



LEARNING WEEK 2021



Parental experiences during the pandemic: what can we learn from the data?

The University of Edinburgh

I'm Alan Marshall, I'm a senior lecturer in quantitative methods based in Social Policy at the University of Edinburgh. I'm also a member of the team of researchers working on the childcare and well-being in times of COVID-19 project. And in my presentation today I'm going to show some results from one strand of the project, which focuses on what we can learn from survey data about parental experiences during the pandemic.

So this is work that I've collaborated on with my colleagues Vicky Gorten and Kevin Ralston, who are also part of the wider project team. Covid-19 has been described a once in a generation crisis. And if we think back to March of 2020 in the UK, we are faced with a situation of rising cases of COVID-19 and a very real threat that the NHS will be overwhelmed, overwhelmed dealing with these COVID-19 cases. And in response, schools and childcare settings were closed to all but key workers in an attempt to minimise the spread of the virus.

This left parents in a really challenging situation. with quite short notice they were left to cover childcare in many cases, continue to work from home, whilst juggling, other responsibilities including a responsibility for home schooling of their children. This part of the project concerned with using gold standard survey data to try to understand how parents to juggle childcare home school, work, and other responsibilities. How do they impact on our well-being and the relationships within households? And was there inequality in the experiences of childcare well-being across social, demographic, and economic groups.

As I've said, all the analysis reported here relates to the early phases of the pandemic for which we have this gold standard survey data. But we will be moving to analyse the same questions for the second, third lockdowns. as

that data becomes available, As the first lockdown took hold, a whole set of competing claims were produced around the impact of the lock-down on families. And these were quite conflicting or competing. So some studies showed that locked down and make families happier, perhaps without spending more time together as a family, less time spent away working or commuting. Whilst other Studies focused on parents reporting more of anxiety in lock down perhaps as a result of the pressures of juggling work, childcare, and homeschooling.

I think one of the reasons for these competing plans is that many of the initial studies were based on web-based samples that followed what we call a convenience sample. So people select themselves into the study. And as a result, there was bias in terms of who select themselves to take part in the survey. Some groups were under-represented, and we don't have a, we didn't have a representative sample. Another problem with these studies is that we often lacked data on circumstances prior to the pandemic. So these initial studies gave us a snapshot of expenses during the early phase of the pandemic. But if you're interested in monitoring wellbeing, we don't have a benchmark before the pandemic to compare to.

One of the things we've done in the strand of the research is to review the data available on the experiences of families focusing on childcare and well-being during the pandemic and we've identified four surveys we think are particularly useful. All of these studies follow the gold standard in terms of the sampling strategy that's used. these are all from random probability samples. And as a result, we can be confident that representative of the wider population. We have two studies understanding society and the next steps study which are longitudinal. So we have repeated observations on individuals or respondents within the studies. And we can compare outcomes before the pandemic to the same outcomes during the pandemic, particularly useful and monitoring things like change and well-being. We have two datasets collected by the Office for National Statistics, the time Use, Survey and the opinions and lifestyle data. And these are very useful to understand. who undertook childcare, who undertook home-school.

How were these juggled what particular types of childcare were undertaken and by who So let me start with the first question that we wanted to consider how a child can manage within households during the pandemic. And I think the key point to note here is that the majority of the childcare was undertaken by women rather than men. So if we focus on this first graph, which is showing the minutes per day spent caring on childcare. And this is all forms of childcare. We can see that women were spending on average around 250 minutes per day compared to a 150 minutes spent by men. This is for children aged under five.

So women were spending more than an hour and a half more per day looking after children at the youngest ages compared to men. The great thing about the time Use survey is that it allows us to distinguish the types of childcare that are undertaken and by who. And one of the types childcare we can look at is what is classed as non developmental childcare. So this refers to things like dressing children as opposed to playing with children, which would be classed as developmental childcare. And again, here we see that if we look at non developmental childcare, the gender inequalities are particularly stark so for the under five age group, women are undertaking twice the amount of time spent on non developmental childcare compared to men. Two hours here compared to one hour on average for men. And we know that the non developmental childcare is classed as the least rewarding form of of the different forms of childcare that this distinguishes.

Another challenge of lockdown was the tension between juggling, homeschooling and childcare. And we can see here too that its women that shoulder the majority of that burden so if we look at the percentages juggling work and homeschool, we can see this applied to 60% of women compared to 40 percent of men with similar differentials. For those juggling. Work and childcare. So women spent more time the man caring for children at all ages, but particularly the younger ages, and particularly for those non developmental forms of childcare that are known to be least, rewarding.

Let's turn now to understanding change in well-being. And the analysis that we undertook around this involve two datasets. First of all, understanding society. And here we have a longitudinal dataset. You can look at change well-being before the pandemic compared to during. And we used a survey instrument called the general health questionnaire, which is a standard measure of mental health, which is used as a screening instrument to detect psychiatric disorders. It comprises 12 question.

So a couple of examples would be whether a respondent felt on the constant strain and whether a respondent lost sleep over worry. And all of the questions are measured on a Likert scale, which allows us to create a continuous variable by adding together these responses across each question, which occurs over a range of nought to 36, with higher scores indicating lower levels of well-being. And what we did in our analysis is we identified individuals in understanding society who experienced a sharp increase of five points in their GHQ score from 2019 to July of 2020.

So this is illustrative of a sharp decline in well-being before the pandemic compared to during. And then we use a logistic regression model to model

the propensity by which people suffered the sharp decline of well-being. Stratifying analysis to include parents versus non parents and various socioeconomic and demographic variables. We also undertook analysis of the next steps, cohort study. And here we looked at a couple of self-reported measures.

First of all, we looked at self-reported measure of change in stress. A question that asked people whether they felt more stressed during the pandemic compared to before. And we also looked at a similar self-reported, measured similar self-reported question on whether a respondent felt they had more conflict with their partner during the pandemic compared to before. And again, we use a logistic regression to explore these two indicators of change in stress and conflict with partner.

So first of all, let me consider some results from our model which looked at the probability of a five-point increase in the GHQ score in the early phase of the pandemic compared to before. So if we looked at a (White) British person at age 30, who was male and a non-parent We found that about one in five people in this group experienced a sharp decline in their well-being. If we change this characteristic to a parent. So now we're looking at a (White) British parent who is male at age (30).

We can now see that one in four people in that group experience, this sharp decline in well-being. So being a parent appeared to be confer a greater risk of experiencing a decline in well-being. We change the characteristic to make this person a female we can see a further increase in the risks of that sharp decline in well-being. And if we alter the age from age 30 to age 18, we can see that we're now at around one in three people who were (White) British parents, female. And around age, age 18 suffered the sharp decline in well-being. We also used our Model to look at how these probabilities of declines in well-being vary according to ethnicity and some, ethnic groups really stood out as experiencing, sharp declines. S

o if we looked at an 18 year old female parent, who is the Bangladeshi ethnic group, we now over 40% of this group experienced a sharp decline in well-being according to that GH Q Score. And if they were never married, we can see we're now approaching almost 50 percent of that group and suffering a strong decline in well-being in the early phase of the pandemic compared to before. We could also use the understanding society dataset to look at how the risks of experiencing a sharp decline in well-being, varied according to the number of children. So if we look at a woman who has no children than

we have around one in four of this group. who, who experience, a decline in well-being of five points on the GHQ score. We can see that that increases if we add one child, but if we add two children, two or more children, we can see we increase to over one in three.

Women with two or more children experience the sharp decline in well-being. So it seems to be a gradient of increasing risk of declines in well-being with increasing numbers of children in the household. We also looked at change in stress and conflict with a partner using the next steps, COVID sweep. So, looking at the question, a self-reported question on whether people felt more stressed or experience more conflict and with that partner during the pandemic compared to before. If we focus first on the graph on the left looking at self-report that change in stress.

The first to note is that women in general experience were more likely to experience more stress compared to men, whether they have children or not. We can also see the parents were more likely to experience more stress during the pandemic compared to before than non parents. If we look at increased conflict with partners, here we don't have an a gender differential in men and women were reporting about the same risks of increased conflict with their partner during the pandemic compared to before. But we can see a clear differential with those couples who are parents being much more likely to experience conflict with their partners than those couples who are not parents.

So we have two surveys. We have two different measures of well-being and a measure of family relationships, all indicating that the parents were more adversely affected by the pandemic than were non-parents in terms of changes in well-being and deterioration in family relationships. S

o let me wrap up by thinking about what we can conclude about the experience of the early phases of the pandemic for Families.

First of all, there were strong gender inequalities, it was women who spent more time on childcare, particularly for young children, particularly for the least rewarding aspects of childcare, such as, non developmental care. We know that from our analysis, that parents were more likely than non parents to experience a sharp increase in symptoms of psychiatric disorder as represented by changes in their GHQ 12 score from before the pandemic compared to during. And we also know that if we look at self-reported measures of stress and self-reported measures of conflict, that parents were more likely to experience a feeling of more stress or more conflict during the pandemic compared to before than were non parents.

We can see from our analysis the female parents were the most likely to experience sharp declines in mental health and self-report as feeling more stressed during the pandemic compared to before. And we also can see from our analysis that the declines in mental health during the first lockdown increase with the numbers of children. But are also associated with a whole set of social, economic, and demographic variables.

We see that these are greatest for those who are young. For particular ethnic minorities such as the Bangladeshi ethnic group. And for those who have never married. And we know that all of these results come from the gold standard surveys. Surveys in the UK. These all come from random samples. And in many cases, these samples where we have repeated observations over time. So we can compare responses before the pandemic to those afterwards.