Evidence of linked-topics research in the GHS
-- A consultation report for the ESDS

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Introduction
This report gives a brief summary of the evidence of the simultaneous use of different topics in the General Household Survey (GHS) for over-time and cross-country analysis. For this purpose, we shall first give a brief introduction to the structure of the GHS and then provide some examples where different topics in the GHS are used to answer sociological questions with regard to social changes in Britain or in comparison with other countries. We conclude that the GHS has been a unique data source for conducting vigorous analysis that has helped us to gain a deeper understanding of the interrelated nature of the socio-economic factors affecting our lives in the last four decades, a role that could be hardly played by any other government or academic data source.

The structure of the GHS
The GHS is the longest-standing government survey. With the exception of 1997/1998 and 1999/2000 when the survey was suspended for re-design, the GHS has been conducted for nearly forty years including its integration to the EU Statistics on Income and Living Conditions (EU-SILC) project in 2005 and its recent incorporation into the Integrated Household Survey (IHS). Every year, information on households and respondents is collected for people resident in private households in Great Britain based on a multi-stage stratified sample design resulting in small sampling errors. Since 2006, the survey has become longitudinal as the EU requires respondents to be followed up for four years (for an authoritative introduction, see Higgins and King-Hele 2010).

The GHS is a multi-purpose continuous survey with a large sample size and a hierarchical structure (household, family and individual), and it has information on all household members aged 16 or over on a wide range of topics and important sociological questions.

The GHS has two main kinds of information, one pertaining to household and the other to individual (ONS 2005). The former allows analysis at the household or family level and the latter allows analysis at the individual level. One could use data at both levels, as some of the examples below will demonstrate. With regard to the household, the GHS contains data such as demographic information about household members, household and family composition, accommodation, housing tenure, consumer durables and migration. As for the individual level information, the data contain, in addition to demographic information such as age, sex, marital status and ethnicity, important topical information such as economic activity, occupational position, educational attainment, health and use of health services, labour market earnings, pensions, drinking and smoking, caring responsibilities and family formation data such as marriage, cohabitation and fertility histories. In addition to household and individual level data, the GHS also contains ‘supra-individual’ data. For instance, from 1972 to 1992 and again in 2005, the GHS contains data on father’s class which enables
sociologists to analyse patterns and trends of social mobility in Britain in the last three decades.

In the following, we give some examples of how the GHS has been used in research to answer sociological questions. We do not focus on univariate trends (see Walker et al 2001 for an excellent summary in this regard). As around three hundred papers have been published on the basis of the GHS (http://www.esds.ac.uk/government/citations/) that cover almost all the major topical areas, it is not possible to give an adequate review of all the publications. Some important research findings that are not listed in the website are also included here for illustrative purposes. The following will therefore only be a partial review focusing on sociological analysis.

Examples of linked-topical analysis
The examples below are chosen because the analyses cross several topics, that is, they cover linked analyses. The key words in italics in the subheadings are the main topics in the GHS. The first key word (underlined) is the main research theme in a specific study and can be viewed as the outcome variable while the other key words, which are also themes covered in the GHS, can be viewed as explanatory variables.¹

*Health, gender, income, class, family structure, life stage and international comparison*

The health condition of the ageing and the aged (the younger old and the elderly old) is not only a personal and family issue but one that requires political and societal attention. How do older people feel about their health and how do the various aspects of health conditions affect their daily life? And what accounts for the observed differences? Sara Arber and Cooper (1999) uses the GHS (1992-1994) on men and women aged 60 and above to address these questions and find a new ‘paradox’. Given the generally poorer socio-economic situation of women than men in the labour market and the close association between socio-economic situation and health, one would expect older women to have poorer health than older men. Yet, there is little difference between the two groups in self-assessed health and limiting long-term illness, even though women are much more likely to experience functional impairment in mobility and personal self-care than men of the same age. These differences persist even after controlling for marital status, social class, income and housing tenure. The results thus reveal a paradox in health reporting among older people: at a given level of disability, women are less likely than men to see their health as being poor and older

¹ The GHS does not contain consistent variable names or the same categories even for variables with the same names in all the files for all the years across the last four decades. Take economic status for example. In 1972, it is called ‘employed’ with 9 categories whereas in 2003, there are quite a few variables for this and the harmonised one is called ‘ecstilo’ with 11 categories. Furthermore, many variables used in research are derived, that is, using information contained in different variables, such as ethnicity and generational status as explained in the text. Some of the derivation involves a very complicated procedure such as father’s class used for social mobility research (Goldthorpe and Mills 2008). In the more recent years, the variable names have become more meaningful and locating the needed variables is also more straightforward. Still, it would be quite difficult to list all variable names used even directly in the examples in the text (variables used in deriving the variables needed for the analyses are even more difficult to identify). Fortunately, both the ESDS and academic researchers have created standardised variables from 1972 to 2005. Interested readers are advised to visit http://www.esds.ac.uk/findingData/snDescription.asp?sn=5664 and http://www.esds.ac.uk/findingData/snDescription.asp?sn=5666 for further information.
women’s higher level of functional impairment co-exists with a lack of gender difference in self-assessed health.

In international comparative studies, researchers tend to place Britain and the USA on the more unequal end and Sweden on the more equal end of the spectrum because of the different welfare regimes. How do women’s health conditions in Britain compare with those in Sweden? This question is addressed by Whitehead et al (2000) and Yngwe et al (2001) using the GHS and the Swedish Survey of Living Conditions from 1979 to 1995/96. They find that the health of lone mothers is poor in Sweden as in Britain and that the magnitude of the differential between lone and couple mothers is of a similar order in both countries despite the more favourable social policies in Sweden which protect lone mothers from poverty and insecurity in the labour market to a much greater degree than the equivalent British policies over the 1980s and 1990s. They also find that the pathways leading to the observed health disadvantage of lone mothers are very different in the two countries. While around 50% of the health disadvantage of lone mothers in Britain is accounted for by the mediating factors of poverty and joblessness, these factors only account for 3% and 13% of the health gaps in Sweden.

**Household composition, social capital, older age, and intermarriage**

The hierarchical nature of the GHS comprising information at household, family and individual levels permits innovative analysis in several interesting perspectives. Two examples are shown here: social capital and intermarriage.

The ageing population in Britain means that more and more people in the retirement ages would withdraw from active economic activity and spend more time at home. How to build social ties for mutual help is of increasing importance not only for the retired but also for their children, for the social workers and for government policy-makers at both local and national levels. Perren et al (2004) find that positive neighbourly relationships offer sociability and the opportunity to reciprocate practical support, which is particularly important in later life when people spend more time around the home and are increasingly likely to live alone. The authors use the GHS 2000 to explore three forms of neighbourly contact in later life: frequent conversations, doing favours and receiving favours. They show that socio-economic assets, such as home- and car ownership, increase the likelihood both of having done a favour for a neighbour and of having received one. In later life, men are more likely than women to have frequent conversations with their neighbours; however, there is an interaction between gender and household composition in the exchange of favours. Among women, living alone increases the likelihood of providing and receiving favours whereas among men, living alone decreases engagement in these forms of neighbourly social interaction.

The GHS contains information on relation to the head of household and to the head of the family unit for each member of the household. Such information could be used together with that of an individual’s ethnicity to find husband’s and wife’s ethnicity with which to study the intermarriage patterns and trends in Britain, arguably the most important indicator of racial assimilation as claimed by Gordon (1964). Even though the information on ethnicity was formally collected quite late in the data series, researchers have been able to use variables on parental and own country of birth and year of arrival to the UK that have been available in the earlier data sets to construct ethnicity and generation variables. Muttarak and Heath (2010) used the GHS 1986-2006 to study the trends, patterns and determinants of intermarriage in Britain. They find that, for all ethnic minority groups, the propensity to intermarry is higher
in the second generation than in the first. They also find that substantial differences in propensity to form majority/minority marriages persist even after controls for individual characteristics such as age, educational level, generation and length of residence in Britain, with men and women of Indian, Pakistani or Bangladeshi background having higher propensities to form endogamous partnerships.

**Employment, ethnicity, generation and education**

How do different minority ethnic groups fare in the labour market, or have fared at different time points over the last few decades? The GHS has proved a unique data source for this purpose. Researchers have used (or constructed for earlier years) ethnicity and generation variables and linked to employment and other GHS data such as education, earnings, class etc.

Is unemployment ‘hyper-cyclical’ for minority ethnic groups? Do second-generation immigrants fare better than the first generation in employment? Is there a grain of truth for the ‘conflict’ theory? These questions have been addressed using the GHS. Hyper-cyclical unemployment means that when the economic situation is good, there is little difference between different ethnic groups in their employment situation but when general unemployment rates go up, those for the minority ethnic groups go disproportionally higher. This is because at times of recession or economic crisis, it is the minority ethnic groups who tend to be the last to come and the first to go, indicating unfair treatment or discrimination by employers. Li and Heath (2008: 234) draw on the pooled data from the GHS (1972-2005) to show that this hyper-cyclical unemployment was indeed the case for minority ethnic men. When the unemployment rate at the societal level was low, the differences in unemployment between the mainstream and the minority ethnic groups were existent but not marked. But when the general unemployment rate reached 10 percentage points such as in the mid 1980s and the early 1990s, the rates for Black Caribbean, Black African and Pakistani/Bangladeshi men rose to 30 percentage points or higher. Furthermore, Heath and Li (2008: 287) show that the second generation men and women fare no better than their first generation peers in unemployment.

**Self-employment, ethnicity, education and earnings**

It is commonly observed in Britain that children from minority ethnic backgrounds stay longer in education than white children and adults from minority ethnic backgrounds are more likely to be found in self employment. Does this necessarily mean that ethnic minority children are more intellectually-motivated and minority ethnic adults more entrepreneurial? Research by Clark and his colleagues (Clark and Drinkwater 1998; Clark, Drinkwater and Leslie 1998) shows that neither is the case but that there is a sociological story behind both. Children from minority ethnic origins stay longer in education because they use education as a ‘pre-emptive strategy’ against labour market discrimination: they and their parents know that, as visible immigrants, they have to have better educational qualifications to compete for jobs. The predominance of some minority ethnic groups in self-employment such as Indians, Pakistanis and Chinese is also driven by discrimination in the labour market. With the same level of human capital as measured by age, marital status and educational qualifications, their earnings in paid jobs in the mainstream sector are lower than those of their white peers. Their decision to become self-employed was therefore an ‘escape route’ rather than a reflection of true entrepreneurialism. Even in self-employment, their earnings are lower than those of their white peers. However, the authors also point out that discrimination is not the whole story. Cultural traditions also play an important role. Black Caribbean men fare no better than most other minority ethnic groups in the mainstream labour market but are seldom found in self employment. Furthermore, minority ethnic groups in self employment tend to concentrate in
lower-end jobs such as catering or taxi-driving. Their lack of bridging social capital and certain aspects of human/cultural capital limits their entrepreneurial pursuits in higher-end sectors such as building, engineering or ICT.

Social mobility, gender, period, ethnicity and international comparison

Social mobility is measured by the difference or similarity between father’s and respondent’s own social positions (jobs). It has two elements: absolute mobility as measured in percentage terms and relative mobility as measured by odds ratios. An equal society is one where there is no association between father’s and respondent’s own class positions.

Is Britain becoming less equal, or more equal, or experiencing no change? In a series of analyses, Blanden and her colleagues (Blanden et al 2004, 2005, 2007, 2008) contend that social mobility in Britain has been declining. This conclusion is drawn based on the two cohort studies (the National Child Development Study of 1958 and British Cohort Study of 1970) using family income on a quartile basis. Although the research conducted by Blanden and her colleagues is of a very high standard methodologically, their findings have been contested by sociologists. Goldthorpe and Jackson (2007) used the same data and found only small changes in the absolute rates and no change in the relative rates. This seems to settle the debate but of course the data sources used by both groups are far from desirable: they pertain to two young cohorts only 12 years apart and the conclusion with regard to the presence or its lack of trends based on the data is thus not decisive. Given this, Goldthorpe and Mills (2004, 2008) resort to the GHS 1972-2005 adopting a class rather than an income approach. They find little change in the levels and patterns of either absolute or relative rates for men in the thirty-three years, rejecting the claims by the economists over declining social mobility and, in passing, the claims by some sociologists (Heath and Payne 2000; Lambert et al 2007) over the increasing mobility thesis. More recently, Erikson and Goldthorpe (2010) find that it is the poorer quality of the income data in the 1958 study that accounts for the discrepancies between the economists’ and the sociologists’ findings.

Do minority ethnic groups have the same mobility chances as whites? This question can be further divided into ethnic mobility per se (as indicated by access to employment and career advancement) and intergenerational mobility. With regard to the former, Cheung and Heath (2007: 532-3) use the GHS 1991-2001 and find that minority ethnic groups, especially the second generation, do have less favourable chances to employment but once they have a job, their class positions are not disadvantaged. ‘Nice work if you can get it’, as they say. However, using more data (GHS 1972-2005), Li and Heath (2010: 91) show that other things being equal, the second generation Black Caribbean and Pakistani/Bangladeshi men still have significant less favourable chances of gaining access to the professional and managerial (salariat) positions. With regard to the latter, Heath and McMahon (2005: 405, 410) use the GHS 1985-1992 and analyse the social mobility patterns of some minority ethnic groups. They find that for the cohort born between 1940 and 1959, Black Caribbean, Indian and Pakistani men and Indian and Pakistani women had significantly less access to the salariat but there was no difference for the cohort born between 1960 and 1979. However, it is noted that father’s class is assessed as a main effect in the models rather than via the standard loglinear models which address the net associational effects. The last aspect is being examined by Li and Heath (2011) using all available data from the GHS 1972-2005 and differentiating all major minority ethnic groups in their first and second generations.

Another interesting aspect of research in this regard is an international comparison in the patterns and trends of social mobility between Britain and the USA. For over one hundred
and fifty years, the USA has been generally regarded as an exceptionally open society in comparison chiefly to Britain. Li (2011b) uses the GHS 1972-2005 for white people and black people aged 25 to 59 and the corresponding data from the General Social Survey (GSS) from the USA (1972-2006) and finds signs of social progress over the last four decades. The USA showed itself markedly more open than Britain in the first three decades from the 1970s to 1990s but in the last decade Britain caught up. A trend of convergence towards greater equality was thus the emergent theme. Black people however, were not found to have the same access to the more advantaged social positions, or not as yet. For both white and black people, there were also strong and fairly persistent origin effects on the respondents’ classes of destination. While the overall evidence gives us some hope and confidence, the pace of progress was still too slow and uneven. Women, black people and people from working-class origins are much behind middle class people in gaining access to the most desired salariat positions and in avoiding the most disadvantaged routine manual positions.

**Education, class, employment sector, early and mature graduates**

The GHS contains a wealth of information not only on the labour market situation including employment status, occupation and industrial sector, but also on educational histories such as the year leaving full time education. Using the last bit of information, one can construct variables differentiating normal-route graduates and mature graduates. Who are more likely to be mature students and do they experience disadvantages in future career development? Egerton (2001a b) using GHS 1982-1993 finds that mature students are proportionately more likely to come from working-class than from middle-class origins. Working-class mature graduates tend to study in less prestigious institutions than middle-class mature graduates, which results in less advantaged jobs. Mature graduates are disadvantaged on entry to the labour market, but their class attainment is similar to that of early graduates after some 15 years. There is, however, a difference in the industrial sectors where the two groups tend to find their employment. While mature graduates tend to work in the public sector and in the welfare services, conventional age graduates increasingly work in the financial and business services sector where the pay is often much higher. From this analysis, we can see how family origins, educational histories, career trajectories, employment sectors, occupational classes and labour market earnings can be linked in a systematic and over-time manner to trace patterns and trends of social inequality at the upper end of the social stratification, namely, the realm of graduates.

**Labour market earnings, education, age, gender, ethnicity and cross-country comparison**

In the last four decades, there have been considerable changes in the labour market and the educational participation in Britain as in other industrial countries, with women now comprising half of the active labour force and having similar educational attainment to men. But do they have the same returns to education as men? To address this question, Silles (2007) uses the GHS 1985-2003 for men and women aged 16 and 64 in full-time or part-time employment to examine the economic returns to education. The analysis shows that the returns to education at all levels have increased for men and declined for women. This suggests that Britain still has a long way to go before the equal pay ideal can be fully implemented. It is also found that over time younger workers have come to experience more unequal returns to education across the wage distribution. Highly-educated younger men and women at the top end of the earnings distribution have fared considerably better than men and women at the lower end. Another interesting finding is that whereas US research tends to focus on years of schooling as an indicator of human capital, Silles finds that higher levels of educational qualifications are always associated with higher earnings, even if the
qualifications take the same number of years to complete. In other words, quality, rather than quantity, carries a greater weight in the eyes of employers in the reward structure.

Do minority ethnic groups, particularly those from the New Commonwealth, get better treatment, that is, higher wages, in the USA than in Britain? Li (2011a) uses the GHS (and Labour Force Survey) for years around 1990s and 2000s in conjunction with the 6% Integrated Public Use Micro-data Series (IPUMs) from the Censuses of the Population in the USA for 1990 and 2000 to study ethnic earnings in the two countries. Controlling for age, education, generational status (first, 1.5 and second generation), marital status, health condition, number of dependent children in the family and occupational class, the analysis shows that while there are significant differences in earning between white and minority ethnic men, women’s pay profiles were fairly equal between the minority and the majority groups, in both countries and at both time points. Second-generation minority ethnic men in Britain from Black African, Indian, Pakistani and Bangladeshis heritages earned significantly less than their white peers in the USA. Furthermore, Black African men’s earnings position improved in Britain whilst Black Caribbean, Indian, Pakistani/Bangladeshi and Hispanic men’s relative earnings in the USA deteriorated significantly in the ten years covered. As in the social mobility study discussed above, there are thus signs of greater social progress in Britain than in the US in the last decade. Again, while such signs of progress are welcome, the big gaps in earnings suggest that governments, employers and wider society on both sides of the Atlantic need to work harder to make equal pay a reality.

Conclusion
In the above, we have given a very brief summary of the linked-topic research using the GHS. The summary focused on a few areas which seem most familiar to social scientists. There are, of course, many other aspects of research that have been carried out such as drinking and smoking, use of health services and pensioners’ life all of which have been addressed in multivariate manners as a look at the ESDS website (above) would show (see, for instance, Evandrou and Falkingham 2000; Gregg, Gutierrez-Domenech and Waldfogel 2007).

Overall, the GHS has been a unique data source that has permitted analysis of patterns and trends of important aspects of our social lives in the last four decades. In terms of the length of time series, the data coverage, the consistency of research themes, the availability of data at different levels, the harmonisation of variables and many other features, it would not be exaggerating to say that the GHS has been the best data source for the social science research community for over-time and cross-country analysis. We therefore owe a great debt to this data source and are very sorry to say goodbye.
Reference


