Avon Longitudinal Study of Parents and Children (ALSPAC/‘Children of the 90s’)

ALSPAC comprises ~14,500 families now over three generations: original mothers/fathers (G0), ‘children of the 90s’ (born 1991-92) (G1), and offspring of G1 born by 2018 (G2). The G2 generation currently ranges in age from < 1 year to 13 years of age. The families were all originally from the Bristol/Avon area and ~50% still live in and around the city.

Executive summary

An ALSPAC COVID-19 questionnaire (collected between 26th May and 5th July 2020) focused on the impact of the pandemic as restrictions in the UK were eased. Schools started to re-open for young children from 1st June. G1 parents were asked to complete a questionnaire about each of their G2 children. These questions included parents’ and children’s pandemic-related worries, and children’s feelings and behaviour since lockdown.

Parents and children had been in lockdown an average of 76 days (SD = 11.18) when they completed the questionnaire.

Parents’ and children’s COVID-19 pandemic-related worries in ALSPAC

Parent-reported data on parent and child worries related to the pandemic were available for 393 participants. Parents responded to two different sets of age-appropriate questions, depending on the age of their child.

As can be seen in Figure 1, most parents of young children (aged less than 3 years) were concerned about the impact of their child missing social experiences and when/if their child would return to nursery or school. The majority of parents were also worried about the long-term impact that the pandemic would have on their child. Most children in this age group were too young (< 1 year old) for parents to contribute data on child worries.

Figure 1. COVID-19 pandemic-related worries in parents and younger children (ages < 1 to 3 years) in ALSPAC
The majority of parents of older children (ages 3 years and up) were also worried about their child returning to school (Figure 2). Most parents also thought that their children were worried about not seeing their friends and missing activities. Worries about having enough money and essential items were less common than were concerns related to the health aspects of COVID-19.

Figure 2. COVID-19 pandemic-related worries in parents and older children (ages 3 years and older) in ALSPAC

Children’s emotional and behavioural difficulties in ALSPAC – before and during the lockdown

Parents reported on children’s emotional and behavioural difficulties before and during the COVID-19 pandemic. Measures of pre-pandemic child emotional and behavioural difficulties were collected between May 2012 and December 2018. See additional information below for a list of age-appropriate measurements used.

At the time of the COVID survey, children ranged in age from < 1 year to 13, and the average age was 5.32 years (SD = 2.64).

We used multi-level models to account for multiple children within families and multiple measurements within children for 393 children with COVID survey data. Our goal was to compare whether children’s trajectories of emotional and behavioural difficulties during the pandemic differ from expected pre-pandemic trajectories.

There is observational evidence that children’s emotional and behavioural difficulties increased during infancy and peaked around the age of 2 years, and then declined throughout the rest of childhood (blue lines in Figure 3).

However, there was evidence that this expected decline in difficulties after 2 years of age was slower during the COVID-19 pandemic (red lines in Figure 3).

This difference in post-age 2 trajectory slopes during the COVID-19 pandemic was more pronounced in boys than in girls. That is, the COVID-19 pandemic may be associated with greater emotional and behavioural difficulties in boys than in girls over the age of 2 years.
Figure 3. Trajectories over time of children’s emotional and behavioural difficulties before and during (“post-COVID”) the COVID-19 pandemic.
### Additional information on measures of child emotional and behavioural difficulties

<table>
<thead>
<tr>
<th>Measure</th>
<th>Child age at measurement</th>
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<tbody>
<tr>
<td>Carey Infant Temperament Questionnaire</td>
<td>6 months pre-pandemic and during the COVID-19 pandemic (ages &lt; 1 year – 3 years)</td>
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<tr>
<td>Carey Toddler Temperament Questionnaire</td>
<td>24 months</td>
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<tr>
<td>The Emotionality Activity Sociability Temperament Survey for Children</td>
<td>36, 60- and 72-months pre-pandemic</td>
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<tr>
<td>Revised Rutter Parent Scale for Preschool Children</td>
<td>48 months pre-pandemic and during the COVID-19 pandemic (ages &gt; 3 years)</td>
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<tr>
<td>Strengths &amp; Difficulties Questionnaire</td>
<td>84 months</td>
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### Source of information

The Avon Longitudinal Study of Parents and Children (ALSPAC) is a prospective population-based cohort study recruiting ~14500 pregnant women in 1990-1992. The health and development of the index children from these pregnancies and their family members have been followed ever since. More information can be found here: [www.bris.ac.uk/alspac](http://www.bris.ac.uk/alspac)