In Praise of Panel Surveys

The achievements of the British Household Panel Survey

Plans for *Understanding Society* – the UK's new household longitudinal study

ISER
INSTITUTE FOR SOCIAL & ECONOMIC RESEARCH

E·S·R·C
ECONOMIC & SOCIAL RESEARCH COUNCIL

Preface

The Economic and Social Research Council welcomes this briefing. It is timed to coincide with the launch of the new innovative panel survey, *Understanding Society*. The new survey will follow nearly 100,000 individuals in 40,000 households. With funding from the Large Facilities Capital Fund, ESRC's own resources, and a number of government departments, *Understanding Society* represents the largest ever single investment in academic social research resources in this country.

The need for this new survey was identified in a recent review of longitudinal data sources, undertaken as part of the ESRC's National Data Strategy. It concluded that a new, much larger and innovative panel survey should be commissioned. This exciting project will facilitate an in-depth understanding of the lives and diversity of experiences of UK citizens, both over time and across generations. The findings from the study will help to inform and evaluate long-term policy decisions in areas as diverse as housing, health, and education.

The UK has long recognised the benefits of longitudinal studies. The British Household Panel Survey (BHPS), and the birth cohort surveys of 1958, 1970 and 2000, are often referred to as the jewels in the crown of the ESRC. These studies have transformed our understanding of the complex trends affecting UK society, and have informed long-term policy making in many areas of government.

This briefing provides a series of illustrations of the value of panel surveys, using BHPS findings to demonstrate how longitudinal analysis contributes to the evidence about social processes. I am grateful to the distinguished group of researchers who have combined here to endorse the ESRC's product.

The BHPS sample will be incorporated into *Understanding Society*, and its long run of data will continue to be analysed. Not only will the new study be the largest of its kind ever undertaken across the world, it will also push the methodological boundaries of quantitative data-sets. It confirms the pre-eminence of UK social science in the international research community.

Professor Ian Diamond
Chief Executive, Economic and Social Research Council

Contents

Edited by Richard Berthoud and Jonathan Burton
September 2008

Contributors

Mel Bartley – Professor of Medical Sociology at University College, London

Nick Buck – Professor of Sociology and Director of the ESRC UK Longitudinal Studies Centre at ISER

Andrew Clark – Research Professor at the Paris School of Economics and a Research Fellow of IZA

John Ermisch – Professor of Economic Demography at ISER

Jonathan Gershuny – Professor of Sociology at the University of Oxford

David Halpern – Director of Research at the Institute for Government; Chief Analyst at the Prime Minister's Strategy Unit, 2001-2007.

John Hills – Professor of Social Policy and Director of the Centre for the Analysis of Social Exclusion at the London School of Economics

Stephen Jenkins – Professor of Economics and Director of ISER

Dean Lillard – Senior Research Associate at Cornell University, and an associate of DIW, Berlin

Jacqueline Scott – Professor of Sociology at the University of Cambridge

Mark Taylor – Principal Research Officer at ISER

Robert Walker – Professor of Social Policy at the University of Oxford

Alan Zuckerman – Professor of Political Science at Brown University

Introducing panel surveys: the BHPS

Nick Buck

In the autumn of 1991, a representative sample of 10,000 British adults, from five thousand households, were enrolled as a 'panel', to be interviewed again and again every year, showing what changes had occurred in their lives. Collecting information from people through time is the essence of a *longitudinal* study. The original household members, and their children, will be followed up for the 18th time this year, providing a continuous sequence of data on the process of social change.

This is the British Household Panel Survey (BHPS). It is funded by the Economic and Social Research Council. ISER is responsible for designing and managing the survey, and disseminating the data.

The British Household Panel Survey members, and their children, will be followed up for the 18th time this year, providing a continuous sequence of data on the process of social change.

2008 marks an important turning point. This year's will be the last wave of interviews for the BHPS in its original format. From next year the long-serving sample members will be asked to join a much larger survey. It is an opportune time to reflect on the achievements. A highly distinguished group of researchers, all of them experienced BHPS analysts, has contributed to this briefing 'in praise of panel surveys' – showing how the longitudinal perspective has transformed our understanding of social processes. The issues examined range from anti-social behaviour, through poverty and ill-health, to party political preferences.

Ordinary ('cross-sectional') surveys tell us what people are thinking or doing at any one time. If the same questions are asked in another, later, survey, we can learn how these results change for the population as a whole. But we do not know how individuals have changed their views or their behaviour, or why. The only way we can do this is if we ask questions of the same people at different times. We can then start to understand change and stability at the level of the individual, rather than for the population as a whole. A steady headline unemployment rate could mask a great deal of movement by individuals, with many people losing work and many others finding jobs.

The BHPS is designed as a resource for the economic and social research community.

This capacity to follow individuals through time, and observe how their experiences and behaviours are influenced by the wider social and economic conditions in which they find themselves, gives panel surveys a major role in understanding social change. They provide unique information on persistence of such states as child poverty or disability, on factors that influence key life transitions such as marriage and divorce, and on the effects of earlier life circumstances on later outcomes. They also support research relevant to the formation and evaluation of policy.

Panel surveys encourage more reliable analytical techniques, to assess causal sequences – an interpretation that cross-sectional data, based on only a single observation of each individual, cannot support

The BHPS is designed as a resource for the economic and social research community. More than 2,000 analysts have accessed the data, generating more than 150 publications per year. The articles in this briefing reflect on the achievements of the BHPS. The survey has been a success.

But the ESRC has now commissioned the development of a new, much larger, survey, to be launched in 2009. The final two sections look forward to the benefits expected from an increased sample size, and other major innovations, in the new longitudinal study of UK households – *Understanding Society*.

More detailed information about the BHPS is available online
For a comprehensive index of research publications based on BHPS data go to this webpage

Income and poverty: the rubber band theory

Stephen P. Jenkins

The dynamic perspective on poverty, rare two decades ago in Britain, is now widely accepted and has infused policy.

In the early 1990s, most analysis of Britain's income distribution and the extent of poverty was concerned with the dramatic increases in inequality and poverty that had occurred between the late 1970s and the late 1980s. But then in the 1990s inequality and poverty rates flattened off – it appeared that there was little or no change in the income distribution from one year to the next.

The BHPS revealed that such apparent cross-sectional stability hid longitudinal flux – households' incomes fluctuate between one year and the next, and there was substantial turnover in the membership of the low income population. Although this picture of dynamics rather than stasis had been revealed earlier for other countries with household panel surveys, such as the USA and Germany, the details of the British situation made headlines.

The picture that emerged was one in which there was substantial income mobility from one year to the next, though long-distance mobility was not very prevalent. Part of this mobility included movements into and out of low income – rather than Britain being a country in which the poor are always poor, it was found that approximately half of those with an income below half average income (a commonly-used poverty line) in one year were not poor the next. At the same time, about one in four of those with an income above half the average moved below the low income line the next year. Over a six-year period, about one-third of individuals were poor at least once, compared to the cross-sectional poverty rate which was then about 18%. But only about 2% of individuals were poor every one of the six years. Put another way, individuals' experience of poverty over a period of time more commonly reflects repeated short spells of poverty rather than a single long spell of poverty[1].

The patterns of income change described are consistent with what might be called a 'rubber band' model. Each person's income fluctuates about a relatively stable long-term average – this value is a tether on the income scale to which people are attached by a rubber band. They may move away from the tether from one year to the next, but not too far because of the band holding them. And they tend to rebound back towards and around the tether over a period of several years.

In the short term some of the observed movement may simply be measurement error and, in the long term, the position of each person's tether will move with income growth or career developments. But, in addition, rubber bands will break if stretched too far by 'shocks', leading to significant changes in relative income position.

Over a six-year period, about one-third of individuals are poor at least once. But only about 2% are poor every one of the six years.

So, what are the events that trigger movements into and out of poverty? BHPS research showed that both 'income' events and 'demographic' events are important[2]. For example, over BHPS waves 1–9, 62% of people leaving poverty had reported an increase in labour earnings (about half of which represented getting a job, and half increased earnings while still in work). But only 44% of people who entered poverty had decreased their labour earnings. Demographic events such as dissolution of marital partnerships or the arrival of a child were more important for poverty 'entries' (accounting for 39% of entries) than for poverty 'exits' (19%). Another important finding was the relevance of earnings changes by persons other than the household head. For example, of the 62% of poverty exits associated with rising earnings, 33% were accounted for by increases for the household head and 29% by increases for his spouse or other household members. These findings underline the importance of household context, and changes in it, for thinking about income and poverty dynamics. Individuals' experiences depend on their households and changes in them – how the combination of income sources from more than one individual changes, or indeed changes in household composition itself.

Recognition of the reality of income dynamics has a number of policy implications, which are now widely accepted in Britain. For example, turnover in the low income population means that substantially more people are 'touched' by low income over time and are therefore helped by social security system, than have a steady low income. The design of income support systems need to recognise that there is no homogeneous and unchanging group of 'the poor'. Although the labour market is an important route out of poverty for those of working age, individuals cannot be seen in isolation from their household context. The phenomenon of poverty spell repetition (and the decline in the chances of returning to poverty the longer the time since leaving it) remind us of the importance of measures preventing entries into poverty (not just helping exits from poverty). The promotion of employment in itself needs to be combined with policies that promote job retention and 'real' jobs. Since people are less likely to break out of poverty the longer they have been poor, it is important to identify potential long stayers early and target them

These views, rare two decades ago in Britain, are now widely accepted and have infused policy. For example, much of the emphasis in the Labour government's welfare reforms from the late 1990s reflects a dynamic perspective, focusing on moving people into work and making work pay. (The policies were much influenced by US reforms that were themselves influenced by earlier research based on panel data.) The dynamic perspective now influences the way in which living standards are measured and monitored in Britain. *Households Below Average Income*, the official source of statistics about the UK's income distribution, and about poverty in particular, has included a BHPS-based chapter on low income persistence for many years, and statistics are also included in the government's *Opportunity for All* reports.

Further reading

Jenkins, S.P. and Rigg, J.A. (2001) *The Dynamics of Poverty in Britain*, DWP Research Report No. 157, London: Department for Work and Pensions.

Jenkins, S.P. and Cappellari, L. (2004), 'Modelling low income transitions', *Journal of Applied Econometrics*, 19(5): 593–610.

Jenkins, S.P. and Schluter, C. (2003) 'Why are child poverty rates higher in Britain than in Germany? A longitudinal perspective', *Journal of Human Resources*, 38(2): 441–465.

The dynamics of health

Mel Bartley

The availability of annual information from the BHPS has added a new dimension to research on some forms of ill-health and health risk behaviours.

One of the founding fathers of epidemiology, Sir Austin Bradford Hill, laid down the criteria that must be met in order to claim a 'causal relationship'. These are: first, sequence over time; second, biological plausibility and third, dose-response relationship. In other words, the putative cause must precede the effect, the link must make sense in terms of what we know about the biology of disease processes, and changes in the 'cause' need to be observed to be followed by changes in the 'effect'.

The vast majority of research in social epidemiology faces severe problems in meeting these criteria. Another major (and related) problem is known as 'confounding'. Confounding happens when one factor appears to cause another when in fact they occur closely together only because of a third factor. The example that is often taught is that of storks and babies. The arrival of storks is often followed by the arrival of babies, but there is of course no causal link! The 'confounder' here would be the seasonal nature of breeding patterns in both storks and humans.

The availability of annual information from the BHPS has added a new dimension to research on some forms of ill-health and health risk behaviours. It has never before been possible to observe changes in material circumstances, living arrangements and lifestyles at such frequent intervals, and relate these changes to changes in health status. As the study unfolded over time, it also became increasingly possible to check for certain forms of confounding. For example, instead of looking at the mental health of study participants who happen to be unemployed, or divorced, it became possible to see whether a spell of unemployment or a relationship breakdown in someone who started with good mental health increased their risk of poorer health after the event[3]. As well as relating the deprivation of a town to the health of its members, it also became possible to see whether healthier people were more likely to move away from more deprived towards more prosperous areas[4].

It would not be an exaggeration to say that the availability of 15 years of panel data revolutionised research into the

impact of social conditions and adverse events on mental health. Low social support does indeed increase the chances of a spell of psychological distress and decreases the chances of recovery. Other social factors such as separation or divorce, becoming and remaining unemployed, also decrease prospects of recovery[5]. The finding that the people with severe psychological distress were less likely to recover was expected, but had not been previously demonstrated.

Panel data has enabled researchers to address a neglected paradox in the study of the causes of mental distress. Poor general health and unemployment are both more frequent in people in more disadvantaged social position, as defined by their occupational social class. Not surprisingly, poorer health and unemployment are also associated with mental distress. However, the measure that is most commonly used in health surveys usually shows little relationship between social class and mental health.

Does low income lead to poor health, or vice versa? There are causal relationships in both directions.

Using BHPS data, it turned out that the relationship between social class and mental health depended on two other influences: employment status, and mental health in the past year. Among employed people, social class did not seem to influence their health. Among people who were not working because of early retirement, work-related disability or family commitments, social class was very strongly related to mental health. And among the unemployed who were still trying to find work, mental health was actually worse in those whose previous jobs would put them in the most advantaged social class. All of these relationships were stronger among those who had experienced higher levels of psychological distress in the past year[6].

Does low income lead to poor health, or vice versa? After controlling for initial health status the association between income and health is attenuated but not eliminated, indicating that there are causal relationships in both directions. Income levels are more significant than income change; persistent poverty is more harmful for health than occasional episodes; and income reductions appear to have a greater effect on health than income increases[7].

Another innovation made possible by the BHPS has been the ability to observe both area and household effects on health over time, including the effects of movement between household types. People living in the same household experience a similar level of health[8]. One reason for this might be that smokers are less likely to give up the habit if they live with other smokers[9]. But other possible factors such as the quality of housing, and of the immediate area environment, remain to be investigated.

These are some of the innovations in health research that have so far been made possible by the BHPS. The findings require extension in time, and open up even more potential for the development and testing of explanatory models.

Further reading

Pevalin, D.J., Goldberg, D.P. (2003) 'Social precursors to onset and recovery from episodes of common mental illness', *Psychological Medicine*, 33(2): 299-306.

Pevalin, D.J. and Ermisch, J. (2004) 'Cohabiting unions, repartnering and mental health', *Psychological Medicine*, 34(8): 1553-1559.

Chandola, T., Head, J. and Bartley, M. (2004) 'Socio-demographic predictors of quitting smoking: how important are household factors?', *Addiction*, 99(6): 770-777.

Young people: risk and resilience

Jacqueline Scott

Can we find out how and why some young people beat the odds and, despite family disadvantage, go on to gain good educational qualifications?

Adolescence is often seen as associated with problems. But not all adolescents engage in risky behaviours and many of those who do so are involved in such behaviours only in a minimal and temporary way, and go on to become well-adjusted adults and good citizens. How do we study risk and resilience in young people? Can we find out how and why some young people beat the odds and, despite family disadvantage, go on to gain good educational qualifications? How do we understand why children from apparently similar backgrounds differ so markedly in anti-social behaviour that puts them at risk? We need to look at young people as they grow up.

It is no good only asking parents about their children. The BHPS questions for 11-15 year olds have shown that parents and children provide very different accounts of within-family interactions. For example many more parents claim that they talk often with their children about things that matter than young people do[10]. The perspective of life from parent and child is different. But both matter.

Parental actions have both a long-term and a short-term influence on young people's actions. For example girls whose mothers worked full-time when they were young are less likely to get pregnant before they reach 21. The risk of early childbearing is reduced still further if the mother worked during a daughter's adolescence[11]. Parents who spend more time with their teenage children, including shared meal times, can strongly (and positively) affect young people's attitudes and behaviour. In particular, the more frequent family meals, the less chance there is of young people being involved in vandalism, truancy or wanting to leave school as early as possible. Family meal-times perhaps reflect strong family values and/or family cohesion[12].

Household circumstances certainly matter for young people – numerous studies show that young people are more vulnerable if they come from low income and disrupted homes[13]. But panel data allows us to get inside the story – why are some children from poor and disrupted homes so resilient against the odds? And why do some children from

privileged and stable homes ruin their life chances through repeated anti-social behaviour? Is the answer the quality of relationships and, if so, what makes a good parent and what does that mean? It is not an easy question to answer because parenting is not a one-way process. Any parent with more than one child knows the striking differences in how difficult or easy they make the parental task. Parents also know that young people help shape the home environment as much as any adult member of the household.

What do we know and what do we need to find out from panel studies about young people?

- We know that there are pronounced gender and age differences in adolescent problem behaviours, and that the timing of risk factors matters[14] (e.g. different consequences depend on the age at which parental separation occurs).

- We know that young people's own aspirations about education matter, even when household circumstances and parental characteristics are taken into account[15].

- We don't know how parenting may have changed over recent times. And we have no clear results about the pros and cons of both parents working. We also know little about how young people's friendships, schooling and well-being are affected by spending time with parents who live apart.

- We do know from the BHPS that family communication matters[16], but we need a much longer span of data to see how young people's experiences of family influences their adult lives.

- We don't understand the process by which growing up in a home where men and women are treated equally influences adult gender roles and relationships. But we do know from the BHPS that girls are spending more time on household chores than boys; and that girls are even more liberal in their attitudes on gender roles than their mums. Boys' attitudes differ little from their (less egalitarian) dads[17]. If we look at the attitudes and behaviours of the younger generation regarding household chores, then gender equality is a long way off.

If we look at the attitudes and behaviours of the younger generation regarding household chores, then gender equality is a long way off.

Young people already play an important part in the economy, as well as in particular labour market sectors. How does early work experience affect later life opportunities? How will this change if there is a recession? Natural experiments are a bonus for panel studies – policies change, economies rise and fall and the panel data may allow us to examine who benefits and who loses in the changed circumstances and why.

We know that the experiences of early life are crucial for later life choices and outcomes. The quality of young people's lives is a matter of concern in its own right and we need large samples to know more about the well-being of different sub-groups such as ethnic minorities and different regions. It is important to look at the process of change – what happens to family relationships, in terms of both expectations and behaviours, when households split up and reconstitute? It matters because it affects the quality of our young people's lives. It matters too because the shape of young people's life pathways affects the future quality of life in the UK, as young people are the parents, workers and leaders of the next generation.

Further reading

Bradshaw, J. (2002) *The Well-being of Children in the UK*. London: Save the Children.

Coleman, J. and Hagell, A. (eds.) (2007) *Adolescence, Risk and Resilience*. Chichester: John Wiley & Sons.

Births outside marriage: the real story

John Ermisch

Only 35% of children born to a cohabiting couple will live with both parents throughout their childhood, compared with 70% of children born within marriage.

The value for policymakers and private sector decision-makers of longitudinal data and analysis is illustrated here by an example central to current policy discussions of family life: the dramatic growth in the number of births outside marriage. Official statistics suggest one story. The BHPS uncovers the real story.

In 1975, 9% of births in Britain were outside marriage. By 2006, this had risen to 44%. There has been a tendency to call the mothers of these babies single mothers, suggesting that almost half children are now born into single parent families. This would be worrying because there is increasing evidence that growing-up in a one-parent family is associated with worse outcomes as young adults.

But looking more closely at the statistics tells a different story. Three-quarters of births outside marriage are jointly registered by both parents. Most jointly registered births outside marriage are to parents living at the same address. These can plausibly be interpreted as births to a couple in a cohabiting union, and so it appears that just over a quarter of recent births are in cohabiting unions, and about one in six births are to women not in a live-in partnership – true single mothers. Does this mean that the rise in extra-marital births should be less cause for concern?

To answer that question we need information about the way families change over time. We need to know how long cohabiting parents remain together, and if they break-up how long does it take for mothers to find a new partner. We also need to know how soon after having a child outside a live-in partnership women find a long-term partner. The usual sources of information, like registration statistics and cross-section surveys like the General Household Survey, cannot provide this information. Longitudinal surveys, like the British Household Panel Survey (BHPS) or the cohort studies, do provide it. What does the BHPS tell us about these family changes in the 1990s and the early 2000s?

The time couples spend living together in cohabiting unions before either marrying each other or separating is usually very short, the median duration being about two years. The

unions that produce children are much less likely to be converted into marriage and more likely to break up than childless ones. About 65% of cohabiting unions which produce children subsequently dissolve. In contrast only 40% of childless unions dissolve. In other words, only 35% of children born into a cohabiting union will live with both parents throughout their childhood (to their 16th birthday), compared with 70% of children born within marriage. So having a child in a cohabiting union is often not indicative of a long-term partnership.

There is increasing evidence that growing-up in a one-parent family is associated with worse outcomes as young adults

Furthermore, the rate of re-partnering after the dissolution of a union is much slower for women who became mothers in the union, with more than half of them still without a partner five years after the break-up. In contrast, women without children get another partner an average of three years after their first union dissolved. Given the short duration of these unions and the relatively long time it takes mothers to find another live-in partner, non-marital childbearing in cohabiting unions tends to create lone mother families.

If we take into account subsequent partnership formation and dissolution, we can calculate the average number of years that a child can expect to spend with two parents, or a parent and a step-parent, according to the mother's partnership context at the time of the birth. Children born outside marriage spend a longer average time living with one parent. Those born into a single mother household spend 7.8 years of their first 16 years without a second parent. This figure is lower for those born into cohabiting unions at 4.7 years. But children born to parents who are married on average spend all but 1.6 years of their childhood with two parents.

Longitudinal data also allow us to study the impact that growing up in a one-parent family has on subsequent well-being as a young adult. Analysis of people born in the 1970s using the BHPS data, indicates that a child who experiences a period in a one-parent family, particularly before they start school, ends up with lower grades, worse job prospects and in poorer health than a child from a family that remains intact.

So the rise in births outside marriage is a real cause for concern. It is primarily attributable to the increase in people's tendency to cohabit in their first partnership and to have children within these unions. The instability of these unions means, however, that more British children will spend significant parts of their childhood in families with only one parent – and this appears to have long-term negative consequences for children.

Further reading

Ermisch, J. (2008) 'The new dynamics of family formation and the explosion of childbearing outside marriage' in J. Scott, S. Dex and H. Joshi (eds.) *Women and Employment: changing lives and new challenges*. Cheltenham: Edward Elgar.

Ermisch, J. (2005) 'The puzzling rise in childbearing outside marriage' in A. Heath, J. Ermisch and D. Gallie (eds.) *Understanding Social Change*. Oxford: Oxford University Press.

Ermisch, J. and Pevalin, D. (2004) 'Cohabiting unions, repartnering and mental health,' *Psychological Medicine*, 34(Nov.): 1553-1560.

The labour market: transitions and persistence

Mark Taylor

Panel data are crucial in understanding the complex processes surrounding transitions into and out of unemployment and insecure jobs.

During their working lives, people may experience a number of transitions: into and out of work; between jobs; pay rises or pay cuts. Panel surveys – the BHPS in Britain – have allowed analysts to observe the characteristics of people who experience such events, and the impact of the events on subsequent behaviour. Although panel data had been available in some countries, such as the USA and Germany, for several years, analyses of the experiences of British workers used to be limited as the same workers were not followed over time.

For policy makers, some of the most important labour market concerns relate to unemployment and low-paying, insecure employment. Panel data are crucial in understanding the complex processes surrounding transitions into and out of unemployment and insecure jobs. Evidence drawn from the BHPS has shown that those who are in low paying jobs are likely to remain in low-paying jobs, and those who are unemployed are likely to stay out of work. In fact, an unemployed person who gets a low-wage job is three times more likely to become unemployed again than an already-employed person who starts the same job – even if they have the same observed and unobserved characteristics[18]. In this respect low wage jobs are more similar to unemployment than to higher paying jobs, and experience of unemployment or of a low wage job is likely to result in a cycle of transitions between the two.

What's more, once a worker returns to work after becoming unemployed, they rarely earn as much as they used to. The size of the difference depends on the number of times they have become unemployed and why they left their previous job[19]. The largest wage loss is associated with the first unemployment experience, although workers who had been made redundant suffered less of a loss than other unemployed people. These findings indicate that permanent improvements in employment prospects need to be based on

the offer of stable jobs which provide training and career progression. They also highlight the importance of education and training in preventing the initial unemployment spell.

Related to this is the introduction in the UK in April 1999 of the National Minimum Wage (NMW), to help counter the widening income inequality of the 1980s and 1990s, rising child poverty, and the increasing fiscal burden of in-work social security benefits. Again, the BHPS has played an important role in assessing the impact of the minimum wage on workers' experiences. As for low-wage jobs generally, the minimum wage appears to be a stepping stone to higher pay for a minority of workers, but the majority seems to experience a succession of minimum-wage jobs, or to intersperse minimum wage jobs with periods out of work[20]. There is no evidence, though, that that the introduction of the NMW reduced the training opportunities of affected workers[21].

The majority of low paid workers experience a succession of minimum-wage jobs, or intersperse minimum wage jobs with periods out of work

Another area of policy concern relates to employment flexibility and work-life balance, with the government promoting family-friendly working practices that allow people to combine work with their home commitments. This requires employers to be flexible in the hours packages they offer to employees, but evidence from the BHPS suggests such flexibility is not yet prevalent. Almost three-quarters of workers in the BHPS sample experienced constraints in their working hours over a ten year period, indicating some rigidity in working patterns[22]. Some employees who wished to reduce their working hours have left paid work altogether, suggesting insufficient availability of employment involving low hours of work[23]. Evidence from the BHPS shows that people moving towards their preferred working hours often change employer[24]. But such moves are costly both for workers and for firms because of the loss of job- and firm-specific skills, knowledge and training. These findings suggest that the British labour market does not yet offer sufficient employment opportunities with flexible work hours to meet demand.

The advantages of the panel nature of the BHPS have also been used to study other labour market issues too broad to cover in this brief summary. These include the role and impact of non-standard work patterns, such as temporary jobs, part-time work and self-employment; the determinants and outcomes of within-firm promotions; identifying job and employer characteristics associated with job satisfaction; and the influences of job satisfaction on a worker's subsequent labour market behaviour.

Further reading

Arulampalam, W. (2001) 'Is unemployment really scarring? Effects of unemployment experiences on wages', *Economic Journal*, 111(475): F585-F606.

Böheim, R. and Taylor, M. (2004) 'Actual and preferred working hours', *British Journal of Industrial Relations*, 42(1): 149-166.

Stewart, M. (2007) 'The inter-related dynamics of unemployment and low-wage employment', *Journal of Applied Econometrics*, 22(3): 511-531.

Personal well-being: the economics of happiness

Andrew Clark

Creating the film of adaptation to life events is hugely demanding in terms of data. We need to see people before, during and after the event in question.

It is hardly surprising to hear researchers asking for more data. After all, if we don't know what is going on, how can we possibly pretend to make things better? But our joy at the continuing presence of the BHPS goes far beyond our general hunger for more numbers.

My research is in the field of subjective well-being, using measures such as job satisfaction, life satisfaction, and general psychological functioning, all of which appear in the BHPS. As the survey's name suggests, the BHPS has (at least) two great things going for it:

- It's at the household level, so we can evaluate connections between the labour supply of household labour members (how does one person's poor health affect another's hours of work?), and take seriously the idea that some decisions are taken jointly.

- It's a panel, so the same people are repeatedly interviewed at one-year intervals.

While both aspects of the survey are fascinating in the field of well-being research (does something that makes my wife happy make me happy too?), I will focus on the panel element here – the advantage of being able to follow the same individuals over time.

The 'economics of happiness', as it is sometimes called, aims to identify what economic and social factors are associated with greater well-being, better understand why people make the decisions they do, and evaluate the relevant policy interventions. These are absolutely central issues in social science.

Yet central as they are, it is remarkably difficult to come up with the right answers without the repeated observations that panels like the BHPS provide. Three areas where such data is crucial can be used as examples.

"These numbers don't mean anything".
Subjective well-being is inherently unobservable. We don't know what people 'really' mean when they give us an

answer of 6 on the seven-point life satisfaction scale for example. Maybe they're really not that happy, but they don't want to share that with the interviewer; maybe they have low standards for reporting happiness. In either case, the person who tells us 6 could be less satisfied than another person who says 5. If so, our data is hopelessly compromised, in the way that data on number of children, income, or height is not.

Individuals don't get used to unemployment (which starts bad and stays bad), but the happiness boost from marriage might only be temporary.

Panel data help us in two ways. Someone may always tend to respond miserably, but seeing that their satisfaction measure rose from 4 to 5 makes us fairly sure that their life has improved. Economists call the statistical analysis which takes someone's long-run response style into account a 'fixed effects' analysis. Also, were these numbers to be meaningless, then they would not help us to predict what people do. In fact, using panel data, people who gave low job satisfaction scores one year are more likely to have quit their job one year later. The same holds for life satisfaction and divorce. This reassures us that people mean what they say.

Panel data allow us to show that the replies contain real information about how people feel, and to apply statistical corrections to remove any fixed response style from well-being scores.

What causes what?

Correlation is not causation, as all undergraduates are taught. We often find that those who earn more are in better health. This could show that money brings good health…. or that those in bad health earn less. Panel data introduces the arrow of time into the debate and allows us to get the causality straight. We can look at income one year ago and health today. If the two are correlated then we can be more confident that it is money that brings about good health; my poor health today can't have prevented me from earning so much one year ago. The same logic applies to all of the subjective well-being variables (of which self-reported health is arguably one).

Does time heal all wounds?

Cross-section data, at one point in time, provides a photograph: panel data allows us to watch the film. We know, on average, that the married are happier than the single, and the unemployed less happy than the employed. But do these effects last, or can we get used to anything? Panel data allows us to follow the same individual to find out. Our best guess at present is that individuals don't get used to unemployment (which starts bad and stays bad), but that the happiness boost from marriage might only be temporary.

Creating the film of adaptation to life events is hugely demanding in terms of data. We need to see people before, during and after the event in question. Even in the BHPS, we interview very many married people, but we observe only a few marriages taking place, and we are able to follow these marriages over time for even fewer. For this, and all the other reasons above, researchers in subjective well-being give the BHPS a 6 out of 7 on the satisfaction scale. We expect to award *Understanding Society* a resounding 7.

Further reading

Clark, A.E., Diener, E., Georgellis, Y., and Lucas, R. (2008) 'Lags and leads in life satisfaction: a test of the baseline hypothesis', *Economic Journal*, 118: F222–F243.

Clark, A.E., Frijters, P., and Shields, M. (2008) 'Relative income, happiness and utility: an explanation for the Easterlin Paradox and other puzzles', *Journal of Economic Literature*, 46: 95-144.

Frey, B.S., and Stutzer, A. (2002) 'What can economists learn from happiness research?', *Journal of Economic Literature*, 40: 402-435.

Political choice in Britain: bounded partisans

Alan S. Zuckerman

From many perspectives, the BHPS provides better data on political decisions than election surveys do.

Let us now praise panel surveys. Whereas surveys at the cross-section typically assume that choices at any one time are explained only by factors that occur simultaneously, panel surveys permit analysis to examine choices at any given time in the context of decisions made at an earlier time. As important, panel data permit tracing and explaining choices taken at different points of time. Applied to the study of political behaviour, panel surveys provide appropriate data on decisions about political parties and vote choice.

BHPS and its parallel, GSOEP (the German Socioeconomic Panel Study) offer an opportunity to examine party choices, because they cover many more years than any other survey of electoral behaviour and tap respondents during adjacent years, whether or not an election is taking place. Indeed, from many perspectives, the BHPS provides better data on political decisions than election surveys do.

Party preferences entail a series of related choices. People decide whether to support a political party or not and if so which party that is. Selecting a party entails its complement: not supporting another party; as you can only support one party at any one point in time. Over time, however, the relationship between these choices – whether to support a party, and if so, which party – is more complex, and interesting. A person who always names party A can never choose party B (or any other party), but never choosing B does not entail always naming A (or any other party). Sometimes choosing A also implies nothing about the selection of other parties. By following people over time we can analyse these flows.

BHPS data have been used to examine party preferences and voting behaviour[25]. Britons are 'bounded partisans'. Most permanently reject one of the two major parties, but they vary in how often they choose the other party. Very few move between the two, and, when it occurs, crossing party lines is not systematic. Hardly anyone moves directly from one major party to the other, and even fewer change from one party to become a constant supporter of the other

major party. Also, most persons pursue unique paths of party choice over time. Their selections distinguish them from almost everyone else and from the aggregate trends as well. For most people, party affiliation is a limited – or bounded – choice.

These findings challenge the claim that people always name the same party (behaving as if they identify with that political organisation). They also contradict any expectation that people evaluate their own and the general circumstances and match them against the parties' past actions and future promises (as supposed by those who apply rational choice theory to party preferences). Neither explanation describes the persons whom we observe in our analyses of the BHPS data.

Hardly anyone moves directly from one major party to the other, and even fewer change from one party to become a constant supporter of the other major party.

What happens when bounded partisans form couples? Shared party preferences do not form the basis of the marriage. Birds of a feather may flock together, but not because of their party stripes. At any one point in time, couples rarely support the same party; nor do they support the two opposing parties. Instead each member reinforces the other's tendency to pick one of the major parties. The longer that they stay together, the more likely they are to share party choices at a particular point in time. Over time, couples also travel along unique political paths – hardly any two couples are alike. The evidence taken from the panel data affirm that party political concurrence within households is a variable that must be explained; it cannot be assumed to be present.

It should not be a surprise that younger people (between the ages of 15 and 30) are also bounded partisans. Most follow unique paths of party choices over time; most are more consistent with regard to the party that they do not choose than with regard to their preferred party, and are more amenable to selecting one of the other parties, particularly the Liberal Democrats. But most are no more likely to move between the major parties than are their parents. Raised by bounded partisans, young people enter adolescence as bounded partisans, and interactions within households reinforce these patterns for everyone present, at one point in time and over time.

Given these remarks about party preferences, the implications for voting decisions (turnout and vote choice) are straightforward. The decision to cast a ballot is strongly affected by how often someone claims to support a party in the years preceding the election. Similarly, variations in the rate of party choice directly influence the probability of voting for one rather than the other of the main political parties. Household members influence each other too. Turnout and vote choice are directly influenced by both a person's past party choices and constancy and the electoral decisions of others in the household.

The panel data provided by BHPS allow us to address critical theoretical issues in the analysis of party preferences and vote choice: the relative importance of calculations that apply the tenets of rational choice theory, the identifications that draw on principles of social psychology, and the social logic of politics. They provide observations to detail the micro-contexts of party choices and the relationship between decisions taken now and in the past. For that they deserve much praise.

Further reading

Zuckerman, A., Dasoviç, J. and Fitzgerald, J. (2007) *Partisan Families: the social logic of bounded partisanship in Germany and Britain*. Cambridge: Cambridge University Press.

Investigating 'social exclusion'

John Hills

'Exclusion' and its counterpart 'inclusion' are words referring to processes. Their investigation needs us to follow people over time

Until the late 1990s, 'social exclusion' was an unfamiliar term in the UK. But after 1997 the phrase became much more common (although without universal agreement as to what it meant). For the government's Social Exclusion Unit set up in 1997 it was a '… short-hand label for what can happen when individuals or areas suffer from a concentration of linked problems such as unemployment, poor skills, low income, poor housing, high crime, bad health and family breakdown'.

Academics have taken a wider approach, considering exclusion over time. 'Exclusion' and its counterpart 'inclusion' are words referring to processes. Their investigation needs us to follow people over time: how is what is happening to them at one moment related to earlier events? How persistent are the problems in any particular dimension? To investigate this, longitudinal data (tracing the same people over time) of the kind generated by BHPS are essential.

Four dimensions of participation have been identified[26] as central to measuring the extent of social exclusion: consumption (the capacity to purchase goods and services), production (participation in economically or socially valued activities), political engagement (involvement in local or national decision-making), and social interaction (integration with family, friends, and community). More colloquially, this could be taken to measure participation in terms of: what people get out; what they put in; having a say; and having someone to listen.

These measures were not ideal, but they lead to suggestive findings, in particular the comparatively low correlation between these four dimensions. At any one time, only 0.1% of respondents were counted as 'excluded' on all four of the dimensions, and only 2.3% on three or four of them. This does not mean that they are unrelated. Those with lower incomes are much more likely than others to lack any 'productive activity', and are less likely to be politically engaged or have someone to turn to for social support. But

the overlap is a long way from complete. By implication, the dimensions they measure appeared to be distinct: inclusion (or lack of it) in one was no guarantee of inclusion (or lack of it) in another.

There is no permanent 'underclass' cut off from the rest of society

Panel data of the kind produced by the BHPS allow analysis of whether people who fell below a threshold in one year did so in others. Exclusion on each of the four dimensions was significantly correlated with exclusion on the same dimension in the previous year, but again the correlation was not strong. For instance, around 13% of the working age population lacked 'productive activity' (work, training, or caring responsibilities) in each year taken separately. However, only 3% were *continuously* in the position for the eight years examined. This did not mean that this was randomly spread through the population: 70% of the working-age population were never without productive activity, but 10% were without it for four or more of the eight years. This was far more continuity than one would see if people moved in and out of work randomly.

Nearly two-thirds of adults (63%) were 'excluded' at some point on at least one dimension over an eight year period. However, *continuous* 'exclusion' in all dimensions was rare. By the time data from three successive waves had been examined, only 0.1% of the sample was below all of the thresholds in all three years. By the time periods of four years or longer were examined, none of the sample was below all of the four thresholds for all of the years.

An alternative approach has been to consider a much larger range of potential indicators, all of them potentially associated with economic disadvantage[27]. Cross-sectional analysis shows that some of them are correlated with low income, but none of them came anywhere near a one for one relationship. Other disadvantages (such as loneliness) were no more common among poor than among rich families.

The most striking differences between disadvantages is in their persistence. Some problems are close to permanent: 92% of people reporting no qualifications *on any occasion* during a five year period reported the same *throughout* the entire period. The equivalent figure for smoking is 71%. But others are transitory: only 4% of people experiencing any financial stress reported it in five consecutive years; for unemployment the persistence rate was only 3%.

As a result of these relatively weak associations, the population does not divide up into one group who experience all of these disadvantages, and another who experience none. 85% report at least one of the 16 problems under review, and only 8% report six or more. People who moved into poverty tended to increase the number of their disadvantages, while those who escaped poverty tended to reduce them. But knowing someone's income trajectory was a long way from predicting their disadvantage with any accuracy.

Such findings explode common stereotypes. On the one hand, there is no permanent 'underclass' cut off from the rest of society. On the other hand, we cannot assume that social fluidity is such that we do not need to worry about people who are disadvantaged at one moment as they will soon escape. Without the ability to trace people over time it would be much harder to counter such stereotypes.

Further reading

Burchardt, T., Le Grand, J. and Piachaud, D. (2002) 'Degrees of exclusion: developing a dynamic, multidimensional model' in J. Hills, J. Le Grand and D. Piachaud (eds.) *Understanding Social Exclusion*. Oxford: Oxford University Press.

Taylor, M., Berthoud, R. and Jenkins, S.P. (2004) *Low Income and Multiple Disadvantage 1991-2001*. London: Social Exclusion Unit.

Changes in social position across generations

Jonathan Gershuny

The panel study allows us to track movements continuously throughout the life-course – and provides unexpected insights, for example, into differences between men's and women's social mobility.

It is sometimes said that we have become a 'classless society'. Over the 60 years since the Second World War the number of middle class jobs like teachers and computer programmers has massively expanded, and the number of working class jobs like farm labourers and miners has shrunk. Average earnings have multiplied, and with so many married women in the labour market, family incomes have increased even faster. These absolute trends, promoted by the availability of education as well as by global economic forces, have benefited us all.

But it would be wrong to assume that class or family background no longer matter. Many children whose fathers were paid weekly 'wages' may have grown up to earn a monthly 'salary'; but children of middle class parents are still ahead of them in the queue. If social position is measured on a relative scale, the signs are that the correlation between parents and children is just as strong as it was in the first half of the 20th century.

Traditional studies of social mobility relied on surveys in which individuals were asked what their job is, and what their parents did. The BHPS asks that question too. But it offers a much more detailed insight into intergenerational dynamics: partly because a richer set of socio-economic information is available about both parents and children who lived together in the same household for at least part of the survey period; and partly because much more is known about changes in people's position within their own lifetime.

This is an issue where the theoretical approaches from both sociology and economics have made mutually supportive contributions. It is also a topic area where ingenious ways of manipulating the data have evolved over the years – for the most part, too complex to be explained in this summary.

Perhaps the closest parallel with the traditional approach is a recent analysis of fathers' and sons' earnings, which takes account of the full range of ages and of birth cohorts in the BHPS[28]. It shows that the relative earnings of sons are still correlated with the relative earnings of their fathers, and (importantly) that there was no systematic upwards or downwards trend in this association over a twenty year period.

Intriguingly, the tendency for privilege and disadvantage to carry on from generation to generation is not simply concerned with the jobs and earnings of parents and their own children. Men and women tend to choose women and men from similar backgrounds when they marry[29]. Getting on for half of the parent-child correlation in family income is associated with the social position of sons- and daughters-in-law.

If social position is measured on a relative scale, the signs are that the correlation between parents and children is just as strong as it was in the first half of the 20th century.

A particularly fruitful way of using the data has been to compare the early-adult outcomes of young people observed late in the survey, with the characteristics of the family they grew up in as children, early in the survey. This has shown, for example, a series of disadvantages associated with growing up in poverty – these include a reduced chance of obtaining A levels (for boys) and increased risk of becoming a teenage mother (for girls)[30].

The same approach has shown a tendency for children whose mothers worked during their early childhood to do less well than those whose mothers stayed at home[31]. (Although the adverse affect is mitigated by the additional income she brought in.) On the other hand, children who were brought up for a significant period in a lone parent household tend to be disadvantaged – both the absence of the father, and the reduction in family income, have their part to play.

The panel study allows us to track movements continuously throughout the life-course –and provides unexpected insights, for example, into differences between men's and women's social mobility[32]. The key concept is what economists call 'human capital' – the personal resources (such as skills, qualifications and experience) that give individuals access to a particular level of job and pay. Rather than treat this as a fixed amount, people's potential earnings can rise and fall as they gain experience or spend time out of work.

Women are now less likely to leave work when they marry than they were fifty years ago, and this has improved their socio-economic position compared with that of men. But they still commonly leave their jobs at least for a period when they have children, especially if their earnings are not enough to pay for child-care. This not only cuts out their current earnings but also reduces their earnings potential when they decide to return to the labour market.

Women with middle-class fathers are nowadays likely to have high human capital themselves, and to be married to men with high earnings (see above). So they are disproportionately likely to be able to buy child-care services and other sorts of home support. They stay in the labour force, continuing their careers in parallel with their husbands' careers. But women from disadvantaged backgrounds are much more likely to leave work, and face poor prospects when they are ready to return. Polarisation in household incomes related to parental backgrounds has increased as a result of these processes.

Rising divorce rates intensify this polarisation. The husband leaves, the wife keeps the children: if her father had low human capital, she is more likely to have dropped out of the labour market, to have very low levels of human capital, and to find it difficult to find a well-paid job.

This means that while women are rather less disadvantaged with respect to men than they used to be, inequality between women with advantaged and disadvantaged backgrounds has widened.

Further reading

Ermisch, J., Francesconi, M. and Pevalin, D. J. (2001) *Outcomes for Children of Poverty*, DWP Research Report No. 158, London: Department of Work and Pensions

Kan, M.Y. and Gershuny, J. (2006) 'Human capital and social position in Britain: creating a measure of wage-earning potential from BHPS data', *ISER Working Papers*, No. 2006-03, Colchester: University of Essex.

The promise of cross-national research

Dean R. Lillard

Cross-national research helps us understand the basic human behaviour common to all cultures, and it improves our understanding of how policies affect those behaviours.

The launch and maturation of general purpose studies like the British Household Panel Survey (BHPS) have been a boon to social science. They are important not only in their own right but also because they have made it possible for researchers and policy makers to compare social and economic outcomes across countries with similarly designed studies. While governments have generally launched surveys to serve national research and policy interests, it natural to use data from similar surveys in cross-national research.

People of all types want to compare outcomes across geographic places. A simple GoogleScholar search for the phrases 'cross-national' or 'cross national' yields more than 1,740,000 'hits', many of which consist of articles in scholarly publications on a wide range of topics that includes clinical depression, economic growth, earnings, income inequality, political participation, and prostate cancer mortality. This large literature testifies to the interest in cross-national comparisons.

The interest is well founded in cross-national research's scientific promise. Cross-national research helps us understand the basic human behaviour common to all cultures, and it improves our understanding of how policies affect those behaviours. For example, cross-national research has shown striking similarities across countries in how widows replace the fall in their income following the death of their spouse[33], in how public and private pension generosity induces workers to retire early[34] and in life-cycle patterns of smoking behaviour[35].

A recent study[36] uses data from the BHPS, and similar surveys in Germany and the US, to show that smoking behaviour is surprisingly similar across all three countries. What's more, when cigarette prices increase, smokers in all three countries react in similar ways. Because these surveys ask respondents to report retrospectively when they began and when they quit smoking, one can analyse smoking behaviour over each individual's lifetime. The data make it possible to study the effects of price variation over long periods of time – up to 84 years in the case of the BHPS. Results show that an increase in the cigarette price of one standard deviation in each country raises the probability that

a smoker quits in that year by between 2 and 8 percentage points. More to the point, tobacco control policies affect behaviour in similar ways in different cultural settings.

With internationally comparable data, researchers can also study how different mixes of policies might affect behaviour, much more effectively than can be achieved using data from a single country. There is as much or more variation in tobacco control policies between countries as there is variation in policies within a country over time[37]. Researchers can use cross-country differences as a rich source of variation to study what affects people's decisions to smoke or to stop smoking. More importantly, the cross-country variation allows social scientists to estimate how behaviour might change if smokers in a given country faced a radically different mix of tobacco control policies.

This sort of cross-national research is possible because researchers collaborate to make available internationally comparable data from individual surveys. One such effort is the Cross-National Equivalent File (CNEF) – a compendium of panel data from six countries that includes the BHPS[38]. The BHPS has also contributed to the 15 country European Community Household Panel survey.

The longitudinal survey design of the BHPS data also means that data will improve with time. Because a given individual can be asked the same question in different calendar years the BHPS offers substantial improvements in the quality of retrospectively reported data, compared to similar data collected in cross-sectional surveys. By repeating the same question annually, panel researchers can construct data with fewer errors[39]. Consequently, one expects the higher quality data to yield higher quality evidence. This type of error reduction is only possible with longitudinal data.

The BHPS is an important and valuable member of the family of internationally comparable panel surveys. Its value as a stand-alone data-set and as part of the ever richer set of internationally comparable longitudinal data is increasingly recognised. These surveys promise to enrich our understanding of the human condition on topics ranging from child poverty to health and its relationship to income inequality[40]. Ultimately the data are likely to provide important evidence that will shape national and international policy making; policies that will improve the quality of life for people in many countries.

Further reading

Burkhauser, R.V., Giles, P., Lillard, D.R., and Schwarze, J. (2005). "Until death do us part: an analysis of the economic well-being of widows in four countries." ***Journal of Gerontology: Social Sciences*****. Vol. 60B No. 5, S238-S246.**

Gruber, Jonathan and Wise, David. (1999). ***Social Security and Retirement Around the World*****, Chicago: University of Chicago Press.**

Impact on policy-makers

The BHPS is heavily used by policy makers and influencers, as well as by academics.

The UK Data Archive records that 21 different ***British government*** departments, agencies and local authorities accessed the raw data over the past four years, including multiple downloads by the DCSF, the DWP, the Bank of England, HMRC, the Cabinet Office and HM Treasury.

The Department for Work and Pensions' own analysis of poverty dynamics is a central feature of its annual monitoring of Opportunity for All. Our library has tracked 112 official publications based on BHPS data.

The survey has also been used by non-academic ***voluntary organisations*** such as Shelter, the National Family and Parenting Institute, the Countryside Commission and the Welsh Language Board

Commercial applications of the data include such well-known names as HSBC, McKinsey's, Deloitte's, the Association of British Insurers, and the Future Foundation.

International policy makers to have accessed the data include the World Bank, OECD and government-based researchers in Japan, Canada, France and Belgium.

Evidence and policy: a symbiosis

David Halpern

There can be no doubt that policy and our society have been changed by the long tradition of empirical research.

Evidence-based policy – and evidence-based politics – are possible only if evidence is available. Of course, political values and the concerns of the moment also significantly affect the evidence that is sought, and the way it is used. It is sometimes asked whether governments build policy on the foundation of evidence, or spray the evidence on afterwards.

Yet there can be no doubt that policy and our society have been changed by the long tradition of empirical research. Engels's and Rowntree's surveys paved the eventual way to a welfare state; Victorian study of infectious diseases built the case for sewerage and public health; and more recent surveys of inequalities across ethnic groups and gender led to anti-discrimination and equal pay legislation.

The BHPS had a baptism of fire. Its early evidence fed into raging arguments about the nature of poverty. The dramatic finding, in the early 90s, that a large proportion of those on low incomes in one year were *not* the same as those in the next appeared to debunk the claim that there was an 'underclass' or that some people were inevitably trapped in poverty. As the data and analysis rolled in, this account of unexpected mobility was itself refined to one of 'churning' or the 'rubber band' theory (see Stephen Jenkins and John Hills in this briefing). There were insights around polarisation between work-rich and work-poor households; the dynamics of child poverty; and most recently – from within-year longitudinal data – of unexpectedly rapid changes in income that the benefits system was never designed to keep up with. Each new insight has forced policy-makers to look at the issues again, and often prompted significant reforms. The New Labour view that 'work is the best route out of poverty', and the welfare-to-work programmes that followed, can be traced directly to the dynamic perspective on low incomes that the BHPS provided.

Reshaping the issues

The main way that longitudinal data impacts on policy is by filling in the detail of an issue that policy makers were aware of, but want to understand better before they act. In this phase of policy work, policy units of the big Departments are data hungry and suck in all the evidence they can get. In the last few years alone, BHPS data has been used within

government on policy analysis including social exclusion; child poverty; welfare reform; pensions; personal accounts; family policy; teenage pregnancy; smoking; youth policy; student loans; social housing; savings and debt; low pay; the skills agenda; social mobility; informal care; road pricing; and immigration[41].

For example, when the Prime Minister returned to the issue of social exclusion in late 2005 and early 2006, a pivotal question was how to interpret the dynamics behind the headline figures. We used the BHPS extensively to look at the overlap between different risk factors, and the longitudinal surveys more generally to understand the extent to which early risk factors were predictive of a range of later negative outcomes. The phenomenon of 'heterotypic continuity' loomed large – where different problems at different ages shared a common causal thread despite exhibiting variable symptoms – and the data helped to identify 'causal bottlenecks' where we might most effectively intervene.

Evaluation

Surveys such as the BHPS can also sometimes help in policy evaluation, at least in the case of national programmes. For example, there has been work on impact of the various New Deal programmes, such as on getting more single mums into work. The advantage of the BHPS is that it gives you the ability to filter out the effects of a programme from individual differences; to look at more subtle effects; and at the dynamics over time. Hence the data show how the New Deal seemed not only to get single mums into work, but also to have a significant mental health pay-off even controlling for other factors.

New challenges

The richness of data in mature panel surveys can really change the way that we think about things. The messy causal pathways and sheer variability of households presents a deep challenge to government departments and delivery organisations organised around narrowly defined problems and single facets of a person, family or community. The new cross-cutting Public Service Agreements, Local Area Agreements and the Varney 'transformational government' agenda all have the common thread of redesigning policy and services around the causal nature of issues, not the classical architecture of government. The agenda is most prominent around lifestyle and behavioural issues, such as obesity, anti- (or pro-) social behaviour, and climate change. In this new world, research gets to shape government itself, rather than the other way around.

Our growing understanding of the real drivers of well-being (see Andrew Clark's contribution) is arguably shaping the policy agenda in an even more fundamental way, by broadening and refining its core objectives. By moving beyond the simple associations that have bedevilled the 'happiness industry', longitudinal data is moving variations in well-being from a fact of life into a credible object of policy concern.

Conclusion

When people ask me, 'does social science evidence ever change policy?' a particular incident springs to mind. In the context of a broad-ranging discussion on education and skills, with a thick set of analytical material in front of us, one of the Ministers present tore out one of the Strategy Unit's slides and – leaning forward to put it in front of the Prime Minister declared '…but what are we going to do about *this*?' The slide – now well-known and based on longitudinal data – showed how the cognitive ability of bright children from poor backgrounds appeared to be overtaken by that of much less able children from affluent backgrounds long before they had even entered school. Within a year more than £500m was assigned to build a programme of pre-school provision for the UK.

Of course, that slide wasn't the only factor involved – ideology and political calculation matter too. But when you're huddled over a surprising regression, or answering the questions of some pesky journalist, it's good to know that what you are doing might make a difference – and maybe a pretty big one at that.

Further reading:

Prime Minister's Strategy Unit, *Reaching Out: an action plan on social exclusion*, Cabinet Office 2006

Understanding Society: the UK Household Longitudinal Study

Nick Buck

The articles in this briefing have illustrated the value of panel surveys, using findings from the British Household Panel Survey (BHPS) as the primary example.

Encouraged by these achievements, the Economic and Social Research Council has commissioned ISER to lead the development of a new, larger, and innovative panel survey, to be known as *Understanding Society*. The design team includes colleagues from the University of Warwick and the Institute of Education. The project partner responsible for implementing the survey is the National Centre for Social Research.

The Economic and Social Research Council has commissioned ISER to lead the development of a new, larger, and innovative panel survey

Understanding Society will incorporate the original BHPS samples. It shares four key features with the BHPS: annual interviews, a household focus, inclusion of the full age-range, and broad interdisciplinary topic coverage. But it will also be a major advance on the existing survey, in four main areas:

Sample size: *Understanding Society* will cover 40,000 households – around 100,000 individuals – across the UK. This size will enable analysis of sub-groups, such as teenage parents or disabled people. The UK focus will facilitate regional and sub-regional analysis, allowing examination of the effects of geographical variation in policy, for example. Events such as births will be common enough in the whole sample to allow analysis of single-year cohorts.

Ethnic minority research: The sample will include an ethnic minority boost, to enable analysis within and between ethnic groups. The ethnicity strand of *Understanding Society* offers a unique and unprecedented opportunity to provide information on ethnicity-relevant topics and to highlight diversity and differences between groups over time.

Bio-medical research: *Understanding Society* will also support the collection of a wide range of biomarkers and health indicators. This opens up exciting prospects for advances at the interface between social science and biomedical research.

Innovative data collection methods: The survey data will be broadened and enriched by linking information held on administrative records – with respondents' permission. Such innovations will all be developed and methodologically tested on part of the sample – the innovation panel. This sample will enable us to test different questions, additional methods of interviewing and collection of qualitative data to allow *Understanding Society* to be at the forefront of the development of data collection methods.

***Understanding Society* will be a flagship resource for the research and user community in the UK – and beyond.**

Work on designing and planning the new survey began in April 2007. There has been extensive and continuing consultation on questionnaire content, to ensure that the study meets the needs of user communities. The main fieldwork for wave 1 is planned to start in January 2009, with continuous interviewing phased over two years. Data will start to come on stream in 2010.

Understanding Society will help us understand the long-term effects of social and economic change, as well as policy interventions designed to impact upon the general well-being of the population. It will be a flagship resource for the research and user community in the UK – and beyond.

For more information about the new survey, visit www.understandingsociety.org.uk

Conclusion: understanding our future

Robert Walker

The BHPS has changed both our understanding of society and the way that we go about trying to understand it.

Understanding how society works is not only important in telling us about ourselves and the chances that our hopes and aspirations will be fulfilled. It is also an essential prerequisite for effective policies, be it running the economy or implementing a local nursery. Policies to promote pre-school care, to invest more in education, to support families, to emphasise preventive health, to assist lone mothers into employment and to develop welfare to work schemes for the unemployed and to foster careers have all been informed by longitudinal evidence – including evidence from the BHPS.

As our understanding grows and society changes, the demand for new kinds of information increases. The new panel survey now being developed, *Understanding Society*, is an essential response to these demands. The BHPS will continue but be part of a bigger, better and methodologically innovative study. This means that very shortly we shall be able to study the whole of childhood and, for many people, the entirety of their retirement. We will learn what matters most in shaping childhood and how this affects outcomes early in adult life. We shall map transitions into retirement, seek to establish how far inequalities in working life are replicated in old age and determine the prevalence and precursors to the happy retirement to which we all aspire.

Understanding how society works is an essential prerequisite for effective policies, be it running the economy or implementing a local nursery.

Our society is much more diverse than it was even in 1991. It is essential to be able to repeat the longitudinal analyses that have re-shaped our understanding of British society for specific ethnic minority groups, some of whom are known to be particularly disadvantaged, and for Northern Ireland, Scotland and Wales now covered by devolved administrations. We also expect *Understanding Society* to enable us to judge, for example, the importance of local factors in creating opportunity and fostering well-being.

It is essential to extend longitudinal research to specific ethnic minority groups, some of whom are known to be particularly disadvantaged.

The increased sample size will also permit researchers to investigate the consequences of rare but important events such as adoption, accidents, victimisation and perhaps even risky behaviours such as drug abuse. There will be scope, too, to refine our understanding of the impact that the BHPS has shown more common events to have on people's lives. It may be, for example, that the impact on individuals lessens as events become more commonplace, especially if policies have been enacted to mediate their negative consequences.

Possibly the most exciting feature of *Understanding Society* is the plans to carry more health indicators and, uniquely, biomarkers. This should enable medical and social sciences to work together to resolve longstanding issues such as the social determinants of ill-health, the social consequences of morbidity and the balance between nature and nurture in determining individual behaviour.

Understanding Society is a bold scientific venture, enabling us to learn from our past, continually to know about our present and to understand and, ideally even to help shape, our future. It should be supported and well resourced – for all our sakes.

Sources

1. Jenkins, S.P. and Rigg, J.A. (2001) *The Dynamics of Poverty in Britain*, DWP Research Report No. 157, London: Department for Work and Pensions.

2. Jenkins, S.P. and Cappellari, L. (2004), 'Modelling low income transitions', *Journal of Applied Econometrics*, 19(5): 593–610.

3. Pevalin, D.J. and Goldberg, D.P. (2003) 'Social precursors to onset and recovery from episodes of common mental illness', *Psychological Medicine*, 33(2): 299-306.

4. Brimblecombe, N., Dorling, D. and Shaw, M. (2000) 'Migration and geographical inequalities in health in Britain', *Social Science and Medicine*, 50(6): 861-878.

5. Pevalin, D.J. and Ermisch, J. (2004) 'Cohabiting unions, repartnering and mental health', *Psychological Medicine*, 34(8): 1553-1559.

6. Wiggins, R.D., Schofield, P., Sacker, A., Head, J. and Bartley, M. (2004) 'Social position and minor psychiatric morbidity over time in the British Household Panel Survey 1991-1998', *Journal of Epidemiology and Community Health*, 58(9): 779-787.

7. Benzeval, M. and Judge, K. (2001) 'Income and health: the time dimension', *Social Science and Medicine*, 52: 1371-1390.

8. Chandola, T., Clarke, P., Wiggins, R.D. and Bartley, M. (2005) 'Who you live with and where you live: setting the context for health using multiple membership multilevel models', *Journal of Epidemiology and Community Health*, 59(2): 170-175.

9. See note 8.

10. Scott, J. (2004) 'Family, gender, and educational attainment in Britain: a longitudinal study', *Comparative Family Studies*, 35(4): 565-589.

11. Ermisch, J. and Francesconi , M. (2001) *The effect of parents' employment on children's lives*. London: Family Policy Studies Centre.

12. Scott, J. and Choudhary, C. (2003) *Beating the odds: youth and family disadvantage*. Leicester: The National Youth Agency.

13. Schoon, I, Bynner, J., Joshi, H., Parsons, S., Wiggins, R.D. & Sacker, A. (2002). The influence of context, timing and duration of risk experiences for the passage from childhood to early adulthood.' *Child Development, 73*, 1486-1504; Hobcraft., J. (2004) 'Parental, childhood and early adult legacies in the emergence of adult social exclusion: evidence on what matters from a British cohort.' In P.L Chase-Lansdale, K.E. Kiernan and R.J. Friedman (Eds.) *Human Development Across Lives and Generations: The Potential for Change*. Cambridge U.P.; Hobcraft, J. and Kiernan, K. (2001) 'Childhood poverty, early motherhood and adult social exclusion'. *British Journal of Sociology* Vol 52 No 3 495-51714.

14. Bergman, M and Scott, J. (2001) 'Young adolescents' wellbeing and health-risk behaviours: gender and socio-economic differences". *Journal of Adolescence*, 24: 183-197; Scott, J. (2004) 'Children's families'. in J. Scott et al (eds.) *Blackwell Companion to Sociology of Families*. New York: Blackwell.

15. Scott, J. (2004) 'Family, gender and educational attainment in Britain: a longitudinal study', *Comparative Family Studies*, 35(4): 565-589.

16. Scott, J. and C. Chadhary (2003) *Beating the odds: Youth and Family Disadvantage*. Youthwork Press

17. Harkness, S. (2008) 'The household division of labour: changes in families' allocation of paid and unpaid work' in J. Scott, S. Dex and H. Joshi (eds) *Women and Work: Changing Lives and New Challenges*, Edward Elgar, p234-267; Burt K. and J. Scott (2002) `Parent and adolescent gender-role attitudes in 1990s' Great Britain', *Sex Roles*, 46: 239-245.

18. Stewart, M. and Swaffield, J. (1999) 'Low pay dynamics and transition probabilities', *Economica*, 66(261): 23-42; Stewart, M. (2007) 'The inter-related dynamics of unemployment and low-wage employment', *Journal of Applied Econometrics*, 22(3): 511-531.

19. Arulampalam, W. (2001) 'Is unemployment really scarring? Effects of unemployment experiences on wages', *Economic Journal*, 111(475): F585-F606.

20. Bryan, M. and Taylor, M. (2006) 'Identifying and explaining patterns of NMW receipt in Britain 1999-2004: report prepared for the Low Pay Commission.' Colchester: ISER, University of Essex

21. Arulampalam, W., Booth, A. and Bryan, M. (2004) 'Training and the new minimum wage', *The Economic Journal*, 114(494): C87-C96.

22. Bryan, M. (2007) 'Free to choose? Differences in the hours determination of constrained and unconstrained workers', *Oxford Economic Papers*, 59: 226-252.

23. Böheim, R. and Taylor, M. (2004) 'Actual and preferred working hours', *British Journal of Industrial Relations*, 42(1): 149-166.

24. Böheim, R. and Taylor, M. (2003) 'Option or obligation? The determinants of labour supply preferences in Britain', *Manchester School*, 71: 113-131

25. Zuckerman, D., Dasoviç, J. and Fitzgerald, J. (2007) *Partisan Families: the social logic of bounded partisanship in Germany and Britain*. Cambridge: Cambridge University Press.

26. Burchardt, T., Le Grand, J. and Piachaud, D. (2002) 'Degrees of exclusion: developing a dynamic, multidimensional measure', in J. Hills, J. Le Grand and D. Piachaud (eds.) *Understanding Social Exclusion*. Oxford: Oxford University Press.

27. Taylor, M., Berthoud, R. and Jenkins, S.P. (2004) *Low Income and Multiple Disadvantage 1991-2001*. London: Social Exclusion Unit.

28. Ermisch, J. and Nicoletti, C. (2007) 'Intergenerational earnings mobility: changes across cohorts in Britain', *The B.E. Journal of Economic Analysis and Policy*, 7(2): Article 9.

29. Ermisch, J., Francesconi, M. and Siedler, T. (2006) 'Intergenerational mobility and marital sorting', *Economic Journal*, 116(513): 659-679.

30. Ermisch, J., Francesconi, M. and Pevalin, D. J. (2001) *Outcomes for Children of Poverty*, DWP Research Report, No. 158, London, Department of Work and Pensions

31. Ermisch, J. and Francesconi, M. (2005) 'Parental employment and children's welfare', in T. Boeri, D. Del Boca and C. Pissarides (eds.) *Women at work: an economic perspective*. Oxford: Oxford University Press.

32. Kan, M.Y. and Gershuny, J. (2006) 'Human capital and social position in Britain: creating a measure of wage-earning potential from BHPS data', ISER Working Paper, No. 2006-03, Colchester: University of Essex.

33. Burkhauser, R.V., Giles, P., Lillard, D.R. and Schwarze, J. (2005) 'Until death do us part: an analysis of the economic well-being of widows in four countries', *Journal of Gerontology*, 60B(5): S238-S246.

34. Gruber, J. and Wise, D. (eds.) (1999) *Social Security and Retirement around the World*. Chicago: University of Chicago Press; Gruber, J. and Wise, D. (2005) 'Social security programs and retirement around the world: fiscal implications, introduction and summary', NBER Working Papers, No. 11290, Cambridge, Mass.: National Bureau of Economic Research.

35. Kenkel, D., Lillard, D.R. and Mathios, A. (2003) 'Tobacco control policies and smoking cessation: a cross-country analysis', *Schmollers Jahrbuch* (Journal of Applied Social Science Studies), Vol. 123, Number 1, pp. 221-234.

36. Lillard, D.R., Wang, H. and Bar, Y. (2008) 'A heap of trouble? Accounting for mismatch bias in retrospective data', SOEP 2008: 8th International German Socio-Economic Panel User Conference, July 9-11, 2008. Berlin: DIW.

37. Kenkel, D., Lillard, D.R., and Mathios, A. (2004) 'A cross-country analysis of tobacco control policies and smoking over the life-course', *Journal d'Economie Medicale* 22(3): 131-143.

38. Frick, J.R., Jenkins, S.P., Lillard, D.R., Lipps, O. and Wooden, M. (2007) 'The Cross-National Equivalent File (CNEF) and its member country household panel studies', *Schmollers Jahrbuch*, 127: 627-654.

39. Lillard, Dean R., Bar, Haim, and Wang, Hua. (2008b). "Tell me again: using repeated reports in panel data to reduce mismatch bias." Manuscript. Department of Policy Analysis and Management, Cornell University.

40. Deaton, A. (2001) 'Health, inequality, and economic development', NBER Working Papers, No. 8318, Cambridge, Mass.: National Bureau of Economic Research.

41. I am grateful to Axel Heitmüller for highlighting several of these examples

About ISER

The Institute for Social and Economic Research (ISER) specialises in the production and analysis of large and often complex datasets. It collects and uses longitudinal data – evidence that tracks changes in the lives of the same individuals over time – household and other panel studies, as well as diary studies, and cross-national and historical comparative materials.

ISER is an interdisciplinary institute, with specialists in demography, economics, sociology, epidemiology, social policy and social statistics. It is an independent department of the University of Essex and is core-funded by the university and the UK's Economic and Social Research Council (ESRC). ISER is organised as two divisions: a research centre; and a resource centre.

The research centre: MiSoC

The ESRC Research Centre on Micro-social Change (MiSoC) is the base for ISER's substantive research programme. The core-funded programme is founded on a central theme – the analysis of life chances, taking a longitudinal perspective on people's careers, incomes, family lives, health experiences and so on. Related topics include time use and consumption, the effects of locality and ethnicity, and microsimulation of the effects of public policies.

The resource centre: ULSC

The ESRC UK Longitudinal Studies Centre (ULSC) is the national resource centre for promoting longitudinal research and for the design, management and support of longitudinal surveys. ULSC activities include managing the British Household Panel Survey (BHPS), interviewing the same respondents annually since 1991. Work is now in progress to develop the innovative UK Household Longitudinal Study, *Understanding Society*, with a sample of 100,000 individuals. The ULSC also runs a methodological research programme to improve longitudinal survey and analysis methods.

International links

The institute has a strongly international atmosphere, with the majority of its researchers originating from outside the UK. We frequently collaborate with research teams in other countries in comparative analytical programmes, in the organisation of international conferences, in the production of cross-national datasets and in the development of new national panel surveys. ISER also regularly hosts visits from researchers and research groups on the Essex campus, offering analytical advice as well as access to data resources.

The album tells us stories. Perhaps the studious child, curled up with a book in the corner of the frame of an old black and white photo at the start of the album, reappears in a graduation photo towards the end. Perhaps the mother-to-be is found again, as we turn the pages, with two toddlers and a less convincing smile. The walk-up flat in the background becomes a three-bedroom semi, and later acquires a roof-light and a downstairs extension, or the semi is exchanged for a studio apartment with a care assistant down the hall. Some faces recur throughout the book, older but still recognisable; we see others for a few pages, and then no more.

Each snap tells us something, but we learn more from the sequence of photographs, and more still from the connections we make between the people shown in them. . . . The whole album provides a picture that is more than the sum of the individual pictures, more than we would get from, say, a random collection of photos from different families in successive decades of the century. The family album tells about the complex pattern of continuity and change that make up the lives of individuals and households.

From Nick Buck, Jonathan Gershuny, David Rose and Jacqueline Scott (eds), *Changing Households: the British Household Panel Survey 1991-1992*, University of Essex, 1994

Additional copies of this briefing paper are available from iser@essex.ac.uk

Design by Rob Pigott

ESRC UK Longitudinal Studies Centre
Institute for Social and Economic Research
University of Essex
Wivenhoe Park
Colchester CO4 3SQ
United Kingdom

Phone: +44 (0) 1206 872957
Fax: +44 (0) 1206 873151
E-mail: iser@essex.ac.uk
Web: www.iser.essex.ac.uk

ISER INSTITUTE FOR SOCIAL & ECONOMIC RESEARCH
University of Essex
E·S·R·C ECONOMIC & SOCIAL RESEARCH COUNCIL