



Department  
for Education

# Children of the 2020s: first survey of families at age 9 months

Research brief

November 2023

**Dr. Marialivia Bernardi\*<sup>1</sup>, Dr. Laurel Fish\*<sup>1</sup>, Jessica van de Grint-Stoop<sup>2</sup>, Sarah Knibbs<sup>3</sup>, Prof. Alissa Goodman<sup>1</sup>, Prof. Lisa Calderwood<sup>1</sup>, Dr. Sandra Mathers<sup>4</sup>, Kavita Deepchand<sup>3</sup>, Chris Ferguson<sup>3</sup>, Tania Borges<sup>3</sup>, Prof. George Ploubidis<sup>1</sup>, Prof. Jacqueline Barnes<sup>5</sup>, Prof. Julie Dockrell<sup>1</sup>, Dr. Claire Crawford<sup>6</sup>, Prof. Lindsay MacMillan<sup>1</sup>, Kevin Pickering<sup>3</sup>, Prof. Pasco Fearon<sup>2</sup>.**

\* These authors contributed equally to this work and are joint first authors of this report.

<sup>1</sup> University College London, <sup>2</sup> University of Cambridge, <sup>3</sup> Ipsos, <sup>4</sup> University of Oxford,

<sup>5</sup> Birkbeck, University of London, <sup>6</sup> University of Birmingham.



Government  
Social Research

## Acknowledgements

The authors wish to thank all families who have generously given their time to take part in the Children of the 2020s (COT20s).

We would like to thank the COT20s research teams at Ipsos for their contribution to the project. We are also grateful to colleagues at the Department for Education and to the COT20s Technical Advisory Board and Steering Group members for comments and advice throughout the project and the writing of this report.

## Executive summary

### Key findings of Children of the 2020s (COT20s) wave 1

#### COVID-19

- COT20s is the first national birth cohort study in England since the COVID-19 pandemic. Children included in this study were born between September and November 2021, therefore their gestation period coincided with the roll out of vaccinations and the lifting of social distancing measures.
- Fourteen percent of mothers had had a confirmed or suspected COVID-19 infection during their pregnancy with the cohort child. Between birth and age 9.5 months, almost half of the cohort children (41%) and more than half of their parents/carers (57%) had been infected with COVID-19.

#### Physical and mental health

- Parents and children were generally in good health but some disparities were evident.
- 23% of primary caregivers reported a longstanding physical or mental health condition or illness. For 13% of primary caregivers, a longstanding health condition reduced their ability to carry out day-to-day activities.
- Most children (74%) did not have any serious or longstanding health or developmental condition by age 9.5 months, though 20% had one condition and 5% had two conditions.
- Being a single parent/carer and having a lower family income were both independently associated with scoring above the threshold for risk of anxiety and depression and poorer general health among parents/carers, and preterm birth and poorer physical health in their children. For example, 19% of primary caregivers in the lowest family income quintile scored above the threshold for depression, compared to 3% of primary caregivers in the highest family income quintile; and 27% primary caregivers in the lowest family income quintile reported their health to be 'fair', 'bad' or 'very bad', compared to 10% of primary caregivers in the highest family income quintile.

#### Financial strain

- One in four families (25%) had experienced significant financial strain, such as having difficulties managing finances, not keeping up with bills, being unable to afford essential baby items, and having to skip or cut the size of meals.

#### Early language development and the home learning environment

- Children's language comprehension development, as measured by the number of words understood at age 9.5 months, was not significantly different from pre-pandemic norms.

- Parents frequently engaged their babies in a variety of stimulating activities and experiences which were associated with language comprehension development. Children who experienced a lower frequency and variety of home learning activities at age 9.5 months on average understood fewer words.
- At age 9.5 months the cohort children typically watched 29 minutes of digital content a day on average. There was substantial variation, as 28% did not typically watch any television, videos or other digital content on a screen, while 7% did so for more than 2 hours a day. Children who watched screens (72% of the sample) typically did so for an average of 41 minutes a day.
- There was no relationship between time spent watching digital content on a screen and the number of words understood at age 9.5 months.
- Socio-economic disparities in home activities and interactions were apparent in the first year of life, as indicated by slightly lower mean home learning environment scores for the lowest income families, primary caregivers with the lowest levels of education, and primary caregivers of Black or Black British ethnicity, and of Asian or Asian British ethnicity.

### **Early childhood education and care (ECEC)**

- By age 9.5 months, 43% of families had used some form of early childhood education and care (ECEC) provision (either informal or formal) on a regular basis, while 57% had not used any regular ECEC provision.
- One in eight families (13%) had regularly used formal ECEC, most often day nurseries (6%), nursery schools (3%) or childminders (3%).
- Over a third of families (37%) had regularly used informal care, mainly from grandparents (34%), other relatives or friends.
- Families in the highest income quintile were the highest users of both informal and formal childcare (40% regularly used informal childcare and 23% regularly used formal). In contrast, single parent families were high users of informal childcare (40%) but low users of formal childcare (9%).

### **Service use**

- Almost all primary caregivers saw a health visitor (97%) and the majority saw a midwife (88%) or a General Practitioner (GP; 87%) in the 9.5 months after birth. Fewer than 1% of families had seen no professional since their baby was born. 24% of primary caregivers reported experiencing difficulties accessing a GP and 19% reported difficulties accessing a health visitor.
- The most frequently used child and family support services were baby classes (used by 38% of primary caregivers), playgroups or play sessions (37%), and breastfeeding support (26%). However, 36% of primary caregivers had not used any of the 15 activities or support services listed in the survey.
- Fifteen percent of COT20s participants reported that they had used a service offered by a family hub or children's centre since their baby was born, most frequently: playgroups or play sessions, health visitors, baby classes, breastfeeding support, and support/check-ups for infant weight and growth.

Children of the 2020s (COT20s) is the first birth cohort study in England in two decades. It aims to longitudinally measure and track the circumstances and outcomes of babies, and their families, over the first 5 years of life, to provide a rich source of data for researchers and policy makers relating to early learning and development, early childhood education and care (ECEC), and family services. COT20s is the first study in the Department for Education's (DfE) longitudinal research programme collectively referred to as the Education and Outcomes Panel Studies (EOPS). These studies will generate evidence on the progress of children through early years, primary and secondary school, and the post-16 period, with data collection continuing until the end of the decade.

The first survey of the COT20s study took place in the second half of 2022 when the children were on average 9.5 months old. At this time, England was adjusting to post-pandemic life and facing significant cost of living pressures. This report provides a baseline description of the cohort and begins to identify demographic disparities in early life such as in health, childcare, the home environment and service use that might lead to longer-term disadvantages in children's learning and wellbeing.

The COT20s sample was drawn from the Child Benefit Register and a total of 8,628 families participated, a response rate of 51%, providing data on 8,733 cohort children. The cohort is broadly representative of the population of families with young babies in England, when compared against the benchmark of the 2021 Census and other relevant statistics, although there were some exceptions, including potential under-representation of higher income families and over-representation of primary caregivers of White ethnicity. Compared to previous cohorts, such as the Millennium Cohort Study (MCS; Dex and Joshi, 2004), the sample includes a more diverse group of primary caregivers, including fathers and step-parents, as well as adoptive parents and foster parents.

The results of this first survey reflect ongoing shifts in society, such as children being born to older parents (32 years old on average), a decrease in married couples in favour of unmarried cohabiting couple families (28%), and more complex family compositions, such as those with parents (mostly fathers) residing elsewhere (14%) and parents who consider themselves a couple but are not living together (6%).

In comparison with the Millennium Cohort Study (MCS), the UK-wide longitudinal study which followed a sample of children born in 2000-02, COT20s found higher levels of education amongst primary caregivers (50% with a highest qualification equivalent to an undergraduate or NVQ level 4 or above compared with 30% in MCS), higher labour market participation (71% employed or self-employed compared with 51% in MCS), and higher percentage of parents being on parental leave when the cohort children were on average, 9.5 months of age (32% compared with 2.5% in MCS).

A large proportion of the cohort children and their parents/carers were exposed to COVID-19 infections, with 41% of babies and 57% of parents/carers having experienced

a COVID-19 infection since the child's birth. A COVID-19 infection during pregnancy with the cohort child was reported for 14% of mothers. Nonetheless, the language development of children at 9.5 months was comparable to that measured in children of the same age prior to the COVID-19 pandemic (CDI-UK). Given the exposure of the cohort children and their families to COVID-19 infections, as well as to the social and economic consequences of the pandemic, the COT20s represents an invaluable source for future investigations of the direct and indirect impact of COVID-19 on children's outcomes.

An indication that many families with babies are facing challenging circumstances is the rate of reported financial hardship. A quarter of primary caregivers (25%) reported financial difficulties, as indicated by experiencing at least one of the following: not keeping up with bills, having difficulties managing finances, being unable to afford essential baby items, and having to skip or cut the size of meals. Rising inflation and the increasing cost of living have likely exacerbated existing financial strains experienced by families with young children, which is a concern given previous evidence of the effect of economic stress on child and parent outcomes (Villadsen et al., 2023).

The findings from the first wave of the COT20s study highlighted socio-economic and demographic disparities in children's and parental health and wellbeing. In particular, being a single parent/carer and having a lower family income were both independently associated with scoring above the threshold for risk of anxiety and depression, higher levels of loneliness and poorer general health in primary caregivers, and their children were at greater risk of preterm birth and poorer general health. For example, compared to coupled parent/carers, single parents were twice as likely to score above the threshold for risk of depression and also twice as likely to report feelings of loneliness; furthermore, they were about two thirds more likely to report not having good general health themselves or that their child was not in good health. Primary caregivers in the lowest income quintile were approximately six times more likely to score above the threshold for risk of depression, five times more likely to report that their children were not in good health and had twice the rate of preterm births, than those in the highest income quintile. The findings highlight the psychological stress and poorer health experienced by families with lower incomes and by single parents, which may place their children at greater risk of poorer outcomes, and as such may benefit from greater policy support.

The home environment plays a crucial role in shaping children's social, emotional, and cognitive outcomes. Initial findings from the COT20s study suggest that primary caregivers typically frequently engage their babies in a variety of stimulating activities and interactions in the home. It was notable however that these early experiences showed evidence of socio-economic disparities even in the first year of life, with children in lower income families being exposed to stimulating activities less frequently than those in higher income families. Further, as expected, the frequency of home learning activities was associated with the cohort children's early language abilities. Those who were more frequently exposed to stimulating activities, such as being read to, turn-taking games and

pretend games were reported to understand, on average, more words. For example, on average, children in the lowest third of home learning scores understood 1.43 fewer words than those in the middle third, and 0.91 fewer words than children in the highest third. The longitudinal design of COT20s, with annual data collection and the enhancement of data collection using the BabySteps smartphone app, will provide in-depth evidence for charting the longitudinal profile of children's development and for understanding whether these associations are causal and what the key mediating and moderating mechanisms might be.

Early childhood education and care (ECEC) services are a key element of government support for families with young children. Currently, government funded ECEC entitlements are not provided to children aged under 2 years (when a proportion of children become eligible for the 15-hour entitlement for disadvantaged 2-year-olds) and universal the entitlement begins at age 3. Findings from COT20s indicate that the majority (57%) of families with children aged around 9 months had not used regular ECEC. Of those that had, the majority had used *informal* childcare provided by relative/friends, particularly grandparents (who had provided regular care for around a third of families (36%)). One in eight families (13%) had used formal childcare (such as day nurseries or childminders). There was significant variation in the use of *formal* ECEC. Children in families with lower incomes and single parent families were less likely to receive formal ECEC, a finding likely linked to the significant cost of childcare for families with children younger than 2 years (Farquharson & Olorenshaw, 2022). Providing evidence on the role of early childhood education and care settings in family life and in children's outcomes is a key objective of the COT20s study. Future waves of COT20s will capture the use of ECEC provision in each inter-wave period, the take up of available government support programmes, and measure key indicators of formal ECEC provision at 3 and 4 years of age.

Another key area of government support for families with young children are community health and wellbeing services, including those provided via the Family Hubs and Start for Life programmes, which aims to reduce inequalities in health and education outcomes for children and families. Families taking part in the COT20s study reported having high rates of contact with professionals supporting families with babies (for example, 97% having seen a health visitor and 87% had seen a general practitioner), despite some of the challenges that such services had faced during the COVID-19 pandemic. Overall, 24% of primary caregivers reported experiencing difficulties accessing a GP and 19% reported difficulties accessing a health visitor. Socio-economically disadvantaged families reported difficulties accessing a GP more frequently than more socio-economically advantaged families, with 25% of those in the lowest income quintile reporting difficulties when accessing a GP compared to 22% in the highest income quintile. Notably, the opposite applied in relation to health visitors, with more socio-economically advantaged primary caregivers reporting more difficulties with access: primary caregivers in the highest education group were seven times more likely to report difficulties accessing

health visitors compared to those in the lowest education group. It will be valuable to examine patterns of access to health and family services in more depth as the Family Hubs and Start for Life programme evolves, both with future data from the COT20s study and from direct service data.

COT20s participants will be recontacted annually and invited to take part in further waves of data collection when their children are aged 2, 3, 4 and 5 years.



## References

- Dex, S., & Joshi, H. (2004). *Millennium cohort study first survey: A user's guide to initial findings*. Institute of Education, University of London.  
[https://www.researchgate.net/publication/320194950\\_Millennium\\_Cohort\\_Study\\_First\\_Survey\\_A\\_User's\\_Guide\\_to\\_Initial\\_Findings](https://www.researchgate.net/publication/320194950_Millennium_Cohort_Study_First_Survey_A_User's_Guide_to_Initial_Findings)
- Farquharson, C., & Olorenshaw, H. (2022). *The changing cost of childcare*. Institute for Fiscal Studies. <https://ifs.org.uk/publications/changing-cost-childcare>
- Villadsen, A., Asaria, M., Skarda, I., Ploubidis, G. B., Williams, M. M., Brunner, E. J., & Cookson, R. (2023). Clustering of adverse health and educational outcomes in adolescence following early childhood disadvantage: population-based retrospective UK cohort study. *Lancet Public Health*, 8(4), e286-e293.  
[https://doi.org/10.1016/s2468-2667\(23\)00029-4](https://doi.org/10.1016/s2468-2667(23)00029-4)



Department  
for Education

© Department for Education copyright 2023

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit [nationalarchives.gov.uk/doc/open-government-licence/version/3](https://nationalarchives.gov.uk/doc/open-government-licence/version/3).

Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.

**Reference: RR1382b**

**ISBN: 978-1-83870-497-1**

For any enquiries regarding this publication, contact us at:

[Team.LONGITUDINAL@education.gov.uk](mailto:Team.LONGITUDINAL@education.gov.uk) or [www.education.gov.uk/contactus](http://www.education.gov.uk/contactus)

This document is available for download at [www.gov.uk/government/publications](http://www.gov.uk/government/publications)