

Changing Populations

November 2018 | Issue 3



International students in the UK



Relations between the young and old



Can social media help us investigate migration?

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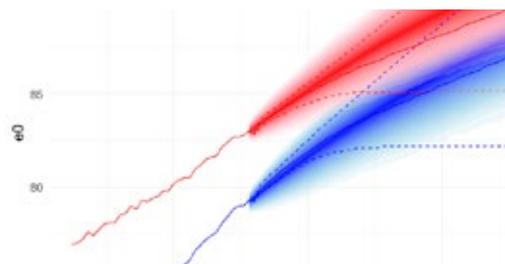
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Welcome

We are heading towards the end of another busy year for CPC, looking forward to 2019 when we will be celebrating 10 years of research investigating society's most critical questions about population change.



I am delighted to be coming up to such an important milestone. The last 10 years have seen many changes in how we live as a society, and those changes are happening more rapidly than ever before. Our research achievements so far have helped us to better understand the drivers of change and contribute to the national and international conversation on how to respond.

In early 2018, the Economic and Social Research Council (ESRC) announced that CPC had been awarded funding to continue its work for another three years under a new model designed to secure the long-term sustainability of social science research in the UK.

We are heading into a time of increased uncertainty, with Brexit on the horizon, and a rapidly changing economy demanding new skills, changes in family life and a growing number of older people living longer. There has never been a more interesting and important time to study population change, and I am delighted that with the support of the ESRC and the institutions involved in CPC we can continue our work helping to improve the world in which we live.

In this edition, you will find details of just some of our latest research. Much of it was recently presented to our research community at the European Population Conference held in Brussels in July and at the British Society of Population Studies (BSPS) conference, held in Winchester in September. Highlights include: international students in the UK (p.6); the Brexit effect (p.8); relations between the young and old (p.10); and our work on transforming projections of migration, births and deaths (p.12).

We hope you enjoy discovering more about our activities.

Professor Jane Falkingham OBE

Director

Facts, figures and news

2018

The year in brief

5 January 2018 – Professor David Bell was made a Commander of the British Empire (CBE) for his outstanding service to economics and public policy.

25 January 2018 – Esther Roughsedge from National Records of Scotland took part in the CPC Brown Bag seminar series at Ladywell House, Edinburgh, to discuss data visualisation and communication which was attended by members of local Councils.

6 February 2018 – The ESRC announced that CPC had been awarded funding to continue its work under a new model designed to secure the sustainability of UK social sciences research.

6 March 2018 – Jane Falkingham was appointed as a member of the new ESRC Council, which came into effect with the launch of UK Research and Innovation (UKRI) on 1 April 2018.

22 March 2018 – The work of Maria Evandrou, Jane Falkingham, Athina Vlachantoni, Saara Hamalainen and Maja Palmer was included in a report 'Demographic Change and Migration', published as part of the European Commission's Joint Programming Initiative (JPI) "More Years, Better Lives".

23 March 2018 – Jane Falkingham gave the second Jan M. Hoem Distinguished Lecture in Demography 'Population Change and the Need for 'Life Course Sensitive' Policy' at the Stockholm University Demography Unit (SUDA).

28 March 2018 – We published CPC Briefing Paper 41 'EU migrants' attitudes to UK healthcare' by Chris Moreh, Derek McGhee and Athina Vlachantoni.

30 April 2018 – We published CPC Working Paper 88 'Mobile no more? The innovative use of linking administrative data to a census-based longitudinal study to investigate migration within Scotland' by David McCollum.

29 May 2018 – Jane Falkingham was announced as President of the European Association for Population Studies (EAPS) and Hill Kulu was elected as Secretary-General and Treasurer.

PRESENTED

106

PAPERS

IN

19

CITIES

PARTICIPATED IN

51

EVENTS

IN

9

COUNTRIES

9 June 2018 – CPC successfully shared knowledge with the scientific community at the European Population Conference (EPC) in Brussels, featuring research by all three CPC Directors, Maria Evandrou, Jane Falkingham and Elspeth Graham, as well as CPC researchers and PhD students Alexandra Ciritel, Katie Heap, Hill Kulu, Brienna Perelli-Harris, Francesco Rampazzo, Albert Sabater, Agnese Vitali and Athina Vlachantoni.

29 June 2018 – Two members of CPC were promoted to the role of Professor at the University of Southampton. Corrado Giulietti was promoted to Professor of Economics and Athina Vlachantoni was promoted to Professor of Gerontology and Social Policy. Corrado has also been appointed as Head of Department for Economics.

30 June 2018 – We published Working Paper 89 on 'Expectations for family transitions in young adulthood among the UK second generation' by Ann Berrington.

2 July 2018 – Jakub Bijak engaged the public with a talk on 'The Uncertain World of International Migration' at Winchester's Café Scientifique.

11 July 2018 – To mark World Population Day and the UN's 2018 theme "Family Planning is a Human Right", we highlighted CPC research on the theme of 'Fertility and Family' with our Briefing Papers identifying fertility and family trends, exploring the impact of recession and economic uncertainty, and the effects of time spent in education.

13 July 2018 – Ann Berrington, Maria Evandrou and Jane Falkingham gave evidence to Hampshire County Council's strategic plan at the Vision for Hampshire 2050 Commission of Inquiry.

13 August 2018 – Nuala McGrath was awarded one of only two Global Health Research Professorships by the National Institute for Health Research (NIHR) for her work improving adult health in sub-Saharan Africa.

5 September 2018 – We published CPC Briefing Paper 42 'Tackling chronic disease among 'left-behind' older people in India and China' by Jane Falkingham, Maria Evandrou, Athina Vlachantoni and Min Qin.

6 September 2018 – David McCollum and Paula Duffy, in conjunction with the Royal Society of Edinburgh, hosted a roundtable event in Edinburgh to discuss the significance of international students in Scotland.

12 September 2018 – CPC members shared their research at the British Society of Population Studies (BSPS) Conference at Winchester University. Together they coordinated several of the academic strands and gave over 22 presentations.

3 October 2018 – David Bell presented work on healthy ageing in Scotland at the Scottish Parliament, Edinburgh, as part of the Life in Future Scotland series run by the Futures Forum.

5 October 2018 – Visiting from the Office for National Statistics, Niomie Warner took part in the CPC Seminar Series in Southampton to discuss recent improvements to migration statistics and use of new and existing data sources.

10 October 2018 – The first talk in the University of Southampton Public Lecture series featured Jackie Wahba on the 'Cost and benefits of international students', coinciding with the second wave CPC-ONS-UUK Survey of Graduating International Students (SoGIS) report and CPC Briefing Paper 43 'Intentions and outcomes of graduating international students' being published.



58

PUBLICATIONS



284,258

WEBSITE VISITS

12 October 2018 – Lord David Willetts gave a CPC / University of Southampton Distinguished Lecture on ‘Fairness between the generations’.

16 October and 6 November 2018 – Athina Vlachantoni and Elspeth Graham (respectively) gave evidence to the House of Lords Select Committee on intergenerational fairness and provision.

25 October 2018 – David Bell and Hill Kulu were appointed to the Scottish Government’s Expert Advisory Group on Migration & Population.

14 November 2018 – We published CPC Briefing Paper 44 ‘UK second generation young adults’ expectations for living together, marriage and parenthood’ by Ann Berrington.

15 November 2018 – An international symposium, jointly organised by CPC and the University of St Andrews, brought together practitioners and researchers in family, fertility, migration and the life course to discuss recent findings and the challenges that changing demographic realities pose to European countries at individual, regional and societal levels.

16 November 2018 – David Bell presented on ‘future finances’ at an event entitled ‘Social care for older people: A sustainable future’ organised by Scotland’s Future Forum at the Scottish Parliament.

19 November 2018 – Hill Kulu and Ann Berrington were speakers at a workshop for analysts, journalists & public policy experts on ‘Why the future of our population matters?’ at the British Embassy, Berlin, organised by the Max Planck Institute for Demographic Research / Population Europe.

20 November 2018 – Jakub Bijak hosted a workshop and took part in the second University of Southampton Public Lecture on the ‘Uncertainty and complexity of migration’ at the British Academy, London.

26 November 2018 – Brienna Perelli-Harris taught the Fertility Module at the European Doctoral School of Demography, University of Southern Denmark, Odense.

30 November 2018 – We published CPC Briefing Paper 45 ‘(Un)Affordable housing and the residential separation of age groups’ by Albert Sabater, Elspeth Graham and Nissa Finney.

Coming up: 13 December, Agnese Vitali hosts an ESRC Future Leaders event at the Royal Astronomical Society, London.

To keep up-to-date with our latest news, events and publications, visit www.cpc.ac.uk and follow us on Twitter @CPCpopulation and Facebook.

CPC media highlights 2018

January – N.IUSSP

Relationship stability is important for abortion decisions in Finland
Heini Väisänen

February – BBC Radio Scotland

Immigration discussion on the John Beattie Show
Robert Wright

March – Avvenire Italy

Economic crisis and births
Francesca Fiori and Elspeth Graham

April – Daily Times Pakistan

Better support needed for people with Dementia
Asghar Zaidi

May – The Health Foundation

Free personal care: what the Scottish approach to social care would cost in England
David Bell

June – Demography Today – Demografia CSIC

Socio-spatial dynamics between younger and older adults in contemporary societies
Albert Sabater

July – Population Europe PopDigest

Measuring Male Fertility Rates by Making Use of Facebook Data
Francesco Rampazzo

August – Moneyweb

Women live longer than men, but save less
Jane Falkingham

September – The Times

What does the Brexit migration report propose?
Jackie Wahba

October – The Scotsman

Experts warn of Brexit’s impact on Scotland’s stalled birth rate
John MacInnes



30,096

FACEBOOK REACH



483,900

TWITTER IMPRESSIONS

For our full media coverage listing, visit www.cpc.ac.uk/news/cpc_in_the_media

International students in the UK: Migration intentions, influences and destinations

In October 2018, CPC researchers Jane Falkingham, Corrado Giuliotti, Jackie Wahba and Chuhong Wang released their latest report on the second wave of the CPC-ONS-UUK Survey of Graduating International Students (SoGIS). The research team have been investigating questions such as: Do students stick to the migration plans they have before graduating? If they have left the country, do they want to return to the UK?

The project, a collaboration between CPC, the Office for National Statistics (ONS) and Universities UK (UUK), aims to improve knowledge on intentions to return to the UK among international students who left the country after graduation, and provide a better understanding of their work and education opportunities after graduation. Tracking the destinations of international students can be difficult but these findings provide new insight into intentions and movements.

The first wave of the survey collected information about international students' post-study intentions, the certainty of these intentions, their travel patterns, use of public services, and employment whilst studying, collecting 3,560 responses from 51 participating Higher Education Institutions. The second wave is a follow-up survey of 563 students surveyed in wave 1 which allows a comparison of students' migration intentions as reported in wave 1 with their actual migration behaviour as reported in wave 2.

What does Brexit mean for student migration?

The prospect of the UK leaving the European Union (EU) poses additional challenges and questions for student migration. The research team have been studying the impact of the UK's departure from the EU on what EU students plan to do after they graduate. In what is a first attempt to study this question, the research team has used the British government's formal withdrawal notification under Article 50 as a 'natural experiment' and have found that, following the Article 50 announcement,

EU graduates are significantly more likely to plan on leaving the UK as soon as they graduate.

Speaking on the report, Professor Giuliotti comments: "Our research shows that the vast majority of international students stick to migration plans made before graduation. Nearly 9 out of 10 students who, before graduating said that they intended to leave the UK immediately after graduation, actually left the country.

However, there is also a clear indication that the prospects of Brexit have made our sample of students think that the UK is a less attractive place to live and work for non-UK nationals. However, the good news is that the UK is still viewed as a good place to study."

The cost and benefit of international students

In the year since the first SoGIS report was published, there has been much discussion surrounding the impact of international students in the UK. The first report, published in August 2017, was referenced in the recent Migration Advisory Committee (MAC) report on the 'Impact of international students in the UK', commissioned by the Home Secretary. The MAC is an independent non-departmental public body that advises the UK government on migration issues.

International students are a significant part of the ongoing debate over net UK migration figures, and whether they are a cost or a benefit to the UK. The MAC report states that there are over 750,000 students who come to the UK each

year to study, contributing to the further and higher education sectors, with the higher education sector making up over 80 percent of student visas sponsored each year. Income from international students largely contributes to the higher education sector and, in turn, UK research, innovation and the economy.

To discuss the issues further, project team members Jackie Wahba and Jane Falkingham spoke at the recent University of Southampton Public Lecture on the 'Cost and Benefit of International Students'. They were joined by Professor Alan Manning, London School of Economics, Mr Jonathan Chaloff, Organisation for Economic Co-Operation and Development, and Professor Sir Ian Diamond, Chair of the Social Security Advisory Committee. It was attended by practitioners in the private and public sectors as well as members of the House of Lords.

The event sought to build on this topical issue, using CPC research as a basis to examine whether overseas students are migrating to the UK in large numbers, if they are remaining in the UK or leaving after they graduate, and the costs and benefits to society. Alongside the CPC researchers, each speaker offered insights into the real-world impact of our research, and the panel discussion offered invaluable feedback and ideas to aid our future research questions.

For the Scottish perspective, David McCollum and Paula Duffy, in conjunction with the Royal Society of Edinburgh, hosted a roundtable event in Edinburgh



in September 2018 to discuss the significance of international students in Scotland and formulate proposals as to how this could be preserved going forward. Scotland is relatively successful at attracting international students but as they constitute a comparatively large share of its student population, it is also vulnerable to geopolitical changes such as Brexit.

Speaking after the event, Dr McCollum said: "There is widespread agreement that international student migration is overwhelmingly positive for Scotland in economic, demographic and cultural terms, and Scotland has an excellent reputation as a destination for international study. Current immigration policy, and wider rhetoric surrounding immigration, is potentially damaging the attractiveness of Scotland to prospective international students, so it is vital to consider Scotland's 'offer' relative to other potential destinations for study."

Further reading:

Intentions and outcomes of graduating international students (CPC Briefing Paper 43)

International Students in the UK: Perspective and Plans (CPC Briefing Paper 40)

University of Southampton Public Lecture Series

Population and Migration

This year's University of Southampton Public Lecture series has been exploring population and migration, working closely with CPC to bring together academics, partners, funding providers and key influencers to showcase the impact of our research. Videos of each event can be viewed through the Centre for Population Change YouTube channel in the 'UoS Public Lecture Series 2018' playlist.

Wednesday 10 October

Costs and benefits of international students

Keynote lectures followed by a panel discussion with Jane Falkingham and Jackie Wahba joined by Professor Alan Manning, London School of Economics, Mr Jonathan Chaloff, Organisation for Economic Co-Operation and Development, and Professor Sir Ian Diamond, chair of the Social Security Advisory Committee.

Tuesday 20 November

Uncertainty and complexity of migration

An 'In Conversation' session, with Jakub Bijak, Professor of Statistical Demography, and Jon Simmons, Home Office Analysis and Insight Directorate, examining the complexities of migration in a discussion facilitated by journalist and University of Southampton alumnus Jason Cowley.

Tuesday 4 December

Population mapping in low- and middle-income countries

Experts discuss the latest techniques and challenges surrounding population mapping, including integrating data from sources such as satellite imagery, mobile phones and surveys. Speakers include Professor Andy Tatem, University of Southampton, Professor Osman Sankoh, Statistics Sierra Leone, and Professor Rachel Snow, UNFPA.

The Brexit effect

Continuing our Brexit work, researchers Maria Evandrou, Jane Falkingham, Athina Vlachantoni and Zhixin Frank Feng have been exploring partnerships between individuals of different nationality in the UK against the background of an impending Brexit. The study, which uses data from the UK Census and Understanding Society, is also examining the association between the type of partnership and the preferences of respondents on whether the UK should remain in, or leave the European Union.

Relationships between individuals of different nationality, or 'bi-national partnerships' have been increasing as a result of intra-European migration, as well as migration into Europe by people born elsewhere. Bi-national partnerships have frequently been used as an indicator of social integration, particularly when they result in bi-national children.

The results of the study show that around three percent of all people aged 18 and over that were in a relationship in the UK were in partnerships where one partner was UK-born, and the other was born in another EU country; this equates to around 2 million people.

Commenting on the findings, Professor Falkingham says: "There are a large number of individuals in the UK that could be affected by any changes to migration rules caused by the UK leaving the EU. Our study found that individuals in bi-national partnerships were more likely to support the UK remaining in the EU. As you might expect, those in UK-EU partnerships which also included children, were even more likely to support the UK remaining in the EU. However, approximately one-quarter of people in an UK-EU partnership supported the UK leaving the EU, highlighting the complexity of the Brexit debate, and what this might mean for bi-national partnerships and families in the UK."

In another study, researchers Chris Moreh, Derek McGhee and Athina Vlachantoni have been examining the effect of Brexit on EU immigrants' attitudes to British Citizenship. Traditionally, individuals that have migrated within the EU have faced few pressures or incentives to formalise their 'permanent' residence or to legally get citizenship or nationality (naturalise) in their EU host countries. Focusing on the UK, the research team have been looking at the changes in practices and attitudes to such 'legal integration' as a result of the EU Referendum.

Combining an analysis of the latest available data on naturalisation trends and data from an online survey done in the months leading up to the EU Referendum, the team have been able to assess whether Brexit is the sole motivating factor behind a renewed interest in British citizenship, or whether other factors also play a significant role. The results have revealed that, as well as the 'Brexit effect' driving interest, the reasons for choosing naturalisation continue to be similar to those pre-Brexit.

Dr Moreh says: "Our analysis makes a significant contribution to understanding the complexities of legal integration processes in times of radical structural change. In particular, the study has found that factors related to more intrinsic attitudes have been driving naturalisation trends. These include: an individuals' initial reasons for migration; more attention being given to legal integration options as a result of the Brexit debate leading to a higher awareness of such options; and, potentially, Euroscepticism. These results allow for initial conclusions to be drawn about the possible political demographic consequences of Brexit."

Further reading:

Should I stay or should I go? Strategies of EU citizens living in the UK in the context of the EU referendum (CPC Briefing Paper 35)

Stakeholder identities in Britain's neoliberal ethical community: Polish narratives of earned citizenship in the context of the UK's EU referendum (The British Journal of Sociology)

The return of citizenship? An empirical assessment of legal integration in times of radical sociolegal transformation (International Migration Review)



Relations between the young and old

Extending the work of CPC's 'Exchange between the generations' strand, Professor Jane Falkingham has recently been appointed as Special Advisor to the House of Lords Select Committee on Intergenerational Fairness & Provision.

The House of Lords Select Committee on Intergenerational Fairness and Provision has been set up at a time when there is a perception that young people in the UK have fewer opportunities and economic benefits than previous generations. At the same time, society is ageing, and people are working longer and retiring later. The Committee will focus on issues of intergenerational fairness and provision across four key policy areas: jobs and the workplace; housing; the role of communities; and taxation.

Within CPC, we are looking at support across the generations, investigating how parents and children care for each other and how younger and older people live together. Can we reduce the public health burden by strengthening ties between the generations? Outside of the UK, we are researching poverty, wellbeing and solidarity across generations, examining the quality of life and well-being of older people in China, India, Pakistan and Bangladesh as well as those living in the slums of Nairobi.

What's housing got to do with it?

For example, new research from Albert Sabater, Elspeth Graham and Nissa Finney shows that the probability of an older adult (65 and over) sharing the same neighbourhood with a younger adult (aged 25-44) has declined over time, with evidence of higher residential age segregation as housing affordability decreases across each neighbourhood in England and Wales.

Drawing on population data from the 2001 and 2011 Censuses, information on key housing characteristics as well as house price and income data for small areas in England and Wales, their research has been investigating the relationship between housing (dis)advantage and residential age segregation.

Speaking on the findings, Dr Sabater says: "In the UK, housing debates have almost entirely ignored residential age segregation as one of the potential consequences of the ongoing housing affordability crisis. Our findings indicate that neighbourhoods with lower levels of affordable housing are more likely to be residentially segregated by age. Such a trend can result in undesired consequences, especially if it continues. For instance: the inability of many young people to access desired housing can impact other aspects of life, such as starting a family and employment opportunities. Also, increasing residential separation by age implies reduced inter-generational interaction that could threaten social cohesion, so further research is of paramount importance."

Indeed, the homeownership vs renting debate has far-reaching effects. Working with colleagues from the University of Florence, Ann Berrington and Agnese Vitali have been examining whether the move away from homeownership in the UK is affecting people's decisions to become parents.

It is usually presumed that people are more likely to become parents after they become home owners. However, couples' preferences to become homeowners before having their first child have been undermined by the dramatic changes in the UK housing market over recent decades. In Britain in particular, homeownership rates have fallen dramatically among young adults as a result of low wages, precarious employment, reductions in the availability of mortgage credit, lack of affordable homes, and rising house prices.

Using data from the British Household Panel Survey and the United Kingdom Household Longitudinal Survey the research team have found that, in comparison to the 1990s, people are now

more likely to be entering parenthood while living in insecure private rented accommodation.

CPC researchers have also been examining how major life events such as entering into a relationship, separation and divorce affect our living arrangements.

Previous research shows that separated individuals move from homeownership to (private) renting and experience a period of instability in their living arrangements. However, little is known about whether and when separated individuals will become homeowners again. Hill Kulu and Julia Mikolai have been investigating what happens after divorce and separation, studying homeownership levels among separated individuals in Britain using data from the British Household Panel Survey. Professor Kulu comments: "Our findings support the view that separation can have long-term effects on people's housing status. Our results have shown that people who have separated are much less likely to own a home than those who are married or living together unmarried. Interestingly, homeownership levels increase over time since separation; however, the levels increase among people who form a new relationship, whereas homeownership rates remain low among those who remain separated."

They are also investigating how house moves and changes in partnership status evolve and interact in individuals' lives. The findings, combining data from the British Household Panel Survey and the Understanding Society study, show that people are more likely to move during the first year of a relationship, or following separation. Separated and cohabiting individuals are most likely to move to private renting, whereas married people are more likely to move to homeownership. Most people now move to start a cohabiting relationship rather than because of getting married.



“

One-third of those in mid-life are ‘at risk’ of having to provide care to multiple generations of their families, and about half have to provide some care to both grandchildren and elderly parents at the same time.

”

Professor Vlachantoni
Project team member

What about those in mid-life?

Maria Evandrou, Jane Falkingham, Madelín Gómez-León and Athina Vlachantoni have been examining those considered to be in the middle of the younger and older generations, the so-called ‘sandwich generation’.

The research team have analysed the 1958 National Child Development Study to examine how mid-life men and women distribute their time dedicated to support their elderly parents and their own adult children through providing grandchild care.

Professor Vlachantoni comments: “Our early findings indicate that around one-third of those in mid-life are ‘at risk’ of having to provide care to multiple generations of their families, and about half have to provide some care to both grandchildren and elderly parents at the same time. With the large generation of baby-boomers entering mid- and later life and an increasing number of families spreading across three or four generations, figuring out ways to support individuals who care for multiple generations will need to be a policy priority.”

Alongside this work, a collaborative project bringing together colleagues from Scotland and Southampton is helping to develop a better understanding of the scale and nature of unpaid caring activities, how these interact with other paid and unpaid activities such as work and leisure, and how patterns of time use may be changing as society changes.

Led by Alison Bowes from the University of Stirling, Maria Evandrou, David Bell, Alison Dawson, Jane Falkingham, Athina Vlachantoni, Nadine Thomas, Alasdair Rutherford and Rosalie Ashworth are working to inform better ways of collecting survey data on unpaid care that will inform policy and capacity planning, such as the design of the Scottish Longitudinal Study of Ageing.

“Closely informed by the views and experiences of unpaid carers themselves, we are investigating the dynamics of unpaid care for older people by collecting and analysing time-use data and by developing improved methods of understanding the nature of unpaid care in survey research.” Says Professor Bowes. “This will in turn inform policies which can effectively support the provision of unpaid care, helping to counteract current demographic changes which may reduce it.”

Older people’s well-being

Demonstrating the complexity of intergenerational relations, Athina Vlachantoni, Jane Falkingham, Maria Evandrou and Min Qin have been investigating the negative impacts on parents’ health when adult sons leave home in India and China. India and China are both undergoing unprecedented urbanisation, with increasing numbers of younger people and adults moving into cities, leaving behind their older parents in rural areas. Both India and China have a patrilineal culture which emphasises a son’s duty to support his parents, however it is also men who are most likely to migrate, leaving parents without this support.

The research demonstrates that having a migrant son in India and China is linked to older parents’ poorer health status. They have found that in China there is a strong association between digestive diseases among parents and having a migrant son. In India, parental hypertension, diabetes and heart disease were found to be strongly associated with having a migrant son.

In another study, Yazhen Yang, Maria Evandrou and Athina Vlachantoni have found that changes to Chinese culture as a result of this rapid modernisation are exerting pressure between the generations in terms of financial and social support.

Professor Evandrou says: “Our studies demonstrate the complex nature of intergenerational relations, for example where a culture change which sees it become more common for adult sons to leave home can have a large impact on the health of their parents left behind. It is vital that we continue to study the effects of how different generations live, or indeed don’t live, together, how they interact and what the social, financial and health costs are. The policy implications of such findings need to be taken into account at the national, regional and local level to strengthen intergenerational ties and to improve older, as well as younger people’s well-being.”

Further reading:

(Un)Affordable Housing and the residential separation of age groups (CPC Briefing Paper 45)

The spatialities of ageing: Evidencing increasing spatial polarisation between older and younger adults in England and Wales (Demographic Research)

Divorce, Separation, and Housing Changes: A Multiprocess Analysis of Longitudinal Data from England and Wales (Demography)

Tackling chronic disease among ‘left-behind’ older people in India and China (CPC Briefing Paper 42)

Children’s migration and lifestyle-related chronic disease among older parents ‘left behind’ in India (SSM-Population Health)

Follow progress of the House of Lords Select Committee on Intergenerational Fairness and Provision on Twitter @LordsIntergen

Simulation models of human migration

CPC member, Professor Jakub Bijak, is leading an interdisciplinary team to develop a ground-breaking simulation model of international migration, aiming to change the way in which migration can be understood, predicted and managed by effectively integrating behavioural and social theory with modelling.



The project is funded by the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme. Jakub was one of 314 top researchers in Europe selected to share in a total of €605m funding, and has been awarded €1.45m for the four-year project 'Bayesian Agent-based Population Studies (BAPS): Transforming Simulation Models of Human Migration'.

The project will build on previous research into migration modelling and forecasting. The simulations will see the agents (migrants, states and institutions) interacting in a way that will mimic the trends observed in the real world. State-of-the-art statistical tools will identify the exact areas for experimentation, and cognitive experiments will help improve understanding about the way people make migration decisions under uncertainty. The team will also

develop a bespoke, intuitive programming language to help deal with the project's computational challenges.

Professor Bijak said: "I am absolutely thrilled to receive the ERC grant for this project. Migration is a top priority EU policy area and one of the key social challenges in contemporary Europe. We need to better understand the processes and decisions that underpin it. This project will look at developing and testing innovative methods for modelling migration which we hope will change the way migration is understood, predicted and managed."

Find out more about the project at
www.southampton.ac.uk/baps

Predicting births and deaths

Forecasts of mortality provide vital information about our future population of elderly citizens, with implications for pension and health-care policy as well as for decisions made by private companies about life insurance and pensions. Fertility is a dynamic social process that is influenced by a range of economic and cultural factors. This complicates the process of forecasting future numbers of births, as the direction and magnitude of changes in fertility rates are consequently much less predictable than they are for death rates.

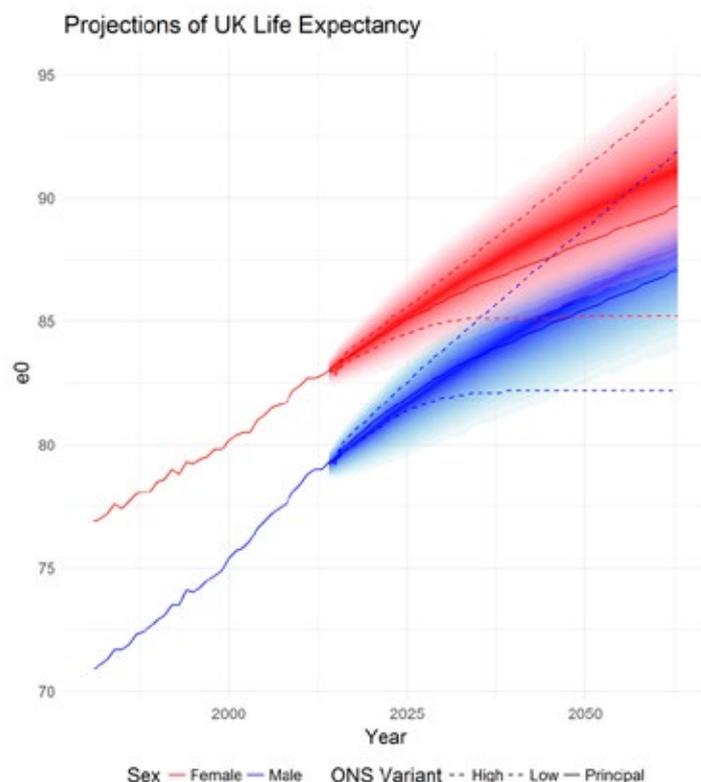
CP members, Jason Hilton, Erengul Dodd, Jon Forster, Jakub Bijak and Peter Smith, have developed innovative new models for the probabilistic forecasting of fertility and mortality that provide not only single values for the number of births and deaths expected in the future, but also the degree of certainty around these numbers. When combined with migration projections, such methods can be used to predict population totals, broken down by age group and incorporating our uncertainty about the future.

On the research, Dr Hilton comments: "Forecasting not only the most probable future number of births or deaths but also

the range of likely values provides decision-makers with the opportunity to manage possible risks, for instance by preparing for more extreme scenarios that, without adequate planning, could lead to financial or logistic problems. Probabilistic forecasts such as these can inform policy questions where it could be crucial to know the likelihood that a forecast will under- or over-predict."

Further reading:

Projecting UK mortality using Bayesian generalised additive models (Journal of the Royal Statistical Society. Series C: Applied Statistics)



Can social media help us investigate migration?

CPC PhD student Francesco Rampazzo is using social media data to provide a clearer picture of the numbers of migrants in the UK. International migration to the UK has become a hot topic both in research and in the media, but there are still huge limitations on the availability of timely data for measuring migration. Detailed data on migrants' characteristics are also much needed for producing accurate statistics and informing policy. Facebook is a non-representative source of data for the whole population of a country, but it is a digital source updated in real time, with numerous possibilities to filter information.

The aim of this project is to create the first longitudinal geo-located dataset from Facebook's Advertising Platform through a weekly collection from mid-December 2017 onwards for two years. It also aims to give a weekly picture of European migration following the 2016 referendum. The analysis, supervised by Jakub Bijak and Agnese Vitali, will complement traditional data sources provided by the ONS, which will be also used for comparisons.

"Using our novel approach, it will be possible to nowcast migration, and provide a more timely picture of its trends using Facebook data." Says Mr Rampazzo. "Our preliminary results from Facebook are promising, showing proportions close to the ONS estimates. We believe that this is an encouraging and new direction for future work, not just in the UK, but at a global level."



PhD spotlight

Natalia Permyakova is a PhD Student who has successfully defended her PhD in Social Statistics and Demography, funded by the ESRC. Her research is focussed on 'Men's health and family environment in contemporary Russia', supervised by CPC members Brienna Perelli-Harris and Jennifer Holland.

"I have always been interested in the socio-demographic causes of low life expectancy of men in Russia, but CPC family demographers inspired me to study the often overlooked importance of family for men's poor health. While studying the Russian context, where one third of households hold multiple generations, I have been focusing on the life-course health effects of living with adult children or older parents.

Throughout my PhD journey, I had been given several opportunities to share my research findings with both academic and public audiences thanks to working with CPC. For example, I spoke at the ESRC Festival of Social Sciences as well as the Population

Association of America Conference, where I presented my PhD findings on the significant negative effect on men's health from living with unhealthy parents, and the effects of living with adult children on a father's health and health behaviours.

Recently, I have shifted my attention to the importance of social support for the psychological well-being of cancer survivors, taking on a new role as Medical Statistician within the Macmillan Survivorship Research Group (MSRG) at the University of Southampton. I hope to develop my career further in medical demography, which could not have been started without CPC's support during my PhD."



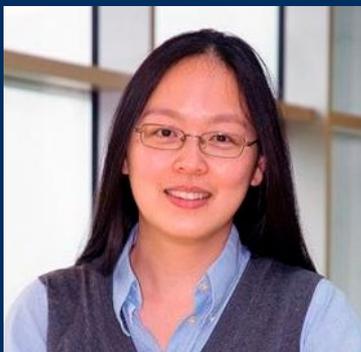
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Natalia Permyakova
PhD Student

PhD congratulations



Sarah Wo, whose work focussed on areas of ageing and pension policy, was awarded a PhD in September.



Greg Payne was awarded a PhD in the Spring for his work on changes to the UK State Pension Age and is now working at ONS.



Sarah Carter was awarded a PhD for her work on factors predicting labour induction in the UK and is now using the skills she acquired in a new role as Research Fellow at the MRC Lifecourse Epidemiology Unit at Southampton General Hospital.

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