

BSPS MEETINGS

BSPS Day Meeting – Preliminary Announcement **National Statistics Disclosure Control: Now and the future** **Tuesday 11 January 2005**

10.00am – 16.00pm. To be held in the Graham Wallis Room at the London School of Economics, Houghton Street, London WC2A 2AE

A whole day meeting at which academic and local authority speakers will present views on the difficulties that are encountered by users of the 2001 Census and other statistics that have been through the ONS disclosure control process. Advice on using the statistics will be given and speakers from ONS and GROS will explain the processes and discuss research that is being undertaken to improve the outcomes.

The final programme will be distributed to all members as soon as this is available, and this will also be posted to the BSPS website at www.bsps.org.uk

The meeting is organised by John Hollis and Oliver Duke-Williams.

This day meeting is free and open to all. However, please pre-register by emailing pic@lse.ac.uk or via the link on the website. Early pre-registration is recommended.

Please feel free to distribute the details of this meeting to others, including non-members.

BSPS Conference 2005

The 2005 BSPS Annual Conference will be held at the University of Kent at Canterbury on Monday/Tuesday/Wednesday 12/13/14 September 2005. The plenary theme of the Conference will be **Intergenerational Relationships**. Strand organisers will be decided in January 2005, but **anyone who would like to volunteer to organise a strand** should contact the Secretariat at pic@lse.ac.uk (020 7955 7666). Submitted papers on the Conference theme would be most welcome, as it is hoped to have an intergenerational relations strand, in addition to the plenary theme. Papers would also be welcomed on associated themes such as ageing populations and pensions.

CALL FOR PAPERS

The BSPS invites members and non-members to submit papers for presentation at the 2005 Conference. Abstracts and proposals for papers can also be accepted. Accepted papers will be sorted into strand sessions, and submissions in all areas of interest to demographers and population specialists are welcomed. Possible strand sessions are: **intergenerational relationships, ageing populations and pensions, longitudinal studies (including SARS and microdata issues), local government and census issues, migration and population mobility, ethnicity, families and households, fertility, health, historical demography, mortality, reproductive health, evolutionary demography, posters.**

Papers and proposals for papers should be submitted to the BSPS Secretariat, PS201, London School of Economics, Houghton Street, London WC2A 2AE. Email submissions to pic@lse.ac.uk or through the website. Fax 020 7955 6831.

Papers may be submitted to strand organisers when appointed, but may be organised into other relevant strands. A deadline for submissions of April 2005 is envisaged.

Please see below for details of four PGRG-sponsored sessions at the forthcoming RGS-IBG Annual International Conference 2005 (31st August - 2nd September 2005 at the RGS-IBG, London).

Please send titles and abstracts (200 word max.) to session conveners by 21st January 2005.

1. The geographical dimension of population ageing

Papers are invited on the geographical dimension of population ageing. Population ageing is one of the most certain future processes that society faces which has profound geographical implications. Papers on all aspects will be invited ranging from the demographic research frontier, to studies of the lives of older people.

Please send titles and abstracts (200 words) to Prof. Phil Rees, School of Geography, University of Leeds, email: p.h.rees@leeds.ac.uk tel (work) +44 (0)113 343 3341. Deadline is 21st January 2005.

2. Population ageing: challenges to public policy

In this session invited speakers who are currently taking part in the national public policy debates on ageing will present papers. The session will include speakers from the Pensions Commission, GAD, Age Concern, International Longevity Centre, and National Statistics. A panel debate on the key choices facing society will be added to the session.

3. The changing 'faces' of rural populations, geographies and mobile societies

'The State of the Countryside 2004: Challenge of Rural Movers' points to the dynamism of rural places and mobile societies, with rural populations rising by 14% (1.7 million) between 1981-2002, and annual net migration estimated at 115,000 in mid-2002. Indeed, it is reported that counterurban movements are now four times the rate of the 'north to south drift'. Such trends may herald a deepening of the rural in the 'twenty-first century psyche', and the (re)production and consumption of new spaces of rurality and rural societies. Indeed, Cloke (2003) suggests 'the smiling 'happy face' mask of country living' is being disrupted, and changing rural population structures may be influential here. Within this context, classifications of rural places, such as the recent ONS classification (2004), are central to analyses, and beg questions of the contemporary meanings of rurality and the blurring of urban-rural constructs (Amin and Thrift, 2002).

This session seeks papers which explore socio-cultural and economic effects of unfolding rural populations, or papers which consider the impact of classifications or representations of the rural. The session seeks to stimulate debate of theoretical and conceptual understandings of the wider politics and processes of rural restructuring, and the formation of new rural geographies.

Please send titles and abstracts (200 words) to Darren P. Smith, Geography Division, University of Brighton, email: D.Smith@Brighton.ac.uk tel 01273 643318. Deadline is 21st January 2005.

4. Life course transitions in space and time

Everyone experiences life events that require major adjustments. Examples may include leaving home for the first time, marriage, childbirth, separation/divorce, children leaving home, retirement or the death of a partner. Most other aspects of everyday life, including migration, mobility, employment, education, housing, leisure activities and life style are in some way related to and affected by such experiences. Although often characterized as 'life-course transitions', such events are often not linear in nature, and the whole concept of transitions can be contested. Numerous transitions have been identified and studied across a range of disciplines, but we know much less about how such events were negotiated in different times and places, and how they affected the individuals involved.

This session invites papers that focus on the geographical dimensions of one or more key life course transitions, and the ways in which they relate to everyday life, in any setting or time period.

The aim is to compare the negotiation of life course transitions from a variety of perspectives and in different places and time periods, to explore and challenge the concept of a linear process of life course change, and to seek to identify commonalities over time and space.

The suggested format for the session (2.25hrs) is 6x15 minute presentations, followed by a discussant (15 min max) who seeks to identify key themes and then circa 30 mins for open discussion. However, this may change depending on the number and nature of papers offered.

We invite offers of innovative papers that address the above themes from any methodological perspective, and relating to any location or time period. Papers that explicitly seek to compare life course events over space and time are especially welcome.

Please send titles and abstracts (200 words) to Lenny Baer, Department of Geography, Lancaster University, email: l.baer@lancaster.ac.uk, tel: 01524 594607 or Colin Pooley, Department of Geography, Lancaster University, email: c.pooley@lancaster.ac.uk, tel: 01524 593738. Deadline is 21st January 2005.

OTHER MEETINGS

Social Information Transmission and Human Biology Symposium

Date: 16-17th December, 2004.

Venue: William Goodenough House, Mecklenburgh Square, London. WC1N 2AB.

Details at:

http://www.ich.ucl.ac.uk/ich/html/academicunits/nutrition/nutrition_events.html

NOTICES

BSPS Logo Competition

Thanks to all those who entered the competition to design a new BSPS logo. Council has carefully considered the entries, but has decided to keep the existing logo for the time being. However, the efforts of those who entered were much appreciated.

BSPS Website

The redesigned BSPS website is now up and running at www.bsps.org.uk

The password protected members only part of the site, including the information provided by those members who chose to have their details available on the site, is still in development and it is hoped that this will be launched in 2005.

Thanks to Rebecca Sear for overseeing the redesign of the site.

BSPS 2004 Conference Poster Prize

The inaugural 2004 BSPS poster prize was awarded to Chiedza Zingoni, Paula Griffiths, and Noel Cameron of the Department of Human Sciences, Loughborough University for their poster "What is the evidence for the nutrition transition globally?" Mike Murphy presented Chiedza with £100 in book tokens at the Conference. Thanks are due to Heather Joshi and Jon Anson who judged the competition.

SITUATIONS VACANT

Department of Human Sciences, Loughborough University

Research Associate £20,235 - £29,715 per annum

Applications are invited for the post of research associate in the Department of Human Sciences to work on an MRC funded project designed to identify the relative contribution of household, school and community measures of socio-economic status (SES) to health and lifestyle inequalities in adolescence in the Johannesburg based South African Birth to Twenty (BTT) cohort.

The research also aims to highlight any variation in the contribution of SES to health by gender, age, ethnicity and birth weight. The successful candidate will assist with the design of questionnaires/ interview guides for collecting data from participants in the study, train fieldworkers in the use of the study questionnaires/ interview guides, liaise with project collaborators in South Africa, set up data entry systems, clean study data, and manage the project's databases, explore the study data and analyse them using SPSS and Stata software packages.

In addition the candidate will compile project reports and papers in collaboration with the study team of researchers for the project sponsors and academic journals, to include undertaking a literature review relating to the research topic.

The successful candidate will have at least a masters degree in either social statistics, epidemiology, medical statistics, demography, human geography, human biology or a related field, although a PhD would be desirable. Previous experience of managing databases and of using SPSS or STATA for data analysis is essential. The candidate will preferably have experience working in developing countries. The post is funded for a fixed term of five years and is available to start in the new year.

The Department's website can be found at
<http://www.lboro.ac.uk/departments/hu/>

You will be required to provide a Disclosure statement in due course (for more information visit the disclosure web-site (www.disclosure.gov.uk) Informal enquiries should be made to Dr Paula Griffiths, email: P.griffiths@lboro.ac.uk telephone: 01509 228486.

For an application form and further details please contact Ms Sheryl Hind, Department of Human Sciences, Loughborough University, Loughborough, Leicestershire, LE11 3TU, email: S.A.Hind@lboro.ac.uk or telephone: 01509 223036. Please quote reference number HU/11647. Alternatively, an application form can be downloaded from <http://www.lboro.ac.uk/admin/personnel/appform.html> Closing date for completed applications is 10 December 2004. Curriculum Vitae will only be accepted if accompanied by a completed University application form.

UNIVERSITY COLLEGE LONDON DEPARTMENT OF EPIDEMIOLOGY AND PUBLIC HEALTH

STATISTICIAN/ DATA ANALYST (Ref 223)

Applications are invited for a Statistician/Data Analyst to work within the Health and Social Survey Research Group in this prestigious research-based department. You will work on the Health Survey for England and Scottish Health Survey to 30th September 2005, for maternity leave cover. This post provides an excellent opportunity for a researcher interested in gaining exposure to data analysis and handling on large scale national studies. Graduates with a suitable first degree and appropriate post-graduate qualification are invited to apply.

Applicants must have knowledge and experience of medical statistics.

Salary: £21,790 - £31,458 pa inclusive.

Full job details at:

<http://www.ucl.ac.uk/epidemiology/vacancies.html>.

Application forms at

http://www.ucl.ac.uk/hr/docs/job_pages.php or from

f.bortolotti@ucl.ac.uk, 020 7679 1681 Applications to Ms Bortolotti, Department of Epidemiology and Public Health, UCL, 1-19 Torrington Place, London WC1E 6BT. Closing date: 13th December 2004.

UCL is situated close to London's West End. Staff benefit from generous annual leave entitlements, a pension scheme and a commitment to ongoing staff training. Members of staff may also have access to many of UCL's facilities, including a fitness centre and the Bloomsbury Theatre.

Taking Action for Equality

COURSES

Short course on

Research Design and Analysis

A short course on **Research Design and Analysis** is being offered by the Centre for Population Studies, London School of Hygiene and Tropical Medicine. The course is taken by about 30 MSc students at LSHTM, but is being opened to a wider

audience as a self-contained Short Course.

The **aim** of the course is to provide experience of applying demographic, epidemiological and statistical principles by planning, analysing and reporting on a simulated survey of neonatal mortality in a fictitious developing country. The intention is to help students apply theoretical knowledge and simple statistical techniques to the research question, thereby providing a preparation for independent research. The course is based on small-group work with participants working as a team of consultants undertaking the survey. Data requirements are specified by teams and then supplied to them for analysis. The data has been recently updated to allow a cluster survey design to be specified and then analysed in a statistically correct way.

The course runs from Monday mornings until midday Wednesdays for five weeks but many sessions are designated for private study or group work. There are 11 sessions that are formally taught. Brief lectures are followed by sessions that put into practice the steps involved in a research project: formulating hypotheses and research questions to assess the problem; planning appropriate study designs, sample frames and methods of data collection; analysis, interpretation and policy-relevant display of data.

Statistical work is undertaken using *Stata*, a package widely used and strongly growing within the epidemiological community. It has the advantage of being able to cope with data from clustered surveys. Those with no experience of this package will be given introductory training. Results from the research exercise are presented in a poster session, which is assessed by academic staff.

The course is likely to appeal to anyone with an interest in basic epidemiological, demographic or public health research approached by the conduct and analysis of surveys. This will include those from academic, NGO and policy backgrounds. Some knowledge of basic statistics and an understanding of the fundamentals of demography and/or epidemiology is assumed.

The cost of the course is £1,250. Applications are being accepted now for the course running from **January 10th – February 9th 2005**. To apply please contact the course secretary at: shortcourses@LSHTM.ac.uk specifying the name of the course "**Research Design and Analysis**" and the code number: 2423.

What previous students have said about the course:

'It gives you experience of the research process from start to finish'

'The group work is very useful – gives a feel of "reality"!''

'This course provides learning through doing – it's very practical'

'I enjoyed being able to decide for myself what was pertinent about the research problem'

'The variety and quality of lecturers was good'

'The availability of tutors/facilitators was good'

Ageing, health and well-being in older populations
11-15 April 2005

London School of Hygiene & Tropical Medicine

This multidisciplinary course on ageing and its implications will provide participants with up to date research based training on this important topic. The course is suitable for professionals working with or for older people, including those from nursing, medical, social work and related backgrounds and planners and providers of services, as well as researchers who wish to update or extend their knowledge. The course will be taught by members of the Centre for Ageing & Public Health; the course director is Professor Emily Grundy. A certificate of attendance will be provided to course participants.

The course is CME accredited.

For further information please contact:

Huyette.shillingford@lshtm.ac.uk

Population studies in Cuba, links with Britain **Ludi Simpson** **Centre for Census and Survey Research, University of** **Manchester** **November 2004**

This note synthesises a report and letter discussed by BPS Council in November, which it is hoped will result in an invitation to a Cuban demographer to attend BPS conference. In response to the requests from Cubans working on population studies in Havana University and at the *Oficina Nacional de Estadísticas*, I am also collating a list of researchers in Britain (a) with Spanish reading ability to consider commenting on Cuban work and/or teaching in Cuba, and (b) others wishing to support or be involved in such links through exchanging or funding bibliography, commenting on English language work, or any other suggestions!

The contacts I have in Cuba are not solely from population studies but social research methods more generally.

So please be in touch: ludi.simpson@manchester.ac.uk

Context

Cuba's combination of a highly educated research community, government health and educational priorities in line with international aspirations, and a need to broaden its international links, provide a fruitful base for links between Britain and Cuba.

For four decades Cuba's social wage, in particular the successful impact of education and health services on life expectancy, culture and sport, have been noted as outstanding in Latin America and surpassing many developed countries. The achievements are in the context of a mode of society quite different from Britain and have been under severe economic restrictions during the past two decades.

In July of 2004 I spent three weeks teaching and discussing concepts of social research, demography and statistics in Cuba. This report summarises the social research infrastructure in Cuba and the potential for relations between social researchers,

demographers and statisticians in Cuba and Britain.

Three sectors of social research in Cuba

Most Cuban social research takes place in government departments, in independent research institutes funded by government departments, and in university research centres.

Ministries. The government's ministries undertake large scale analyses of their own administrative data as well as one-off or continuous population surveys. Statistical studies are led by the Office of National Statistics (*Oficina Nacional de Estadísticas*, ONE). Within ONE, the Centre for Population and Development Studies has a methodology section and undertakes not only the census and its own national surveys, among them income and expenditure and the labour force, but also work commissioned by other ministries. For example it has recently completed surveys on reproductive health and on drug use, and often accepts commissions to design and undertake fieldwork for studies that have gained international funding. Cuban statistics count on a highly developed state infrastructure of health and social services, as well as the registers of addresses based on a personal identity card. Since 1997, ONE has a master sampling list for multi-stage social surveys which identifies local housing blocks for enumeration. The enumeration for the 2002 census was mainly undertaken by students aged 17-18 and their teachers after a nation-wide course in censuses and census taking, supervised by ONE regional and municipal staff. There is no legislation on reporting and release of statistics. The ONE website is http://www.cubagov.cu/otras_info/estadisticas.htm

Independent. Most social research however, takes place in less quantitative environments, in independent research centres funded by government ministries. For example, I taught at the Centre for Research and Development of Cuban Culture (the *Centro Juan Marinello*), which leads a network of cultural studies centres funded by the Ministry of Culture. The *Centro Juan Marinello* and the *Instituto de Historia* have regional equivalents focusing on local developments. The work programme may include commissions from the Ministry that funds them but is mainly decided by their staff's own interests. Additional funding is gained through teaching and research for other organisations, including international links. Although these are not frequent events, during my stay the *Centro Juan Marinello* was teaching Mexican students Cuban history and the life and works of José Martí, hosting and teaching a PhD student from New York University, and preparing for a collaborative project on reading and politics with a research team from England.

Independent research institutes typically do not have strong methodological support from within their own organisation; as in other countries they look to professional associations and other means of updating and exchanging skills. The National Association of Cuban Economists (ANEC) performs this task well for economists but there is weaker support for social research methods.

Universities. University research centres are the third large site of social research. Cuban university departments tend to focus on teaching, but there are some academic centres that focus on research and postgraduate teaching. The University's Centre for Demographic Studies (CEDEM) is one, and has methodological

support through its links to other University departments. Some staff manage dual roles, for example working both as a professor of statistics in the University and within ONE.

Other. Social research also takes place in the Communist Party's organisations, Trades Unions, the National Women's Federation and in other social organisations, but I did not get to know these well enough to evaluate the weight of their contribution.

Those I taught and worked with were drawn mainly from the independent research centres, but also from ONE and university departments. Their backgrounds varied, including sociology, psychology, legal studies, cinematography, health studies and geography. To illustrate, the work which course participants brought to the class included the drug use survey supported by ONE, questionnaires proposed to assess the prevalence of sexual dysfunction, a study of the developing stature of a ballet school's students, statistical analysis of migration and immigration, and the

use of a national survey to characterise individuals' concept of the family as nuclear or matrilineal. Such a varied participation speaks not only for the interest in quantitative methods, but also for the networks that exist across disciplines to advertise and co-ordinate methodological support. Most national research centres have their own substantial publication list, but plans are significantly limited by resources.

Demography and population studies.

The University's Centre for Demographic Studies (CEDEM) is the main academic centre for population studies. Its staff regularly publish on historical and contemporary Cuban demography. A collection appears in Spanish on a CD released in 2004 (*Novedades en Población - CD de 13 libros y 5 artículos por investigadores del CEDEM, Centro de Estudios Demográficos, Universidad de la Habana, Havana*).

CEDEM's Director Otilia Barros Díaz has written to Manchester University specifically requesting exchanges of materials, students and staff, and joint projects. The willingness extends to links beyond Manchester! CEDEM particular interests were listed to include "thematic areas related to:

- Demographic and health indicators
- Longitudinal studies of ageing
- Survival studies with censored data
- Studies of family structure and development
- Ethnic characteristics in socio-demographic analysis
- Life histories in demographic analysis."

The letter continued "It is of common interest to include the methodological aspects necessary to support development of research and teaching activities within the above themes. In this respect we highlight the study of small area estimation, missing data, multi-level analysis, and multivariate analysis of complex survey designs, among the approaches that could be required for the development of these various activities."

BSPS's sister organisation is SOCUESPO (*Sociedad Cubana en Estudios de Población*) whose president Sonia Catasus Cervera is also deputy Director of CEDEM.

Government population statistics and population studies are the

responsibility of the Centre for Population and Development Studies within ONE, headed by Juan Carlos Alfonso Fraga. Data administration is devolved to regional offices of ONE, which receive vital statistics, social and industrial data from municipal offices, collate and analyse them as well as send both individual and extracted aggregates to the national office.

Cuba-Britain exchanges on social research methods

There is already some variety of collaborative social research involving both Britain and Cuba, usually initiated by personal contacts and interests. The Cuba Research Forum now based at Nottingham University has attempted to put such projects in touch with each other.

There is certainly room for further collaboration. Apart from CEDEM's letter, I have specific requests for collaboration and correspondence on small area estimation, text analysis, income and expenditure surveys, foetal mortality, missing data, and strategic health indicators.

I am happy to share the materials and contacts I have to help make such exchanges as fruitful as possible, and I would welcome any support and suggestions for the development of these initiatives. No doubt there are other individuals who already have fruitful contacts with Cuba. Please be in touch.

I would like to construct an informative website and active network to help these links, and would also welcome any offer of skills or just plain help to get these going. In the mean time I will respond to all who contact me and maintain a list to send relevant information from time to time.

Ludi Simpson, Centre for Census and Survey Research, University of Manchester

Crawford House, Manchester M13 9PL, UK. 0161-275-4975.
ludi.simpson@man.ac.uk

▶ **REPORTS OF PREVIOUS MEETINGS**

BSPS Conference 2004. Conference Report

The Conference continued to have a number of lively and stimulating sessions. These are summarised below under the main headings

Plenary sessions

Professor David Coleman (University of Oxford) opened the conference with the plenary: *Migration in the 21st century: A third demographic transition in prospect?* offering the hypothesis that a third demographic transition could be underway.

David began by pointing out that the role of migration in demographic change has traditionally been largely ignored by compared with births and deaths. Migration's status as the 'weak sister' of demography has partly been due to the difficulties in measurement and the lack of consistent data across Europe. Definitional and methodological differences throughout Europe were cited as key factors in impairing the comparability of data

between countries. David explained that migration's importance on population is relatively new with its effect on Europe's population having grown since the 1950s. Migration's use as a make weight in terms of adjustments to population figures reinforces the perception of migration as the 'weak sister' of demography.

David argued the case for the importance of migration within demography. Throughout history, it has been a key strategy for survival and played a vital role in the globalisation of people, cultures and disease. The importance of migration continues today, at a range of scales from moves within local authorities to international migration. International migration, especially since the 1980s, is responsible for ensuring the populations of some European countries do not decline and supporting the continued growth of many others. The most frequently cited reasons for migrations across Europe are dependants joining those already resident and marriage (both for the purpose of formation and unification). Most European countries expect a continued increase in the number of international migrants they receive. In the official projections of the UK population, the long-term assumption is for essentially constant international migration, unlike those for other countries where migration is factored as continuing to expand over the time series.

David put recent migration trends in the context of demographic transitions. The first demographic transition was the reduction in vital rates that have in some instances led to a static, or even declining population for some countries. Van de Kaa's second demographic transition particularly emphasises changes in partnership behaviour. David hypothesised that recent trends in international migration could be considered as the driver of a third demographic transition, where the consequence of sustained migration of one population into another with sustained low fertility is that the one will tend to replace the other.

In the discussion following his paper David was asked why the current levels of migration constituted a third demographic transition. David replied that the effect of migration had the hallmarks of a significant demographic transition: it is having a major effect on population change, it is widespread and appears irreversible especially in developed countries, and is the result of a peaceful change rather than of war.

In a wide-ranging discussion, David was asked about the time lag in the prehistoric colonisation of Europe from southern Africa compared to other continents, even though Europe was one of the closest landmasses to the migratory route. David replied that Europe was inhospitable due to the large ice formations that covered much of Europe at the time of original migration out of Africa and that more hospitable continents where colonised first with Europe colonised when the climate became more favourable. However, David explained that in more recent times climate change has not been strongly related to migration.

Demography and conflict in Israel-Palestine: explaining the failure of the Oslo Peace Process – Mushtaq Khan (SOAS)

Mushtaq Khan provided a compelling explanation for the failure

of the Peace Process, which centred on the demographic tensions within Israel. At the heart of the crisis is the question of ‘What does it mean to have a state religion?’ The contrast was made with Anglican England where the legal rights of individuals are the same whatever their religious background. This is not the case in Israel where many basic rights and legal entitlements do differ according to whether a person is Jewish (eg the right of return; voting rights; access to land; taxation rights etc). Whether Israel should have a constitution is a major area of debate currently within Israel. Mushtaq suggested that there is a fundamental contradiction between Jewish State and democracy.

The total population of Israel is 5 million, with 1 million (20%) being non-Jewish. However there are 7 million refugees with the right of return to Israel. If even a small proportion were to return it would have a huge impact. This was not brought into the Two State Solution. After the Oslo Accord, the number of Jewish settlers doubled (between 1994 and 2004) – the opposite of what was expected.

Mushtaq suggested that the long term aim of the Israeli Government is to achieve self-governing territories, through land settlements on the best land, with checkpoints, barriers and zones of control that leave Palestine encircled - with land that is environmentally unsustainable and economically dependent on Israel. Mushtaq fears further disintegration in the situation as Palestine’s position is weakened by acts of violence and Arafat has begun to lose control. With no second tier leadership the way may be open for other groups (such as Islamic groups) to step in, who will not give in.

The ethnic definitions of statehood need to be considered – blurred ethnicities occur over a long period. Mushtaq felt that while the failure was not due to greed, it was not resolvable either since the marriage of faith and State was not conducive to democracy.

In response to a question as to whether his analysis applied to other conflicts, such as the Balkans, Russian Caucasus, and Northern Ireland, Mushtaq answered that he thought so. The need was to find solutions that don’t define the state through ethnicity, as this evolves over many years. In response to question on population growth rates, Mushtaq reported that the Arab population, currently around 20 per cent, is increasing at a much faster rate than for other groups (except the Orthodox group but this is a small minority of the population). They are expected to account for 30% of the population in 20 years. When asked what ideas or visions he had to take the place of the Two State Solution, he said he thought there were two issues: the first is to explore what it means to be Jewish, to aim for democracy with a state religion; the second is for significant land and population transfers but this is likely to lead to further conflict.

Managing unexpected asylum flows and the concerns of the local population - Mary Blanche and Chris Endersby, Kent County Council

Chris set out the background to recent asylum seekers flows into Kent and more broadly into England & Wales. Local Authorities around the country were required to understand both complex migration flows (including increasing levels of those seeking asylum) and develop policy responses to this pressure.

It was recognised that asylum seekers and refugees were only part of a wider population which were hidden from official statistics. Definitions of migrants and asylum seekers are central to discussing these groups in the context of this wider population. The United Nations definition of an asylum seeker is most commonly used and is in fact tightly drawn.

Policy responses centrally have changed substantially over recent years with bills passed in 1999, 2001 and 2004. The latest of these included the criminalisation of those who enter the UK without papers, a move which has enormous implications for the children of such migrants. In addition central government policy, local authorities must also be aware that European Institutions are also impacting at the local level, for example with the harmonization of reception standards.

Mary then considered the specific case of Kent. Described as the ‘Gateway of Europe’, Kent receives a third of all asylum applications into the UK. Responses from the County Council, since 1996, have included the setting up of the first family centre in Dover, setting up of emergency planning procedures, and the establishment of reception facilities for unaccompanied children. These responses were prior to the setting up of a National Asylum Support Service in April 2000. Any gaps in emergency legislation had to be covered by county level solution.

The focus was then moved to integration of asylum seekers. Local Authorities face particular difficulties with the integration of large numbers of non-British children. Policy direction from central government suggested that integration should occur only after a positive decision was made on the asylum applications. Such an approach is difficult to handle in practice given that decisions can take up to three years. In addition, even after a positive decision, support for asylum seekers ceases 28 days after the positive decision. There is a real need for Local Authorities to have integration policies for example in the building up of independent interpretation facilities, enabling work & training, and obtaining National Insurance numbers.

Overall they thought that the sharing of best practice was essential, for example inclusive community strategies such as the ‘friendship project’ for local schools, even across different policies that were needed for different local areas.

Does religion matter? - Dr David Voas (University of Manchester)

This plenary session discussed whether the study of religion mattered to social scientists. Two main ways of examining religion were identified: studying religious identification or affiliation and religiosity, the degree of religious involvement. David Voas maintained that religiosity is the more useful variable.

There are a number of factors involved in being a member of a particular religion, such as belief, practice, membership, affiliation, moral sense and a cultural affinity. These factors can be difficult to measure.

Religion might matter in a number of ways: personally, geopolitically, to fertility, mortality and morbidity and to public policy. In terms of health it can have both positive and negative associations. The positive include promotion of a healthy lifestyle, increased social integration and support and psychological benefits (self esteem and a positive outlook). However religion may also have negative effects, in particular specific risky practices, declining blood transfusions, rejecting abortion and contraception, hazardous rituals/pilgrimages and reduced interest in self-preservation.

In public policy terms, religion is important in a number of areas:

Education: faith schools, single sex schools, curriculum (in areas such as RE, art, biology, history), dress code (in France pupils are banned from wearing items of religious clothing in school). Employment: European equal opportunities legislation, work schedules, prayer facilities, inappropriate social activities. Crime: police stop and search, security profiling, hate crimes legislation, inter-group conflict. Prisons: prison food (such as halal or kosher food), abusive and offensive behaviour, availability of chaplains. Immigration: favouritism towards Christian immigrants, unfavourable treatment of arranged marriages, difficulties in obtaining visas for religious leaders, dispersal of asylum seekers restricting access to worship. Housing and planning: accommodation for extended families, planning permission for temples and mosques. Health and social services: food, chaplaincy, unacceptable medicine and treatment, mixed wards, treatment of female patients, post mortem requirements, adoption, circumcision, and contraception. Religious groups are also major providers of some social services, either overtly (providing sheltered housing and hospice care) or covertly (promoting charitable giving, voluntary work and informal networks of care.)

Measuring religion (or religiosity) is prone to a number of problems, David suggested that a quarter of all responses to any questions on religion were unreliable. Answers to questions on religion are very sensitive to context and question wording. He illustrated the difficulty of collecting religion data by comparing two data sources, the 2001 Census and the British Social Attitudes Survey (BSAS). According to the Census 72 per cent of the population of England and Wales were Christian, whereas the BSAS put the proportion at 54 per cent.

Other problems with any religion question also include aggregate stability disguises individual churning, 'spiritual' views are often uninformed, shallow, volatile and not salient, the meaning or questions/answers can be unclear, there is a bias due to identity or social desirability. Questions are also susceptible to facetious responses (over 300,000 Jedi Knights according to the 2001 Census) and coding problems.

It is clear that collecting data on religion is important to social scientists and policymakers. In future there needs to be consistency across the UK in Censuses and surveys (in the 2001 Census Northern Ireland and Scotland had different questions to England and Wales): a coherent business case for a religion question in the 2011 Census: and Religiosity should be measured – as well as Religion.

Ageing

The first of the two Ageing sessions had a focus on health and disability, including methods for measuring and forecasting both, and was chaired by Emily Grundy, London School of Hygiene and Tropical Medicine, the strand organiser. Unfortunately the Leicester home team from the Department of Epidemiology and Public Health were themselves affected by illness and Professor Carol Jagger had to present two papers on behalf of herself, colleagues and collaborators. The first of these 'Trends in health, function and disease in East Cambridgeshire: A comparison of cohorts in the MRC Cognitive Function and Ageing Study (MRC- CFAS) aged 65-69 in 1991/2 and 1996/7' by Nicola Spiers, Carol Jagger, Felica Huppert, Eugene Paykel, Judith Nickson, Carol Brayne and MRC-CFAS, University of Leicester and University of Cambridge was a timely contribution to the continuing debate about whether the health status of the older population is improving or not. The presentation was based on a comparison of health and function in two Cambridgeshire cohorts surveyed using identical protocols of the MRC Cognitive Function and Ageing Study. Respondents were men and women aged 65-69 in 1991/2 and in 1996/7. There was no increase in the prevalence of moderate to severe self-reported ADL/IADL (Activities of Daily Living/Instrumental Activities of Daily Living) disability in men or women, but when mild disability, requiring regular help with shopping and heavy housework, was included, there was an increase in the percentage of all men then classified as disabled. The overall picture for diseases and impairments was of increased morbidity in the later cohort, although only in the case of arthritis in both sexes, and asthma in women were these increases statistically significant. The increase in the prevalence of respiratory conditions in women was not explained by differences in self-reported smoking behaviour. Although limited in timescale and geography, this cohort comparison supported the concern that increased life expectancy is accompanied by declines in perceived well-being amongst older people, especially men.

In the second paper 'Forecasting future disability levels under changing patterns of diseases' by **Carol Jagger, Nicola Spiers, Ruth Matthews, Carol Brayne, Chad Boulton, Tom Robinson, Fiona Matthews and MRC-CFAS**, also presented by Carol, data from the MRC CFAS study were used to examine the effects of changing disease prevalence on the size of the older disabled population. Disability was characterised as requiring help several times a week, assessed by dependency in Activities of Daily Living. From a population perspective, prevalent arthritis cognitive impairment and Chronic Airways Obstruction had the biggest effect on risk of becoming disabled in the follow up period. The predicted age and sex-specific probabilities of disability onset and death, for given disease prevalence, together with smoothed observed age-specific transition probabilities to recovery and Government population projections, were used to simulate the disability experience of future cohorts at age 65 and over. The effect on the disabled population of fixed percentage reductions every 2 years in the prevalence of different diseases was explored through the simulation.

The third paper by **Mike Murphy and Stamatis Kalogirou** of the London School of Economics, also looked to the future and was entitled 'The future distribution of population and death among older people'. The results presented were partly based on work

undertaken as part of an EU funded programme on the Future living conditions of elderly people in Europe (FELICIE). Mike, who presented the paper, noted that in the recent, highly influential Wanless Review, the importance of proximity to death as an indicator of likely health costs was emphasised. Other demographic changes, notably changes in the marital status of the older population are also likely to have large impacts on demands for formal and informal care towards the end of life.

There was considerable debate about likely trend in future mortality in Europe, with, for example, current projections of e_0 for females ranging from 81 in the Netherlands to 88 in France around 2030. Mike showed how the patterns of deaths among older populations and population numbers exhibit very different trends and, in particular, how the distribution of deaths by marital status is likely to change with plausible assumptions about mortality in Britain. The sensitivity of these outcomes to alternative mortality and marital status trends were discussed, and the implications for long-term and acute care considered.

In the second ageing session, which was chaired by Professor Carol Jagger, the final paper by **Dulce Benigna Dias Alvarenga Baptista**, a PhD student at the Centre for Population Studies, London School of Hygiene & Tropical Medicine also focussed on health and disability and methods of measuring them. Dulce's presentation, entitled 'The health status of elderly people in Latin America and the Caribbean' reported estimates of healthy life expectancy based on analysis of the Age, health and wellbeing in Latin America and the Caribbean (SABE) survey. This collected a broad set of information on the health status, functioning and wellbeing of elderly people in Argentina, Brazil, Chile, Cuba, Mexico and Uruguay. Dulce used Grade of Membership methods to identify disability profiles for the SABE countries and analyse gender and other socio-demographic differentials in disability. She argued that GOM methods had considerable advantages over other methods for estimating health expectancies as they recognised the fuzzy nature of boundaries between different health statuses.

The other papers in this session focussed more on care and support issues. **Iain Atherton**, a PhD student in the School of Geography and Geoscience, University of St Andrews presented his work on retirement moves in Scotland and the effect these might have on proximity of older people to adult children. Iain used census data and Special Migration Statistics to identify areas as popular to settle in at retirement, or places showing a tendency for younger people to move away. He concluded by considering the implications of these trends and his plans for follow up work involving interviews with later life migrants in Scotland.

Ursula Henz, Department of Sociology, London School of Economics, next presented her paper on 'The effects of informal care on paid-work participation in Great Britain'. She examined the dynamic relationship between informal caring and employment with a special focus on job characteristics that might affect an individual's ability to combine caring and employment using the 1994-95 British Family and Working Lives Survey (FWLS). This allowed her to examine the interrelationship between longitudinal caring histories and the job histories, and also the perceived effects of informal care-giving on work arrangements as reported by carers. In following the second approach it emerged that of all informal carers about one third had not been employed when they

started caring for the first time in their lives, another third said that caring had no effect on their work arrangements, and about one third reported one or several effects on their work arrangements, especially that they had stopped working. Multivariate analyses show that semi-routine and routine manual workers reported the strongest effects of care giving on work. Interestingly, part-time workers were more prone than full-time workers to reduce their hours of paid work when they started caring. The latter result could point to restricted opportunities of full-time workers for reducing their working hours to balance family and employment.

In the fourth presentation of the session **Emily Grundy** presented a paper by herself, **Stamatis Kalogirou**, and **Cecilia Tomassini** from the Centre for Population Studies, London School of Hygiene & Tropical Medicine and other European collaborators on 'Contacts between elderly parents and their children in four European countries: current patterns and future prospects'. This work was also carried out as part of the EU FELICIE programme. Using four comparable European surveys from Britain, Finland, France and Italy, the team had analysed variations in face to face contact between elderly parents and their adult children and made some projections of changes in the extent of this form of contact under various assumptions of population change. As might be expected, the proportions of older people who saw a child at least weekly were highest in Italy (over 90%), but also high in the other countries (for example, over 70% in Finland and France). Parental divorce, especially paternal divorce, and higher education were negatively associated with frequent contact but demographic and socio-economic changes likely to occur in the next few decades would have only a limited effect on the probability of parents having weekly contact with their children, *given* current propensities. This suggests some commentaries on the future family ties of older people are over alarmist.

Both sessions were well attended and followed by lively debates.

Families and households.

The families and household strand consisted of two sessions at which a total of six papers were presented.

The first paper was given by **Vicky Hosegood**, one of four co-authors, on the impact of adult mortality on household dissolution and migration in rural South Africa. Data on households and their members were collected on 1st January 2000 and the effects of adult mortality and other risks to household stability, such as divorce, were assessed from then up to October 2002. Besides deaths due to AIDS and other causes, there was extra mortality particularly for men, due to accidents and violence. Poorer households, as measured by ownership of assets, were vulnerable to dissolution, and households which suffered several adult deaths in succession were four times more likely to dissolve than the average.

The second paper was presented by **Christine Callum**, on behalf of three co-authors, on Transitioning to adulthood: community access to schooling and household/family learning. The study concerned adolescents, particularly girls, in Pakistan and their patterns of ever having attended school, and the ages

at which they left school. Data from the “Adolescent and Youth in Pakistan 2001/02 Survey” were used. The proximity of schools made a significant difference both with ever having attended school – fewer with more distant schools – and with age at leaving school – younger ages for more distant schools. Other factors – such as the socio-economic status of the household, the parent’s literacy and the presence of brothers and sisters in the household who were going to school – were also found to vary significantly with school attendance and age at leaving school.

The third paper, given by **Juan-Manuel Contreras**, was on ‘Conflict with intimacy: men involved in violent relationships – a socio-demographic analysis of intimate partner violence in Mexico’. Juan indicated that violence in relationships has a high prevalence in Mexico. Several data sources were used, and the main finding was that violence towards one’s partner tends to occur early in the relationship; half had occurred during the first year. Factors such as disputes over the control of money and men’s need to control their partner’s sexuality were particularly associated with men’s violence towards their partner.

The fourth paper was presented by **Elizabeth Cooksey** and was on the subject of Amish households and family patterns. The Amish population has grown dramatically during the last century, quadrupling to 200 thousand. Over one quarter of Amish settlements are in Ohio and Elizabeth presented results from a survey of over 8 thousand Amish households. There is a distinct Amish culture – typified by a slower-paced community-based lifestyle. Young men work with older relatives, and traditionally many have worked in farming and agriculture. Family building begins soon after marriage and families have been large. Elizabeth discussed the impact of social and economic changes on Amish demographic patterns.

The fifth paper, on “Stepfamilies: parents and stepparents with children belonging to them inside and outside the household” was given by **John Haskey**. Using results from a special module of questions devised and run on the ONS Omnibus Survey in Great Britain, John gave comparative demographic characteristics of married couple stepfamilies and cohabiting couple stepfamilies with resident dependent children. Whilst married couple stepfamilies had grown slightly as a proportion of all families with dependent children over the period 1991 to 2002, the proportion of cohabiting couple families had more than doubled – to over one in 25 families with dependent children. John then considered the effect of children living outside the reference household – and concluded that at least one in 9 families with dependent children were stepfamilies. He also discussed how other “de facto stepfamilies” exist but are concealed.

The sixth and final paper in the Families and Households strand was given by **Oliver Duke-Williams**, on “Household members: their relationships, their membership of extended families and multigenerational families”. Oliver first discussed the “relationship matrix” question which had been introduced into the 2001 Census, which obtained information on the relationships between pairs of household members. He discussed various issues concerning its completion, and the potential information which could be obtained from it, whilst indicating some of the limitations of the question (there was no provision for recording “in-law” relationships, for example) and some of the errors/inaccuracies which might have occurred (getting the relationship the wrong way round – for example ticking

parent instead of child). Oliver then outlined the analyses planned using the relationship matrix data – investigating the prevalence and characteristics of extended families, “horizontal” (same generation), “vertical” (different generations) and combined “horizontal and vertical” extended families.

Fertility

The fertility stand at this year’s conference attracted eleven papers covering a broad spectrum of issues within the topic. The first session of the strand was concerned largely with historical fertility and also fertility in the developing world. The other two sessions concentrated on developed world fertility, mainly focusing on Britain, but from many different perspectives.

The first session opened with **Svetla Baloutzova** of the University of Cambridge giving a paper entitled *The amazing rise of fatherless illegitimacy in socialist Bulgaria: “Wanton wenches” or minority issues?* She examined the incidence of illegitimacy in socialist Bulgaria (1944-1989). The focus was on fertility among the country’s major ethno-religious groups over the 20th century. In this context, it began with an outline of the demographic make-up of Bulgaria which, although dominated by ethnic Bulgarians following the Orthodox religion, contains important ethnic and religious minorities – Turks, Roma and Muslims. Against a backdrop of a sharp decrease in fertility in Bulgaria, the proportion of illegitimate births has risen, so that possibly almost 1 in 2 children is now born outside marriage. Illegitimacy was primarily an urban phenomenon in pre-socialist Bulgaria, spreading to rural areas during the later half of the century. However, the rise in illegitimacy overall actually began in the inter-war years.

Under the communist regime illegitimacy was associated with ‘lone mothers’, perceived as having little or no formal education, and being liable to anti-social behaviour, and having other negative traits. However, the paper demonstrated that births outside marriage varied (and continue to vary) by ethnic group. For example, by the early 1970s illegitimacy rates can be shown to be much higher among the Roma than the ethnic Bulgarian population. In fact, illegitimacy rates in socialist Bulgaria can be geographically divided, with lower rates in western areas, with a mainly Bulgarian Orthodox population, and higher rates in eastern areas, with higher ethnic minority and Muslim populations.

The next three papers all came from the University of Southampton. **Angela Baschieri**, spoke on the *Effect of modernisation on desired fertility in Egypt*. This paper sought to address a number of issues: to test the effect of current family composition on desired fertility (the ‘at least one boy’ hypotheses); test the relative importance of social and economic modernisation at individual and community levels in explaining the geographical differential in desired fertility in Egypt; develop a complex analysis technique which combined a multilevel logistic model with GIS techniques; and empirically test a conceptual framework which combined the economic theory of fertility with social interaction theory. Desired fertility rates vary considerably within Egypt, with over three quarters desiring only 2 children in the urban areas compared with only two fifths in the Upper Egypt area. Geographical influences on desired

fertility have been highlighted in the literature, while it seems probable that economic and social modernisation at both the individual and social level have had considerable contextual effects on fertility behaviour. Both individual level variables, such as age and place of residence, and community level variables such as GDP per capita and female literacy rates were included in the model to reflect the interplay between individual and societal factors.

Results confirmed the 'just one boy' hypotheses, and social modernisation variables were relatively more important in the model than economic modernisation. Significant variables in the model included infant mortality rates, formal enrolment rate for women, and percentage of women in the labour market. Both economic and social interaction theories were found to have explanatory value in examining fertility rates in Egypt, with social interaction more relevant for variations between regions. The paper concluded that an increased role for women in society should translate into decreased fertility rates, although this pattern is not much yet in evidence in Egypt. Policy directed to reduce fertility should aim to promote gender equality and enhance women's role in society, which should in turn translate into a fertility reduction.

Kandala Ngianga-Bakwin, then presented work he had carried out with his colleague R William Stones on *Birth intervals and reversible contraception in sub-Saharan Africa*. The interval between births is associated with child survival in the developing world, with short birth intervals contributing to mortality risks beyond the first year of life and controlling for other potential determinants. There is a Millennium Goal for reducing child mortality in Sub-Saharan Africa, and this paper used survey data from 9 countries in the region over the period 1991-93 to 1999-2001 to examine changes in the incidence of short birth intervals, and also the link between this phenomenon and the use of reversible contraception. A logistic regression model was used to try to explain the changes in the proportion of short birth intervals in the four countries with relatively high usage of reversible contraception over the period.

Overall, small changes in the percentage of short birth intervals between 1991-93 and 1999-2001 were noted, ranging from a decrease of 6.5 per cent in Cameroon to an increase of 6.4 per cent in Ghana. The use of modern methods of contraception fell in many of the countries over the same period. The modelling suggested that the overall odds ratio for the trend in short birth intervals in the four selected countries was 0.90, and this was unaffected by adjusting for other variables. While the odds of short birth intervals were reduced by exclusive breast feeding, they were increased by the use of reversible contraception. During the question and answer session, one suggested reason for this was that women had to visit clinics to get the injections and this was a barrier to proper use. It therefore appears that widespread adoption of injectible reversible contraceptives in Sub-Saharan Africa would not be a positive contribution to any attempt to increase birth intervals, and therefore to any attempt to reduce infant mortality.

Finally **Mahesh Puri**, presented work carried out with **Zoe Matthews and Roger Ingram** on the Determinants of unintended pregnancy among young couples in Nepal.

In contrast to the US and UK, unwanted pregnancies are more commonly reported among young married couples in Nepal, where 45 per cent of women are married before age 19 and most of them

conceive within a year. Most of these pregnancies are believed to be unintended. Overall, the Total Fertility Rate in Nepal is high in a South Asian context, and while knowledge of family planning is widespread use is low.

However, there has been methodological criticism of the way unwanted pregnancies (UP) are measured. The standard question discussed here could be subject to recall bias, as well as factors such as the desire for children changing over time affecting perceptions of past events. The aims of this paper were to assess the levels of UP among young couples, look at what the determinants might be, and discuss the policy implications of any findings.

Both quantitative and qualitative data were used, with the primary survey a two stage cluster sample of around 1,000 married young women and men. Two definitions of UP were tested, firstly the standard definition (i.e. that defined by the question "At the time of you became pregnant with (name), did you want to become pregnant then, did you want to wait until later, or did you not want to have any (more) children at all?") and secondly one which defined a pregnancy as unwanted if any one of a number of other criteria, such as use of contraception or no prior agreement within the couple, were met. A logistic regression model was applied which utilised 15 independent variables, including factors such as household well being, self esteem and decision making. Key findings included that young couples with high parity and small ideal family sizes were more likely to report UP, that those with knowledge of a higher number of methods of contraception were less likely to experience UP, and that there was marked regional variation in the results. The findings also suggested that measurements of UP using the conventional definition are undercounts.

In the second of the three sessions three papers were presented that focussed on the theme of early childbearing.

Heather Joshi presented work carried out with colleagues from the Institute of Education, Denise Hawkes and Kelly Ward, on *The timing of childbearing: Signals of intergenerational advantage and disadvantage*. Based on data from the UK Millennium Cohort Study, the presentation had three key themes: 1) Trends in delayed childbearing in the last quarter of the 20th Century have been socially differentiated; 2) How far are British social inequalities among a national sample of families with babies born at the turn of the Millennium, aligned with age at childbearing? And; 3) How far do inequalities by entry to motherhood reflect antecedent, concurrent and consequent circumstances? Key findings included that 11% mothers entered motherhood aged 18 or under, 21% were 31 or older at the birth of their first child and; approximately 6 in 10 mothers under 21 live in ethnic or other disadvantage neighbourhoods. Suggestions included looking at the socio-economic information of the father and the contact he has with the child, and there was also discussion of the effect of education on men as well as women and the relationship with early child bearing.

Denise Hawkes then presented *The socio-economic consequences of early childbearing: Evidence from a sample of UK female twins*. This study used the sample from the St Thomas Twin Research Unit and looked at the impact early

childbearing can have on socio-economic variables such as income. Twin data was used as each twin could effectively act as a control for the other twin having come from the same socio-economic background and followed the same life-course in youth. The study found that controlling for key socio-economic factors, for each year childbearing was delayed there was an increase in household income. Those who enter motherhood early are likely to have had a poorer start in life largely because of a disadvantaged family background rather than due to the incidence of being a young mother. Those mothers who were aged 20-24 were not significantly different from those under 19 in terms of their outcomes in later life. Within twin pairs for each year childbearing was delayed there was a one per cent increase in income. It was suggested that the study could examine if this difference held for the sets of identical and non-identical twins differently, to help inform the debate on the relative role environment and genetics. Previous studies found that family background was more important but it would be of interest if this was shown for the St. Thomas's sample.

David Paton, from Nottingham University Business School then presented on *Does pharmacy provision of emergency birth control reduce teenage pregnancy? An analysis of quarterly data from England*. He examined if, to date, there was a reduction in early child bearing (under-18) since free emergency birth control became available to under-16's at some pharmacies. The study controlled for key factors such as other family planning provision (which can be concentrated in the highest risk areas), sex-education and other socio-economic factors but found no reduction in early childbearing. He concluded that the most likely explanations for the result are either that young people are substituting pharmacy birth control for other sources (e.g. GPs) or that pharmacy emergency birth control schemes have contributed to an increase in risky sexual behaviour. However, the scheme to provide free emergency contraception is still relatively new it may be too early to see an effect. During questions the suggestion was made to extend the work to make international comparisons.

The final session of the conference was more wide ranging. The first of the four presentations was by **Michael Anderson** (University of Edinburgh) who spoke on '*Planning and family planning: Forethought and fertility related attitudes and behaviours*.' He explored the idea that planning family is linked to, and interpretable through understanding of, the planning of wider areas of individual's lives.

Michael examined quantitative and qualitative data from three surveys taken in the Kirkcaldy labour market area, with the qualitative interviews being of 25 married and co-habiting couples surveyed in 1999, aged 20-29. The surveys contained questions on many aspects of forethought, including work and careers, housing and DIY, living standards and savings, financial planning, retirement and will-making, as well as general questions on plans and ambitions. The small numbers involved in the surveys made the results suggestive rather than definitive. Michael presented results which showed that: most couples used contraception; that more risky methods of contraception were used by a higher percentage of non-planners; that working class couples discuss contraception less than other social classes; and, that a higher percentage of couples who do not already have children plan contraception in advance. He also found that: long-term planners

were especially likely to seek to fit children into wider plans; that 'shock' over an 'unplanned' pregnancy for long-term planners tends to mean mistiming while for short-term planners it was more likely to be really unexpected; 'unexpected' births could disrupt even the sequenced planning of long-term planners, but for some short-term planners they were often part of much more generally unplanned lives; an unexpected first child may encourage some to adopt much more precise planning in all groups, including sterilisation and, in more than one case, both using contraception at the same time; and, that even many long-term and very detailed planners do not start out with a clear view of how many children they want to have.

Michael concluded by saying that from these results there seemed to be very few people who make no plans at all – in this they are very different from what is known from survey and other data from earlier generations in the United Kingdom. For most, family planning was one aspect of planning and only a small number did not exercise any forethought with respect to it. By contrast, preliminary attempts to examine forethought in the pre-modern period, even among the British middle class, suggests that active forethought which considers options, between competing opportunities, over years or even months ahead, seemed to be much less common than today. Michael then posed the question that if this is indeed so, is it the case that the exercise of conscious choice over family size within marriage emerges as part of a wider emergence of the exercise of forethought?

Michael Rendall (Office for National Statistics) presented a paper entitled *First births by age and education in 1950s and 1960s birth cohorts in Britain, France and Norway* (with a number of co-authors). Michael hypothesised that the heterogeneous pattern of age-specific fertility in Britain compared to France and Norway would be reflected in greater differentials by education for first births, and that changes across birth cohorts ten years apart would accentuate these cross-national differences by education.

Several explanations had been proposed for the distinct heterogeneity in age-specific fertility patterns in Anglo-American countries compared with Continental Europe. These included non-marital childbearing, social and economic inequality, family policy, and early life-course pattern heterogeneity. Michael examined data from the large linked birth-registration datasets of the ONS Longitudinal Study (LS) of England and Wales (sample size 1%), the French Demographic Panel (EDP) (sample size 0.5%), and the Norwegian Fertility Database (FDB) (sample size 100%). The data analysed were educational qualifications measured in mid-20s and at the latest observation (mid 30s or 40s), and the first birth probabilities estimated by age and education for a comparison of two birth cohorts (those born in late 1950s and late 1960s) in each country. Michael found that for both cohorts for all countries a peak was seen at a higher age in those with higher qualifications than for those without higher qualifications. The age fertility pattern for both Norway and France was homogeneous for both cohorts and both educational attainments. The patterns seen for England & Wales, however, were heterogeneous for both cohort and educational attainments. When education attainments were examined France had a much more differentiated distribution

than England & Wales for both cohorts. Michael concluded that England & Wales is more differentiated by education in its fertility patterns than both France and Norway but that this is not caused by a more differentiated distribution of education.

Jessica Chamberlain and **Steve Smallwood** (Office for National Statistics) next gave a presentation entitled *Replacement fertility in England and Wales: What has it been and what does it mean?* Their presentation explored the empirical levels of period replacement fertility in England and Wales over the last six decades, and also looked at replacement fertility from a cohort perspective for cohorts born since 1924. This was then explored further to give a better understanding of what replacement fertility really means, and how this affects population changes.

Jessica highlighted the demographic importance of the term replacement fertility, but also pointed out that its common usage meant that the complexity behind the concept was often not considered. Replacement fertility is the level required to ensure the population exactly replaces itself in size. An average of 2 children would replace all mothers and fathers but only if all children survive to reproductive age. However, mortality and an unbalanced sex ratio of births, means that replacement fertility is higher than 2 and is often assumed to be a Total Fertility Rate (TFR) of 2.1 in developed countries. As this is an average across all women, a considerable proportion of women need to have 3 children in order to compensate for those who don't reproduce or have only one child. Steve then showed empirical calculations of replacement level fertility for England and Wales on both a period (if fertile population for that year will be replaced) and cohort (if the birth cohort will replace itself) basis. A chart of historical period replacement fertility in England & Wales showed that the TFR was below replacement level for much of the first half of the Century although there was an increase to above replacement level from 1946-1973 with a brief dip during the early 1950s. A chart of historical cohort replacement fertility showed that fertility was only above replacement for cohorts born between 1930 and 1946. However, if the cohort replacement was defined as 'replacing the number of females of fertile age' then cohort fertility had been above replacement, and further above replacement, from the mid-1920s through to 1950. Modelling work was being produced that looked at the impact on population structure of different scenarios concerning below level replacement fertility.

Finally **Aleks Collingwood Bakeo** (Office for National Statistics) presented a paper on '*Analysis of trends in live births by mother's country of birth in England and Wales, 1983-2001: Birthweight, mother's age and multiple births.*' The study used national data from birth registration to investigate variations in low birth weight live births, registration status, mean age of mother at birth, and multiplicity among babies of mothers born in countries that contribute to the main ethnic minority groups in England & Wales. The study focused on births to mothers born in the UK, Caribbean, West Africa, East Africa, India, Pakistan, Bangladesh, former Yugoslavia, the rest of Eastern Europe and the Republic of Ireland.

Aleks found that there was no difference over time in the sex ratio of babies of mothers born in the UK but that the proportion of boys to girls for mothers born in India had increased drastically. When birthweight was analysed mothers born in East Africa, Pakistan and Bangladesh consistently had the highest proportion

of low birthweight babies but the highest proportion of very low birthweight babies were born to mothers from West Africa and the Caribbean. Low birthweight babies of mothers born in all of the countries analysed except the South Asian countries were more likely to be born outside marriage than larger babies. Mothers born in the Caribbean and West Africa had a higher mean age at birth than UK mothers throughout the time period, and mothers born in these countries also had the highest proportion of multiple births. In answer to a question about geographical differences in birth patterns Aleks replied that some analysis had been done by Chris Dibben at Oxford University, although it is not yet published.

Health

The Health Strand of the 2004 BPS conference was organised into two sessions. The first of these sessions focussed on health and ethnicity and the second on child health and nutrition in resource-poor sessions.

Session 1 - This session included three papers. The first paper presented by **Saffron Karlson** from University College London, focussed on the influence of racism on ethnic inequalities in health, and examined whether this was a missing link in our understanding of health inequalities. The paper suggested that inequalities in health are not normally fully understood when we consider conventional measures of inequality such as socio-economic disadvantage. The paper used data from the 1999 Health Survey for England as well as a follow-up study, The Ethnic Minority Psychiatric Illness rates in the Community Study. The paper considered racial harassment on the basis of ethnicity or religion and examined how indicators of harassment are associated with both physical and mental health outcomes and how these factors interact with social class. Findings from the paper show that measures of racism are linked to health inequalities, suggesting a need to consider the different ways in which racial oppression can impact upon health.

The second paper in the session delivered by **Sarah Salway** considered limiting illness as a barrier to livelihood improvement in Bangladeshis living in the UK. The presentation began by highlighting the poor socio-economic conditions in which many UK Bangladeshis live, showing both economic and educational deprivation for this group. The study used data from the UK National Family Resources Survey as well as qualitative data collected from Bangladeshis living in London. Qualitative findings revealed that ill health was an important factor in the lives of UK Bangladeshis. Survey data support this finding, showing that Bangladeshis were much more likely than whites and most other ethnic groups for adults aged 35 plus to report limiting long term illness. Limiting long term illness of adults in households was found to affect not only the individuals concerned but also other members of the household, especially younger members who were forced to take on 'adult roles'. The paper highlighted the role of social networks as a coping mechanism for households. The qualitative work also identified inadequate or 'ethnically stereotyped' provision of services. The paper concluded by highlighting the strong reliance in research on the concept of socio-economic causes of ill health and calls for a rethinking of this idea to consider ill-health as both an input to, as well as an

outcome of, poverty.

The final paper in the session was presented by **Jon Anson** and considered immigrant mortality in Israel. The presentation began by highlighting the fact that first generation migrants tend to have lower mortality than native populations at their destination, which is normally attributed to the fact that migrants are a select robust and healthy population. The study investigated mortality among immigrants to Israel using a six year follow-up of the population from the census between 1995-2001. Five years prior to the census 10% was added to the population through migration and the majority came from Europe, mostly Eastern Europe. Compared to the native born Jewish and Arab population in Israel, it was observed that immigrants to Israel did not display lower mortality rates, even when age standardised.

The paper used information on education, work and standards of living to formulate hypotheses for why this unusual mortality pattern is observed in Israel.

Session 2 - This session included four papers that explored influences on child health and nutrition, two set in South Asia and two in South Africa. The session was attended by an informed and interested audience which made for lively discussion.

The first paper delivered by **Natalie Spark-du Preez**, currently working on her PhD at Loughborough University, focused on health-seeking behaviour for childhood illnesses in urban South Africa. In a fascinating talk illustrated with a colourful array of lotions and potions, Natalie presented preliminary findings from qualitative interviews and discussions with traditional healers and parents/guardians. In the urban centres of Johannesburg and Soweto concepts of health and healing are found to be diverse and dynamic. Focusing on the behaviours of Black families with children under 6, an eclectic mix of beliefs and health-seeking strategies was identified, some with serious implications for children's health. Natalie's future work will integrate an analysis of quantitative data in order to more fully address her research questions: What are the main factors influencing choice of health-care provider? Are caregivers using health-services and administering medicines 'appropriately'? After 10 years of restructuring and free public health care for children under 6, are health services meeting the needs of the under 6 population?

The second paper, presented by **Barbara Willey**, again a PhD student from Loughborough, was a quantitative investigation into the associations of socio-economic status (SES), social support and ethnicity with child anthropometric measures in urban South Africa. Using data from the 1990 Johannesburg-born Birth-to-Twenty (BTT) cohort, logistic regression model results were presented. Family financial/emotional readiness for the pregnancy and ethnicity were significant predictors of both small-for-gestational age (SGA) and stunting, while measures of economic status, household utilities, education and employment were not. Asians were more likely to be born SGA, while black children had increased risk of stunting. The author concluded that these findings suggest the need for social policies which recognize the importance that family cooperation and cohesiveness have on child growth and health, particularly in groups previously marginalized under Apartheid.

The third paper switched geographical focus to South Asia and **Sabu Padmadas**, of the University of Southampton, presented some initial work in the area of mapping geo-demographic inequalities of under-nutrition among children in India using anthropometric data from the recent NFHS. Two specific research questions are addressed in this research.

- 1) Is there any consistent change in the nutritional status of children over time in India and how are these changes spatially patterned by region and states?
- 2) To what extent do the selected demographic, socioeconomic and household factors mediate the spatial effects associated with children's nutritional status?

Sabu impressed the audience with a variety of spatial representations of patterns of under-nutrition across the Indian states, but concluded that this work needed further development before the above questions could be fully answered.

Finally, perhaps the very last paper of the conference, was presented by **Faiza Tabassum** (just a few days before her PhD viva). Faiza presented a complex quantitative analysis of time, individual and household influences on the nutritional status of children in rural Pakistan. Using the Pakistan Panel Data collected from 1986-89, multilevel models for longitudinal data were used to look at the determinants of wasting and stunting over time. The three-level multilevel models took time as level-1, children as level-2 and the households as level-3. Such an approach was aimed at revealing age-specific aetiologies of children's growth faltering as well as exploring whether the determinants of wasting are different from stunting. Discussion centered primarily on the finding that indicators of household size and structure were found to be important predictors of nutritional status.

Historical demography

The historical demography strand consisted of eleven papers spread over three sessions.

The first session, on Monday afternoon, addressed illegitimacy and family formation: **Eilidh Garrett** presented a paper written with Ros Davies and Andrew Blaikie, entitled '... She's had her bit bairnie, too': illegitimacy, morality, migration and economy. A Scottish comparative study'. Using linked census and civil registration material for two Scottish communities, she clearly demonstrated the distorting effect that migration can have on the calculation of demographic measures for small areas. She showed that the custom of young women to give birth to their illegitimate infants in their parents' home, and to leave them there while they went to neighbouring counties to work, produced denominators which did not reflect the numbers of women at risk of illegitimate births and thus artificially raised illegitimacy indices. In his paper, 'Determining "illegitimate" paternity under the Old and New Poor Law: the evidence from a nineteenth century magistrates' court', **Tom Nutt** considered illegitimacy from the angle of the fathers as well as the mothers. For a child to be supported by the Poor Law, an unwed mother had to make a court application naming the father, and Nutt showed how the change from the Old to the New Poor Law shifted the burden of proof from the man to the woman, making it much more difficult to establish paternity. **Silvia Sovic** rounded off this session with 'Did the Eastern European family

ever exist?' in which she argued that the geographic and cultural mapping famously used by Hajnal and Laslett was an artificial construct, and that the economy is a much more powerful influence on household structure. These papers provoked a lively discussion about measurement, the importance of migration, and the links between economy, culture, and society.

The remaining two historical demography sessions were on Tuesday. The first, unfortunately scheduled against one of only two sessions in the mortality strand, contained four papers on mortality. In a change from the advertised paper on 'The concentration of mortality at macro and micro scales', **Jim Oeppen** presented his work on the early life effects on mortality of influenza. Influenza is governed by period and cohort effects, and through the use of an age-period-cohort framework, he showed that the peculiar age structure of the 1918-19 pandemic was the product of the period and cohort interaction, and that understanding the 1891 epidemic is crucial to understanding the course of influenza in the following decades. **Diego Ramiro** presented a paper co-authored by Kazunori Murakoshi on 'Stillbirths in Spain and Japan', two countries where remarkably detailed information is available on foetal loss by month of pregnancy, legitimacy and sex for both rural and urban areas in the first half of the twentieth century. The information for Japan was particularly useful in revealing that the relationship between foetal mortality at different ages and stillbirth mortality has not been constant over time. In 'Topology, economy, and the shape of early age mortality in Derbyshire', **Alice Reid** continued the emphasis on early age mortality by investigating the roles of elevation and geological structure in the development of the local economy, settlement patterns and health environments. She argued that in Derbyshire, the dominant influence was the presence of coal deposits: the development of the mining industry was characterised by the establishment of densely populated and unsanitary pit-villages and the health implications of these were partially shared by non-miners living in mining areas. Finally in this session, Tricia James presented 'The anti-vaccinationists: shoemakers in Rushden', which described the local development of smallpox vaccination and its opponents, of which shoemakers were a particularly strong group, perhaps partly due to their wider contacts.

The last session in the historical demography strand was dominated by Ireland. In 'Bridget the barmaid and Norah the nurserymaid: Irish domestic servants in London in the nineteenth century', **Christine Jones** compared the occupations of the Irish-born from samples of the 1851 and 1881 censuses of London. Although there was an increase in the percentage of Irish born females over these 30 years, there was a substantial fall in the proportion of these in service, but she showed that this was due to the ageing of the Irish-born population rather than to an increase in prejudice against them. **Malcolm Smith**, addressed a similar topic using similar source material but a different tool in 'Population structure of Irish migrants to Northern England in the late nineteenth century', a paper co-authored by A Hepburn and D MacRaild. He used the technique of isonymy (analysis of surname distribution to measure the relationships between populations) to show that Irish migration to England was strongly geographically structured, influenced by transport routes, chain migration and sectarian values. This

differentiated settlement pattern meant that instead of being a homogenising influence, Irish immigration mapped regional Irish

variation onto England and Wales. **Malcolm Macourt** looked at the Irish in their own country. His paper, 'A separate ethnic group? Protestants in the south of Ireland', examined the survival and dwindling of groups of protestants over the twentieth century. Through examination of the occupational and religious structure of a small community he showed that although the landed gentry, and those in commerce and trade, were gradually driven out, the protestant farming community persisted. **Nigel Goose** presented the final paper in the historical demography strand: 'How legendary was the 'legendary xenophobia' of the English? The reception of strangers of the "first refuge" in England c 1550-1660'. Focussing on an earlier period than most of the other papers, he nonetheless highlighted some of the perennial pitfalls of historical analysis. In his often light-hearted examination of reports of the English and their attitudes, he argued that selective repetition of historical material which fitted historians ideological perspectives has produced a long-standing stereotype which still affects the perspectives of academics, colours their analysis, and

can even affect numerical results. A salutary lesson for us all!

Local government

The strand had three sessions dealing with **Housing** issues, the **Census** and **Population Estimates and Projections**.

In the **Housing** session **Malcolm Brown** (Cornwall County Council) discussed the impact of seasonally occupied properties, focussing on Cornwall, using data from the past three Censuses and making comparisons with locally held sources. He pointed out major discrepancies with location of such properties and the actual numbers as shown by the 2001 Census and recommended improved methods for 2011. **Dave King** (Anglia Polytechnic University) looked at the housing and planning consequences of an aging population. Over 75% of the net growth of household numbers projected over the next two decades is headed by those aged 55 and above, with over half above retirement age. There is a general trend towards smaller households and in particular, a rapid growth in the number of one-person households. Policy makers have seen this particular demographic trend as supporting various related strands of policy. They have leaned towards seeking smaller dwellings at higher residential densities, preferably within the confines of existing developed areas (to meet regeneration and sustainability policies) and have connected this in some instances to the wider issue of housing affordability. Dave showed that the elderly must be viewed as individual cohorts rather than be seen as a heterogeneous group, when the impacts of the trends on tenure and dwelling size requirements are looked at in this way the conclusions can be very different. **Emily Grundy** (LSHTM) considered geographical variation in informal care-giving using 2001 Census results. As a result of this it is now possible to examine the distribution of carers within England and Wales. Areas with higher proportions of carers also have higher deprivation and show poorer general health. Where caring is less prevalent it is likely that caring is combined with employment. It is hoped that the LS will allow individual carers circumstances to be investigated.

The **Census** session had two papers on the impacts of disclosure control on the analysis of 2001 Census. The first was

by **Eileen Howes** (Greater London Authority) who had compared journey to work tables from a number of sources (Theme Tables, SWS and GLA Commissioned Tables). The results were not promising.

Disclosure control applied to the tables before release means that much of the data from separate sources are considerably different when summed for particular destinations or origins. When comparing the six SWS tables only 30% of flows feature in all six. The geographic integrity of the data has therefore been completely lost and for all but the more trivial uses the data as produced are hardly fit for purpose. Eileen called for ONS to create a special class of user who would be able to have access to tables that had not been disclosure controlled. **Paul Williamson** (University of Liverpool) picked up this theme and looked at the impacts upon the census cross-tabulations showing, by using the results of randomly adjusting small cells the extent to which the process ONS are believed to have used impacted on the types of analyses normally undertaken by users, taking into account a range of factors including area type, population rarity and number of spatial units being aggregated. He compared the impacts of other possible adjustment methodologies – rounding to base 5, rounding to base 3 and two forms of ‘barnardisation’ – and while showing that ONS small cell adjustment was the less disruptive to the data than rounding (i.e. it changed fewer cells and produced narrower confidence intervals) it performed worse than all other methods in the ability to correctly rank areas. In the light of this analysis, Paul offered a best practice guide to minimising the impact of disclosure control, for both users and statistical agencies. In the final paper **Chris W Smith and Lucy Baker** (ONS) opened up the debate upon the population definitions to be used for the 2011 Census. The results of the recent ONS consultation exercise were reviewed and the process that ONS intend to use to reach a conclusive view was presented. Greater mobility and changes in British society over the last few decades have encouraged a wider diversity of living arrangements. For some people determining where they are usually resident is no longer as straightforward as it once was. While the consultation showed an overwhelming need for a usual residence base this needs to be closely and unambiguously defined to meet the criticisms of the 2001 Census and changing user needs. It was also recognised that the element of de facto population should be used within the Census enumeration strategy to ensure that people were not missed and that the definitions used were applied as inclusively as possible.

In the **Population Estimates and Projections** session **John Hollis and Georgia Hay** (Greater London Authority) presented analysis of vital statistics at London borough level for 2000-02 that enable age-specific fertility schedules and life tables to be prepared for the GLA’s demographic models. One issue to emerge was the impact that disclosure control was having on the data made available by ONS at borough level. Data for 2002 had to be obtained against a signed statement of non-disclosure. Raw and smoothed age-specific fertility curves for boroughs demonstrate bi-polar distributions with clear peaks at around 20 and the early 30s in many inner London boroughs. There was speculation about the main causes for these patterns: marital status, ethnicity and other social variants. The finding led to potential problems of forecasting local fertility levels. The life table analysis was more straightforward – but methodological allowance had to be made for the deaths now occurring to the survivors of the low birth cohorts from the end of the First World War. Comparisons were made with life tables based on 1991 and 1996 and the nature and possible

causes of variations amongst the boroughs was discussed in light of comparisons with other variables from the 2001 Census – working hours, ethnicity, health, etc. **Richard Cooper** (Nottinghamshire

County Council) showed how, in preparation for the Joint Structure Plan, the City of Nottingham & Nottinghamshire County Council had tailored population and household projections based on the Chelmer model. Key decisions had to be made over the inputs, in particular changes from the default options, particularly should the 1991 Census or more recent ONS patient register data be used and how to cope with the level of ‘transient population’, incorporating students. This was a particular problem due to students not generally being included in 1991 Census migration at their term-time address and 2001 Census data not being available. This work was pragmatic, and illustrated the compromises necessary to produce useable, but locally tailored outputs where resources are limited. **Denise Williams** (ONS) then gave a progress report on the Small Area Population Estimates Project (SAPE) that was set up to investigate which data sets and methods could be used to produce an authoritative set of estimates for England and Wales. A number of administrative data sets were evaluated including the DWP child benefit and pensions data, electoral roll information and patient registers. The evaluation included comparisons with derived mid-2001 ward estimates and the development of a ward categorisation to see whether the differences and patterns observed could be accounted for by differences in area type categorisation. This analysis led to the development of models using three different methods: ratio change, apportionment and components. These methods were briefly explained. From these models, sets of ward estimates were produced for mid-2002. These were evaluated, and a recommendation made to use the ratio change model. However, the ONS Methodology Group requested further evaluation that should be complete in the autumn. Future work plans including a consideration of small area population estimates for other geographies, for example Super Output Areas.

Migration

Tony Champion acted as organiser for what was initially seen as the ‘migration and population mobility’ strand but was subsequently extended to include offers of submitted papers relating to the plenary theme. This ended up as four sessions. Thanks go to Iain Atherton, Naomi Bushin and Stuart Burley for drafting reports of the second, third and fourth sessions respectively, also to Paul Boyle, John Hollis and David Coleman for chairing the first three sessions.

The strand kicked off with three papers on international migration. **Emma Wright** and **Giles Horsfield** provided an update on taking forward the recommendations of the Office for National Statistics quality review on international migration estimates. This review had reported in September 2003, with an implementation plan being published in January 2004. The current work includes examining how to improve the estimates of international migration derived from the International Passenger Survey and how best to combine these with Home Office data on the control of immigration. Also being examined are alternative administrative, survey and overseas data sources, and the use of household surveys and administrative data to improve the distribution of international in-migrants at a local

level. In the IPS, thought is being given to asking relevant migrants about both intended and actual length of stay in the UK or of absence from UK, about extending the questioning to those intended to stay at least 6 months as opposed to 12 months as now, and about immigrants' degree of certainty about their final destination within the UK. Perhaps a case could be made for additional questions in the Population Census, for instance on nationality and year of arrival.

Michael Rendall presented a research note, authored jointly with Christian Dustmann, on the effect of length of stay on the employment rates and wages of immigrants to the UK. According to theory, immigrants' labour-market performance should improve with length of time spent in the receiving country, but this may be confounded by selective return migration, problems of survey non-response and misreporting, and repeat migration and the fuzziness of the concept of arrival. Their analysis used mainly the Labour Force Survey, covering two periods 1979-2000 and 1992-2000, with some cross-checking with Census data. It was found that the best-performing immigrants generally tend to stay the shortest time. Allowing for this, it would indeed appear to be the case that the true effect of length of stay is more positive and more consistent across countries of origin than previously estimated.

James Raymer set out a general method for estimating place-to-place migration flows in situations where the data are missing or inadequate. He put forward a parameter coding scheme that fed into a structure to be used in a log-linear model. The available data is assembled, giving greater weight to the inflow data where there are discrepancies with the outflow data collected by the origin country. Marginal totals are then estimated, expected flows calculated, and ratios of the available observed to expected flows derived. The methodology had first been tested on internal migration flows in the USA, but in this paper it was applied to international migration flows in Northern Europe in 1999-2000 where the data are incomplete.

The four papers presented in the second session covered a wider range of subject matter, but all focused on population and migration in the UK. **Stuart Burley** outlined some of the early findings from his PhD on the relationship between in-migration and the economy of small areas in Cornwall. The study used census data to consider the motivations behind population movements into and within the county, particularly with regard to differences between rural and urban areas. Quality of life motivations were behind much in-migration into rural areas, while economic factors played a much more significant role to urbanised wards. However, it was suggested that the former is connected to the latter.

Dan Vickers described the results of his ESRC CASE studentship work (with ONS) on developing 'The United Kingdom National Area Classification of Output Areas'. This provided an insight into the classification process of summarising the complex and diverse data available from the census into a single summary figure. He outlined how these areas had been constructed. Examples were used to highlight issues, including the problems of such a classification, but also opening up different ways in which such work could be used.

Tony Champion then presented the initial results of work that he has been doing on the links between cities and their surrounding regions based on a definition of City Regions and lower-tier

Localities produced by Mike Coombes. Their paper compared changes in the population of cities and their associated regions using census data for decades from 1971. Examples were given from different parts of the UK, highlighting the success of London and Edinburgh, but the relative underperformance of other regions that were headed by large provincial cities. In the earlier decades, there was a pretty consistent pattern of regional cities lagging behind the growth rate of their city regions, signifying regional population deconcentration, but in the 1990s the census-based analysis suggested a rather even split amongst the 43 city regions between those where the regional city was lagging and those where it was leading. However, checks using the consistently defined mid-year population estimates suggested a less rosy picture for the regional cities.

Finally in this session, **Paul Boyle** asked whether *selective* migration alters the relationship between deprivation and mortality, drawing on a study with Paul Norman. They had used longitudinal data on individuals in England and Wales who survived between 1971 and 1991, and may or may not have died between 1991 and 1999, to see if widening disparities in morbidity between different localities are the result of growing disparities in the population's health or the result of selective migration. Comparing the deprivation circumstances for this closed sample in both 1971 and 1991, they found all-cause mortality 1991-99 was more strongly related to deprivation in 1991 than in 1971 and concluded that this result arises from the selective movement of the healthy towards less deprived areas.

The third session focused on ethnicity and religion. **Gareth Piggott** used Census 2001 to examine the ethnic diversity by religion and country of birth. Simpson's Diversity Index was used to rank districts of England and Wales according to their ethnic diversity. The paper then concentrated on London and Leicester. He showed that Leicester's ethnic diversity is dominated by the Indian population whereas London's ethnic diversity is more equally spread across all 16 groups. In both London and Leicester the Indian population is located in cluster areas based not only on ethnic group but also on religion. For example, Indian Hindus were shown to be clustered in ten wards in London and two wards in Leicester. Clusters also exist for Indian Muslims and Indian Sikhs. Leicester also has the highest proportion of the Indian population who were born in the UK. The author emphasised that ethnic diversity is more about the spread across ethnic groups than the clustering of ethnic groups but that, even in areas with high ethnic diversity, Census 2001 data show that there are clusters of ethnic groups based on both nationality and religion.

The second paper, co-presented by **Baljit Bains** and **Ed Klodawski**, examined ethnic group fertility rates for London using data from Hospital Episode Statistics (HES). By using admission method, episode type, ethnic group, local authority district, sex and age of the patient for 2002/3, the authors allocated births by age of mother and ethnic group of mother. The HES analysis suggested that births by Pakistani and Bangladeshi mothers were 50% higher than the Census indicated, but the authors acknowledged that one of the limitations of the HES were likely biases in reporting and geography. The HES also exclude home births and births in private hospitals and there may be ethnic difference in these.

There is also the possibility that babies are under enumerated in Census 2001 and that the fertility rates extracted from HES were not that inaccurate.

Atreyi Majumdar then presented a more qualitative paper that looked at the nature, causes and consequences of migration, drawing on a sample of 93 professional workers (mainly doctors) who had moved from India to the UK, many of these over 20 years ago. Push factors were mentioned only rarely by the interviewees. The main pull to the UK was found to have been the higher wage potential, but in 33 cases non-economic factors were involved to some extent. The difficulties the interviewees experienced when first arriving in the UK, such as homesickness, decreased with time for this group of migrants. Some of the respondents felt that they were 'losing touch with home' but a permanent return to India was impossible for a number of reasons. The author highlighted that a 'culture of migration' has emerged which is both different to the culture in India and the UK and has resulted in immigrant enclaves. Increased income enabled them to send money back to relatives and all thought that this mitigated negative impacts of migration. However, 74% of the interviewees did not feel part of British society and 43% wanted to return to India.

Finally in this session, **Malcolm McCourt** used the Northern Ireland Census 2001 question on religion to probe the possible emergence of a third tribe in Northern Ireland, being neither Catholic nor Protestant. Residential segregation in Northern Ireland enabled him to categorize EDs/OAs as either Protestant or Catholic and allocate the Census respondents who answered 'none', or refused to answer the religion question, to either Catholicism or Protestantism. The results showed that those who answered 'none' and non-respondents were not spread throughout the segregated areas. People living in mixed Catholic and Protestant areas were less likely to answer the religion question than those in other areas. Protestants were more likely than Catholics to answer 'none' overall, particularly Protestant men in aged 30 to 40 living in urban areas. The Census question on 'community background' showed that 0.6% of Catholics in predominantly Catholic areas stated they had no religious background, compared to 3% in Protestant areas and 4% in middle class mixed areas. The conclusion was that the Census religion and community background question were not designed to identify a third tribe in Northern Ireland and that analysis of the data at a micro-level suggests that the emergence of a third tribe is false.

The fourth and final session in this strand began with a paper entitled 'What the immigrants can do for us; or the economic consequences of Mr. Blunkett', presented by **Bob Rowthorn** and co-authored with David Coleman. This questioned two claims implicit in recent policy – first, that immigration is a solution to the demands of an ageing population, and second, that it is necessary for economic growth. By using projected support ratios, they demonstrated how the demands of an ageing society can be reduced by increasing employment in the existing population rather than by increasing the potential workforce through immigration. As regards the economic benefit of immigration, it was suggested that fiscal contribution is dependent on the type of immigration. Younger and highly skilled immigrants may be beneficial, but unskilled non-economic immigrants are likely to have a negative fiscal impact and may actually harm opportunity for existing unskilled workers in the UK. The paper concluded by suggesting that the moral debate on immigration is hidden by spurious

economic arguments.

Anne Green examined the changing nature and spatial distribution of employment and non-employment and their implications for access to work. She showed that, although all areas in England and Wales have shared in a growth of employment and a reduction in unemployment over the last 10 years, geographical differentials in labour market opportunities remain. The changing structure of employment, differences in participation in employment and the issue of matching supply and demand with regard to numbers of jobs and skills were described at regional and district levels. The geographical areas with significant employment deficits were found to be most marked in areas of already low employment and with low skilled workers. Using a case study of Belfast, it was shown that low-skilled workers experience physical and social barriers regarding access to employment within and beyond their residential area. A number of initiatives to combat under-employment were suggested, including enhancing the mobility of people most affected.

Oliver Duke-Williams examined relationships between migration and the geography of property prices in England and Wales, using the 2001 Census Special Migration Statistics and data from the Land Registry. Increases in property prices were shown to be highest in the Southern regions, while the North had the most districts where prices had fallen. While the rates of in- and out-migration are geographically varied, net migration increases seem to be most prominent in the coastal districts. While changes in property prices were shown to have a moderate correlation with in-migration and a slightly stronger correlation with out-migration, inter-district and inter-regional migrants were more likely to be moving from higher to lower house priced areas.

Finally, **David Owen** presented a paper co-authored with Anne Green on population growth, migration and economic development in rural areas. It was shown that rural areas have experienced population growth due to net migration over the last 20 years but without significant economic improvement. The implications of migration for economic development were examined using an in-depth study of the East of England region. This found that the economies of rural areas are characterised by under-employment and inactivity, possibly related to the type of migrants that move there. Wages are also low, reflecting the low-value-added occupations of rural areas. It was concluded that, to improve the economic conditions of rural areas, it is necessary to address the low skills equilibrium. There appears to be no simple solutions but one intervention would be to encourage new businesses to invest in skills and training rather than to follow a low-skill trajectory termed as a 'poverty of aspirations'.

Mortality

The first mortality session consisted of four papers each exploring different demographic aspects influencing mortality. **Cecilia Tomassini** (ONS & LSHTM) began the session by presenting work carried out with colleagues Emily Grundy (LSHTM), Axel Skytthe & Kaare Christensen (Institute of Epidemiology, Denmark) on *Twins and their costs: Consequences of multiple births on health and mortality*. The

paper discussed previous work, the suggested negative implications of twinning to a mother's health and longevity, and presented twinning rates in the respective study countries – England and Wales and Denmark. Preliminary results examining the health and mortality of mothers of twins were given for each of the study populations – in England and Wales, the ONS Longitudinal Study, and in Denmark, the Danish Civil Registration system.

Cohort life tables and a logistic regression were used to investigate whether mothers of twins have negative health outcomes and higher mortality as compared with mothers of singletons. It was found that there was no difference between the expected and observed mortality of mothers of twins in both countries and that there was no higher risk of having a limiting long-term illness for mothers of twins (only assessed in England and Wales). A discrete-time event history model explored cohort differences between twinning and health and mortality – there was a small effect of having twins on mortality for older cohorts (i.e. those born before 1930). Overall, it was concluded that higher twinning rates may not have long term implications for the health and mortality of mothers.

Clare Griffiths (ONS) spoke about *Mortality by country of birth in England and Wales, 2001-2003* and presented work in progress at ONS with colleagues Anita Brock (ONS), and Sarah Wild & Colin Fischbacher (University of Edinburgh). The paper builds on previous analyses of mortality by country of birth based on census data and death registrations. This new analysis studied patterns of mortality around the 2001 Census, included a larger group of countries of birth than previous studies, additional causes of death and age specific mortality rates as well as an overall rate. It was noted that country of birth couldn't be used as a proxy for ethnicity in this study.

Age-standardised rates of mortality were examined for men and women by country of birth and cause of death. Similarly to previous analyses, mortality varied by country of birth around the 2001 Census. However, thanks to additional information included in the study, some interesting new findings were presented which highlighted differences by cause of death – for example, rates of cerebrovascular disease (CVD or stroke) were very high in West African born men but ischaemic heart disease (IHD) rates were very low in the same group of men.

Barbara Toson (ONS) presented the third paper carried out with Cecilia Tomassini (ONS), Steve Smallwood (ONS) and Arjan Gjonca (LSE) on *Sex differences in mortality in the UK and Other Countries* over the last two decades. It was noted that despite 'common knowledge' that the gap between life expectancy of men and women is decreasing this is not true in all countries. It was observed that men's life expectancy has improved at a faster rate than women's in some countries but not in others – the UK, France, Germany and Sweden all saw a decrease in the differential of life expectancy at birth between 1980 and the most recent year, whereas in Spain and Japan the opposite was true. Lexus maps for England and Wales and France gave some interesting insights into the patterns of male and female mortality for different ages, periods and cohorts, whilst data on cause of death in the two countries highlighted how mortality for the two sexes are influenced in different ways by the health related behaviour of people in each country.

Mike Murphy (LSE) turned the focus to projecting mortality with his presentation of work with Stamatis Kalogirou (LSHTM) on *Non-parametric estimates of mortality among older people in Europe*. The study discussed how generalised additive models (GAMs) may be used to estimate and project trends in mortality for those aged 75 and over, by marital status, age and sex in nine different European countries. The presentation considered the merits of using a GAM approach to modelling data as compared to alternative mathematical and statistical approaches. Mike concluded that GAMs provide a useful addition to traditional demographic tools for modelling but are not a complete replacement for traditional approaches.

Owing to a late withdrawal, there were two paper in the session, *Adult mortality in sub-Saharan Africa: evidence from demographic and health surveys* by **Ian Timæus** and Momodou Jasseh (LSHTM) and *Reproduction, health and mortality in Gambian women* by **Rebecca Sear** (LSE), Ruth Mace (UCL) and Ian McGregor (MRC Gambia).

Ian Timæus discussed levels, trends and age patterns of adult mortality in 23 sub-Saharan Africa countries using the sibling histories and orphanhood data collected by Demographic and Health Surveys. He showed that adult mortality has risen sharply since HIV became prevalent, but that the size and speed of the mortality increase varied greatly between countries. Excess mortality is concentrated among women aged 25-39 and men aged 30-44. These data suggest that the increase in the number of men dying has exceeded somewhat that for women. He concluded that it is time for a systematic attempt to reconcile the demographic and epidemiological evidence concerning AIDS in Africa. (The full paper is to be published in *Demography* 41(4)).

Reproduction, health and mortality in Gambian women

Rebecca Sear used a life history theory approach which predicts that where resources are limited, investment in reproduction will cause a decline in body condition and ultimately may lower survival rates. The setting for investigating the relationship between reproduction and survival in women was in rural Gambia, a high mortality, high fertility population which suffers periodic food stress. The analysis used discrete-time event-history analysis to model the probability of death for both reproductive-aged women (15-49 years) and post-reproductive women (50+ years). A number of different measures of reproductive investment: the timing of reproduction (age at first and last birth), intensity of reproduction (pace of reproduction, sex of children and twinning) and cumulative reproductive investment (parity) were used.

Though giving birth is clearly a risk factor for increased mortality, there is only limited evidence that the timing, intensity or cumulative effects of reproduction have a survival cost. On the contrary, there is evidence for a *positive* correlation between investment in reproduction and survival rates, so that women who have invested heavily in reproduction have higher survival rates than women with lower reproductive investment. For reproductive-aged women parity is positively correlated with survival; for post-reproductive women, age at last birth is positively correlated with survival.

One explanation for this finding is that this analysis is confounded by individual variation in health or 'quality': healthy women are able to invest considerably in both reproduction and in maintaining their own somatic tissue, which lowers their mortality rate. Differences in 'quality' between women by including measures of body condition were controlled for. However, even when controlling for health, the positive correlation between investment in reproduction and survival remains unchanged.

The only evidence that there may be costs of reproduction in this population is that women who have given birth to twins have higher post-reproductive mortality than women with only singleton births. Mothers of twins invest particularly heavily in reproduction: not only are twin births themselves energetically costly, but these women also have shorter birth intervals than singleton mothers and, as a result, higher completed fertility.

Reproductive health

The Reproductive Health strand at this year's BSPS Conference consisted of 8 diverse papers, incorporating both quantitative and qualitative approaches and including studies from developing, developed and transitional countries. The strand opened with two papers analysing the contraceptive behaviour of men in Asia. **Govinda Dahal** presented a paper, co-authored with Andy Hinde and Monique Hennink, on the contraceptive behaviour of married men in Nepal. He explored why men in Nepal don't use male methods of contraception, concluding that negative attitudes towards condom use and fear of post-surgical complications of vasectomy resulted in low use of male methods. Though there was higher acceptance of female methods, poverty and lack of education were associated with reluctance to use any method of contraception. **Mohammed Amirul Islam**, Sabu Padmadas and Peter Smith continued this theme of men's contraceptive behaviour with a paper investigating men's contraceptive knowledge in Bangladesh. Though knowledge of at least some methods of contraception was universal, men differed in their degree of contraceptive knowledge.

Katerini Storeng began the second Reproductive Health session with an anthropological perspective on reproductive health. She reported on a qualitative study she and Mélanie Akoum have conducted investigating obstetrical complications in Burkina Faso. She described women's obstetrical problems in this underdeveloped country, and explored how women manage these problems given their poverty and limited power within society. Attention switched back to contraception for the next two papers. **Amos Channon** presented a study of 'Risky behaviour and condom use in Malawi', co-authored with Nyovani Madise. This paper introduced a new definition of risky sexual behaviour and assessed levels and correlates of both this risky sexual behaviour and condom use, using data from the 2000 Malawi DHS. **Nicole Stone** closed the session with work she has done with Bethan Hatherall, Juliet McEachran and Roger Ingham on 'The choreography of young people's condom use in the UK'. This study went beyond asking young people whether they used condoms to find out whether they were using condoms correctly. The findings suggested a significant minority of young people may be using condoms ineffectively, which has implications for the transmission of sexually transmitted infections.

In the final session, **Lisa Hurt** described an analysis of mortality

by time since pregnancy in rural Bangladesh, using Matlab data. She and her co-authors (Carine Ronsmans and Nurul Alam) have investigated whether the increased risk of mortality after a birth extends beyond the traditional 42 day cut-off for maternal mortality, and found evidence that this was indeed the case. **Gail Grant** then presented a paper on abortion culture in Estonia. She discussed work she has done in this Eastern European country examining why abortion was apparently such a prevalent form of contraception. The paper included descriptions of historical and ethnic variation in abortion rates and suggested a framework for the analysis of abortion culture. Finally, Lisa Hilder closed the strand by presenting data on perinatal mortality rates in three communities in the East End of London. She has found evidence that perinatal mortality varies by both ethnicity and borough in this region of London. She discussed possible reasons for these patterns, and suggested the explanation may include differences in the countries of origin and in the durations of settlement of these mothers.

Posters

I am delighted to report that the poster stand at this year's conference was a great success, no doubt interest was boosted by a £100 prize given by the BSPS for the poster competition. Thanks must go to Heather Joshi (Centre for Longitudinal Studies) and Jon Anson (University of Negev) who judged the poster competition.

Posters covered a wide range of subjects; **Melissa Andrews** (LSHTM) outlined the issues involved in the social capital, health and long term care residence of older adults. **Sarah Hall's** (University of Southampton) very informative poster gave an excellent outline of the problems of neonatal mortality in developing countries. **Kaveri Harriss** (LSHTM) outlined the issues behind illness and poverty within ethnic groups and the methodology she is using in her study area of Pakistani families in east London. **Hannah McConnell** (ONS) presented summary statistics and plans for further analysis of relationships and household composition. **Chiedza Zingoni** et al (Loughborough University) outlined the evidence for global nutrition transition which emanates from a shift from a traditional diet high in fibre and low in fat to a diet high in fibre and low in fat. **Daniel Vickers** (University of Leeds) presented his classification of local authorities which he has classified into a hierarchy of 5, 13 and 26 groups. **Naomi Bushin** (University of Wales Swansea) shed light on the issues surrounding the migration of young people to rural areas, particularly her study area of Devon. Naomi describes how rural areas experience the highest rate of youth exodus, & the effect that this has on the participants.

The Poster Competition was won by: What is the evidence for the nutrition and transition globally? By Chiedza Zingoni, Paula Griffiths and Noël Cameron, Department of Human Sciences, Loughborough University
