

Longitudinal data analysis

There are a host of interesting research problems linked to the design and analysis of longitudinal studies. We need to find solutions to these problems because the UK already has some of the best longitudinal resources in the world and is intending to expand them. These resources include the four birth cohort studies (1946, 1958, 1970 and 2000), the British Household Panel Survey and the large UK Longitudinal Household Survey, due to start in 2009. There are also very large longitudinal administrative datasets such as the National Pupil Database. The social science community has a responsibility to ensure that these resources are used as effectively as possible and effective use requires good methodological research.

We are seeking PhD students interested in carrying out methodological and statistical research that uses longitudinal data to address questions such as:

- The effects of measurement error on models for change.
- Preventing attrition and adjusting for missing data.
- Making predictions across the lifecourse.
- The development of educational and other inequalities.
- Models for structured longitudinal data.

References:

Plewis, I. (1985) *Analysing Change*. Chichester: Wiley.

Plewis, I. (2007) *Predictions, Explanations and Causal Effects from Longitudinal Data*. London: Institute of Education.

Singer, J. D. and Willett, J. B. (2003) *Applied Longitudinal Data Analysis*. New York: Wiley.