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# Our next Director: Professor Emily Grundy

We are delighted to announce the appointment of Professor Emily Grundy as Director of the Institute for Social and Economic Research at the University of Essex.

Professor Grundy, currently Professor of Demography at the London School of Economics, will join ISER as Director and Professor of Population Science in October 2017, in succession to Professor Nick Buck.

Prior to her appointment at LSE, Professor Grundy was Professor of Demography at the London School of Hygiene & Tropical Medicine (LSHTM), where she is now an Honorary Professor. She previously led a National Centre for Research Methods node, based at LSHTM and has collaborative links with a range of universities in the UK and elsewhere in Europe.

Her research is focused largely on the social support and intergenerational relationships of older people and on trends and differentials in later life health, disability and mortality. She has a particular interest in associations between family trajectories and health and disability at older ages.

Professor Grundy is a Fellow of the Academy of the Social Sciences and has various national and international roles, including serving as Council Member for Europe for the International Union for the Scientific Study of Population and Chair of the UK Population Investigation Committee.

#### **About ISER**

Originally established in 1989 at the University of Essex to house the British Household Panel Survey (BHPS), ISER has grown into a leading interdisciplinary research centre.

ISER encompasses the highly-respected ESRC Research Centre on Micro-Social Change and the successor to the BHPS, Understanding Society, the innovative UK Household Longitudinal Study. ISER houses an internationally-renowned Microsimulation Unit, producing EUROMOD, the tax benefit microsimulation model and a growing number of spin-off models for countries across the world.

ISER also hosts unrivalled postgraduate study opportunities and a thriving visitor and fellowship programme.

ISER receives financial support from the University of Essex, the Economic and Social Research Council and from a large number of trusts, charities and other partners.

For more information on ISER's work, to sign up for our newsletters or to find out more about fellowships and our visitor programme please see www.iseressex.ac.uk





...leading edge research here at ISER creates major synergies benefiting both the research and the quality of the infrastructures.



DIRECTOR



#### From the Director

I am very pleased to introduce this edition of Taking the Long View, representing the last year's research in ISER. It is my last report as Director and in October I will be handing over to Emily Grundy, who is introduced on the opposite page.

It represents activities in the three main strands of ISER's work, Understanding Society, EUROMOD and the ESRC Research Centre on Micro-Social Change (MiSoC) as well as a number of other projects. One of the core strengths of ISER is the way it brings together the creation of leading research infrastructures, including household panel studies and tax and benefit microsimulation models, with advanced interdisciplinary social science research. The infrastructures are used by researchers around the world but bringing them together with leading edge research here at ISER creates major synergies benefiting both the research and the quality of the infrastructures. This has been the vision for ISER since it was created more than twenty five years ago, which we have maintained and strengthened over those years. In all this activity we are very grateful to the Economic and Social Research Council (ESRC) who have supported Understanding Society and MiSoC, a range of other funders and especially the sustained support from the University of Essex.

It is ten years since we started working on Understanding Society, receiving our first award to undertake development work in April 2007. Since then it has become firmly established as a key resource for longitudinal research around the world with very large numbers of users and publications emerging and substantial use by policy researchers in government. This will be reflected in the Understanding Society Research Conference taking place at Essex in July.

I particularly want to highlight its role as a resource for research at the interface between the social sciences and biological and medical research. Its collection of biomarkers including genetic and epigenetic data alongside rich social science data is unique in household panel studies and has enormous potential for future research. Thanks to the ESRC, we are undertaking a linked programme of research to exploit these data and demonstrate their value of social scientists. Some early results are illustrated in this report.

Last year was the twentieth anniversary of EUROMOD, the tax benefit microsimulation model and we held a very successful conference at Essex in September to celebrate. This reflected the wide range of research which is being undertaken using EUROMOD and some of the research carried out here at ISER is reported here. EUROMOD is also having increasing impacts on public policy and has become a vital research resource for EU policy makers, and The European Commission is taking a more active role in the production of EUROMOD in partnership with ISER, transferring some activities to the Commission.

Policy impact is a key goal of all of ISER's research including that of MiSoC and we were very pleased with MiSoC Director Mike Brewer's success in the ESRC Impact competition. The core themes of the MiSoC programme are of central importance to understanding individual and family behaviours in the current era of uncertainty and change. They include how individuals and families are affected by and react to changes in their life circumstance, of how new members of society – children, young people and new migrants – develop and are integrated into it and of how values, attitudes, expectations, tastes or preferences and identity are formed. Articles in this report illustrate new research on some of these themes.

We were extremely pleased to see two awards in the Queen's Birthday Honours List for key figures in ISER's history. Shamit Saggar, currently seconded from ISER as Associate PVC Research was awarded a CBE for services to Social Science and Public Policy. Within ISER he was responsible for establishing the Understanding Society Policy Unit. Jonathan Gershuny, from the Department of Sociology at Oxford was awarded a CBE for services to Social Science and Sociology. Jonathan Gershuny was Director of ISER from 1993 to 2005 and had a huge impact in creating the institution as we now know it and in ensuring its success. He was responsible for making a reality of the vision for ISER with which we started.

In concluding I want to give my best wishes to Emily in taking over. I am very confident that ISER is in safe hands.



# CHANGING THE DEBATE

# on benefits, incentives to work & factors of child poverty in the UK

Mike Brewer, Professor of Economics at ISER and Director of the ESRC-funded Research Centre on Micro-Social Change, was recognised for his policy-relevant research at the ESRC's Celebrating Impact Prize awards ceremony on 22 June 2017.

The prizes are awarded to ESRC-funded researchers who have achieved impact through outstanding research, collaborative partnerships, engagement or knowledge exchange activities. Professor Brewer was a finalist in the Outstanding Impact in Public Policy category for his work on work incentives, poverty and perspectives on welfare reform.

Professor Brewer's work has changed public debate and understanding of how tax credits and welfare benefits affect incentives to work, and on the determinants of child poverty in the UK. He has made material differences to at least three specific policy activities: a comprehensive report on Universal Credit, produced by the Resolution Foundation in 2015; policy work relating to tax credits and child poverty undertaken by the Child Poverty Action Group (CPAG) during the 1997-2010 Labour government; and policy work relating to poverty undertaken by the Joseph Rowntree Foundation.

Alison Garnham, Chief Executive of CPAG noted that Professor Brewer was "responsible for the definitive and trailblazing analysis of child poverty through the Labour years. His work on the policy options to reduce child poverty inspired numerous campaigns, policy prescriptions and direct campaigns - for example, our CPAG campaign Make it a fiver, Gordon! in the runup to one budget. He put paid to the argument that governments can "play" the poverty data or deliver "poverty plus a pound" as some in the [2010-2015] Coalition government used to claim." Chris Goulden, Deputy Director of Policy and Research at the Joseph Rowntree Foundation, said that "it is hard to think of another academic in the UK today who more effectively combines a commitment to understanding poverty issues through robust research in order to influence policy with a similarly high commitment to methodological rigour." Nick Timmins, the public policy editor at the FT from 1996 to 2012 praised Professor Brewer for being "an absolutely key figure in helping not just other academics and the government, but the public more generally, understand the impact of benefits and tax changes on work incentives and labour supply."

As Professor Brewer explains, "these impacts are based on two long-running strands of research that span my time at the Institute for Fiscal Studies (2000-2011) and the University of Essex (2011 to date). One is about how the tax and welfare system affects individuals' financial work incentives and labour supply decisions; the other understanding past changes in the distribution of living standards, and forecasting future trends given expected economic and policy changes. These strands overlap: core to both is the use of microsimulation methods or models running on large representative household datasets." Professor Brewer's work has been published in: the Economic Journal, the Journal of Labor Economics, Oxford Bulletin of Economics and Statistics, Labour Economics, and Fiscal Studies.

Professor Brewer was also able to reflect on his strategy for achieving impact: "as you would expect, it is crucial to produce accessible findings, disseminate to non-academic audiences, work with third-sector and other organisations involved in policy, and talk to journalists. But there is also so much that can be achieved through informal relationship and becoming a "trusted friend". This means not just taking opportunities to tell people about my work, but also spending time advising them on issues important to them, even when there was little link to my research interests. Such investment makes it much more likely that policy people do listen when I do have something to say."

Professor Brewer concluded by saying that he had also learned to be patient: researchers can't hope to affect the political cycle, and policy makers probably won't want to listen to researchers at the precise moment that new findings are produced. Instead, it is key to keep oneself in the public eye, and to keep old findings available and accessible, until policy makers want to listen.

Professor Mike Brewer was a finalist in the Outstanding Impact on Public Policy category. For a full list of the winners of the 2017 ESRC Impact Prizes, see www.esrc.ac.uk/research/celebrating-impact-prize/

# The long term impact of treating maternal depression

A new ISER study investigates the longer term impacts of treating depression on women or their children. **Professor Sonia Bhalotra** describes her research with international colleagues.

It is estimated that about 12-20% of women in OECD countries and 20-35% in poorer countries suffer perinatal depression and that 10-35% of children are exposed to this in their first year of life. Maternal depression is often undiagnosed and hence untreated, and in many cases is incorrectly perceived as a transient condition.

In general, it is difficult to find independent variation in depression. In other words factors that lead women to fall into depression may be similar to the factors that directly influence women's economic position or parenting behaviours. This makes it difficult to isolate the short and long term causal effects of depression. We addressed this challenge by exploiting the variation in depression generated by a randomized controlled trial intervention that provided a cognitive behavioural therapy (CBT) treatment to a sample of women who were diagnosed as depressed in pregnancy.

### The randomized control trial and its immediate impacts

The intervention, the Thinking Healthy Programme (THP), was implemented in 40 communities in rural Pakistan in 2005/2006. It was one of the largest such trials in the developing world. Women were recruited in the third trimester of pregnancy and screened for depression. A total of 903 women diagnosed as clinically depressed were included in the trial, with women in 20 control communities receiving routine maternal and health services from trained community health workers, and women in the other 20 communities receiving in addition a CBT-enhanced treatment ("thinking healthy"). Women in both arms received 16 home visits, starting in pregnancy and ending when the children were 10 months old. The THP focused on identifying and modifying cognitive distortions common in depression, using techniques of active listening, collaboration with the family, and guided discovery of healthy thinking, aided by pictorial and verbal messages. Following publication of the immediate impacts of this intervention, (Rahman

et al. 2008), the Thinking Healthy Programme has been widely hailed as evidence that a scaleable low-cost community-based intervention can have substantial impacts on depression, and it was recently adopted by the WHO as a model for other countries.<sup>1</sup>

#### Long term impacts

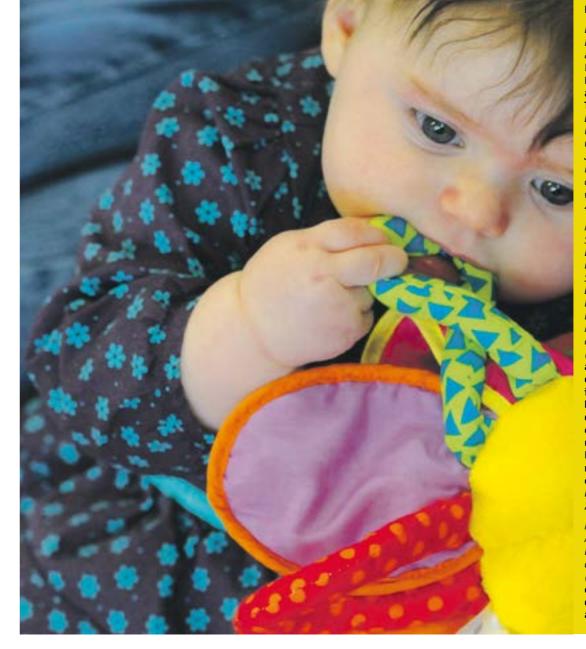
Our research team returned to the site and surveyed the participants six years after the end of the intervention with a view to identifying whether the demonstrated reduction in post-partum depression among women in the intervention communities had persistent impacts on the lives of the mothers, or the lives of children that were in the womb at initiation of the trial.

We identified fairly large and statistically significant impacts of maternal depression on women's financial empowerment, and on the monetary (e.g. learning materials and opportunities, educational expenditure) and time (e.g. daily stimulation and enrichment, help with studies, play) investments they made in their children. Six years after the end of the treatment. an index of financial empowerment for women in the intervention arm was 0.22 standard deviations higher than in the control arm. In particular, the intervention was associated with a 9% point increase in control over household spending relative to a mean of 52% in the control arm. Indices of money and time investments in children were both larger by about 0.2 standard deviations in the intervention arm. These results are consistent with previous research which suggests that investments in children are greater when the mother has greater control over household resources (Lundberg et al., 1997). We also found that parental investments improved for girls rather than boys, which lines up with previous evidence that women may favour girls more than their husbands do, or at least favour equality between girls and boys (Thomas 1994).

Despite significant improvements in mothers' empowerment and parental inputs, we found no

<sup>1</sup> See the information publicly provided at http://www.who. int/mental\_health/ maternal-child/ thinking\_healthy/

<sup>2</sup> This research was funded by two research grants awarded by Grand Challenaes Canada to Maselko and Bhalotra jointly with Siham Sikander, We are indebted to Atif Rahman and Siham Sikander, who led the design of the THP intervention, for facilitating access to their baseline and early followup data, and for providing generous comments on this follow-up study. Siham Sikander led the fieldwork for this study.



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consistent evidence that children in the intervention arm performed better on assessments of growth (e.g., age adjusted height and weight, motor function, morbidities), cognition (e.g., an IQ score, school performance), or socio-emotional development (e.g., psychometric tests of behavioural and anxiety screening) (Maselko, Sikander et al. 2015). This suggests that child development at age seven is robust to maternal depression. However, there is growing evidence that parental inputs in early life may have latent impacts that exhibit later in life (Almond and Currie 2017). We may hence find that the trajectories of children born to treated versus control group mothers will diverge later over time, with potential impacts on adult cognitive attainment, personality skills and health - but verification of this requires very long term followup data.

The intervention cost \$10 per woman per year and was provided by training public sector health workers in administration of THP. Compared to therapy using anti-depressant drugs, this intervention has no known adverse side-effects, has no recurrent costs and, in our setting, had large and lasting impacts on women's control over household resources, and their investments in their children.

This is a non-technical summary of a research mimeograph "Maternal Depression and Women's Decision Making" authored by Victoria Baranov, Sonia Bhalotra, Pietro Biroli and Joanna Maselko². Mimeo available from the authors on request or on their webpages.

# The effect of policy reforms on wellbeing

Over the last decade, increasing attention has been given to the idea of going beyond monetary measures to assess social progress. New EUROMOD research by **Dr H. Xavier Jara** with **Professor Erik Schokkaert** from the University of Leuven, shows the importance of taking into consideration a broader range of wellbeing indicators to assess the potential effect of policy reforms.





#### Measuring individual wellbeing

From a policy perspective, the use of income as a measure of individual wellbeing has been predominant. This is particularly the case for the evaluation of taxbenefit reforms, which focus mainly on the effects on the income distribution. In recent years, however, there has been increasing agreement about the importance of considering other life dimensions in the evaluation of wellbeing in society.

Subjective wellbeing measures, such as happiness and life satisfaction, have recently become popular. Numerous studies have shown that, in addition to income, life dimensions such as health, employment, housing and environmental quality are important determinants of subjective wellbeing; and increasing effort has been put by national statistics offices to collect subjective wellbeing measures in large representative surveys.

The use of subjective life satisfaction for policy evaluation has, however, been called into question because it is not only determined by objective outcomes of life and the importance individuals attach to life dimensions, but also by aspirations and expectations. As pointed out by Nobel Prize winner Amartya Sen, "A person who is ill-fed, undernourished, unsheltered and ill can still be high up in the scale of happiness or desire-fulfilment if he or she has learned to have 'realistic' desires and to take pleasure in small mercies".

Different approaches have been considered to define wellbeing measures which go beyond income but also beyond subjective wellbeing. An alternative measure is the so called "equivalent income", which determines the

#### Which policies work

Our study uses EUROMOD, the EU tax-benefit microsimulation model and data from EU-SILC 2013 for Sweden, which contains information about life satisfaction and satisfaction with specific life domains, as well as information about feelings and emotions. Our analysis consists in assessing whether the effect of hypothetical policy reforms differ depending on the measure of wellbeing considered in the evaluation: income, life satisfaction or equivalent income.

Four alternative and budget neutral tax-benefit reforms are simulated: (A) an additional payment for recipients of social assistance; (B) an increase in the basic amount of child benefit; (C) an additional payment of housing allowance for pensioners; and (D) an improvement in the quality of low-quality housing. Our simulation results confirm that the choice of wellbeing measure is important for comparing the impact of different policies (see table below).

Looking beyond income provides a better picture of individual wellbeing and makes it possible to analyse the effects of non-monetary policy reforms such as improvements to housing quality for example and to compare the welfare effects of such reforms with those of tax-benefit policies. Additionally, interactions between different life dimensions should be considered. For instance, the effect of income changes on health following a policy reform.

Our study is particularly relevant given the increased effort by national governments and international organisations to collect data on monetary and nonmonetary life dimensions and subjective life satisfaction.

#### References:

EUROMOD Working Paper Series, EM9/16, Putting Subjective Well-being to Use for Ex-ante Policy Evaluation, Holguer Xavier Jara Tamayo and

Erik Schokkaert

TABLE. RANKING OF POLICIES									
	DISPOSABLE INCOME			LIFE SATISFACTION			EQUIVALENT INCOME		
	ρ=0	ρ=2	ρ=5	ρ=0	ρ=2	ρ=5	ρ=0	ρ=2	ρ=5
	С	С	Α	D	D	D	Base	В	D
	Α	Α	С	Α	Α	Α	С	Α	В
	Base	В	В	С	С	С	Α	Base	Α
	В	Base	Base	В	В	В	В	С	С
	D	D	D	Base	Base	Base	D	D	Base

Note: Policy scenarios ranked by social welfare at different levels of inequality aversion (p = 0, 2, 5). Base=baseline scenario; A=Increase in Social Assistance; B= Increase in Child Benefit; C= Increase in Housing Allowance for Pensioners; D= Improvement of housing quality

level of income that, combined with the best values of non-income life dimensions (e.g. perfect health), would keep a person in a situation she considers equally good as her initial situation. Equivalent income encompasses multiple life dimensions and is not affected by aspirations and expectations, ensuring respect for the relative importance individuals attach to different life dimensions.

Microsimulation models should exploit the availability of richer data to analyse the role of the welfare state on individual and social welfare taking into account a wide range of life dimensions.

# DOES INCOME MATTER TAPPINESS?

**Dr Gundi Knies** on new research on factors affecting children's wellbeing.

As a teenager I read that children living in households affected by unemployment showed socio-psychological responses to their family's economic hardship that were similar to their parents? They had more headaches and were sadder, and - like their parents - they felt ashamed and tried to hide their economic hardship from others. They did not feel like they belonged.

Reading this had a profound impact on me. Naturally, as a teenager striving to belong myself, I felt that child poverty was a great big social injustice. It's not the children's fault, is it? Why should they suffer? Why does society allow this to happen? Is there nobody to help?

These were rather big questions for me to ponder about in the confines of my shared bedroom in an overcrowded family home, however, and the adults in my local community who I dared challenge for answers did the obvious: they referred me, first, into (youth) politics, and then into studying sociology and social research. Fast-forward a couple of years, and I arrived in London to study Social Policy.

I learned about poverty and social exclusion and was well impressed by the Labour government's ambitious pledge, in 1999, to end child poverty by 2010. Child poverty rates in Britain had been among the highest in OECD countries, and the newly-implemented policies looked well-placed to address (a great deal of) the issue. Excellent news!

### The link between child poverty and children's happiness

Child poverty rates did indeed halve over the period 1999-2008, quite to the shock of the nation, however, children in the UK came out at the bottom of the league table of subjective wellbeing. Was there perhaps no link between children's material and subjective wellbeing after all?



I had come across numerous studies that suggest that income matters for happiness, albeit they were all based on research with adults. The small number of quantitative studies on children's happiness did not corroborate the association. Moreover, most of the studies had taken place in the classroom, which means children were from similar backgrounds, the income measures were much cruder than those used in research with adults, and many aspects of life that may be correlated with both income and happiness - such as the community context and health - were not considered.

With the arrival of data from interviews with around 5,000 children aged 10-15 taking part in the first wave of Understanding Society, it was possible to provide evidence on the association between children's life satisfaction and material wellbeing using a more comprehensive modelling framework. The empirical results did not suggest an association between income and children's happiness, highlighted, however, that children may be receptive of more visible aspects of their material situation, and that they are unhappier than their more well-to-do peers if they cannot afford to enjoy goods and activities perceived as necessities

by a majority of the population, such as holidays and school trips.

#### But then things got tougher

Following the Great Recession, child poverty rates in the UK have been on a steep rise again and most programmes designed to address structural disadvantage from the early years have been phased out. I decided to revisit the question of whether income matters for children's life satisfaction. This time I considered even more aspects of children's living circumstances that may explain why some children are happier than others (including the neighbourhood context and school holidays). Most importantly, I could take advantage of more powerful longitudinal data.

By following the same children over a period of up to five years, it was possible to separate the association between income and happiness into its concurrent and longitudinal components. The results suggest that richer children tend to be more satisfied with life than their less well-off counterparts (just like adults), that it mattered more the poorer the child is, and that, at every point in the income distribution, older children (i.e.,

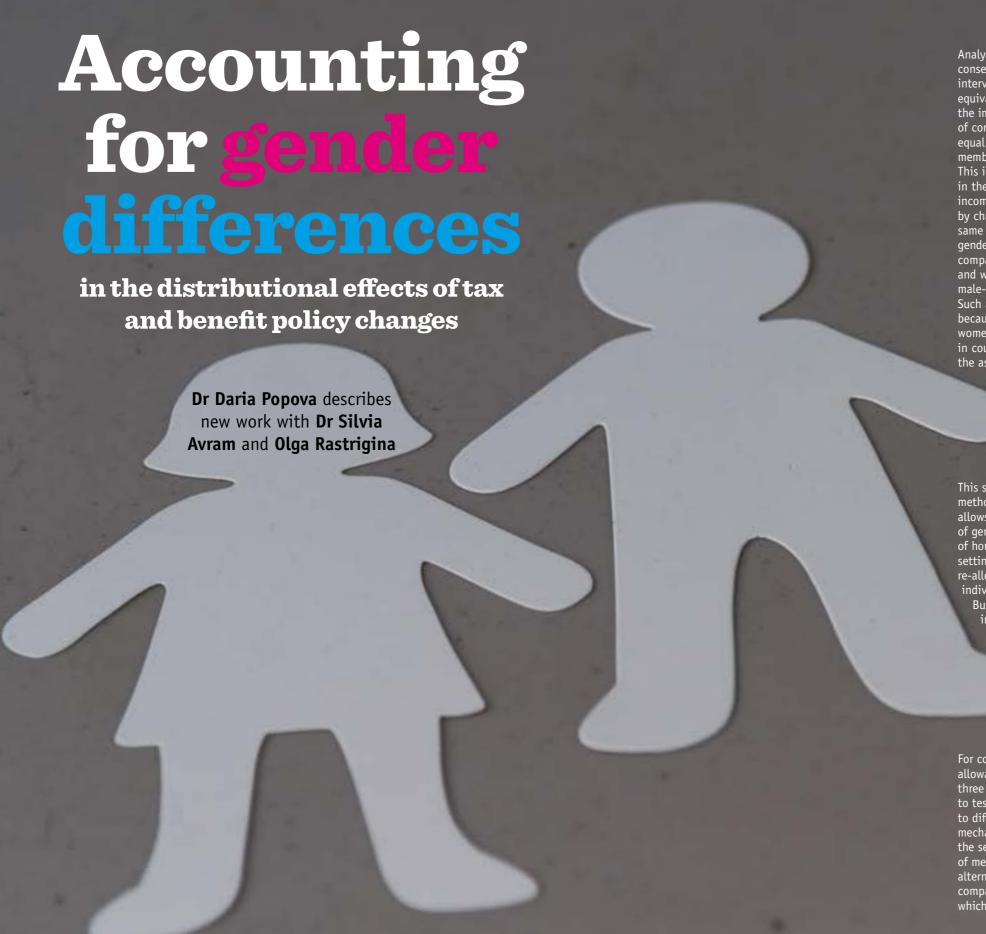
those aged 13-15 but not those aged 10-12) got happier when their family improved their income position over time (and vice versa). The research also confirmed that children are unhappier if they are excluded from perceived necessities such as holidays and activities with friends on account of their family not being able to afford it.

### What the eye doesn't see, the heart doesn't grieve over

Income does matter for children's happiness. Albeit, the income effects were small and we may conclude that governments interested in maximising population wellbeing in this age group will not achieve much (in terms of children's subjective wellbeing; there may well be bigger effects on structural outcomes!) simply by handing families more money. On the other hand, as more and more children find themselves at the bottom of the income distribution - where extra money is appreciated the most - income may become more salient to children's happiness. We should also bear in mind that children have a limited ability to notice exactly how much income the family has so it is difficult to identify an effect of income changes on children's happiness.

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ISER Working Paper Series, 2017-02, Income effects on children's life satisfaction: longitudinal evidence for England Gundi Knies



Analyses of the distributional consequences of welfare state interventions usually rely on equivalised household income where the implicit assumption is that of complete income pooling and equal sharing among all household members (Canberra Group, 2011). This implies that men and women in the same household have equal incomes by default and are affected by changes in policies in the same way. Hence the estimates of gender inequality have to rely on comparisons between single men and women or between female and male-headed lone parent households. Such an approach is clearly limited because it excludes the majority of women and men, i.e. those who live in couples. This leads to a bias in the assessments of gender gap in incomes (Bisdee et al. 2013,

Himmelweit et al. 2013,
Ponthieux and Meurs
2015) and the impact of
public policies on men
and women (Sutherland
1997, Bennett 2013).

This study offers a new methodological approach which allows for the assessment of the level of gender inequality across all types of households and in a cross-country setting. This approach consists of re-allocating all received incomes to individuals within the household.

Building on theories that relate income-generating capacity and bargaining power within couples, the approach

couples, the approach adopted in this study assumes that individual incomes (e.g. earnings, pensions etc.) are retained by their recipients.

For common incomes (e.g. housing allowances, family benefits) the three sets of rules are designed to test the sensitivity of results to different potential sharing mechanisms between the primary and the secondary earner. The outcomes of men and women in these three alternative scenarios are then compared to the baseline scenario which assumes equal income sharing.

The analysis is performed for six EU countries, Belgium, the Czech Republic, Finland, France, Romania and Spain, with welfare systems that differ in terms of the degree of defamilialisation, i.e. the extent to which the welfare state undermines women's dependency on the family and facilitates their economic independence (Taylor-Gooby 1996). The analysis is performed using EUROMOD, the tax-benefit microsimulation model for the EU.

First, the study has investigated whether female incomes tend to approach male incomes in similar types of households and found out that under the three alternative scenarios men's incomes tend to be considerably higher than women's incomes compared to the baseline, in all countries and in all household types.

The highest impact of shifting the traditional equal sharing assumption has been observed for households with children, especially for one-earner couples. Overall, the differences between the three alternative scenarios are small, with the exception of one-earner couples with children. Therefore, the study has confirmed that differences in incomes of men and women are largely generated by the gender gap in employment, earnings, and other market incomes. Tax-benefit systems compensate for the gender gap in market income only to a small extent. The two countries where the gender gap appears to be compensated better than in others are Finland and Belgium. Both can be attributed to the welfare regimes with a high degree of defamilialisation.

Second, the study has established that the effects of policy changes between 2008-2014 had been largely the same for men and women. However, incomes of women in one particular household type – one-earner couples – seemed to be especially sensitive to policy changes related to cuts or increases in social benefits.

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12 Taking the Long View
Taking the Long View



One possibility that has not been widely considered is that unemployment may impact people's body weight differently depending on their personal circumstances. Previous research may have failed to capture this complexity, because most studies use methods based on comparing mean body weight between groups. If unemployment can cause weight gain for some individuals but weight loss for others, these processes might cancel each other out in their impact on the group's average body weight, but with both processes contributing to jobseekers' elevated mortality risk.

The researchers used a model that simultaneously compared, between unemployed participants and controls, the probability of three mutually exclusive, adverse outcomes: being overweight, being obese, and being underweight. This allowed not just the strength but the direction of associations between unemployment and body weight to differ between individuals.

To focus on unemployment rather than wider non-employment, only people currently available for work were considered unemployed, and people out of the labour force due to sickness or disability were excluded. The researchers took factors such as age, gender and education, health conditions, mental health, smoking and physical activity into account so as to isolate associations of body mass index (BMI) with unemployment itself. To look at which factors might predispose someone towards weight loss or weight gain during unemployment, they studied relationships separately according to a number of factors: duration of unemployment, gender, age, household income, and smoking status.

Contrary to widely-held beliefs they found that unemployed participants were less likely to be overweight. This points to an impact of unemployment on body weight, rather than vice versa, since being normal weight rather than overweight is unlikely to make somebody less employable. Strikingly, unemployed

participants were also more than four times as likely to be medically underweight (a BMI below 18.5). At the same time, jobseekers were more likely to be obese (a BMI of 30 or above), but only if they did not smoke. This may suggest different ways of coping with stress, or competing priorities between tobacco, food, and other essentials in the context of a severely restricted budget - possibilities which the authors plan to investigate further.

Splitting the sample by household income revealed that every underweight unemployed person came from a low-income household. with the reduced probability of being overweight also restricted to the less affluent jobseekers. This suggests household financial reserves, or the support of family members, could buffer against weight loss during unemployment. Differences were more extreme for people who had been unemployed for longer, suggesting impact on body weight may occur cumulatively over time, and differences were starker for men than women. Together, these results point to a complex picture in which jobseekers, depending on the complexities of individual lives, are at increased risk of being underweight and obesity, each with their own associated health risks.

Jobseekers' fourfold increase in risk of being underweight and reduced chance of being overweight are quantitative evidence that many unemployed people are not eating enough in simple caloric terms. Despite the political importance of this question, reports of this phenomenon have so far been fairly anecdotal. Our results make an important contribution to understanding the worse health of jobseekers - suggesting that in contemporary Britain, not eating enough may contribute more than previously realised.

Unemployment, underweight, and obesity: findings from Understanding Society (UKHLS), Amanda Hughes and Meena Kumari, Preventive Medicine - Apr 2017.

#### The research is available here:

https://dx.doi.org/ 10.1016/j.ypmed. 2016.12.045

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# UNDERSTANDING **BREXIT WITH** UNDERSTANDING **SOCIETY DATA**

**Dr Nicole Martin** describes research projects planned using unique new data on attitudes to the UK leaving the European Union.

The UK leaving the European Union will be one of the biggest constitutional changes in living memory. Researchers have been using new data from Understanding Society to better understand support for both sides of the debate on Brexit.

Throughout 2016 and 2017, Understanding Society has been asking its respondents whether they would prefer to leave or to remain a member of the European Union. The normal release date for this wave of data (wave 8) would be November 2018. However, in order to allow researchers to use this data in a timely fashion to address current policy and political decisions, we obtained funding from the Economic and Social Research Council to release the part of the data that was collected during 2016. Researchers who wanted access to the data submitted an entry to our competition in March; we received 27 applications involving 65 individual researchers, of which 16 projects had no researcher on the team who had used the study before.

The topics of the research being carried out fit into three themes. which underline the usefulness of the multiple disciplines covered in the data, and its panel design where the same people are interviewed

again each year. The largest group of projects considers the 'left behind' narrative – that is, why were people with less education, in working class jobs, and deprived areas more likely to support Leave? Many projects are taking an interdisciplinary approach - finding explanations for a political act in subjects more routinely studied by labour economists, such as job security, or epidemiologists, such as clinical depression. By using the fact that Understanding Society follows its evidence on the extent to which participants over years, researchers can compare people's opinions on Brexit with the evolution of their own financial trajectory since 2009.

Some researchers are linking the Understanding Society data with the British Household Panel Survey, which started in 1991. They show that you can tell a lot about how people voted in the 1992 general election, based on whether they supported Leave or Remain in 2016 - 24 years later on. This analysis suggests that Brexit tapped into a longer-running political divide. Another project using the British Household Panel Survey is looking at how the Euroscepticism of people's parents in the BHPS affected their own views in 2016.

The third group of projects considers migrant and ethnic minority perspectives on Brexit. One project looks at how many people in bi-national families supported

Brexit; not only are those in binational families much more likely to have supported Remain, this is particularly true of those families that have children. This underlines the discontent that many people in bi-national families feel about the uncertainty of their situation after the referendum. Other projects make use of the large ethnic minority and immigrant boost samples in Understanding Society, to provide minority groups supported the vote to leave the EU.

These research projects were presented at a symposium in June at the University of Essex. The next step for researchers is to write up their findings into working papers, which will be made publicly available in the beginning of December at an event for the public and journalists with the ESRC-funded UK in a Changing Europe.

For more information about **Understanding Society's EU** referendum research programme, or any of the projects mentioned here, please contact Nicole Martin (nmartin@essex.ac.uk) directly.





# obesity

A new study by Dr Apostolos Davillas with Professor Michaela Benzeval, published in Social Science and Medicine, used alternative measures of obesity to unpack the link between social inequalities and adiposity.

The prevalence of obesity is a burgeoning concern worldwide. Obesity is associated with increased mortality and morbidity risks and so places a significant burden on healthcare systems worldwide. A growing number of countries and the World Health Organization have recently established policies and strategies to tackle obesity levels. UK governments have identified tackling obesity as a key priority. Recent evidence has shown that the UK not only has one of the highest obesity prevalence rates in Western Europe and the 8th highest among all OECD member countries but is one of the countries with the highest obesity growth rates in the past three decades. Socio-economic inequalities in obesity are therefore of particular interest.

Previous studies that explored socio-economic inequalities in adiposity were limited, mainly using conventional self-reported obesity measures, such as the Body Mass Index (BMI). Typically, BMI is defined as body weight (in kg) over the square of height (in metres). These studies suggested that more socio-economically disadvantaged females experienced higher obesity levels, while this is not true for males. But these studies have a number of limitations. First, BMI is a noisy adiposity measure, which does not distinguish fat from lean body mass. Moreover, previous reports may have been biased because they rely on self-reported body weight and height values (self-report questionnaires).

New ISER research looked at over 13,000 adult participants in a specific health study within Understanding Society (the UK Household Longitudinal Study) and compared income-related inequalities with both the conventional BMI and a number of alternative adiposity measures such as waist circumference, absolute and relative measures of body fat. These body fat measures allowed distinguishing between the fat- and lean-mass components of BMI, while waist circumference captured central adiposity. Findings indicate that the absence of income-related obesity inequalities for males in the existing reports may be attributed to their focus on BMI-based measures. This is because similar income-related inequalities are found for both males and females

when authors consider alternative BMI measures such as central adiposity (waist circumference) and body fat.

Capitalising on the richness of the Understanding Society dataset, the researchers went beyond the conventional BMI measures to use body composition and central adiposity measures, thus distinguishing between the fat- and lean-mass components of BMI. Moreover, in contrast to many of the previous studies, the study used nurse-administered adiposity measures that were not subject to self-reporting. The study suggested and found that previous measures focusing solely on BMI may have missed the link between income and obesity for men.

# UK governments have identified tackling obesity as a key priority

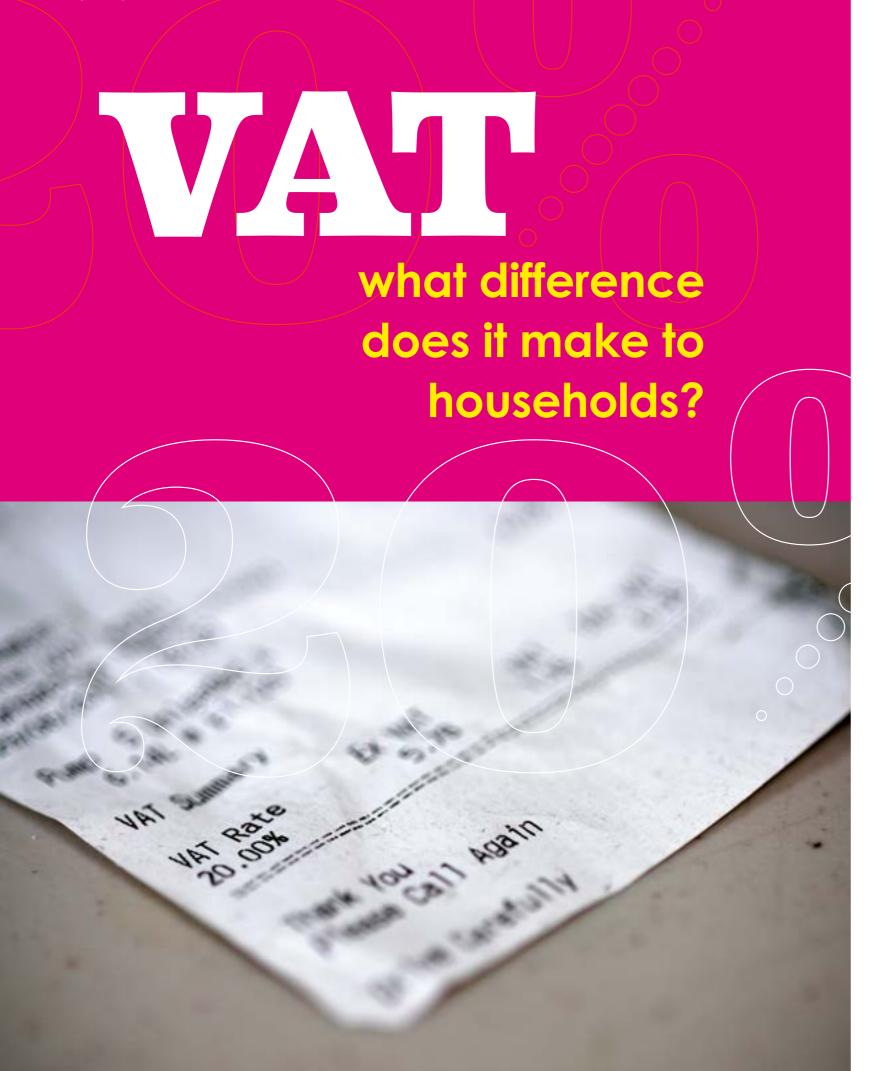
These findings have important implications for the measurement of socio-economic inequalities in adiposity and indicate that central adiposity and body composition measures should both be included in health policy agendas.

In this study, some further analysis explored the factors that lie behind the observed income-related inequalities in adiposity. The findings also highlight the importance of schooling, as differences in education between obese and non-obese individuals explain a large part of the observed income-related inequalities in adiposity. Over and above the role played by schooling, the study also shows that the association between income and obesity may be partially driven by psycho-social mechanisms that link individuals' perceptions of their financial conditions (such as feeling unable to manage on their income or perceived material deprivation) to adiposity.

#### References:

**Apostolos Davillas Michaela Benzeval** *Social Science and Medicine Oct 2016* 

Alternative measures to BMI: exploring incomerelated inequalities in adiposity in Great Britain



**Dr Paola De Agostini** describes the joint work of ISER with the University of Leuven on a new extension to our microsimulation model EUROMOD, to measure the impact of indirect taxation on household incomes in different countries.

The European Commission has identified the area of indirect taxes as an important domain for tax policy reforms with potentially wideranging socioeconomic effects. There is renewed interest in tax shifts that reduce labour taxes and increase taxes on commodities, keeping the overall government revenue fixed. While often desirable from an economic or fiscal perspective, these shifts might entail substantial distributional changes.

The Institute for Social and Economic Research jointly with the Department of Economics of the University of Leuven conducted a project related to the integration of indirect tax simulations into EUROMOD – the tax-benefit microsimulation model for the European Union. The project was financed by the European Commission Joint Research Centre (Institute for Prospective Technological Studies).

The project "EUROMOD extension to indirect taxation" enhanced EUROMOD's Indirect Tax Tool (ITT) plug-in to allow it to analyse indirect taxes such as VAT and excise duties for ten countries: Austria, Belgium, Czech Republic, Estonia, Finland, Greece, Latvia, Poland, Romania and the United Kingdom. It built on two smaller projects covering four countries – France,

Italy, Germany and Spain – designed last year to pilot a method already developed by the EUROMOD Belgian team from University of Leuven.

In order for the tool to work, consumption expenditures from national Household Budget Survey (HBS) data were used to inform the imputation of expenditure into the existing EUROMOD input data based on the Survey of Income and Living Conditions (SILC). Household demand curves were estimated on the aggregated HBS data and the resulting parameter estimates were then used by the ITT in the imputation of expenditures to the EUROMOD input data. Fiscal years have been coded for the period 2011-2016 for all 10 EU countries. The researchers produced a detailed synopsis of the VAT and excises systems in each of the ten countries and a complete validation of the input data, as well as of the output produced by the model. They also created cross-country comparative technical information and comparative baseline results, and analysed an example of a policy reform - involving a revenue-neutral switch from direct to indirect taxation across all countries - in terms of its distributional effects.

The updated ITT allows for a more comprehensive assessment of the effects of policy changes on households than was previously possible in EUROMOD, enabling the analyst to perform static microsimulation analyses in

a comparable way on a single platform. The tool allows for the evaluation of both the budgetary effects and the equity impact of (simultaneous) reforms to direct and indirect tax policies and to the social benefit system. The analytics have also been extended with welfare measures for reforms, providing users with money-metric outcomes quantifying the combined effect of income and price changes.

EUROMOD's new functionalities are particularly suited to investigating how such fiscal policy reforms affect different income groups or subgroups of the population. This project will provide a sound basis for extending indirect tax simulations in EUROMOD to more, and eventually all, the EU Member States.

#### The research team:

Paola De Agostini, Bart Capéau, Andre Decoster, Francesco Figari, Jack Kneeshaw, Chrysa Leventi, Kostas Manios, Alari Paulus, Holly Sutherland, Toon Vanheukelom.

# Sticking with

# The job

# the benefits of in-work credits

In new work funded by the Nuffield Foundation, **Mike Brewer**, **Professor of Economics** at ISER and Director of the ESRC-funded Research Centre on Micro-Social Change, together with **Jonathan Cribb** from the Institute for Fiscal Studies, come to a positive conclusion on the advantages of time-limited in-work benefits.

In-work tax credits are a well-established policy tool in many countries for increasing employment and tackling poverty. However, because in-work tax credits can be paid indefinitely, they are expensive for governments to provide. In comparison, time-limited in-work credits that are paid to former welfare recipients who move into work should be considerably less expensive because they are only paid for, at most, a few years. By making payments only to people who have previously received welfare, they may also be better targeted on lowpotential-wage individuals than conventional tax credits. However, most of the evidence on the effectiveness of these time-limited credits come from the Self Sufficiency Project (SSP) in Canada, where evidence suggests that the incentives had little or no long term impact on employment or wages.

The new research looks at two time-limited in-work credits for lone parents that were piloted in Britain in the mid 2000s, known as "In-Work Credit" (IWC) and the "Employment, Retention and Advancement Demonstration" (ERA). IWC was paid to lone parents who had been on welfare for at least a year if they moved into work of 16 or more hours per week; it was worth £40 per week and was paid for a maximum of 12 months. ERA paid £400 for every 17 weeks of full-time work (short gaps out of work were disregarded), for a maximum of 2 years.

The researchers were able to use rich administrative data available through the Work and Pensions Longitudinal Study that gives detailed information on the time that lone parents spent receiving DWP benefits, such as Income Support, and the periods of time in which they were doing paid work. Key to the research was a model that accounted in full for the different ways in which the two programmes affected lone parents' moves into or out of work, and how the impacts of the two programmes on lone parents' decisions changed over time. Although both IWC and ERA had been previously evaluated, Professor Brewer's new work had access to previously unavailable administrative data from HM Revenue and Customs that gave detailed information on the amount of paid work being done by lone parents.

The research looked at whether the time-limited in-work credits led to sustained increases in employment, and whether it mattered whether the credits rewarded part- or full- time work. Professor Brewer found that credits got more lone parents off welfare and into work, especially for ERA, the credit that was conditional on full-time work. Once in work, both programmes incentivised lone parents to stay in work, and this rise in the numbers in work (and the consequential fall in the numbers claiming



# "credits led to sustained increases in employment... credits got more lone parents off welfare and into work"

welfare) persisted even after payments of IWC or ERA had stopped. Second, the research found a marked difference between the credit that rewarded only full-time work, and the one that was also available to lone parents working part-time. Paying IWC to those working 16 or more hours a week did increase numbers in part-time work, but led to slightly fewer in full-time work. However, paying ERA only to those working 30 or more hours a week led to more lone parents working full-time, fewer not working at all, and fewer working part-time.

A version of the research is available as ISER Working Paper 2017-01, Lone parents, time-limited in-work credits and the dynamics of work and welfare, https://www.iser.essex.ac.uk/research/publications/working-papers/iser/2017-01, and also as an IZA Discussion Paper. Professor Brewer presented these findings at a workshop on 24 May, "Retention and progression in work: what do we know (now)?", alongside speakers from the Resolution Foundation and the Joseph Rowntree Foundation, and a summary report of the whole project will be published by the Nuffield Foundation later in 2017

This research was funded by the Nuffield Foundation and is supported by a research contract with the Department for Work and Pensions. 22 Taking the Long View
Taking the Long View

# DO UNPAID INTERNS BENEFIT BENEFIT FROM THE EXPERIENCE?

or who is hurt the least?

**Angus Holford** describes new research on the pay back from working for nothing.

It seems now to be accepted, with resignation, that to get a toehold on the job ladder in many several highly competitive industries such as politics, the arts, media and sciences, you need some practical experience on your CV, and that for many students and graduates, this means spending time working for nothing, in an unpaid internship.

Much has been written about unpaid internships from the point of view that they are exploitative, on the grounds that work that benefits the employer should be paid, costly to the individual, and as a result damaging to social mobility if only those from well-off backgrounds can afford to participate. Yet individuals can still have their own motivations to take part, and these may be very different. Some may be able to afford to set aside offers of paid work to take a gamble: to work unpaid for a while in the hope of this unlocking the job they really want. Others may take these positions as a last resort, having been unable to find a paid job matching their skills or experience. Those willing to take an unpaid position may still be unable to apply for one where recruitment is not transparent, instead done internally or informally through existing professional or social connections.

The study "Access to and Returns from Unpaid Graduate Internships" sets out to understand who takes unpaid internships; who, if anyone, benefits from taking them;

and if they do, how? Is there a financial return, or are the benefits all in terms of career satisfaction? And does it matter what they would have been doing instead?

The study uses the data from the Destination of Leavers from Higher Education (DLHE) survey of graduates from English and Welsh universities between 2005 and 2011, to study the returns to taking an unpaid internship six months after graduating from a first degree, on labour market outcomes a further three years later. The research compared interns with individuals who went straight into paid work, into further study, or 'something else', by pairing each one with a 'matched' individual, according to their demographic characteristics and their reported motivations for taking the job or internship they are in.

The results show that both particularly advantaged (e.g. privately schooled) and disadvantaged (e.g. from areas with a high unemployment rate) graduates are more likely to be tracked into doing an unpaid internship. But they support the picture of a segregated market in which the social and financial capital that graduates from better-off backgrounds can access gives them an advantage in accessing the 'good' internships with a relatively high labour market return.

Nevertheless, almost everyone taking an unpaid internship can expect to do worse three years later than had they not: former interns face a salary penalty



of approximately £3500 per year compared with those who went straight into paid work, and £1500 compared with those who went into further study. The negative returns to taking an internship are merely significantly smaller for those who were privately schooled or with parents in professional occupations.

Only compared with those doing 'something else' (including travelling or remaining unemployed) do interns gain any significant benefit on average, being 6.4 percentage points more likely to be 'very satisfied' with their career.

These results argue for improving access to and reducing the opportunity cost for students from lower socio-

economic backgrounds, of taking relevant experience for ambitious careers. Expanding opportunities during undergraduate degrees, and enforcing public and transparent recruitment processes for all placement positions would be good ways to do this. So would enforcing the law that those "working set hours, doing set tasks and contributing value to an organization" should be paid.

Finally, improving the information available to students and graduates about the likelihood of different outcomes from internships in key fields would go a long way ethically. We all need to understand the rules of any lottery we are entering.

#### References:

ISER Working Paper Series 2017-07, Access to and Returns from Unpaid Internships, Angus Holford

# Benefits, of time

More time with mothers may be better for children's development according to a new study of millennium babies.

The more time a mother spends with her child between the ages of three and seven, the better that child's cognitive and social skills will be, according to a new study by Professor Emilia Del Bono with Professor Marco Francesconi from the University of Essex and Professor Yvonne Kelly and Professor Amanda Sacker from University College London.

The study also finds first-born children tend to benefit more from early investment of mothers' time than children later in the birth order.

The research, which analyses representative data on more than 8,000 children and their mothers, finds that the positive effect of

mothers' time investment on early child outcomes is quantitatively large. It corresponds in magnitude to 20-40% of the advantage that young children get from having a mother with a university degree as opposed to having a mother with no qualifications.

The researchers also find that the level of education attained by a mother and the birth order position of her child within the family (oldest, youngest, etc) has an effect on early years development.

For example, time spent doing educational activities, such as reading, between the ages of three and five with a mother who has been educated beyond the minimum school leaving age, leads to an

> increase in verbal skills at age seven that are significantly greater than those achieved by children whose mothers are less well educated.

In addition, early time investment by the mother in first-born children is more productive than in subsequent children. Mothers are also likely to change how much time they spend with their children in the early years in accordance with how those children are progressing.

The study is the first to look at the effect of time spent with mothers on their children. It uses data from the UK Millennium Cohort Study (MCS) based at the Centre for Longitudinal Studies. The MCS is a nationally representative longitudinal study of infants born in the UK between September 2000 and January 2002.

The results emphasise that the time spent by mothers with their children has a noticeable influence on early child development.

Mothers are also likely to change time investments over the early years of life of their children in response to earlier outcomes. When this is the case, the socio-economic gradient in outcomes observed at later points of children's lives may be driven by variation both between and within families.

This suggests that there may be limited scope for later policy interventions that aim to affect mothers' time availability or inform them about the effectiveness of their time investments.

Early maternal time investment and early child outcomes

Emilia Del Bono, Marco Francesconi, Yvonne Kelly, Amanda Sacker Economic Journal - Oct 2016



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