

CALLS Hub conference

Friday 23rd March 2018
University of St Andrews



Programme

- 9.30-9.50 Registration
- 9.50-10.00 Welcome (Hill Kulu & Fiona Cox, CALLS Hub)
- 10.00-11.40 Session 1 - 'Health & mortality' (Chair: Lee Williamson, SLS-DSU)
- Mark McCann 'Health Inequalities, economic transitions and multimorbidity in Northern Ireland'
 - Megan Yates 'Inequalities in rates of amenable mortality by individual socioeconomic position'
 - Matthew Wallace 'Can the salmon bias effect explain the migrant mortality advantage in England and Wales?'
 - Tanya Wilson 'Long-run Health and Mortality Effects of Exposure to Universal Health Care at Birth'
 - Jennifer Thomson 'Are people healthier when they live closer to forests? A longitudinal study of Scotland'
- 11.40-11.55 Coffee break
- 11.55-1.15 Session 2 - 'Employment & economic activity' (Chair: Nicola Shelton, CeLSIUS)
- Adriana Duta 'Inequalities in school leavers' labour market outcomes: do school subject choices matter? Evidence from the Scottish Longitudinal Study'
 - Wei Xun 'Exploring the economic outcomes of young people Not in Education, Employment or Training (NEET) in England and Wales using the Longitudinal Study'
 - Matthew Iveson 'Childhood cognitive function and later-life economic activity: Linking the Scottish Mental Survey 1947 to administrative data'
 - Evan Williams 'Neighbourhood Effects and Occupational Mobility in Scotland: limits to the 'tenure-split' approach'
- 1.15-2.00 Lunch
- 2.00-3.30 Session 3 - 'Migration & residential mobility' (Chair: Ian Shuttleworth, NILS-RSU)
- Mark Livingston 'The processes of poverty decentralisation: evidence from the Scottish Longitudinal Study 1991-2011'
 - Carolina Zuccotti 'Ethnicity and neighbourhood attainment in England and Wales'
 - Deborah Hyden 'Migration Between Identity (In)congruent Places and its Effects on the Wellbeing of a Northern Irish Sample'
 - Brad Campbell 'Internal Migration in a Religiously Segregated Society, the case of Northern Ireland 1981-2011'
- 3.30-3.45 Coffee break
- 3.45-4.45 Discussion panel - 'Challenges & opportunities for the LSs'
- Piers Elias - President, British Society of Population Studies
 - Rob Davies - Public Affairs Manager, CLOSER
 - Patricia Armstrong OBE - Chief Executive, Association of Chief Officers of Scottish Voluntary Organisations (ACOSVO)
 - Frank Sullivan - Professor of Primary Care, University of St Andrews
- 4.45-5.00 Concluding remarks



Abstracts

Brad Campbell

School of Geography, Archaeology & Palaeoecology, Queen's University Belfast

Internal Migration in a Religiously Segregated Society, the case of Northern Ireland 1981-2011

Since the signing of the Good Friday Agreement in 1998, Northern Ireland has prospered from the economic dividend of peace and political stability. However, one important facet of Northern Ireland's divided past - inter communal residential segregation between Protestants and Catholics remains persistently high. Using the Age, Period and Cohort (APC) model as a methodological and theoretical framework this paper sets out to understand how the propensity to move a more or less religiously segregated area has changed between 1981 and 2011. This will be achieved by accessing linked census data from the Northern Ireland Longitudinal Study (NILS) upon which negative binomial regression will be performed to disentangle age, period and cohort effects. The analysis will take place in three stages by firstly exploring how movements to more/less segregated areas vary as individual's age and progress through key life course phases. Secondly, assess whether Northern Ireland's two communities in the current era of peace and stability are continuing to grow apart at the same rate as in previous, more unstable years. Lastly, cohort analysis will be carried out to assess how one's birth cohort and relative experience of the violence has influenced their migratory behaviour, with comparisons made between pre and post 'troubles' cohorts.

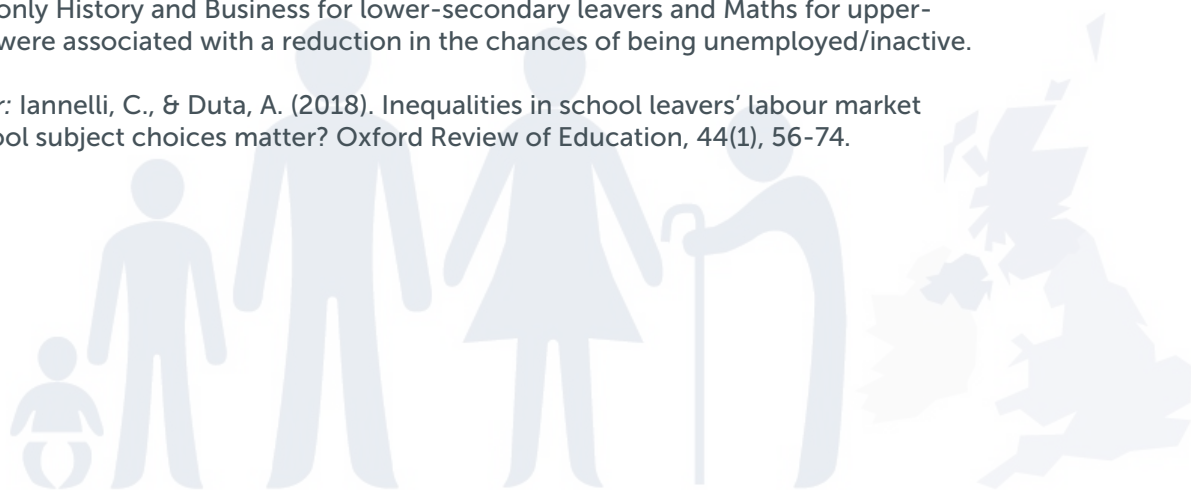
Adriana Duta

Institute for Education, Community & Society, University of Edinburgh

Inequalities in school leavers' labour market outcomes: do school subject choices matter? Evidence from the Scottish Longitudinal Study

This study examines gender and social inequalities in school leavers' labour market outcomes and whether the curriculum studied at school explains these inequalities in Scotland. Previous research has shown that people from more advantaged social backgrounds tend to study a larger number of academic subjects than people from less advantaged social backgrounds and this gives them an advantage when applying to enter higher education. However, there is limited evidence on whether curriculum choices may lead to differentiated labour market outcomes among young people from different social origins who do not continue to higher education. This research aims to fill this gap by examining differences in employment chances of young people who left education early, either at the end of compulsory schooling or at the end of secondary school. Using data from the Scottish Longitudinal Study, a large-scale linkage study created using data from administrative and statistical sources, we found little gender differences but strong parental background differences in school leavers' employment status and type of occupation entered. Social inequalities in labour market outcomes were only partly explained by curriculum choices. Moreover, after taking into account social origin and grades, only History and Business for lower-secondary leavers and Maths for upper-secondary leavers were associated with a reduction in the chances of being unemployed/inactive.

Based on the paper: Iannelli, C., & Duta, A. (2018). Inequalities in school leavers' labour market outcomes: do school subject choices matter? *Oxford Review of Education*, 44(1), 56-74.



Migration Between Identity (In)congruent Places and its Effects on the Wellbeing of a Northern Irish Sample

According to neighbourhood effects research literature, moving to less stressful neighbourhoods with better amenities, improved housing conditions and contact with new social networks with healthier lifestyles are understood to be some of the mechanisms that have a positive impact on individual wellbeing (Galster, 2012). However, other investigations into the effects of internal migration on wellbeing have so far produced mixed results (e.g., Cheshire, 2007; Van Ham & Manley, 2012).

Potential reasons for the lack of clear evidence for positive outcomes associated with upward social and spatial mobility may be increased individualism (Oishi, 2010) and/or the failure to develop a shared identity which is protective of wellbeing (Jetten, Haslam, Haslam, Dingle, & Jones, 2014; Jetten, Haslam, & Haslam, 2012). This research therefore examines the links between identity, neighbourhood, wellbeing and internal migration in Northern Ireland. This presents an interesting case study because as well as moves through social deprivation space there are the added issues of sectarianism and local political territoriality (Anderson & Shuttleworth, 1998; Shirlow & Coulter, 2014).

Northern Ireland is also well placed as a location in which to undertake this research because the Northern Ireland Longitudinal Study (NILS) constitutes a 28% sample of the population. To this end, a range of analytic techniques including multilevel modelling and discrete-time survival analysis were employed on a NILS distinct-linkage project. While results indicated a significant effect of migration across deprivation space, the results for migration between identity (in)congruent places were inconclusive. The implications of these results will be discussed.

References

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Matthew Iveson

Dept of Psychology, University of Edinburgh

Childhood cognitive function and later-life economic activity: Linking the Scottish Mental Survey 1947 to administrative data

As the population ages, older adults are expected to work later into their lives. However, older adults experience particular challenges in staying economically active, even before reaching statutory retirement. Recent work has suggested that early-life circumstances – such as childhood socioeconomic circumstances, childhood cognitive ability and education – can have long-lasting consequences for mid-life economic activity. In the present study, we investigate whether these same early-life factors contribute to the odds of being economically active much later in life, from ages 55 to 75. To do so, we capitalise on recent initiatives to link data between a subsample of the Scottish Mental Survey 1947 cohort and the Scottish Longitudinal Study, which includes 3 waves of national census data (1991, 2001 and 2011). Latent growth curve analyses were used to assess the direct and indirect associations between early-life factors and later-life economic activity, for males and females separately. Notably, the odds of being economically active decreased non-linearly across the 20-year follow-up period for both males and females. For males, higher odds of being economically active at age 55 were predicted by higher childhood cognitive ability and higher educational attainment. For females, higher odds of being economically active at age 55 were predicted by higher childhood socioeconomic status and higher childhood cognitive ability. In contrast, there was little evidence to support the contribution of early-life factors to the odds of becoming inactive over the 20-year follow-up period. We suggest that early-life advantage may contribute to the capacity for work in later-life, but that it does not necessarily protect from subsequent decline in this capacity.

Mark Livingston, Nick Bailey & Wouter van Gent

Urban Big Data Centre, University of Glasgow; University of Amsterdam

The processes of poverty decentralisation: evidence from the Scottish Longitudinal Study 1991-2011

There is growing evidence of a process of decentralisation of poverty across cities in many developed countries (Kavanagh et al 2016; Hunter 2014; Kneebone and Berube (2013); Cooke and Denton (2015); Randolph and Tice (2016); Hochstenbach and Musterd (2017)). The drivers for these changes lie in a combination of factors including economic and labour market restructuring, as well as consumption and demographic shifts. In the UK at least, housing policies and reductions in welfare expenditures related to housing also play a role (Lupton 2011).

Previous studies have quantified the extent of decentralisation and shown how the pace varies between cities. In addition, Minton and Bailey (2016) showed that, in the Scottish cities at least, the decentralisation of poverty occurs through a combination of reductions in the number of poorer households close to the city centres and simultaneous increases in the numbers not poor. This suggests not merely a dilution of inner city poverty but a process of displacement as typically accompanies gentrification. Being based on repeated cross-sectional data, however, that study cannot trace changes for individual households over time.

In this research we extend the analysis of the processes driving poverty decentralisation in Glasgow and Edinburgh from 1991 to 2011. Using linked census data from the Scottish Longitudinal Survey (5% population sample), we apply the methodology developed by Bailey (2012) and extended by Bailey et al (2016). This decomposes the changes in relative centralisation of poverty between the effects of a range of processes: population exchanges between each city and other areas through external migration; demographic processes of ageing and dying; processes internal to each city of social and residential mobility.

Funding acknowledgement

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Mark McCann

MRC/CSO Social & Public Health Sciences Unit, University of Glasgow

Health Inequalities, economic transitions and multimorbidity in Northern Ireland

This project assessed the association between economic circumstances and health outcomes, drawing on data from the 2001 and 2011 censuses and data on house value. The Northern Ireland Census contained questions on a range of health conditions, providing an opportunity to explore patterns of comorbidity and how these vary according to economic circumstances.

Jennifer Thomson

Institute of Geography & the Lived Environment, University of Edinburgh

Are people healthier when they live closer to forests? A longitudinal study of Scotland

International evidence demonstrates that visiting or viewing forests is linked to better health. Proposed mechanisms include the opportunities for physical activity, reduced stress and social interaction which forests can provide. Studies also suggest that forests may have a role in reducing health inequalities by weakening the links between low socioeconomic status and poor health. However, the evidence to date relies on cross-sectional analyses, which limits our understanding of potential causal effects. This study investigated associations between access to forests and general health through time. It was also assessed whether visiting forests explained the relationship. Lastly, differences by demographic and socioeconomic groups were examined. Measures of forest access in 1991, 2001 and 2011 and a synthetic estimate of forest use were linked to the Scottish Longitudinal Study (SLS) which contains census data for a semi-random sample of the population (5.3%). The current study included adults aged 18+ years in 1991 who were present in the last 3 censuses (n=97,658). Statistical techniques included hybrid-effects models and a mediation analysis. Findings indicated that living closer to forests may be beneficial for health by enabling greater use of forests for recreation. However improvements in forest access did not improve health. Those interested in reducing health inequalities may consider improving forest access whilst addressing other barriers to visiting, particularly for low socioeconomic groups.

Matthew Wallace & Hill Kulu

French Institute for Demographic Studies (INED), Paris, France; University of St Andrews

Can the salmon bias effect explain the migrant mortality advantage in England and Wales?

Despite researchers regularly observing a “migrant mortality advantage” in high-income destination countries, it remains unclear whether empirically observed low mortality among foreign-born relative to natives is genuine, or the result of censoring and selection biases inherent in the remigration of foreign-born people. Our aim is to determine whether the main mode of selection bias, the “salmon bias effect” (remigration triggered by poor health), can account for the migrant mortality advantage. We use the largest longitudinal resource in the United Kingdom, the Office for National Statistics Longitudinal Study, to fit discrete-time survival models and observe which foreign-born groups experience a migrant mortality advantage and/or salmon bias effect. For groups in which we observe both, we correct their mortality (using an indirect method) to see whether the salmon bias effect can explain the observed mortality advantage. Importantly, we demonstrate that for many foreign-born groups a mortality advantage exists in the absence of the salmon bias effect. Furthermore, in cases which we observe a migrant mortality advantage and a salmon bias effect (males and females from India, Pakistan and Bangladesh, and the Caribbean), the latter cannot sufficiently “explain away” the former. Taken together with previous findings on censoring bias in the United Kingdom and the wider international literature on censoring and selection biases, it becomes clear that biases arising from remigration cannot sufficiently explain the migrant mortality advantage.

Evan Williams

School of Social & Political Science, University of Glasgow

Neighbourhood Effects and Occupational Mobility in Scotland: limits to the 'tenure-split' approach

An extensive literature investigates the association between neighbourhood context and individual outcomes such as health, educational attainment and income. A central problem for observational studies in this neighbourhood effects literature is the issue of selection bias; whether correlations between neighbourhood characteristics and individual outcomes are explained by the impact of neighbourhood context on individuals, or by individuals with different characteristics selecting into distinct neighbourhoods. One approach to strengthening the causal claims of neighbourhood effects research is the 'tenure-split' natural experiment, which relies on the assertion that social housing allocations are random with respect to the neighbourhood. Three recent UK studies employ the 'tenure-split' approach, and utilise the results obtained to cast doubt on a wide range of neighbourhood effects studies. This study critiques the claims made relating to the random nature of social housing allocations in the UK and re-examines the results of the three UK studies. In addition, new analyses are presented that use the 'tenure-split' approach to investigate the association between neighbourhood deprivation and occupational mobility. The results obtained support the view that, in the UK at least, the 'tenure-split' approach is not a valid natural experiment and does not therefore help address the issue of selection bias.

Tanya Wilson

Division of Economics, University of Stirling

Long-run Health and Mortality Effects of Exposure to Universal Health Care at Birth

In this paper we investigate to what extent the childhood healthcare environment influences later life health outcomes. We examine a fundamental re-organisation of the healthcare environment to universal healthcare in the United Kingdom, which occurred through the introduction of the National Health Service (NHS) in July 1948. Immediate large decreases in infant mortality ensued. They were focused on the neo-natal period and larger for individuals who prior to the NHS had a lower access to medical services. Using a dataset drawn from the Office of National Statistics Longitudinal Study of linked census records combined with administrative mortality data, we compare mortality outcomes above age 50 of individuals born in the immediate cohorts around the introduction of the National Health Service (NHS) in a regression discontinuity design. Our findings indicate that age-specific survival rates are systematically higher among lower class individuals whose post-natal care expanded through the NHS, with the magnitude of the effect increasing monotonically with age. We supplement these findings with analysis of hospital records, which reveal a similar decrease in hospitalisations for cardiovascular disease for lower class individuals. These long run impacts of birth exposure to universal healthcare coverage through the NHS are economically significant, representing a 14% reduction in mortality at age 58.



Exploring the economic outcomes of young people Not in Education, Employment or Training (NEET) in England and Wales using the Longitudinal Study

Worklessness at early stages in the life-course may have long-term effects on health status in later life, through the accumulation of socio-economic disadvantage. There is some evidence regarding the shorter-term economic penalties and psychological morbidities that follow, however, the longer-term (decadal scale) consequences in terms of socioeconomic status and health are unclear.

This study follows a representative sample of 1% of the England and Wales (E&W) census population aged 16-24, drawn at 1971 from the Longitudinal Study (ONS LS), and explores how their economic trajectories differ in a 40-year follow-up period by worklessness status at baseline.

Descriptive results suggest that NEETs in the sample went on to have divergent economic outcomes compared with their non-NEET counterparts. Men showed a certain degree of uniformity in economic activity trajectories: a large proportion (35%, $n = 11186$) of men stayed in employment/studying throughout 50-year study period, while another 16% ($n = 5186$) did so until age 46-54. Men who started as NEETs at baseline displayed a variety of trajectories, most of which involved shorter stretches of work/study in-between inactive states. Women, on the other hand also started from a majority position of non-NEETs at baseline, showed more diversity which could be interpreted as early and late interruptions in work/study.

Gender-specific multinomial regression was used to explore the time-lag effects of previous economic activity states in determining "current" activities, adjusted using economic activity at 16-24 years, most recent economic activity status, age group, education level, marital status, health status, spouse working status, presence of household member with long-term illness, parental social class at baseline, and ward-level deprivation. The results show that as expected, the most recent economic activity states were highly predictive of "current" states 10 years later; while although the influence from economic activity states at 16-24 weakened over time, it was still informative in predicting inactivity up until mid-life (aged 36 to 44) in both genders.

In conclusion: in a large, representative, historical sample from E&W, worklessness at the age of 16-24 was found to inform economic activity status into mid-life, even after adjusting for the more recent states.



Inequalities in rates of amenable mortality by individual socioeconomic position

Background: Mortality amenable to healthcare intervention constitutes premature deaths which should not occur in the presence of timely and effective healthcare. Socioeconomic gradients within rates of amenable mortality (AM) have been explored at the individual level in many European countries, finding increasing inequalities across various measures of socioeconomic position. Inequalities in rates of AM have previously been estimated at the area level in Scotland, but little is known about inequalities at the individual level.

Methods: Socioeconomic patterning of AM was explored across levels of educational attainment, two measures of occupational social class, and household composition for Scottish Longitudinal Study (SLS) members enumerated in the 1991 and 2001 Censuses, with follow-up to 2010. Absolute and relative inequalities within rates of amenable, non-amenable and all-cause mortality were explored using the slope and relative indices of inequality (SII and RII) respectively. The representativeness of the sample to the total population was evaluated by calculating inequalities using area deprivation indices.

Results: Between 1991 and 2010, 6,462 SLS members died of an amenable condition before the age of 75 (16% of all deaths). Despite an overall declining trend in mortality rates, large inequalities in the three mortality groups were found, with no consistent trends. Educational attainment produced the largest RII (Men: 3.4 95%CI (1.9 to 7.5) in 1991-94) and SII, whilst those based on occupational social class were smaller (NS-SEC Men: RII= 1.5 95%CI (1.0 to 2.2) in 1991-94).

Conclusions: Significant, although inconsistent, inequalities within rates of AM were found for all individual measures.

Carolina V. Zuccotti

Migration Policy Centre, RSCAS, EUI Migration Policy Centre, Florence, Italy

Ethnicity and neighbourhood attainment in England and Wales

Most of the research advocated to the study of ethnic minorities' spatial segregation in the UK, and the links between neighbourhood ethnic segregation and deprivation, has followed a macro perspective, focusing on segregation indices, internal migration trends and spatial correlations of various kinds. While these studies are fundamental for understanding ethnic minorities' spatial patterns, they are not sufficient for understanding the relationship between ethnic and spatial inequalities. One of the key interests of researchers advocated to the study of (in)equality of outcomes (of any kind, including those related to the neighbourhood) across groups, is whether and to what extent these inequalities hold after we consider (in)equality of individual and social origin characteristics. In this study, I use a large-scale longitudinal dataset of England and Wales covering a 40-year period (1971-2011), in combination with aggregated Census data, to address this issue. Specifically, I study whether ethnic minorities reside or move to less concentrated and less deprived neighbourhoods (in 2011) to a similar extent as the white British do, once individual and social origin factors –which play a role in neighbourhood choice–, have been taken into consideration. Furthermore, I explore whether this varies depending on their levels of achieved socio-economic and cultural capital characteristics (measured in 2001) and their varied the characteristics of their neighbourhoods in youth (measured when they are between 0 and 15 years old). The study focuses solely on groups that are born and/or mostly raised in destination, and concentrates on the most numerous non-white populations: Indian, Pakistanis, Bangladeshis, Caribbean and African. The analysis shows that, on equality of individual, social background and origin neighbourhood characteristics, ethnic minorities are less likely to live in whiter and less deprived areas compared to the white British. These differences, however, reduce (although do not disappear) for most groups among those with more education and a higher social class. The results also show that the effect of origin neighbourhood is stronger for most ethnic minorities, in particular Pakistanis and Bangladeshis, suggesting that they are less likely to “improve” their neighbourhood both in terms of the share of white population and in terms of the deprivation level, compared to the white British. The implications of these results in terms of ethnic minorities' preferences (and constraints) in the process of neighbourhood choice are discussed.

FURTHER INFORMATION

- For further information about the Longitudinal Studies please visit our website at www.calls.ac.uk where you can explore the variables held in the datasets, browse research outputs and more.
- Follow [@CALLS_HUB](https://twitter.com/CALLS_HUB) on Twitter to be kept up-to-date with announcements, events and news from all three Research Support Units
- Contact us by email at: info@calls.ac.uk

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