

## Exploring the reach of the Census-based Longitudinal Studies 2010-2016

### Overview

The Northern Ireland Longitudinal Study, ONS Longitudinal Study (England and Wales), and Scottish Longitudinal Study include a vast range of data relevant to many different types of research question. Their combination of administrative, census and health data across time make them a rich and unique set of resources. Examples of the types of research enabled by these features of the LSs include: [The role of subject choices in secondary education on further education studies and labour market outcomes](#) and [Population characteristics of stigma, condition disclosure and chronic health conditions](#).

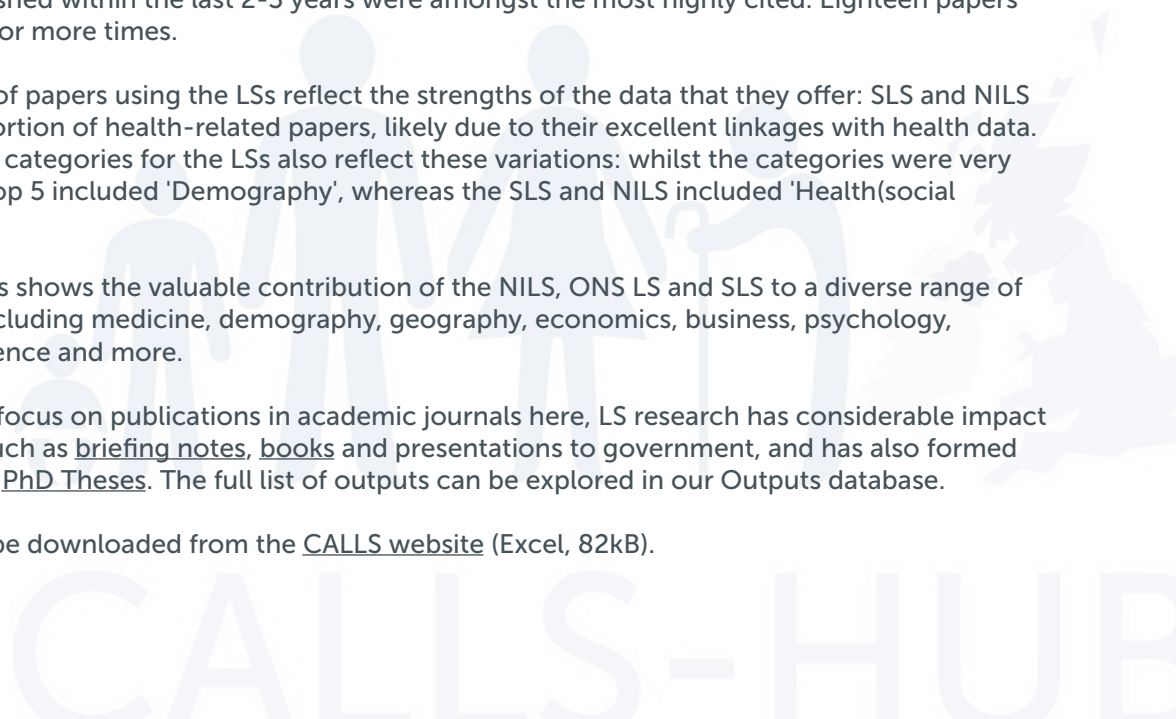
As an exploration of the many ways in which the LSs have been used, CALLS have conducted an analysis of the journal papers produced by LS researchers.

This citation analysis demonstrates the impressive range of academic fields to which LS-based research has contributed in the last 6 years. Research featured in almost 60 journals, and spanned more than 40 Scopus subject categories.

Research based on the LSs is regularly published in top quality international peer reviewed journals such as Demography, the International Journal of Epidemiology and Population, Space and Place. Fifteen papers in the citation analysis were published in journals ranked within the top 5 for their field (articles ranked by SJR Impact Rating for the relevant subject category in the publication year).

<u>LS</u>	<u>n papers published</u>	<u>Total citation count</u>
NILS	29	119 (avg 4.1)
ONS LS	51	264 (avg 5.2)
SLS	32	259 (avg 8.1)
All LSs	106	588 (avg 5.6)

Papers had excellent citation rates indicating the acknowledgement of the unique contributions LS data offer. Papers published within the last 2-3 years were amongst the most highly cited. Eighteen papers had been cited 10 or more times.

The subject areas of papers using the LSs reflect the strengths of the data that they offer: SLS and NILS had a higher proportion of health-related papers, likely due to their excellent linkages with health data. Looking at subject categories for the LSs also reflect these variations: whilst the categories were very similar, ONS LS's top 5 included 'Demography', whereas the SLS and NILS included 'Health(social science)'.  


Overall the analysis shows the valuable contribution of the NILS, ONS LS and SLS to a diverse range of academic fields including medicine, demography, geography, economics, business, psychology, environmental science and more.

Although we only focus on publications in academic journals here, LS research has considerable impact in other formats such as [briefing notes](#), [books](#) and presentations to government, and has also formed part of a variety of [PhD Theses](#). The full list of outputs can be explored in our Outputs database.

The raw data can be downloaded from the [CALLS website](#) (Excel, 82kB).

## Methods

Using the [CALLS Hub outputs database](#) a total of 106 published papers from the period January 2010 - May 2016 were identified from the three LSs. It should be noted that whilst CALLS and the RSUs actively solicit LS users to record all outputs, and also conducts literature searches to maximise capture, it is possible that some further papers exist.

All papers published in journals or regularly produced official publications - such as ONS Population Trends - were included. We did not include working papers in this analysis. Citation counts were gathered from [Scopus](#), taking the final counts as of 30 June 2016. Impact Factors were taken from the Scopus project [SCImago](#) using the [SJR2 indicator](#).

## Results

### The LSs combined

Of the 106 papers identified, 16 were from non-peer-reviewed journals such as Population Trends. Four papers used more than one LS for their analysis. (see figure 1)

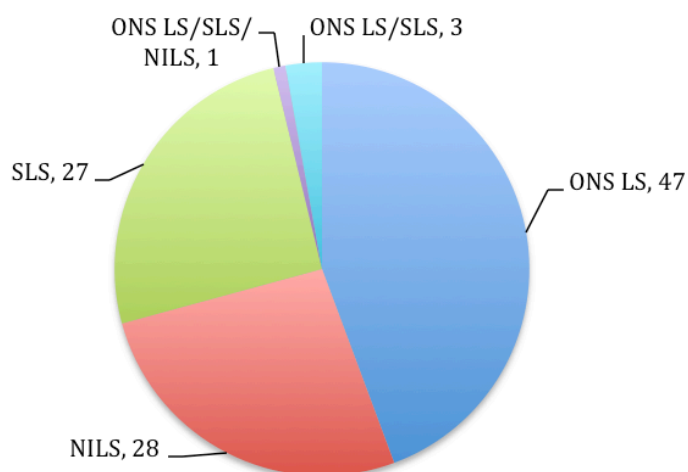


figure 1. Number of published papers per LS, Jan 2010 - May 2016. n = 106

Papers from the three LSs were published in a total of 59 different journals, spanning 41 SCImago Subject Categories in 11 Subject Areas (figure 2). SJR Impact Factors for the papers ranged from 0.128 to 9.893, with an average of 1.577.



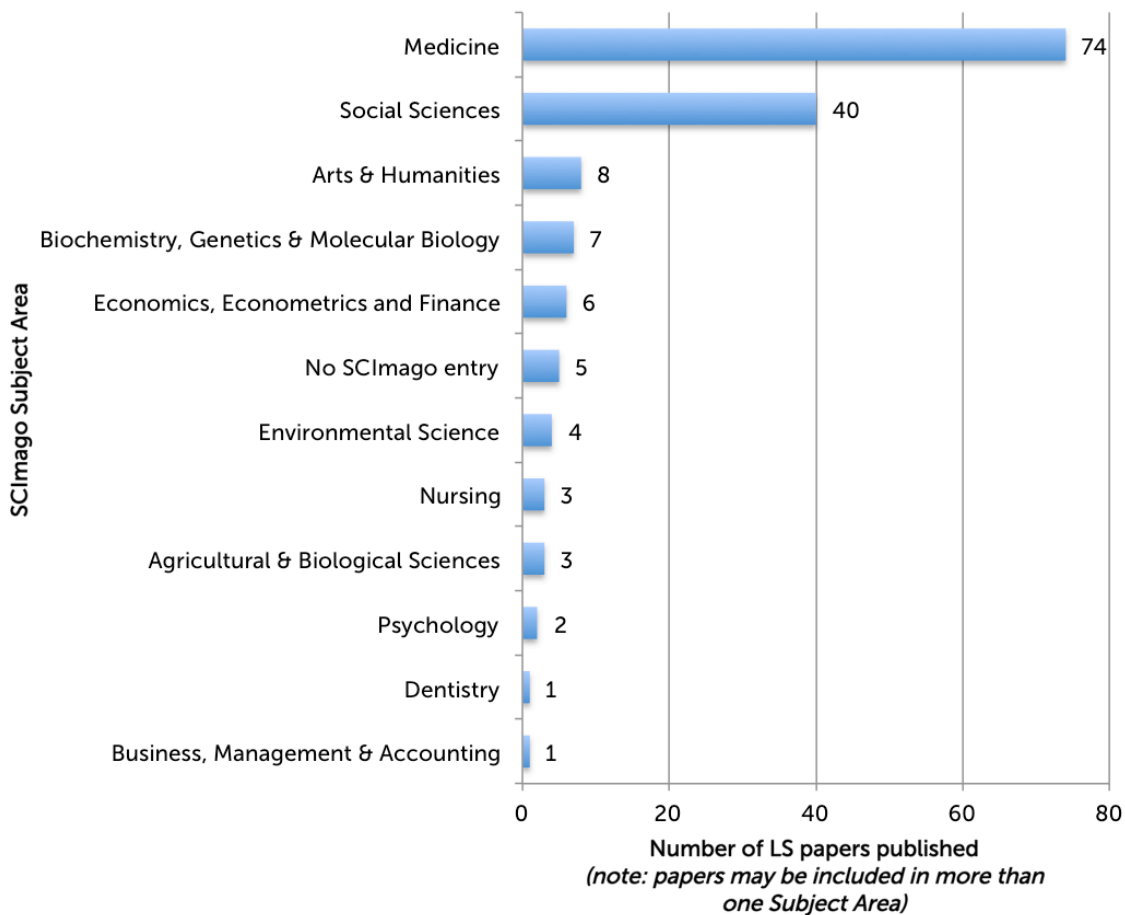


figure 2: Number of LS papers published by SCImago Subject Area

The 5 most frequent subject categories for LS papers were:

1. Public Health, Environment & Occupational Health (30 papers)
2. Medicine(misc) (25 papers)
3. Geography, Planning & Development (20 papers)
4. Epidemiology (17 papers)
5. Health(social science) (16 papers)



The ten most cited papers from the three LSs were:

<u>LS</u>	<u>Year</u>	<u>Authors</u>	<u>Paper Title</u>	<u>Scopus Citation Count</u>	<u>Journal</u>	<u>Journal Impact Factor</u>
SLS	2010	van Ham, M. & Manley, D.	<u>The effect of neighbourhood housing tenure mix on labour market outcomes: a longitudinal investigation of neighbourhood effects</u>	64	Journal of Economic Geography	3.050
ONS LS	2013	Clark, D. & Royer, H.	<u>The Effect of Education on Adult Mortality and Health: Evidence from Britain</u>	37	American Economic Review	9.893
SLS	2011	Boyle, P., Feng, Z. & Raab, G.	<u>Does widowhood increase mortality risk? Comparing different causes of spousal death to test for selection effects</u>	31	Epidemiology	2.325
ONS LS	2010	Grundy, E. & Tomassini, C.	<u>Marital history, health and mortality among older men and women in England and Wales</u>	19	BMC Public Health	1.180
NILS, ONS LS & SLS	2010	Young, H., Grundy, E., O'Reilly, D. & Boyle, P.	<u>Self-rated health and mortality in the UK: results from the first comparative analysis of the England and Wales, Scotland, and Northern Ireland Longitudinal Studies</u>	18	Population Trends	0.255
NILS	2010	Connolly, S., O'Reilly, D. & Rosato, M.	<u>House value as an indicator of cumulative wealth is strongly related to morbidity and mortality risk in older people: a census-based cross-sectional and longitudinal study</u>	17	International Journal of Epidemiology	2.443
SLS	2010	Boyle, P.J., Popham, F. & Norman, P.	<u>The Scottish excess in mortality compared to the English and Welsh: is it a country of residence or country of birth excess?</u>	16	Health & Place	1.199
ONS LS	2011	Riva, M., Curtis, S., Norman, P.	<u>Residential mobility within England and urban-rural inequalities in mortality</u>	16	Social Science & Medicine	1.743
ONS LS	2013	Elliot, P., Shaddick, G., Douglass, M. et al	<u>Adult Cancers Near High-voltage Overhead Power Lines</u>	16	Epidemiology	2.729
SLS	2012	Bailey, N.	<u>How spatial segregation changes over time: sorting out the sorting processes</u>	15	Environment & Planning A	1.446

## Northern Ireland Longitudinal Study

During the period January 2010 to May 2016, a total of 29 journal papers were found which had used NILS data, including one paper which had used all 3 LSs. Five NILS publications appeared journals with top-5 ranked impact factor.

NILS journal papers were published in 18 different journals, spanning 8 SCImago Subject Areas and 22 Subject Categories (see below). SJR Impact Factors for the papers ranged from 0.219 to 4.381, with an average of 1.632.

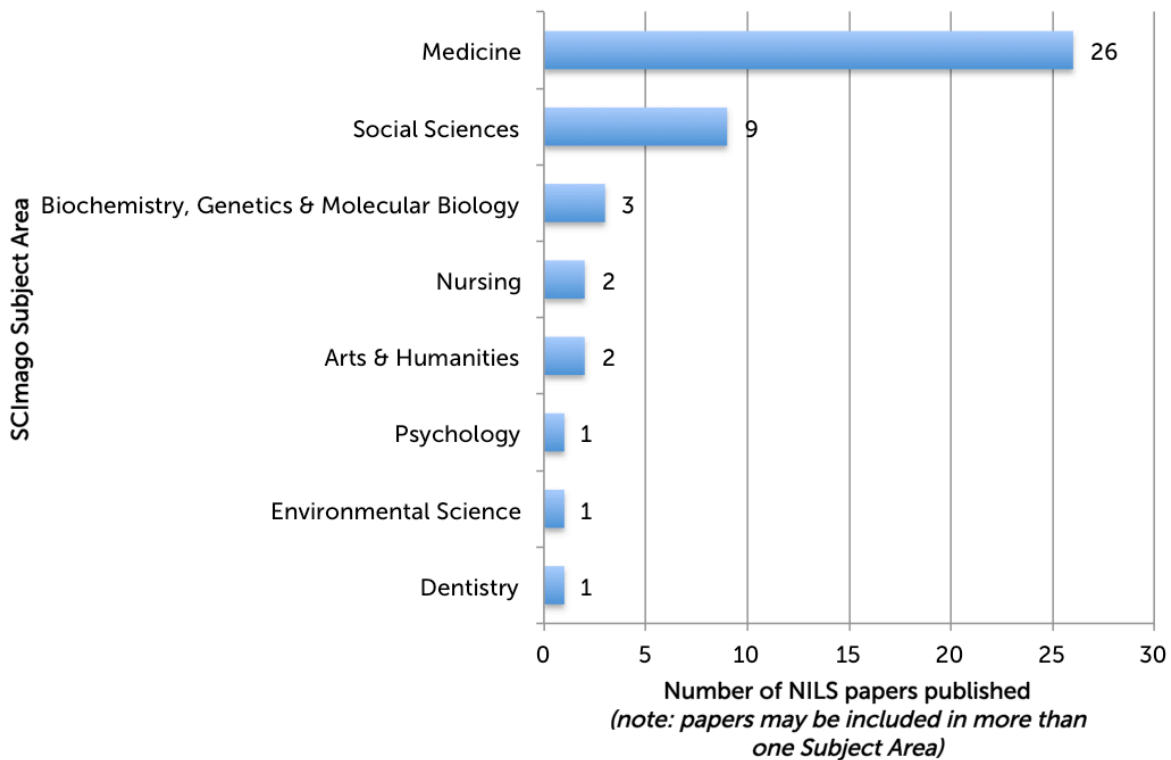


figure 3: Number of NILS papers published by SCImago Subject Area

The 5 most frequent subject categories for NILS papers were:

1. Public Health, Environmental & Occupational Health (11 papers)
2. Geography, Planning & Development (7 papers)
3. Health(social science) (7 papers)
4. Epidemiology (6 papers)
5. Medicine(misc) (5 papers)



The 10 most cited NILS papers were:

<u>Year</u>	<u>Authors</u>	<u>Paper Title</u>	<u>Scopus Citation Count</u>	<u>Journal</u>	<u>Journal Impact Factor</u>
2010	Young, H., Grundy, E., O'Reilly, D. & Boyle, P.	<u>Self-rated health and mortality in the UK: results from the first comparative analysis of the England and Wales, Scotland, and Northern Ireland Longitudinal Studies</u>	18	Population Trends	0.255
2010	Connolly, S., O'Reilly, D. & Rosato, M.	<u>House value as an indicator of cumulative wealth is strongly related to morbidity and mortality risk in older people: a census-based cross-sectional and longitudinal study</u>	17	International Journal of Epidemiology	2.443
2011	McCann, M., Donnelly, M., & O'Reilly, D.	<u>Living arrangements, relationship to people in the household and admission to care homes for older people</u>	12	Age & Ageing	1.592
2011	O'Reilly, D., Rosato, M., Catney, G. et al	<u>Cohort description: The Northern Ireland Longitudinal Study (NILS)</u>	11	International Journal of Epidemiology	3.116
2011	McCann, M., Grundy, E. & O'Reilly, D.	<u>Why is housing tenure associated with a lower risk of admission to a nursing or residential home? Wealth, health and the incentive to keep 'my home'</u>	10	Journal of Epidemiology & Community Health	1.575
2011	Connolly, S., O'Reilly, D., Rosato, M. & Cardwell, C.	<u>Area of residence and alcohol-related mortality risk: a five-year follow-up study</u>	9	Addiction	2.199
2010	O'Reilly, D. & Rosato, M.	<u>Dissonances in self-reported health and mortality across denominational groups in Northern Ireland</u>	6	Social Science & Medicine	1.531
2011	Connolly, S., Rosato, M. & O'Reilly, D.	<u>The effect of population movement on the spatial distribution of socio-economic and health status: Analysis using the Northern Ireland mortality study</u>	6	Health & Place	1.344
2014	Stockdale, A. & Catney, G.	<u>A Life Course Perspective on Urban–Rural Migration: the Importance of the Local Context</u>	6	Population, Space & Place	1.339
2011	Kinnear, H., Rosato, M., Mairs, A. et al	<u>The low uptake of breast screening in cities is a major public health issue and may be due to organisational factors: A Census-based record linkage study</u>	6	The Breast	0.906

## ONS Longitudinal Study

During the period in question, 51 journal papers were identified as having been produced from ONS LS projects (including 4 papers which also used other LSs). Of these, 14 appeared in non peer-reviewed journals. Seven papers appeared in top-5 ranked journals.

ONS LS papers appeared in 33 journals, and covered 20 SCImago Subject Categories in 7 Subject Areas. SJR Impact Factors for ONS LS papers ranged from 0.128 to 9.893 with an average of 1.453.

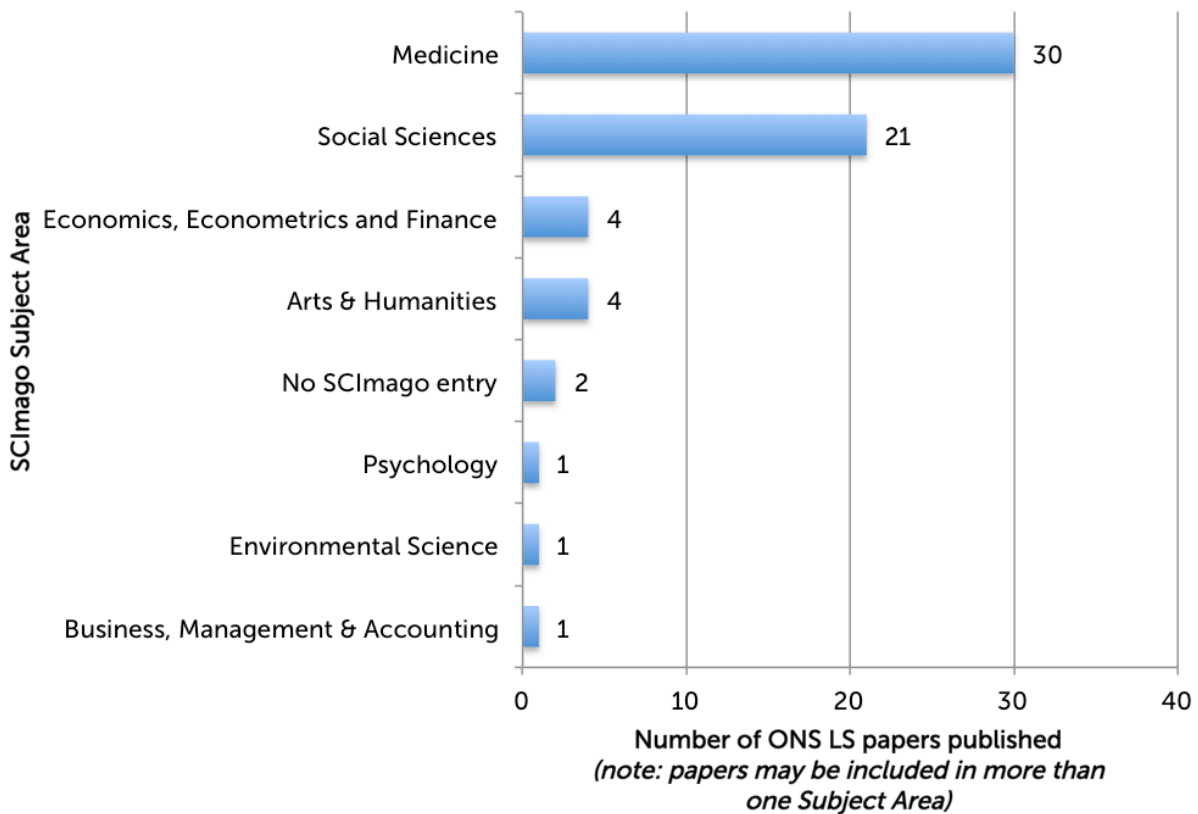
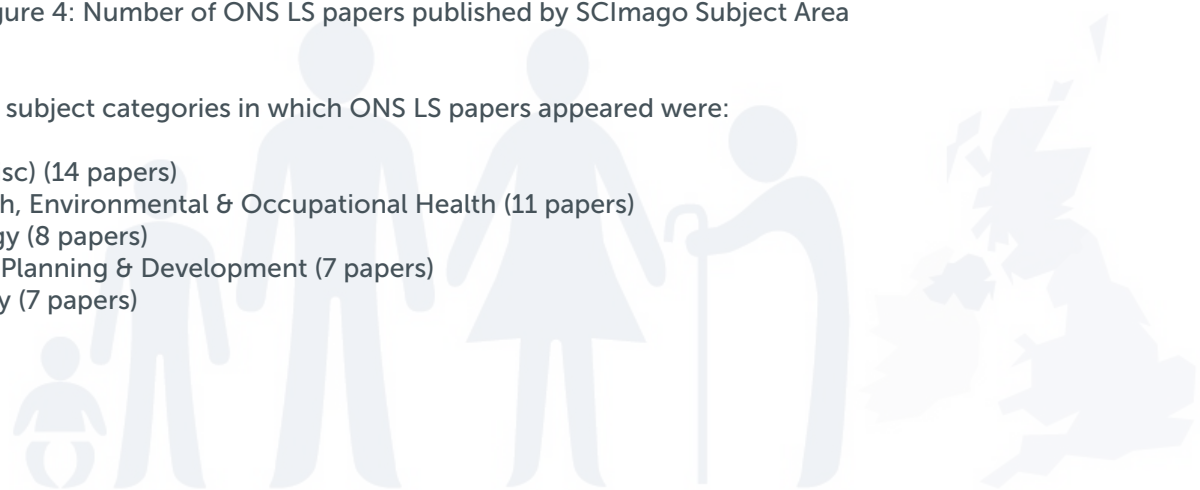


figure 4: Number of ONS LS papers published by SCImago Subject Area

The most frequent subject categories in which ONS LS papers appeared were:

1. Medicine(misc) (14 papers)
2. Public Health, Environmental & Occupational Health (11 papers)
3. Epidemiology (8 papers)
4. Geography, Planning & Development (7 papers)
5. Demography (7 papers)





The most cited ONS LS papers were:

<u>Year</u>	<u>Authors</u>	<u>Paper Title</u>	<u>Scopus Citation Count</u>	<u>Journal</u>	<u>Journal Impact Factor</u>
2013	Clark, D. & Royer, H.	<u>The Effect of Education on Adult Mortality and Health: Evidence from Britain</u>	37	American Economic Review	9.893
2010	Grundy, E. & Tomassini, C.	<u>Marital history, health and mortality among older men and women in England and Wales</u>	19	BMC Public Health	1.180
2010	Young, H., Grundy, E., O'Reilly, D. & Boyle, P.	<u>Self-rated health and mortality in the UK: results from the first comparative analysis of the England and Wales, Scotland, and Northern Ireland Longitudinal Studies</u>	18	Population Trends	0.255
2011	Riva, M., Curtis, S., Norman, P.	<u>Residential mobility within England and urban-rural inequalities in mortality</u>	16	Social Science & Medicine	1.743
2013	Elliot, P., Shaddick, G., Douglass, M. et al	<u>Adult Cancers Near High-voltage Overhead Power Lines</u>	16	Epidemiology	2.729
2012	Blomgren J., Martikainen P., Grundy E. & Koskinen S.	<u>Marital history 1971-91 and mortality 1991-2004 in England &amp; Wales and Finland</u>	14	Journal of Epidemiology & Community Health	1.550
2011	Popham, F., & Boyle, P.J.	<u>Is there a 'Scottish effect' for mortality? Prospective observational study of census linkage studies</u>	11	Journal of Public Health	0.851
2013	Scott, A.P. & Timæus, I.M.	<u>Mortality differentials 1991–2005 by self-reported ethnicity: findings from the ONS Longitudinal Study</u>	10	Journal of Epidemiology & Community Health	1.845
2013	Blackburn, C.M., Spencer, N.J. & Read, J.M.	<u>Is the onset of disabling chronic conditions in later childhood associated with exposure to social disadvantage in earlier childhood? A prospective cohort study using the ONS Longitudinal Study for England and Wales</u>	9	BMC Pediatrics	1.086
2012	Riva, M. & Curtis, S.	<u>Long term local area employment rates as predictors of individual mortality and morbidity: a prospective study in England spanning more than two decades</u>	9	Journal of Epidemiology & Community Health	1.550
2011	Akinwale, B., Lynch, K., Wiggins, R. et al	<u>Work, permanent sickness and mortality risk: a prospective cohort study of England and Wales, 1971-2006</u>	9	Journal of Epidemiology & Community Health	1.575



## Scottish Longitudinal Study

During the period January 2010 - May 2016, 32 SLS-based journal papers were identified (including 4 papers which also used other LSs). Of these, 2 appeared in non peer-reviewed journals. Three papers were published in top-5 ranked journals.

The SLS papers were published in 26 different journals, spanning 23 SCImago Subject Categories in 8 Subject Areas. Impact Factors for the papers ranged from 0.226 to 5.667, with an average of 1.6.

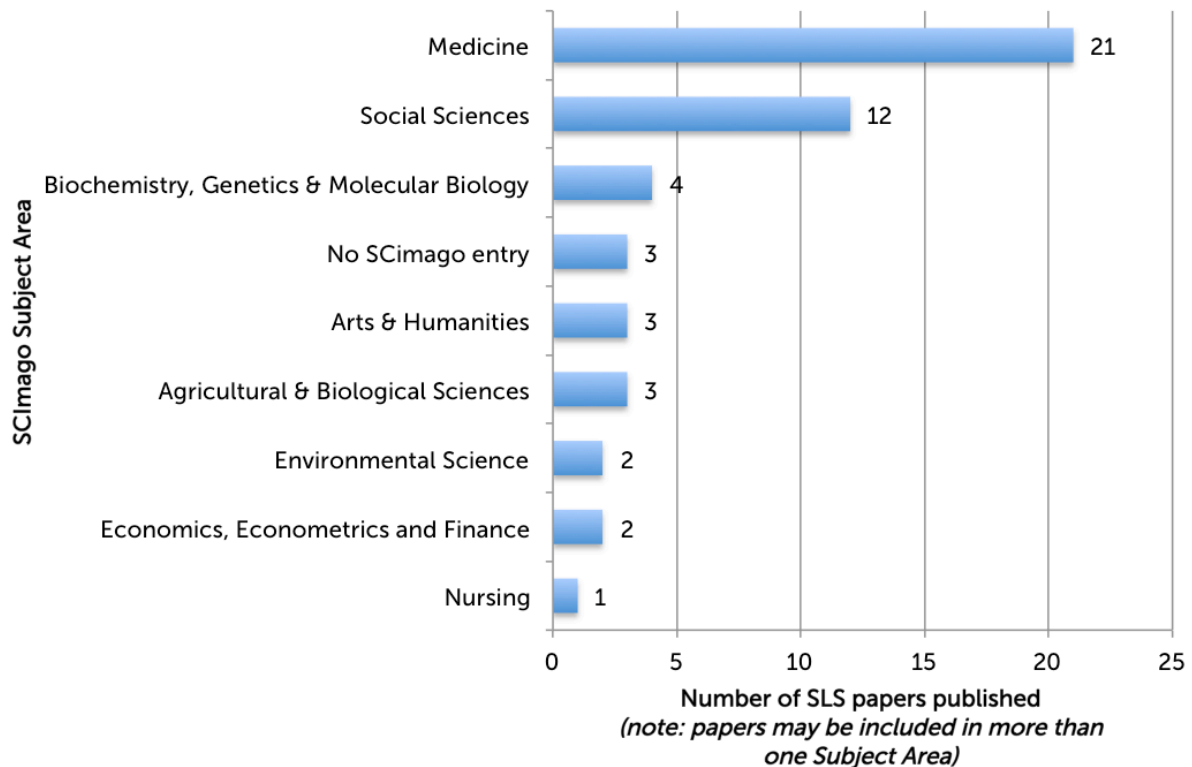
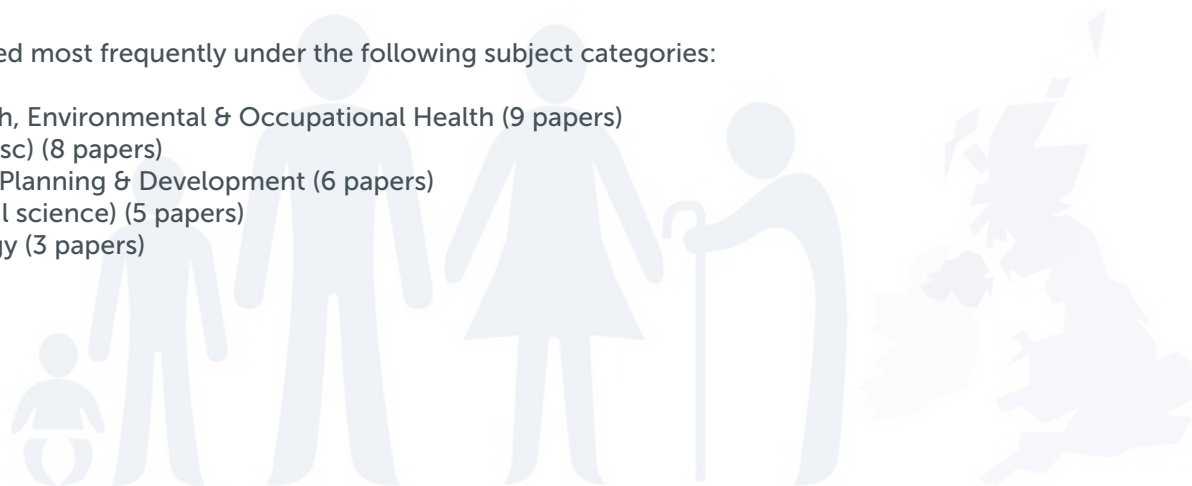


figure 5: Percentage of SLS papers published by SCImago Subject Area

SLS papers appeared most frequently under the following subject categories:

1. Public Health, Environmental & Occupational Health (9 papers)
2. Medicine(misc) (8 papers)
3. Geography, Planning & Development (6 papers)
4. Health(social science) (5 papers)
5. Epidemiology (3 papers)



The 10 most cited SLS papers were:

<u>Year</u>	<u>Authors</u>	<u>Paper Title</u>	<u>Scopus Citation Count</u>	<u>Journal</u>	<u>Journal Impact Factor</u>
2010	van Ham, M. & Manley, D.	<u>The effect of neighbourhood housing tenure mix on labour market outcomes: a longitudinal investigation of neighbourhood effects</u>	64	Journal of Economic Geography	3.050
2011	Boyle, P., Feng, Z. & Raab, G.	<u>Does widowhood increase mortality risk? Comparing different causes of spousal death to test for selection effects</u>	31	Epidemiology	2.325
2010	Young, H., Grundy, E., O'Reilly, D. & Boyle, P.	<u>Self-rated health and mortality in the UK: results from the first comparative analysis of the England and Wales, Scotland, and Northern Ireland Longitudinal Studies</u>	18	Population Trends	0.255
2010	Boyle, P.J., Popham, F. & Norman, P.	<u>The Scottish excess in mortality compared to the English and Welsh: is it a country of residence or country of birth excess?</u>	16	Health & Place	1.199
2012	Bailey, N.	<u>How spatial segregation changes over time: sorting out the sorting processes</u>	15	Environment & Planning A	1.446
2013	Spijker, J. & MacInnes, J.	<u>Population ageing: the timebomb that isn't?</u>	14	BMJ	2.443
2011	Popham, F., Boyle, P., O'Reilly, D. & Leyland, A.H.	<u>Selective internal migration. Does it explain Glasgow's worsening mortality record?</u>	12	Health & Place	1.344
2011	Popham, F., & Boyle, P.J.	<u>Is there a 'Scottish effect' for mortality? Prospective observational study of census linkage studies</u>	11	Journal of Public Health	0.851
2014	Gaye, A., Marcon, Y., Isaeva, J. et al	<u>DataSHIELD: taking the analysis to the data, not the data to the analysis</u>	9	International Journal of Epidemiology	4.353
2013	Kulik, M.C., Menvielle, G., Eikemo, T.A. et al	<u>Educational Inequalities in Three Smoking-Related Causes of Death in 18 European Populations</u>	9	Nicotine & Tobacco Research	1.354

For more info on CALLS Hub visit: [calls.ac.uk](http://calls.ac.uk)  
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F M Cox, 23 November 2016