)	1464 (35.1%)	1078 (31.2%)	1030 (33.8%)
Child (4-10 years)	649 (63.2%)	2469 (59.1%)	1924 (55.8%)	2021 (66.2%)
Missing	0 (0%)	243 (5.8%)	448 (13.0%)	0 (0%)
<i>SEN/ND Status</i>				
No SEN/ND	835 (81.3%)	3451 (82.6%)	2733 (79.2%)	2440 (80.0%)
SEN/ND	192 (18.7%)	725 (17.4%)	603 (17.5%)	496 (16.3%)
Missing	0 (0%)	0 (0%)	114 (3.3%)	115 (3.8%)
<i>Child Mental Health</i>				
Depression, anxiety, or other	86 (8.4%)	245 (5.9%)	166 (4.8%)	148 (4.9%)
No	941 (91.6%)	3931 (94.1%)	3170 (91.9%)	2788 (91.4%)
Missing	0 (0%)	0 (0%)	114 (3.3%)	115 (3.8%)

# Appendix C

## Participants' demographics per month: July to October

	July (N=2485)	August (N=2105)	September (N=2051)	October (N=1746)
<i>Location</i>				
Greater London	264 (10.6%)	223 (10.6%)	221 (10.8%)	188 (10.8%)
Northern England	473 (19.0%)	409 (19.4%)	423 (20.6%)	348 (19.9%)
Northern Ireland	28 (1.1%)	26 (1.2%)	27 (1.3%)	22 (1.3%)
Southern England	1309 (52.7%)	1098 (52.2%)	1058 (51.6%)	907 (51.9%)
the Midlands	320 (12.9%)	272 (12.9%)	251 (12.2%)	220 (12.6%)
Wales	91 (3.7%)	77 (3.7%)	71 (3.5%)	61 (3.5%)
<i>Parent Gender</i>				
Female	2294 (92.3%)	1967 (93.4%)	1918 (93.5%)	1611 (92.3%)
Male	165 (6.6%)	119 (5.7%)	121 (5.9%)	120 (6.9%)
Missing	26 (1.0%)	19 (0.9%)	12 (0.6%)	15 (0.9%)
<i>Employment Status</i>				
Self employed	257 (10.3%)	224 (10.6%)	198 (9.7%)	190 (10.9%)
Unemployed/Other	369 (14.8%)	349 (16.6%)	356 (17.4%)	314 (18.0%)
Working full time	865 (34.8%)	668 (31.7%)	680 (33.2%)	568 (32.5%)
Working part time	994 (40.0%)	864 (41.0%)	817 (39.8%)	674 (38.6%)
<i>Household Income (per year)</i>				
< £16,000 a year	134 (5.4%)	135 (6.4%)	142 (6.9%)	120 (6.9%)
> £16,000 a year	2163 (87.0%)	1799 (85.5%)	1757 (85.7%)	1495 (85.6%)
Missing	188 (7.6%)	171 (8.1%)	152 (7.4%)	131 (7.5%)
<i>Parent Ethnicity</i>				
BAME	74 (3.0%)	64 (3.0%)	71 (3.5%)	60 (3.4%)
White	2351 (94.6%)	2003 (95.2%)	1935 (94.3%)	1653 (94.7%)
Missing	60 (2.4%)	38 (1.8%)	45 (2.2%)	33 (1.9%)
<i>Child Gender</i>				
Female	1128 (45.4%)	972 (46.2%)	942 (45.9%)	800 (45.8%)
Male	1221 (49.1%)	1016 (48.3%)	1005 (49.0%)	845 (48.4%)
Missing	136 (5.5%)	117 (5.6%)	104 (5.1%)	101 (5.8%)
<i>Child Age</i>				
Adolescent (11-17 years)	844 (34.0%)	765 (36.3%)	733 (35.7%)	646 (37.0%)
Child (4-10 years)	1637 (65.9%)	1334 (63.4%)	1315 (64.1%)	1098 (62.9%)
Missing	4 (0.2%)	6 (0.3%)	3 (0.1%)	2 (0.1%)
<i>SEN/ND Status</i>				
No SEN/ND	1963 (79.0%)	1640 (77.9%)	1629 (79.4%)	1328 (76.1%)
SEN/ND	400 (16.1%)	363 (17.2%)	329 (16.0%)	326 (18.7%)
Missing	122 (4.9%)	102 (4.8%)	93 (4.5%)	92 (5.3%)
<i>Child Mental Health</i>				
Depression, anxiety, or other	124 (5.0%)	106 (5.0%)	103 (5.0%)	93 (5.3%)
No	2239 (90.1%)	1897 (90.1%)	1855 (90.4%)	1561 (89.4%)
Missing	122 (4.9%)	102 (4.8%)	93 (4.5%)	92 (5.3%)