Insights: PEACH data

with Edith Aguirre

Chris Coates 00:08

Hello, and welcome to Insights – a podcast from Understanding Society, the study that captures life in the UK in the 21st century. Understanding Society is longitudinal, which means that, every year, we ask each member of thousands of the same households across the UK about different aspects of their life. These podcasts look at how the data can be used: what have researchers found, and what we can learn from it? I'm your host, Chris Coates, and in this episode, I'm talking to Edith Aguirre, a senior research officer at the Institute for Social and Economic Research about our Pregnancy and Early Childhood data file, which is known as the PEACH file. It brings the data children parents report for children under 10 together with data on pregnancy and child development. So, Edith, what's the idea behind the peach file?

Edith Aguirre 00:59

Well, the household is at the heart of Understanding Society. Essentially we are a rich resource for anyone interested in family life. By creating this data set, we are offering an accessible resource that delves into various aspects of family dynamics, providing valuable insights for those studying child development. And related.

Chris Coates 01:30

So how is the- how is the PEACH file going to help those researchers?

Edith Aguirre 01.34

So what the PEACH file does is that it brings together data from all children reported in the main survey from Wave 1 to the latest release, and this is what makes easy to track child development over time, and also linking to our main datasets is straightforward, so researchers can dive deep into the information they need without any hassle. So, the child's journey can be seen in the context of their family circumstances, and this provides researchers with a more comprehensive perspective to conduct their analysis.

Chris Coates 02:22

OK, so what's actually in the PEACH file?

Edith Aguirre 02:25

Something very important about the PEACH file is that the information is at the child level. So we are using the unique person identifier number that identifies children across all waves. The data includes relevant information, such as like, for example, birthweight, whether they were premature or how much they cried as an infant, if they, for example, could speak in full sentences at age 3, or even how often parents read to the child at 3, 5, and 8 years old. It also covers of pregnancy, so the file includes whether the baby was born through normal delivery or by C section, or if the mother smoked or drank during pregnancy. So it really does contain a wide range of useful information.

Chris Coates 03:25

OK, and is there anything specific that *isn't* in there?

Edith Aguirre 03:30

Well, we include age specific variables only, so that is information that stays the same once measured. We decided to leave out data, for instance, on child care and child maintenance, as it varies across time or waves. Plus, for example, we have assigned values to explain why some information might be missing. For example, if a child hasn't reached the age to be asked a particular

question yet – or if they joined to study when they were older and missed a question that should have been asked when they were younger.

Chris Coates 04:07

OK, and so who's in it? Which participants are in are in the file?

Edith Aguirre 04:11

We have gathered information over 32,000 children in the 13 waves of Understanding Society that have been released so far. But we started collecting a full set of child development questions at ages 3, 5, and 8 from Wave 3 onwards. This means that all children, up to 6 years old, who appear for the first time in Wave 1 are eligible because they were 8 or younger in Wave 3. But if they were older than 6 in Wave 1, then they couldn't be asked these questions in Wave 2 or afterwards. Therefore they are not eligible to be reported in the PEACH file. And we are also leaving out children with age inconsistencies, so, after all the processing, including Wave 13, we have ended up with 19,327 children in the latest version of the PEACH file.

Chris Coates 05:13

So, now you've brought this together, it's easier for researchers to find out about child development in in one file rather than looking at, I think it's up to seven different files. So what can they study now?

Edith Aguirre 05:25

Well, to start with, it's much easier to monitor child development, right, which helps to understand delays in development and potentially inform interventions to improve children's skills and abilities. For example, children with developmental disorders are likely to have health problems and perform less well at school, but early treatment can make a real difference. Plus the first months of life are crucial to future learning, as a baby's brain reaches over half its adult size during this time, so stimulation then is linked to better outcomes at school confidence and social skills. Upbringing also affects intellectual and social skills. The way parents interact with their children impacts their behaviour, wellbeing, their educational choices. For example, in Understanding Society, when a child is 10 years old, we ask parents about their parenting style – whether it is authoritarian, authoritative, or permissive. So this way we can see whether parenting is influenced by financial problems or physical or mental illness, and explore how this is linked to child development, giving to our users lots of research opportunities.

Chris Coates 06:53

And thinking about how parents interact with their children and how that affects their behaviour and wellbeing, I think you've recently published a paper about parents' gender attitudes and children's mental health, and that used the Understanding Society data on children's development and parenting behaviour. Can you tell me a bit about that?

Edith Aguirre 07:13

Yes, yes, sure. This is a joint work with my colleagues. Michaela Benzeval and Aja Murray, and, as you said, we examined the relationship between parents' attitudes towards gender roles and mental health of their children, and our analysis is focused on assessing how parental gender attitudes correlate with various aspects or dimensions of children's mental health, measured by the strengths and difficulties questionnaire that we collect in Understanding Society when children are age 5 and age 8, and we employ the structural equation models to investigate this association, controlling for key socio-demographics. And what we find is that parental attitudes toward gender roles appear to correlate with the specific dimensions of children's mental health, suggesting that exploring parental gender attitudes might be a potential avenue for intervention in the prevention of child mental health challenges. For example, to highlight, in the case of fathers, the parenting behaviour was found to strongly mediate the relationship between gender attitudes and their children's mental health. But such mediation effect was not observed in mothers, and this indicates potential differences in the mechanisms through which parental gender attitudes might be influencing children's mental health

based on the gender of the parent. But of course, while these results imply the potential importance of parental gender attitudes in children's mental health, further research is needed to examine the extent to which these associations actually reflect causality.

Chris Coates 09:08

So there's a whole range of questions that researchers can ask. And, and it sounds like there are lots of different ways that that that people can look at this this new file.

Edith Aguirre 09:18

Yes, absolutely. Researchers can do, for example, cross sectional analysis of just one wave, or they can pull together different waves, and you can increase your sample size by doing this. You can also dive into longitudinal analysis it could involve looking, for example, at parental biomarkers that probably were collected before in Understanding Society, or even data that we collected during Covid. So it's all about exploring different angles and seeing what insights come out of it.

Chris Coates 09:57

As I understand it, there are other data sets on children that researchers can use. So what's different here?

Edith Aguirre 10:04

Well, Understanding Society is unique. We've got data from during pregnancy, and even before conception, which is something really unusual to find, and this gives a fuller picture right from the start. Plus, we've got context. We're talking social, economic family circumstances, even information on siblings. Because Understanding Society collects data on all members of the household. And after children turned 10 years old, they start filling in their own survey, and that's following them across their whole life. And it's like seeing the whole story unfold right in front of you.

Chris Coates 10:55

So, thank you, Edith. You can find out more about how the data from Understanding Society is changing practice and informing policy by visiting our website, understandingsociety.ac.uk. Thank you for listening, and remember to subscribe wherever you get your podcasts.