POLICY BRIEF 4

The Impact of COVID-19 on Children: **The Importance of Longitudinal Data and Survey Infrastructures**







This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101008589

1 SUMMARY

This thematic policy brief has been developed for the COhort cOmmunity Research and Development Infrastructure Network for Access Throughout Europe (COORDINATE) H2O2O project. It provides evidence of how pre-existing longitudinal research infrastructures can deliver high-quality data in a short amount of time and is thus informative about the invaluable role of these research infrastructures in informing how policies addressing children and young people should be designed in times of crisis, such as the COVID-19 pandemic.

This Policy Brief presents some of the findings of COVID-19 dedicated surveys of three longitudinal studies: Born in Bradford (BiB), the Danish National Birth Cohort (DNBC), and Growing Up in Ireland (GUI). BiB gathers data from thousands of children from the city of Bradford in Yorkshire in the north of England. DNBC is one of the largest birth cohort studies in the world, mainly focused on health. GUI is a multidisciplinary study that follows the life of two cohorts of Irish children. During the pandemic, these studies' participants were asked to take part in specific surveys that aimed at understanding the effect of COVID-19 and policies adopted to fight it, on various aspects of the lives of children and their households. To this end, BiB researchers administered four surveys from April 2020 to July 2021, receiving more than 3,000 answers from children and parents. Several thousand DNBC participants answered seven weekly surveys in 2020 and a follow-up survey in 2021. In December 2020, GUI researchers administered Covid-19 surveys, receiving answers from almost 10,000 participants.

While ad-hoc COVID-19 surveys explored several topics related to the pandemic experiences of their participants, this brief focuses on three interrelated themes: mental health, work and financial (in)security, and food consumption. Many respondents reported a worsening in mental health due to diminishing social interaction because of national lockdowns and other policies aimed at limiting the spread of the virus. These policies had also implications for job security, with many people being furloughed (put on leave) or becoming concerned about losing their jobs. Precarious job conditions increased financial insecurity, and, in some cases, affected food security as well.

BiB, DNBC, and GUI made it possible to quickly measure the extent to which these dynamics affected people in their countries, providing valuable insights for researchers and policymakers. These examples show the priceless value of having survey infrastructures that can be utilised rapidly for research and to inform policymaking in times of crisis. affected food security as well.

2 INTRODUCTION

GUIDE is a proposed European longitudinal survey of children and young people's wellbeing. The survey is currently being developed through the COhort cOmmunity Research and Development Infrastructure Network for Access Throughout Europe (COORDINATE) project, which is led by the Policy Evaluation and Research Unit at Manchester Metropolitan University (MMU) in the UK, and is funded under the European Union's Horizon 2020 research and innovation programme, grant agreement No 101008589.

The aim of GUIDE is to provide deep, insightful, comparative, and longitudinal data on the wellbeing and experiences of children and young people across Europe. With such data, researchers, governments, and others might better understand – and take steps to improve – the life chances, outlook, happiness, and wellbeing, of children and young people.

To understand whether and how GUIDE might have such impact, researchers from the University of Bologna (UniBo) and MMU have developed a series of Policy Briefs. This thematic case study provides important insights into the usefulness and value-added deriving from longitudinal surveys in times of crisis by presenting the case of ad-hoc Covid 19 surveys administered through pre-existing research infrastructures to samples of families that were already connected to particular surveys.

The following section provides an overview of the studies which are the object of this brief. The next section will present findings related to three topics concerning the pandemic. Each topic draws on findings from two or three of the studies. The brief concludes by arguing for the relevance of GUIDE in the light of these case studies.



3 THE STUDIES

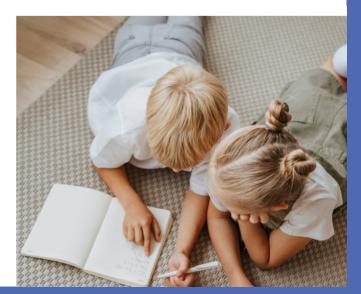
Born in Bradford (BiB) is a research programme following the lives of more than 13,000 children born in Bradford (UK) between 2007 and 2010. The study aims to understand how children's health and wellbeing are affected by various factors, such as the environment in which they grow up, their lifestyle, and their genes.

During the COVID pandemic, researchers administered different surveys to understand the effects of the crisis on the study's participants. With limits on social contacts meaning face-to-face interviews were not available, researchers used emails and phone calls as well as traditional mail, as tools to administer surveys. Surveys were carried out between April and June 2020, between October and December 2020, and between May and July 2021. Answers were gathered from more than 1,000 children between 10 and 13 years old, as well as their parents.

The Danish National Birth Cohort (DNBC) is one of the largest birth cohort studies in the world. It recruited more than 100,000 Danish pregnant women between 1996 and 2002. Its primary aim is to understand the early life causes of diseases. Researchers investigated the impacts of Covid-19 through ad-hoc surveys sent to the study's participants, split between adolescents and mothers. They conducted 7 surveys (each in the space of a week) related to the COVID-19 between March and June 2020. The first one was completed by around 25,000 respondents, among which almost half were adolescents; the last one by slightly less than 5,000, one quarter of which were adolescents.

A follow-up wave took place in April and May 2021 and saw more than 20,000 respondents, of which almost half were adolescents. Findings shed light on several aspects related to the impact of COVID-19 on young people, among which mental health, self-harming behaviour, and eating disorders.

Growing Up in Ireland (GUI) is a multidisciplinary longitudinal study following the lives of two cohorts of Irish children and young people. The first cohort includes children that were 9 months old in 2008/9. while the second cohort is made up of children that were 9 years old in 2007. The study is led by the Department of Children, Equality, Disability, Integration and Youth (DCEDIY) and the Central Statistics Office (CSO). In 2020. almost 25,000 young people and parents were active participants in the study. Researchers investigated the impacts of COVID-19 through three online surveys issued in December 2020. One survey aimed to collect answers related to the experiences of the caregivers of the cohort born in 2008, and one survey collected those of their children. For the cohort born in 1998, one survey was answered by young people. This last survey had the lowest response rate (33%), while primary caregivers were the group with the highest response rate (45%). Overall, almost 10,000 surveys were completed.



4 FINDINGS

Mental Health

During the pandemic, one of the main concerns of researchers was its impact on young people's mental health and that of their families. The COVID-19 surveys carried out by BiB, DNBC, and GUI, all investigated this topic, providing important data for evidence-based research and policymaking.

BiB researchers analysed data from almost 2,000 mothers. They found an increase in depression and anxiety during the pandemic. For almost one-fifth of the mothers, these were clinically important increases. Among the factors associated with these symptoms were lack of social support, loneliness, and financial insecurity. Because of this, researchers highlighted that it is important to consider these factors when designing future pandemicrelated policies (Dickerson et. al, 2022). In another study, BiB researchers investigated the mental health of British Muslim Pakistani women. They found poor levels of mental health associated with COVID restrictions, their impacts on life activities, and how they hindered social interactions. This was correlated with anxiety about the spread of the virus and its effects. However, respondents also reported a better work-life balance (Iqbal et al., 2023).

DNBC data were also used to assess the impact of lockdowns on mental health. One study found that mental health decreased the most for young people *"living alone, in denser households, and without direct access to outdoor spaces"* (Groot, 2022, pg. 1). Another study, with a more long-term approach, found only temporary worsening of the mental health of those people that did not suffer from depression already, concluding that DNBC data *"do not suggest a substantial detrimental impact of the lockdowns"* (Joensen et. al, 2022, pg.1).

In Ireland, GUI researchers reported that, according to their COVID survey, "almost half (48%) of the 22-year-olds had elevated scores on a measure of depressive symptoms" (Growing Up in Ireland, 2021, pg. 19). This rate was importantly higher than those reported during the previous wave of data collection. One out of ten 22-year-olds reported that they did not receive the mental health support they needed. Most of them also reported feeling lonely, but this was common also prior to the pandemic. 12-year-olds were worried about school and the possibility of their families catching the virus. Importantly, females reported significantly worse mental health conditions than males. Despite these problems, most 12-and 22-year-olds and parents had an optimistic attitude concerning their future and, in the case of parents, also of that of their child. 12-year-olds were the most optimistic of all (Growing Up in Ireland, 2021).

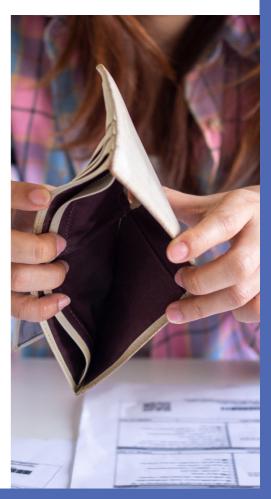
Overall, while all the data reported suggests that the pandemic and its associated restrictions on social interaction, were associated with a deterioration in mental health, findings based on DNBC data suggest that, at least in Denmark, this was only a temporary effect.

Work and Financial Security

Lockdowns and other measures adopted during the pandemic had important consequences for employment status and the financial health of families around the world. The COVID-19 surveys which are the object of this brief provided important insights about these trends in Ireland and Bradford.

Almost 10% of parents and 22-year-olds responding to GUI's COVID-19 survey experienced serious financial difficulties in meeting their monthly expenses, while two-thirds did not report problems from this point of view. This figure was strongly different between households belonging to different income categories. Not surprisingly, parents belonging to the lowest category experienced the greatest difficulties, with one quarter reporting serious financial distress. The level of financial distress experienced by 22-year-olds was also higher for those whose parents belonged to lower income categories (Growing Up in Ireland, 2021). According to BiB researchers, the pandemic was associated with an important increase in the risk of being financially insecure also among the residents of Bradford. Around one-third of their COVID-19 surveys' respondents reported that, during the first lockdown, they experienced greater economic difficulties than before. This was especially true for households already facing difficulties before the pandemic which, in some cases, increased their level of indebtedness. Financial insecurity was associated with higher anxiety levels and lower mental health.

Employment status was one of the most important determinants of financial insecurity (Dickerson et. al, 2020). From this point of view, around one-tenth of BiB respondents reported being self-employed but with no possibility to work, while 15% were furloughed (temporarily laid-off or put on leave). Employment insecurity was among the things respondents were worried about the most. Almost 40% of families expressed concern about this topic, especially those having difficulties to make ends meet. BiB researchers argued that these data pointed to the risk of increasing inequalities and the need for policies to stop this trend (Dickerson et. al, 2020). In Ireland, GUI researchers reported that, according to their Covid-19 survey, almost half of previously employed 22-year-olds and onefifth of parents lost their jobs during the pandemic. Many 22-year-olds benefitted from the 'Pandemic Unemployment Payment', a scheme to support those who lost their job as a result of the pandemic. Thus, researchers highlighted the importance of enacting policies to reduce youth unemployment. One-tenth of survey respondents reported changes in work or pay, such as starting to work remotely (Growing Up in Ireland, 2021).



Food Consumption

The pandemic also had important effects on food consumption. GUI, BiB, and DNBC COVID19 surveys provided evidence on this topic from different points of view.

In Ireland, an important share of survey respondents reported an increase in unhealthy eating (e.g., junk food and sweets). This was particularly true for women: one-third of 12-year-olds and almost half of 22-year-olds. For men, these percentages were a bit lower: onequarter among the younger cohort and almost 40% for the older one (Growing Up in Ireland, 2021). According to BiB researchers, their survey respondents experienced important problems related to food insecurity. One-fifth reported that they could not afford to buy the quantity of

food they wanted to, while one-tenth had to skip meals (Dickerson et. al, 2020).

In Denmark, DNBC data were used to spot the possible effects of lockdown on eating disorders. Researchers compared answers to the survey provided before and after the lockdown period. They found that self-reported symptoms of eating disorders diminished for women and did not significantly change for men (Danielsen et. al, 2023). Thus, the different surveys cited provided evidence on different ways in which the effects of the COVID-19pandemic, and the measures adopted to control the spread of the virus, may have affected food consumption.



5 CONCLUSION

clbeing and the welfare of their households. Longitudinal studies such as BiB, DNBC, and GUI provided timely data to investigate this topic. This was feasible because these longitudinal studies provided a pre-existing research infrastructure with access to samples of families with children.

This Policy Brief illustrates the contribution of this timely data collection to understanding the impact of the Covid-19 pandemic on three issues: mental health, insecurity related to work and income, and food consumption. These are key issues among many on which data were collected, and so were selected for this brief. On mental health, the studies provided H invaluable data on the extent to which the pandemic may have affected outcomes, distinguishing between different income levels and ages, and changes across different time horizons. Similarly, data from the studies shed light on the impact of the pandemic and public policy responses to it, on employment status, highlighting the extent to which people lost or changed their work. They also measured the change in the financial security of households and how this change influenced several aspects of their lives, including mental health. Finally, data were gathered about food consumption, focusing on different trends such as unhealthy eating, food insecurity, and eating disorders.

The studies we cite present interesting findings, highlighting different trends that, unfortunately, cannot be compared with one another. If comparisons were possible, this would enable researchers and policymakers to spot national or regional differences and trends, and understand which policies work best to address specific interregional or international issues. This would be possible with a pan-European research infrastructure such as GUIDE, which could quickly gather data that can be compared across countries. GUIDE will make it possible for policymakers to craft timely and effective evidence-based policies to address future shocks affecting young European people.



6 REFERENCES

- Danielsen, S., Joensen, A., Andersen, P. K., Madsen, T., & Strandberg-Larsen, K. (2023). Selfinjury, suicidality and eating disorder symptoms in young adults following COVID-19 lockdowns in Denmark. Nature human behaviour, 7(3), 411-419.
- Dickerson, J., Kelly, B., Lockyer, B., Bridges, S., Cartwright, C., Willan, K., ... & Pickett, K. E. (2020). Experiences of lockdown during the Covid-19 pandemic: descriptive findings from a survey of families in the Born in Bradford study. Wellcome Open Research, 5.
- Dickerson, J., Kelly, B., Lockyer, B., Bridges, S., Cartwright, C., Willan, K., ... & Pickett, K. E. (2022). 'When will this end? Will it end'The impact of the March–June 2020 UK COVID-19 lockdown response on mental health: a longitudinal survey of mothers in the Born in Bradford study. BMJ Open, 12(1), e047748.
- Groot, J., Keller, A., Joensen, A., Nguyen, T. L., Nybo Andersen, A. M., & Strandberg-Larsen, K. (2022). Impact of housing conditions on changes in youth's mental health following the initial national COVID-19 lockdown: A cohort study. Scientific Reports, 12(1), 1939.

Growing Up in Ireland (2021). Key findings: special Covid-19 survey

Joensen, A., Danielsen, S., Andersen, P. K., Groot, J., & Strandberg-Larsen, K. (2022). The impact of the initial and second national COVID-19 lockdowns on mental health in young people with and without pre-existing depressive symptoms. Journal of Psychiatric Research, 149, 233-242.