C-SPACE study

COVID-19: Supporting Parents, Adolescents and Children during Epidemics

Report 09: Update on children's & parents/carers' mental health; Changes in parents/carers' ability to balance childcare and work: March 2020 to February 2021

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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*. See Appendix A and B for the full demographic table.

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

Focus of this report

Participants

To date, over 12,500 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 8,386 parents/carers. These participants completed[1] the survey at least once since the start of the UK lockdown (between 30/03/2020 and 31/01/2021). 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 from March 2020. They then received each follow up questionnaire every month after completing the baseline survey. Of the overall sample, 4,557 (55 %) have completed the questionnaire twice or more (up to ten times so far). Information on characteristics of participants included each month can also be seen at the end of the report (Appendix B). Each month represents the surveys completed at any point during that calendar month.

Data analysed

In this report, we focus on:

1. **Children's mental health outcomes as measured by the Strengths & Difficulties Questionnaire (SDQ).** 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. The following subscales were used:
    - **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 "often lies, or cheats", or is "generally obedient, usually does what adults request);
    - **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 "Often unhappy, down-hearted or tearful", or has "many worries, often seems worried");
    - **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").

    These outcomes were examined for groups based on:

    a. Whole sample
    b. Child age (primary school aged [4-10 years] or secondary school aged [11-17 years]);

[1] '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. **Parent/carers' mental health outcomes as measured by the Depression, Anxiety and Stress Scale (DASS-21).** The DASS-21 is a useful and well-validated assessment of emotional disturbance. It is not a measure of clinical diagnoses. Each of the three DASS-21 scales contains 7 items, divided into subscales with similar content:

    - **Depression**: the depression scale assesses dysphoria (dissatisfaction), hopelessness, devaluation of life, self-deprecation, lack of interest / involvement, anhedonia (lack of pleasure) and inertia (inactivity).
    - **Anxiety**: the anxiety scale assesses autonomic arousal, situational anxiety, and subjective experience of anxious affect.
    - **Stress**: the stress scale assesses difficulty relaxing, nervous arousal, and being easily upset / agitated, irritable / over-reactive and impatient.

    Participants are asked to score every item on a scale from 0 ("did not apply to me at all") to 3 ("applied to me very much"). Scores for depression, anxiety and stress are calculated by summing the scores for the relevant items for each subscale and multiplying them by 2. Sum scores for the total DASS-total scale range between 0 and 126, and those for each of the subscales range between 0 and 42. DASS-21 scores are considered to be elevated, if they range above 7 for anxiety, above 9 for depression, and above 14 for stress subscale.

    These outcomes were examined for groups based on:

    a) Whole sample
    b) The presence of young children in the household (whether or not there were any young children, aged 10 years or less, in the household)

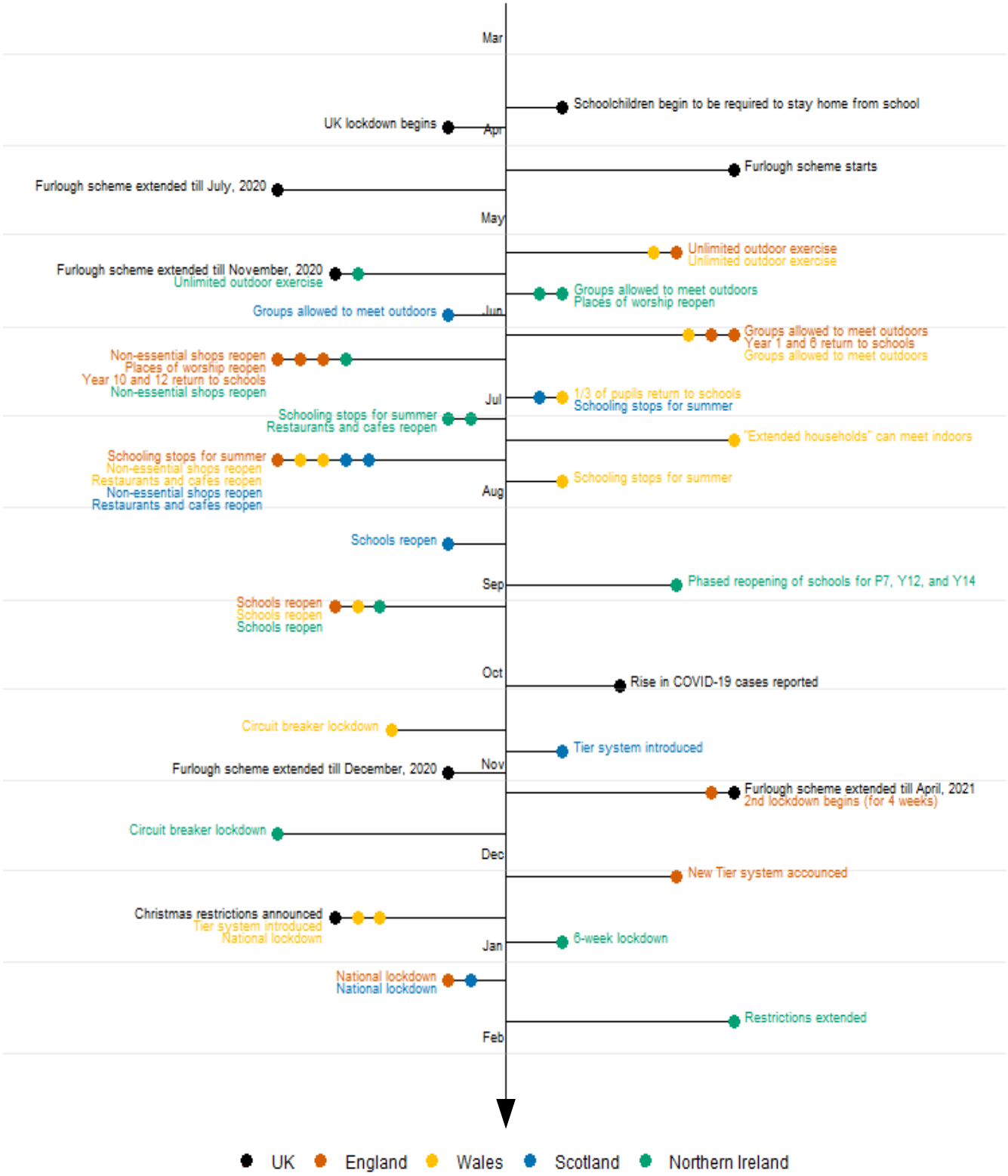
3. **How many parents/carers-reported that they found it difficult to meet the needs of their work and their child.** When completing the survey, parents/carers were asked how able they felt to meet the needs of both their work and their child.

Possible responses to the survey question were "Not at all", "A bit", "A lot", and "Completely". "Not at all" and "A bit" were combined to indicate where participants reported having difficulties in meeting the needs of both work and their child. Those responding "A lot" or "Completely" were considered to not have particular difficulties in balancing work and childcare.

These outcomes were examined for groups based on the following:

a) Whole sample
b) Work arrangements (either full-time or part-time)
c) The presence of young children in the household (whether or not there were any young children, aged 10 years or less, in the household)
d) Children and young people with and without special educational needs and/or neurodevelopmental differences (SEN/ND or no SEN/ND)
e) Whether or not the child lived in a single adult household
f) Household income (more or less than £16,000 per year, i.e., below the poverty line)

Timeline of significant events



Key findings

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

- **Children and young people's behavioural, emotional, and restless/attentional difficulties have increased again from January to February 2021.** For emotional difficulties these have surpassed the level reported in the first lockdown
- **Parent/carer anxiety, stress and depression have increased since November 2020** and have surpassed the level reported in the first lockdown
- **From December 2020 to February 2021, there was a sharp increase in number of parents/carers who reported that they could not meet the needs of both their child and their work.**
- **More parents/carers of younger children** than those with only older children **reported that they could not meet the needs of both their child and their work**
- More parents/carers of children with SEN/ND **than those without** reported that they could not meet the needs of both their child and their work.

Findings

Notes for interpretation

Mental health symptoms

The dots in the figures of this section (page 9-10) represent the average SDQ scores (child mental health symptoms) for all surveys completed within that calendar month. The dots in the figures of this section (page 10-13) represent the average DASS-21 scores (parent/carer mental health symptoms) for all surveys completed within that calendar month. As each follow-up survey asks participants to report on experiences in the past month, they will have partially reported 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. 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 reported difficulties. Standard deviations represent 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 rather than just graphical representation. 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). This allowed a more reliable estimation of month-to-month changes, where changes were mostly modelled based on full data (in this case, change in people who have both data points at each month-to-month comparison), but adjusted for partial and missing data, too.

Meeting the needs of work and childcare

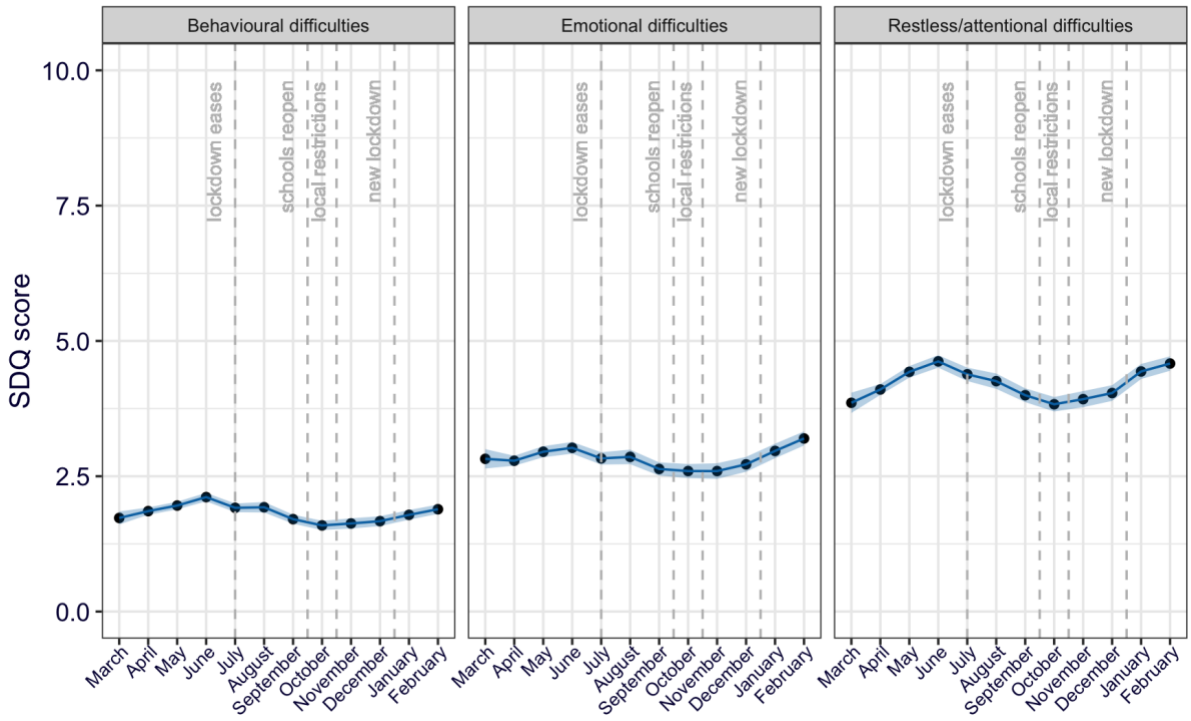
This section (page 13-18) includes supplementary analysis on the extent to which working parent/carers have felt able to meet the needs of their work and their child. Figures in this part of the analysis represent the percentage of participants that month who were in employment and who indicated that they felt “not at all” or “a bit” capable of meeting the needs of both their work and their child, as opposed to those who felt “a lot” and “completely” able to meet both these needs. Please note that the sample of participants slightly differed each month. Thus, small changes in percentages could reflect changes in the sample rather than time and should be interpreted with caution.

Section 1:

Children and Young People Mental Health Symptoms

a. Whole sample

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



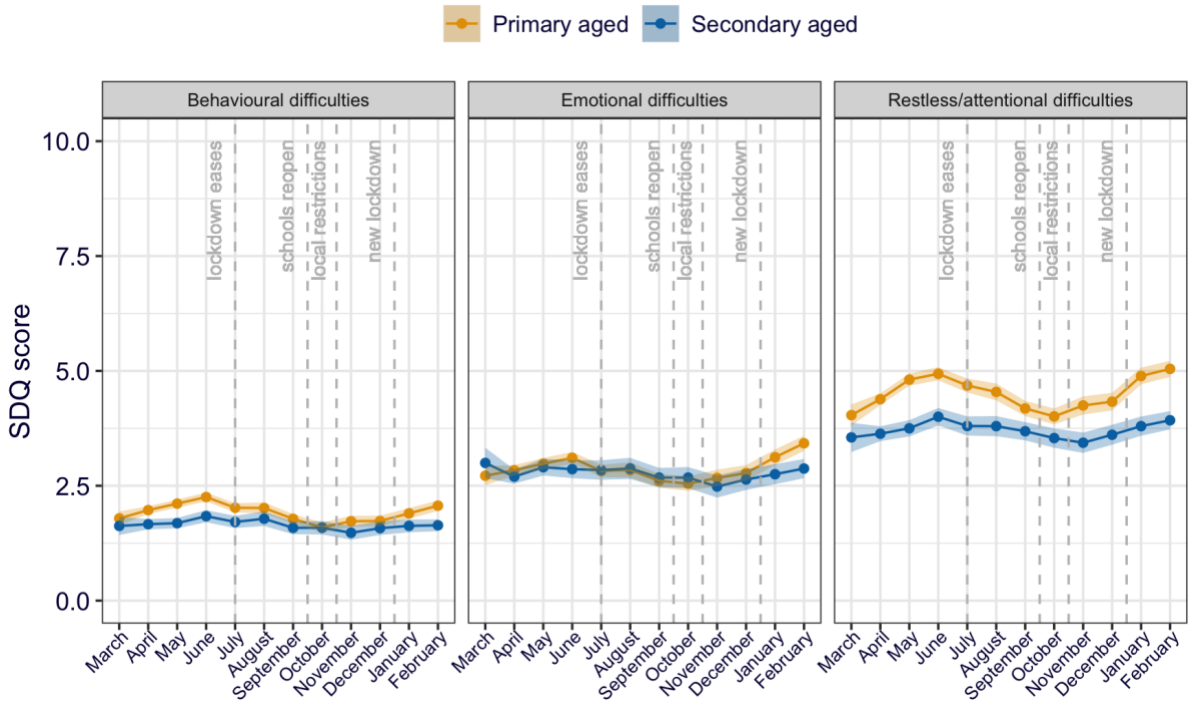
From January to February 2021 there was an increase in reported symptom severity for behavioural, emotional and attentional difficulties (see Report 8 for interpretation of data from March 2020 to January 2021).

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

	2020										2021	
	Mar	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**
Behavioural difficulties												
Mean	1.73	1.86	1.96	2.11	1.92	1.93	1.71	1.59	1.63	1.67	1.79	1.89
(SD)	(1.68)	(1.81)	(1.78)	(1.88)	(1.76)	(1.83)	(1.74)	(1.69)	(1.70)	(1.69)	(1.74)	(1.80)
Emotional difficulties												
Mean	2.82	2.79	2.95	3.03	2.83	2.86	2.63	2.60	2.60	2.72	2.97	3.20
(SD)	(2.52)	(2.46)	(2.59)	(2.58)	(2.50)	(2.56)	(2.54)	(2.57)	(2.59)	(2.56)	(2.61)	(2.73)
Restlessness/Attentional difficulties												
Mean	3.86	4.10	4.43	4.62	4.38	4.26	4.00	3.83	3.92	4.04	4.44	4.58
(SD)	(2.64)	(2.68)	(2.72)	(2.76)	(2.72)	(2.69)	(2.66)	(2.64)	(2.67)	(2.70)	(2.72)	(2.80)

b. Child age

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



Throughout the pandemic, parents/carers reported higher levels of behavioural and restless/attentional difficulties for primary (4-10 years old) than secondary (11-17 years old) school aged children. However, they reported higher levels of emotional difficulties for secondary than primary school aged children.

Between January and February 2021, parents from both age groups reported increases in behavioural, emotional, and attentional difficulties.

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

	2020										2021	
	Mar	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**
Behavioural difficulties												
Primary aged												
Mean	1.79	1.97	2.11	2.25	2.02	2.02	1.78	1.59	1.73	1.73	1.90	2.07
(SD)	(1.68)	(1.79)	(1.81)	(1.89)	(1.79)	(1.80)	(1.73)	(1.63)	(1.68)	(1.65)	(1.72)	(1.82)
Secondary aged												
Mean	1.63	1.66	1.69	1.84	1.71	1.78	1.58	1.59	1.48	1.58	1.63	1.64
(SD)	(1.70)	(1.83)	(1.70)	(1.83)	(1.70)	(1.87)	(1.77)	(1.78)	(1.71)	(1.76)	(1.75)	(1.73)
Emotional difficulties												
Primary aged												
Mean	2.72	2.84	2.98	3.11	2.82	2.84	2.61	2.55	2.67	2.78	3.12	3.42
(SD)	(2.31)	(2.42)	(2.50)	(2.51)	(2.38)	(2.47)	(2.45)	(2.43)	(2.50)	(2.47)	(2.51)	(2.64)
Secondary aged												
Mean	3.00	2.70	2.90	2.86	2.84	2.88	2.68	2.68	2.48	2.64	2.75	2.88
(SD)	(2.85)	(2.52)	(2.74)	(2.72)	(2.72)	(2.70)	(2.68)	(2.79)	(2.72)	(2.69)	(2.73)	(2.83)
Restlessness/Attentional difficulties												
Primary aged												
Mean	4.04	4.38	4.81	4.94	4.68	4.54	4.18	4.01	4.25	4.33	4.89	5.04
(SD)	(2.57)	(2.67)	(2.66)	(2.78)	(2.69)	(2.73)	(2.72)	(2.68)	(2.74)	(2.75)	(2.70)	(2.80)
Secondary aged												
Mean	3.55	3.63	3.75	4.00	3.80	3.80	3.69	3.54	3.44	3.61	3.80	3.93
(SD)	(2.74)	(2.65)	(2.68)	(2.64)	(2.68)	(2.57)	(2.53)	(2.55)	(2.50)	(2.57)	(2.63)	(2.66)

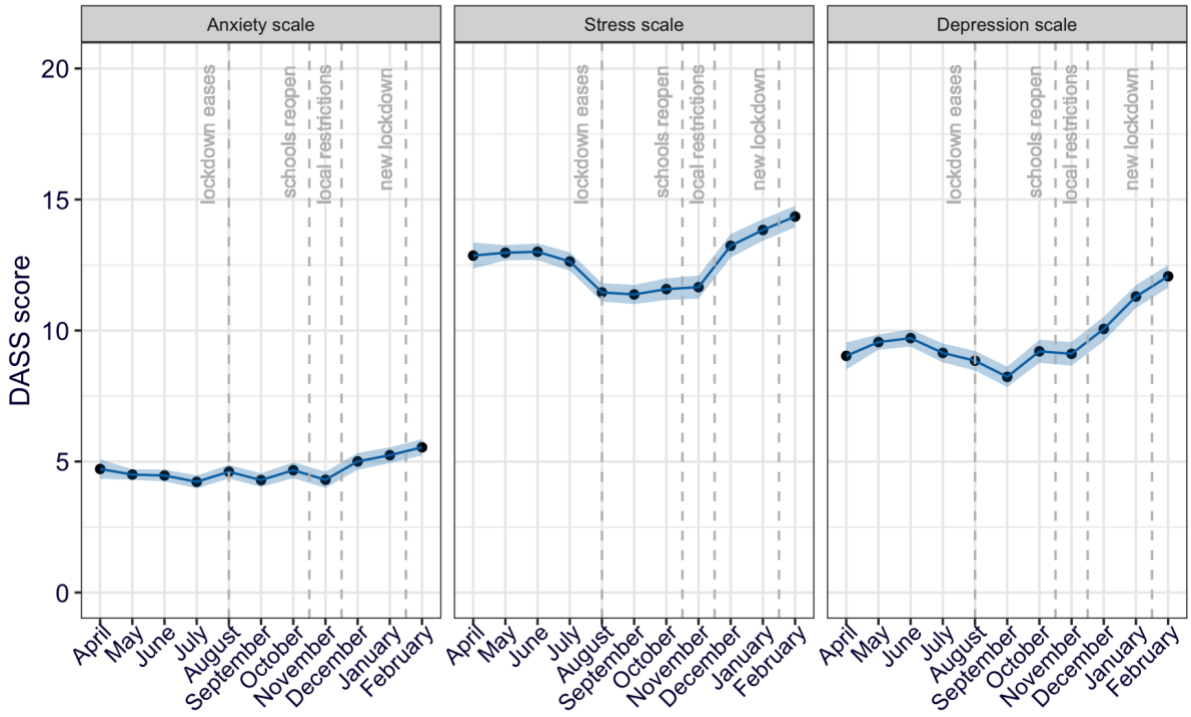
Section 2:

Parent/Carer Mental Health Symptoms

Section 2 provides an overview of monthly data from 6,246 parents/carers. These participants completed the survey at least once between 17/04/2020[2] and 28/02/2021.

a. Whole sample

Figure 3. *Means and 95% CI's of parents/carers reported DASS-21 scores per month*



Parent/carer stress and depression have increased substantially from November 2020 to February 2021. Average parent/carer anxiety scores increased slightly from November to December 2020 but remained relatively stable since then. Parent/carer reported anxiety, depression and stress scores in February all surpassed the equivalent scores in the first lockdown (see Report 07 for interpretation of data from April to December 2020).

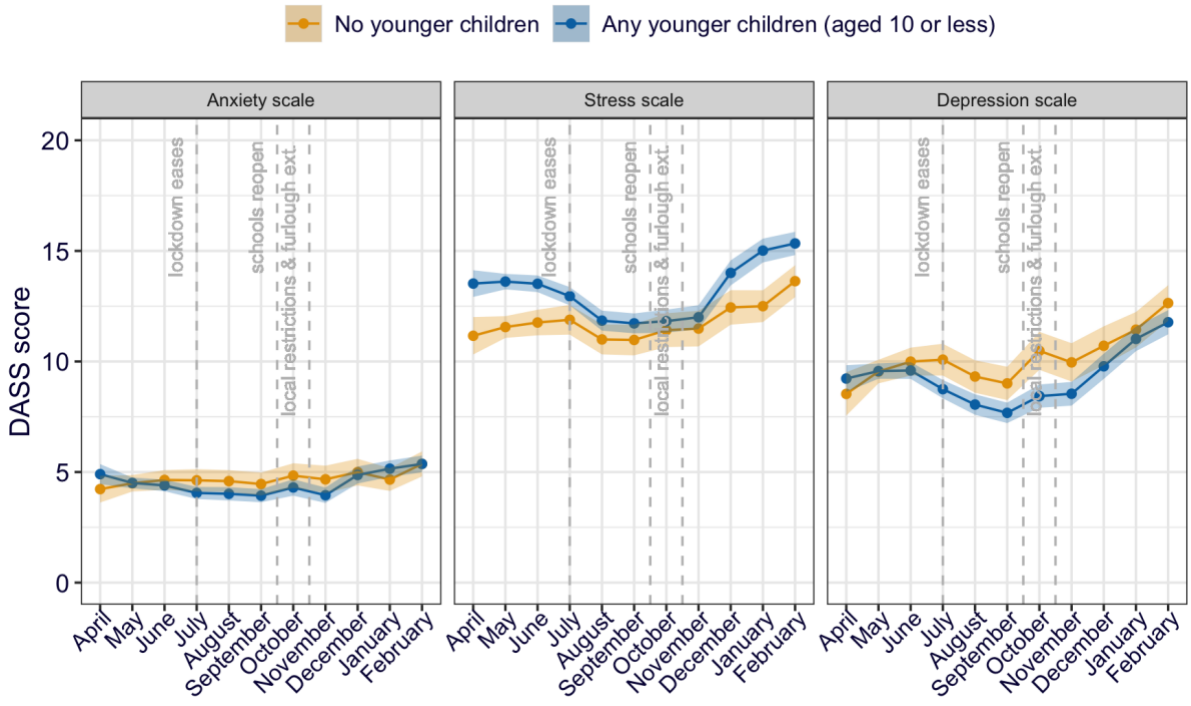
[2] Only partial data was collected for parental mental health before 17/04/2020 and thus was excluded to allow comparisons over time.

Table 3. Means and standard deviations (SD) of parent/carer reported DASS-21 scores per month

	2020									2021	
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
Anxiety subscale											
Mean	4.71	4.50	4.47	4.22	4.61	4.29	4.67	4.30	5.00	5.24	5.54
(SD)	(6.26)	(6.13)	(6.34)	(6.24)	(6.69)	(6.27)	(6.84)	(6.41)	(6.83)	(7.12)	(7.42)
Depression subscale											
Mean	9.03	9.56	9.71	9.15	8.85	8.23	9.21	9.11	10.1	11.3	12.1
(SD)	(8.75)	(8.80)	(9.17)	(9.26)	(9.66)	(9.38)	(9.89)	(9.32)	(9.92)	(10.3)	(10.4)
Stress subscale											
Mean	12.9	13.0	13.0	12.6	11.5	11.4	11.6	11.7	13.2	13.8	14.3
(SD)	(8.49)	(8.68)	(8.93)	(9.01)	(9.11)	(8.84)	(9.29)	(9.09)	(9.56)	(9.81)	(9.87)

b. Presence of young children in the household

Figure 4. *Means and 95% CI's of parents/carers reported SDQ scores per month and age*



Parents/carers who only have older children (aged 11 or above) and parents/carers who have younger children (aged 10 or less) in the household both reported increases in stress symptoms between December 2020 and January 2021; however, this was particularly the case for parents of younger children.

For parent/carer reported anxiety, there was an increase from December and January for parents of young children, but not for parents who have older children.

Parent/carer depression scores followed a similar increasing pattern between December 2020 and January 2021 for those with both younger and older children.

For both parents of younger and older children, in February 2021 average self-reported stress, anxiety and depression were at the highest they have been since first recorded in April 2020.

Table 4. Means and standard deviations (SD) of parent/carer reported SDQ scores per month and presence of any young children in the household

	2020									2021	
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
Anxiety subscale											
Any young children											
Mean	4.71	4.50	4.47	4.22	4.61	4.29	4.67	4.30	5.00	5.24	5.54
(SD)	(6.26)	(6.13)	(6.34)	(6.24)	(6.69)	(6.27)	(6.84)	(6.41)	(6.83)	(7.12)	(7.42)
No young children											
Mean	4.23	4.49	4.64	4.63	4.59	4.46	4.84	4.67	5.00	4.66	5.37
(SD)	(5.47)	(6.28)	(6.76)	(7.03)	(6.55)	(6.63)	(6.80)	(6.99)	(6.98)	(6.51)	(7.42)
Depression subscale											
Any young children											
Mean	9.23	9.57	9.59	8.75	8.05	7.68	8.43	8.54	9.78	11.0	11.8
(SD)	(8.71)	(8.71)	(8.99)	(8.88)	(9.04)	(8.97)	(9.28)	(8.70)	(9.57)	(9.96)	(9.98)
No young children											
Mean	8.53	9.54	9.99	10.1	9.32	9.01	10.5	9.96	10.7	11.4	12.6
(SD)	(8.85)	(9.00)	(9.59)	(10.0)	(9.69)	(9.63)	(10.5)	(9.83)	(10.2)	(10.2)	(10.6)
Stress subscale											
Any young children											
Mean	13.5	13.6	13.5	13.0	11.8	11.7	11.8	12.0	14.0	15.0	15.3
(SD)	(8.71)	(8.76)	(8.94)	(8.85)	(8.86)	(8.73)	(9.17)	(8.82)	(9.49)	(9.64)	(9.60)
No young children											
Mean	11.2	11.6	11.8	11.9	11.0	11.0	11.4	11.5	12.4	12.5	13.6
(SD)	(7.63)	(8.32)	(8.78)	(9.35)	(8.91)	(8.88)	(9.32)	(9.12)	(9.08)	(9.13)	(9.50)

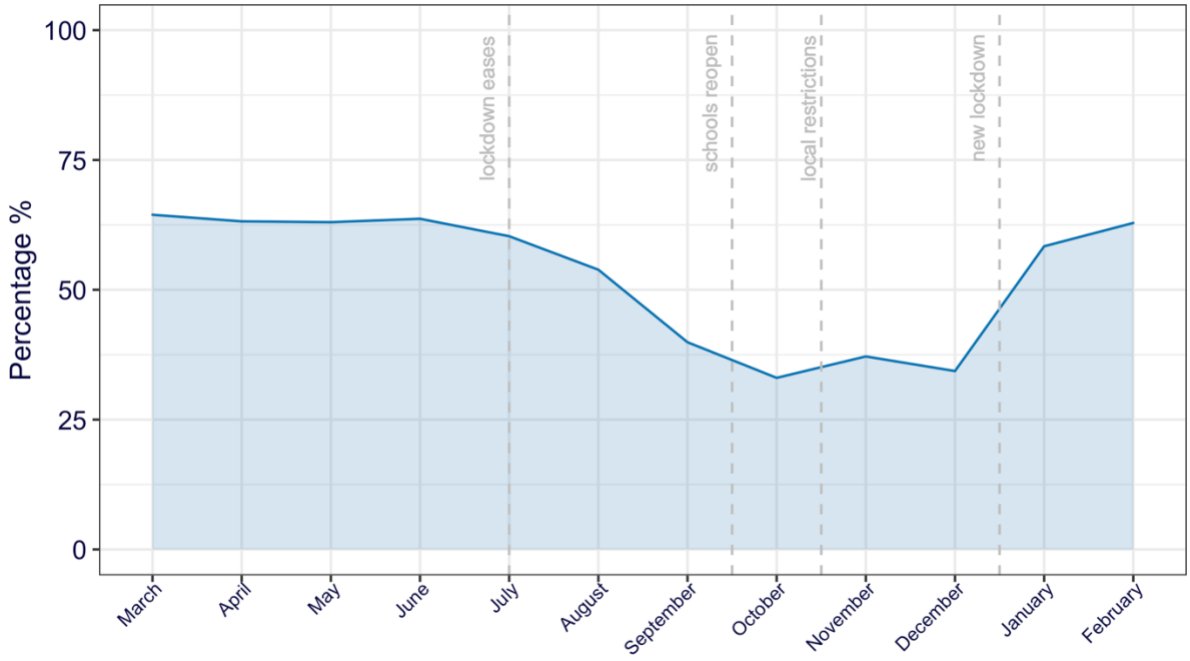
Section 3:

Meeting the needs of childcare and work

Out of 8,386 parents/carers who completed the survey at least once between 30/03/2020 and 28/02/2021, 6,118(73%) reported that they were in employment, either full-time or part-time, at the time they completed the survey. Only these parents/carers were included in the following analysis.

a. Whole sample

***Figure 5**. Percentage of parents/carers who reported not feeling able to meet the needs of their work and their child per month*



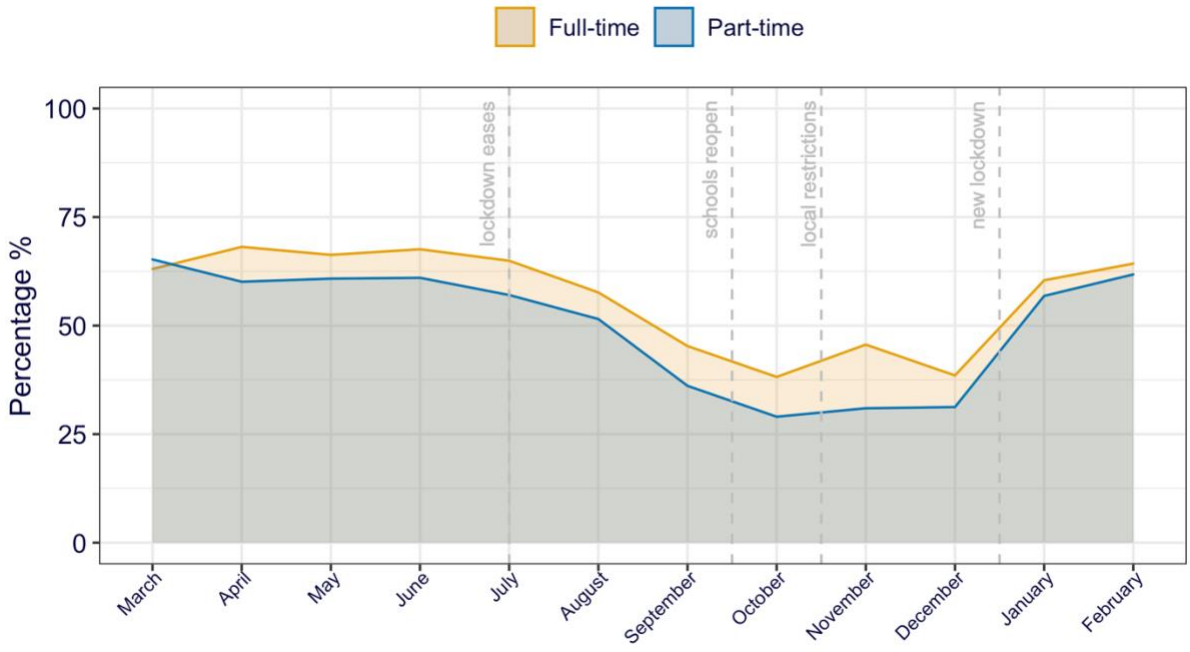
The number of working parents/carers who did not feel that they could meet the needs of their child and their work peaked in the first lockdown (63.6% on average in the first lockdown) and decreased steadily from July to December (43.1% on average), then increased again from December to February (60.7% on average in the recent lockdown).

Table 5. Percentage of parents/carers who reported not feeling able to meet the needs of their work and their child per month

	2020										2021	
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
%	64.5	63.2	63.0	63.7	60.3	53.9	39.9	33.0	37.2	34.4	58.4	62.9

b. Work arrangements

Figure 6. *Percentage of parents/carers who reported not feeling able to meet the needs of their work and their child per month and work arrangements*



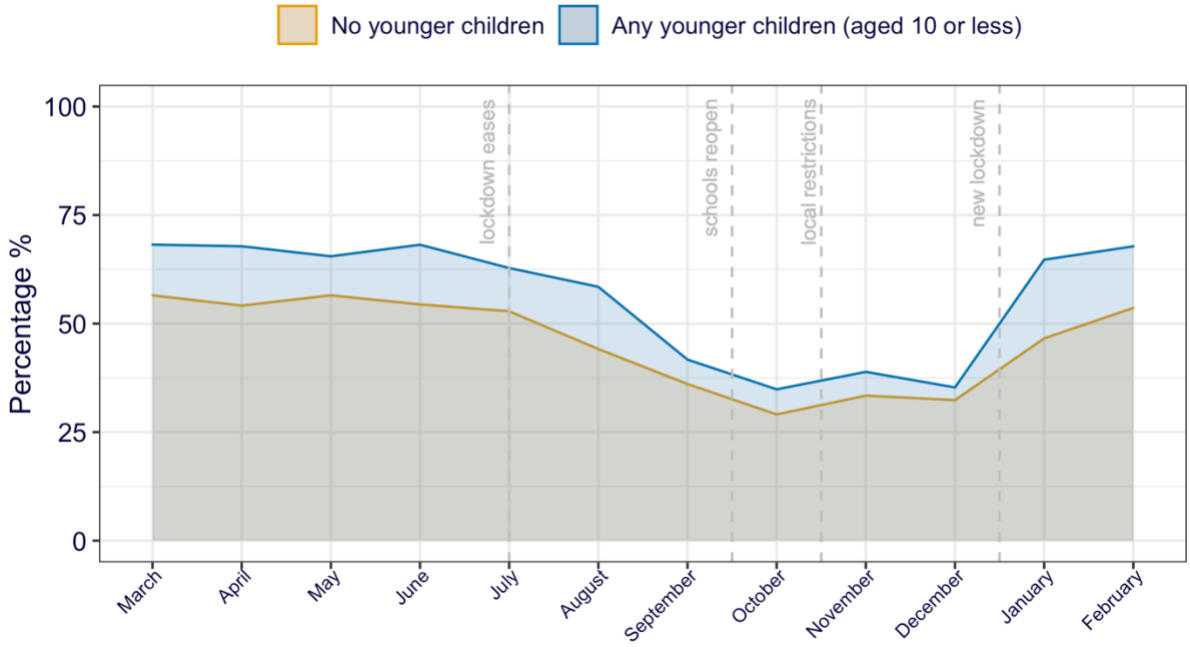
Proportionally, more parents/carers working full-time felt that they were not able to meet the needs of their work and their child than those working part-time (56.7% vs. 50.1% on average).

Table 6. Percentage of parents/carers who reported not feeling able to meet the needs of their work and their child per month and work arrangement

	2020										2021	
	Mar	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**
Full-time	63.0	68.1	66.3	67.6	64.9	57.6	45.3	38.2	45.6	38.5	60.4	64.3
Part-time	65.2	60.1	60.8	61.0	57.1	51.5	36.1	29.0	31.0	31.2	56.8	61.8

c. Presence of younger children in the household

Figure 7. *Percentage of parents/carers who reported not feeling able to meet the needs of their work and their child per month and presence of young children in the household*



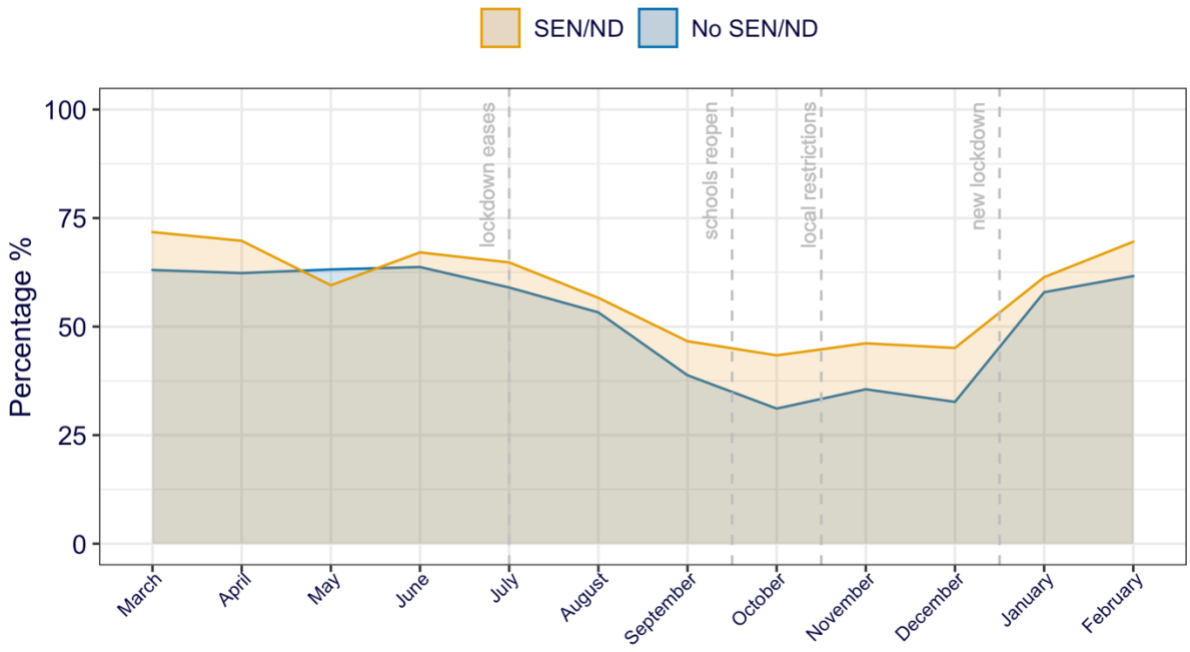
Throughout the whole period, more parents/carers with young children (56.2% on average) reported not being able to meet the needs of their work and their child per month, compared to those with older children only (45.8% on average). The difference between child age groups appeared to be smaller during the months when most children were attending school (in Autumn 2020) than in the months when most children were at home.

Table 7. Percentage of parents/carers who reported not feeling able to meet the needs of their work and their child per month and presence of young children in the household

	2020										2021	
	Mar	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**
Any younger children	68.2	67.8	65.5	68.2	62.8	58.5	41.7	34.9	38.9	35.3	64.7	67.8
No younger children	56.5	54.2	56.5	54.4	52.8	44.1	36.1	29.1	33.4	32.4	46.6	53.6

d. Special educational needs/ Neurodevelopmental differences

Figure 8. *Percentage of parents/carers who reported not feeling able to meet the needs of their work and their child per month and SEN/ND*



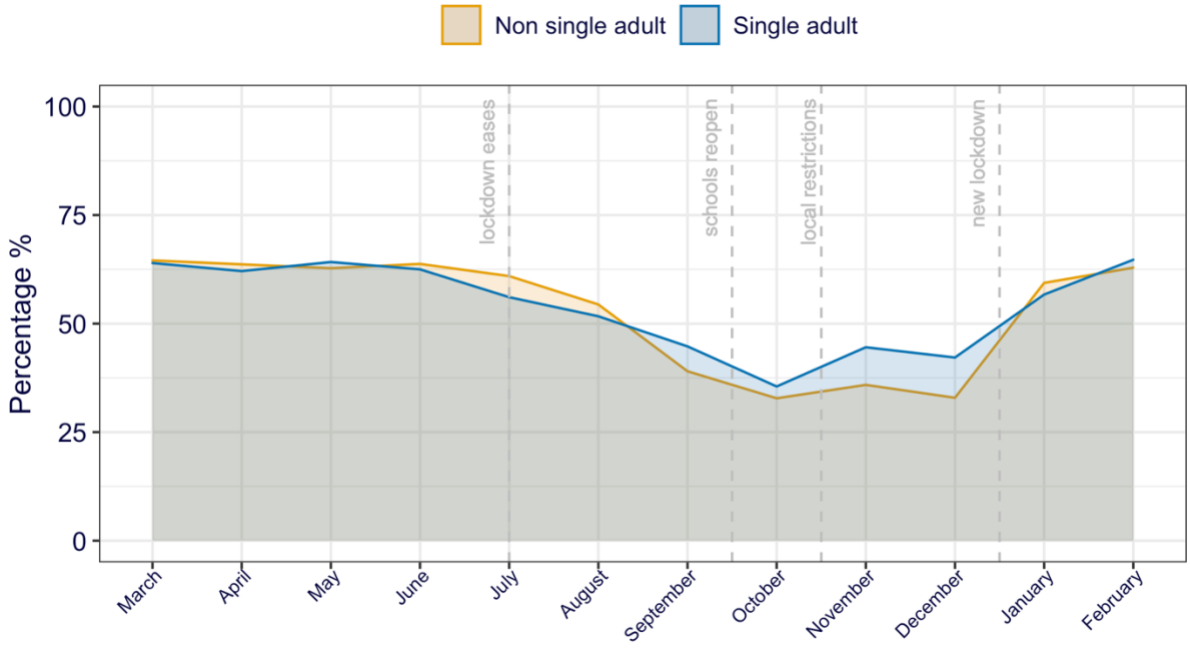
Proportionally, more parents/carers of children with SEN/ND reported that they were not able to meet the needs of their work and their child per month than those without (59.1% vs. 51.8% on average).

Table 8. Percentage of parents/carers who reported not being able to meet the needs of their work and their child per month childcare per month and SEN/ND

	2020										2021	
	Mar	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**
SEN/ND	71.8	69.6	64.4	66.9	66.5	57.1	46.6	43.8	46.8	45.0	61.4	69.8
No SEN/ND	63.0	62.2	62.8	63.2	59.3	53.3	38.8	31.1	35.6	32.7	57.9	61.7

e. Single adult household

Figure 9. *Percentage of parents/carers who reported not feeling able to meet the needs of their work and their child per month and single/non-single adult households*



On average, similar proportions of parents/carers felt that they were not able to meet the needs of their work and their child, regardless of whether or not they were the only adult in their household (54.1% of single adults and 52.8% of non-single adults on average).

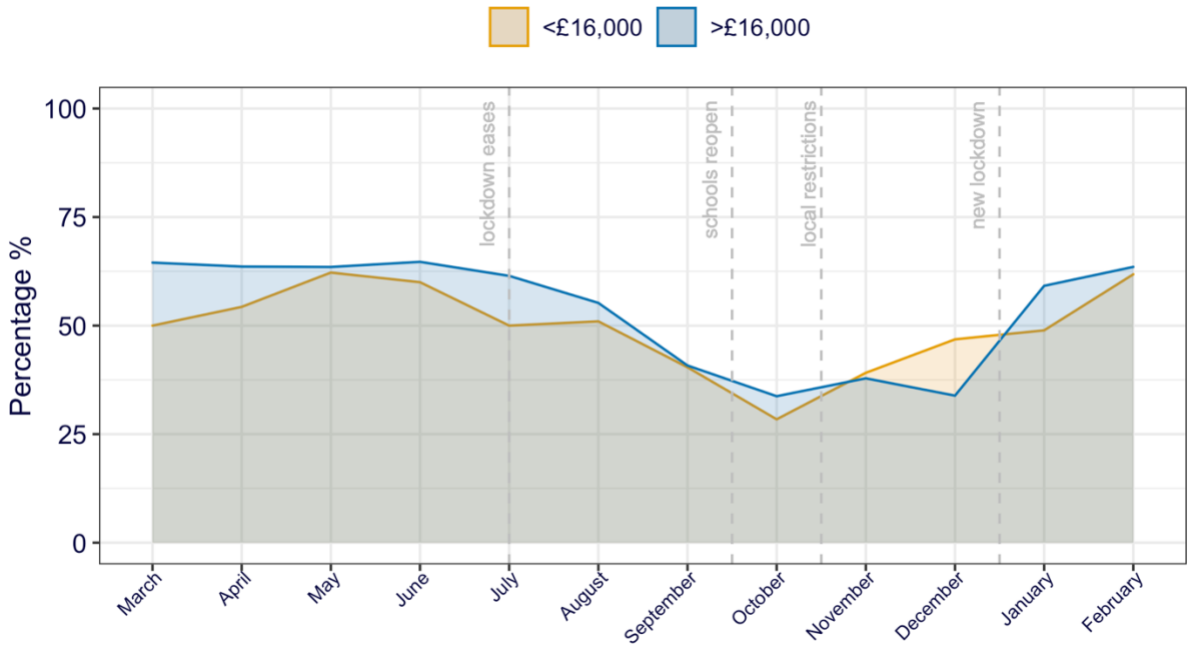
Notably, parents/carers in single adult households did not experience as substantial an improvement in their perceived ability to meet the needs of both their work and their child during the months when most children attended school in Autumn 2020.

Table 9. Percentage of parents/carers who reported not feeling able to meet the needs of their work and their child per month and single/non-single adult households

	2020										2021	
	Mar	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**
Single adult	64.0	62.1	64.2	62.5	56.1	51.7	44.8	35.5	44.6	42.2	56.7	64.7
Non-single adult	64.5	63.7	62.8	63.8	60.9	54.4	39.0	32.8	35.9	32.9	59.4	62.9

f. Household income

Figure 10. *Percentage of parents/carers who reported not feeling able to meet the needs of their work and their child per month and household income*



On average, 53.5% of parents/carers from households with higher annual incomes (> £16,000 p.a.) and 49.4% of parents/carers from lower income households (< £16,000 p.a.) reported not being able to meet the needs of their work and their child. The pattern of change was broadly similar over time.

Table 10. Percentage of parents/carers who reported not feeling able to meet the needs of their work and their child per month and household income

	2020										2021	
	Mar	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**
<£16,000	50.0	54.3	62.2	60.0	50.0	51.0	40.4	28.4	39.1	46.8	48.9	61.8
>£16,000	64.5	63.6	63.5	64.7	61.5	55.2	40.8	33.7	37.9	33.9	59.2	63.5

Appendix A

Participants' demographics at baseline: March 2020 to February 2021

	Overall (N=8386)	National Figures*
Relationship to Child		
Grandparent	63 (0.8%)	-
Other	70 (0.8%)	-
Parent	8191 (97.7%)	-
Step-parent	62 (0.7%)	-
Location		
Greater London	847 (10.1%)	13.4%
Northern England	1654 (19.7%)	23.2%
Northern Ireland	129 (1.5%)	2.8%
Scotland	543 (6.5%)	8.2%
Southern England	3885 (46.3%)	22.1%
The Midlands	1000 (11.9%)	16.1%
Wales	328 (3.9%)	4.7%
Parent Gender		
Female	7682 (91.6%)	51%
Male	647 (7.7%)	49%
Missing	57 (0.7%)	-
Employment Status		
Self employed	904 (10.8%)	8.5%
Unemployed/Other	1483 (17.7%)	3.8%
Working full time	3051 (36.4%)	50.7%
Working part time	2948 (35.2%)	16.9%
Household income (16k)		
<£16,000	772 (9.2%)	19%
>£16,000	7031 (83.8%)	81%
Missing	583 (7.0%)	-
Household income (30k)		
<£30,000	2053 (24.5%)	58%
>£30,000	5750 (68.6%)	42%
Prefer not to say	583 (7.0%)	-
Parent Ethnicity		
Other ethnic backgrounds	405 (4.8%)	14%
White: British, Irish, other	7757 (92.5%)	86%
Missing	224 (2.7%)	-
Presence of younger children (aged 10 or less)		
No younger children	2517 (30%)	-
Any younger children	5451 (65%)	-
Missing	418 (5%)	-
Index Child's Gender		
Female	4027 (48.0%)	52%
Male	4297 (51.2%)	48%
Missing	62 (0.7%)	-
Index Child's Age		
Adolescent (11-17 years)	3156 (37.6%)	45%
Child (4-10 years)	5230 (62.4%)	55%
Index Child's SEN/ND Status		
No SEN/ND	6903 (82.3%)	85.3%
SEN/ND	1483 (17.7%)	14.7%
Index Child's Child Mental Health		
Depression, anxiety, or other	488 (5.8%)	12.8%
No	7882 (94.0%)	87.2%
Missing	16 (0.2%)	-

*National Figures were extracted from the following sources on 12/05/2020:

https://digital.nhs.uk/data-and-information/publications/statistical/mental-health-of-children-and-young-people-in-england/2017/2017

https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/datasets/z1zippedpopulationprojectionsdatafilesuk

https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/employmentintheuk/september2019#:~:text=Main%20points%20for%20May%20to%20July%202019,and%20unchanged%20on%20the%20quarter.

https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/bulletins/householddisposableincomeandinequality/yearending2018

https://www.gov.uk/government/collections/statistics-special-educational-needs-sen

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/814244/SEN_2019_Text.docx.pdfhttps://www.ethnicity-facts-figures.service.gov.uk/uk-population-by-ethnicity/demographics/age-groups/latest#data-sources

https://en.wikipedia.org/wiki/Countries_of_the_United_Kingdom_by_population

https://www.unison.org.uk/get-help/knowledge/pay/low-pay/

Appendix B

Participants' demographics per month: March 2020 to February 2021

	2020										2021	
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
N =	1061	4459	3709	3229	2651	2640	2335	2027	1699	1758	2211	2260
Location												
Greater London	99 (9.3%)	470 (10.5%)	366 (9.9%)	321 (9.9%)	266 (10.0%)	252 (9.5%)	236 (10.1%)	199 (9.8%)	174 (10.2%)	162 (9.2%)	217 (9.8%)	216 (9.6%)
Northern England	173 (16.3%)	830 (18.6%)	738 (19.9%)	606 (18.8%)	473 (17.8%)	549 (20.8%)	483 (20.7%)	414 (20.4%)	328 (19.3%)	339 (19.3%)	428 (19.4%)	431 (19.1%)
Northern Ireland	9 (0.8%)	62 (1.4%)	42 (1.1%)	34 (1.1%)	28 (1.1%)	38 (1.4%)	29 (1.2%)	24 (1.2%)	20 (1.2%)	21 (1.2%)	26 (1.2%)	24 (1.1%)
Scotland	55 (5.2%)	264 (5.9%)	244 (6.6%)	177 (5.5%)	164 (6.2%)	143 (5.4%)	120 (5.1%)	106 (5.2%)	70 (4.1%)	92 (5.2%)	123 (5.6%)	127 (5.6%)
Southern England	589 (55.5%)	2174 (48.8%)	1751 (47.2%)	1602 (49.6%)	1309 (49.4%)	1205 (45.6%)	1098 (47.0%)	955 (47.1%)	837 (49.3%)	865 (49.2%)	1060 (47.9%)	1096 (48.5%)
The Midlands	89 (8.4%)	492 (11.0%)	440 (11.9%)	384 (11.9%)	320 (12.1%)	355 (13.4%)	288 (12.3%)	257 (12.7%)	224 (13.2%)	227 (12.9%)	288 (13.0%)	294 (13.0%)
Wales	47 (4.4%)	167 (3.7%)	128 (3.5%)	105 (3.3%)	91 (3.4%)	98 (3.7%)	81 (3.5%)	72 (3.6%)	46 (2.7%)	52 (3.0%)	69 (3.1%)	72 (3.2%)
Parent Gender												
Female	977 (92.1%)	4120 (92.4%)	3477 (93.7%)	3025 (93.7%)	2447 (92.3%)	2415 (91.5%)	2172 (93.0%)	1848 (91.2%)	1560 (91.8%)	1605 (91.3%)	2011 (91.0%)	2066 (91.4%)
Male	76 (7.2%)	321 (7.2%)	213 (5.7%)	191 (5.9%)	176 (6.6%)	206 (7.8%)	149 (6.4%)	164 (8.1%)	128 (7.5%)	143 (8.1%)	191 (8.6%)	178 (7.9%)
Missing	8 (0.8%)	18 (0.4%)	19 (0.5%)	13 (0.4%)	28 (1.1%)	19 (0.7%)	14 (0.6%)	15 (0.7%)	11 (0.6%)	10 (0.6%)	9 (0.4%)	16 (0.7%)
Employment Status												
Self employed	109 (10.3%)	502 (11.3%)	377 (10.2%)	333 (10.3%)	270 (10.2%)	262 (9.9%)	219 (9.4%)	212 (10.5%)	171 (10.1%)	182 (10.4%)	212 (9.6%)	243 (10.8%)
Unemployed/Other	136 (12.8%)	721 (16.2%)	595 (16.0%)	513 (15.9%)	389 (14.7%)	513 (19.4%)	441 (18.9%)	397 (19.6%)	324 (19.1%)	311 (17.7%)	415 (18.8%)	380 (16.8%)
Working full time	408 (38.5%)	1652 (37.0%)	1332 (35.9%)	1113 (34.5%)	924 (34.9%)	838 (31.7%)	756 (32.4%)	653 (32.2%)	528 (31.1%)	568 (32.3%)	724 (32.7%)	754 (33.4%)
Working part time	408 (38.5%)	1584 (35.5%)	1405 (37.9%)	1270 (39.3%)	1068 (40.3%)	1027 (38.9%)	919 (39.4%)	765 (37.7%)	676 (39.8%)	697 (39.6%)	860 (38.9%)	883 (39.1%)
Household Income												
<£16,000	48 (4.5%)	309 (6.9%)	292 (7.9%)	200 (6.2%)	144 (5.4%)	282 (10.7%)	210 (9.0%)	184 (9.1%)	148 (8.7%)	153 (8.7%)	218 (9.9%)	209 (9.2%)
>£16,000	943 (88.9%)	3827 (85.8%)	3141 (84.7%)	2790 (86.4%)	2307 (87.0%)	2180 (82.6%)	1966 (84.2%)	1702 (84.0%)	1437 (84.6%)	1489 (84.7%)	1841 (83.3%)	1909 (84.5%)
Missing	70 (6.6%)	323 (7.2%)	276 (7.4%)	239 (7.4%)	200 (7.5%)	178 (6.7%)	159 (6.8%)	141 (7.0%)	114 (6.7%)	116 (6.6%)	152 (6.9%)	142 (6.3%)
Parent Ethnicity												
Other ethnic backgrounds	47 (4.4%)	163 (3.7%)	115 (3.1%)	107 (3.3%)	78 (2.9%)	113 (4.3%)	93 (4.0%)	78 (3.8%)	66 (3.9%)	62 (3.5%)	86 (3.9%)	94 (4.2%)
White: British, Irish, other	991 (93.4%)	4191 (94.0%)	3518 (94.9%)	3047 (94.4%)	2512 (94.8%)	2474 (93.7%)	2184 (93.5%)	1907 (94.1%)	1598 (94.1%)	1662 (94.5%)	2072 (93.7%)	2116 (93.6%)
Missing	23 (2.2%)	105 (2.4%)	76 (2.0%)	75 (2.3%)	61 (2.3%)	53 (2.0%)	58 (2.5%)	42 (2.1%)	35 (2.1%)	34 (1.9%)	53 (2.4%)	50 (2.2%)
Index Child's Gender												
Female	520 (49.0%)	2136 (47.9%)	1747 (47.1%)	1539 (47.7%)	1247 (47.0%)	1261 (47.8%)	1101 (47.2%)	960 (47.4%)	810 (47.7%)	864 (49.1%)	1045 (47.3%)	1103 (48.8%)
Male	533 (50.2%)	2291 (51.4%)	1907 (51.4%)	1647 (51.0%)	1365 (51.5%)	1342 (50.8%)	1210 (51.8%)	1047 (51.7%)	871 (51.3%)	884 (50.3%)	1142 (51.7%)	1125 (49.8%)
Missing	8 (0.8%)	32 (0.7%)	55 (1.5%)	43 (1.3%)	39 (1.5%)	37 (1.4%)	24 (1.0%)	20 (1.0%)	18 (1.1%)	10 (0.6%)	24 (1.1%)	32 (1.4%)
Index Child's Age												
11-17 years old	383 (36.1%)	1642 (36.8%)	1319 (35.6%)	1081 (33.5%)	903 (34.1%)	1057 (40.0%)	888 (38.0%)	794 (39.2%)	681 (40.1%)	716 (40.7%)	932 (42.2%)	951 (42.1%)
4-10 years old	678 (63.9%)	2817 (63.2%)	2390 (64.4%)	2148 (66.5%)	1748 (65.9%)	1583 (60.0%)	1447 (62.0%)	1233 (60.8%)	1018 (59.9%)	1042 (59.3%)	1279 (57.8%)	1309 (57.9%)
Index Child's SEN/ND Status												
No SEN/ND	862 (81.2%)	3682 (82.6%)	3047 (82.2%)	2689 (83.3%)	2197 (82.9%)	2176 (82.4%)	1953 (83.6%)	1651 (81.5%)	1403 (82.6%)	1468 (83.5%)	1836 (83.0%)	1873 (82.9%)
SEN/ND	199 (18.8%)	777 (17.4%)	662 (17.8%)	540 (16.7%)	454 (17.1%)	464 (17.6%)	382 (16.4%)	376 (18.5%)	296 (17.4%)	290 (16.5%)	375 (17.0%)	387 (17.1%)
Index Child's Child Mental Health												
Depression, anxiety, or other	88 (8.3%)	266 (6.0%)	182 (4.9%)	158 (4.9%)	135 (5.1%)	127 (4.8%)	115 (4.9%)	102 (5.0%)	84 (4.9%)	93 (5.3%)	112 (5.1%)	113 (5.0%)
No	973 (91.7%)	4193 (94.0%)	3407 (91.9%)	2951 (91.4%)	2389 (90.1%)	2402 (91.0%)	2121 (90.8%)	1826 (90.1%)	1537 (90.5%)	1597 (90.8%)	2011 (91.0%)	2038 (90.2%)
Missing	0 (0%)	0 (0%)	120 (3.2%)	120 (3.7%)	127 (4.8%)	111 (4.2%)	99 (4.2%)	99 (4.9%)	78 (4.6%)	68 (3.9%)	88 (4.0%)	109 (4.8%)