

Impact case study (REF3b)

<p>Institution: University of Essex</p>
<p>Unit of Assessment: 23 – Sociology</p>
<p>Title of case study: The development and application of the National Statistics Socio-Economic Classification (NS-SEC)</p>
<p>1. Summary of the impact Research at Essex, commissioned by the Office of Population Censuses and Statistics (now Office for National Statistics), involved the development of a new, theoretically informed, socio-economic classification – the National Statistics Socio-Economic Classification (NS-SEC). Regarded as a better measure of socio-economic position, the NS-SEC has replaced the two previous UK Government classifications, and is now used in all surveys by the ONS. It provided the basis for key questions on socio-economic position in the 2011 Census, is used in surveys to explore economic and health inequalities, and is used by HESA and HEFCE to monitor widening participation in higher education.</p>
<p>2. Underpinning research When this research began in 1994, the UK Government used two socio-economic classifications – Social Class based on Occupation (SC, formerly known as Registrar General’s Social Class - RGSC) and Socio-Economic Groups (SEG) – both of which had major conceptual and operational weaknesses. SC had remained substantively unchanged for 80 years and reflected an outdated nineteenth-century view of social structure. SEG did not have a conceptual explanation for its basis and had no rules to guide researchers on how SEGs might best be collapsed for analysis. As both relied on outmoded distinctions—skill and the manual/non-manual divide—the then Office of Population Censuses and Statistics (OPCS) wished to explore whether a new classification should be developed. The OPCS commissioned the ESRC to undertake a review of government social classifications and the ESRC approached Professor David Rose to carry out the preliminary research because of his earlier research on stratification and social class. The NS-SEC is based on employment relations and conditions of occupations and allows for the nested construction of three, five and eight analytical classes. It also allows for the classification of the unemployed and students.</p> <p>The research was conducted in four phases overseen by a Review Committee established by Professor Rose in conjunction with senior management at the OPCS.</p> <p><u>Phase 1, November 1994–March 1995:</u> The Review Committee invited written evidence from government departments, local authorities, government agencies, employers’ and employees’ associations, market research organisations, learned societies, and individual experts. By way of this process, the Committee:</p> <ul style="list-style-type: none"> ▪ Established that there was a continuing overarching need for government socio-economic classifications. ▪ Established that there was a need to replace the existing classifications as the two existing classifications had demonstrated weaknesses. ▪ Determined the criteria for assessing a revised or new classification. ▪ Determined the work required to produce a revised or new classification. ▪ Key research output: report to OPCS in 1995, reproduced as Appendix 1 in Rose and O’Reilly (1997). <p><u>Phase 2, June 1995–March 1997:</u> The Review Committee created a sub-group, led by Professor Rose, to produce a single classification with a clear conceptual rationale, improved population coverage, and operational and maintenance rules. Data were collected from three National Statistics Omnibus Surveys to facilitate the research for this Phase. In this Phase, the sub-group and other experts:</p> <ul style="list-style-type: none"> ▪ Undertook the conceptual development and substantive research necessary for deriving a single new occupation-based socio-economic classification.

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- Produced, assessed and tested an interim version of the NS-SEC based on the existing Standard Occupational Classification (SOC90) against both the current government socio-economic classifications and existing alternative classifications using a variety of relevant datasets.
- Provided advice to OPCS on the Census design requirements of the NS-SEC.
- Key research output – Rose and O'Reilly (1997).

Phase 3, April 1997–March 1998: Phase 3 continued the aims of Phase 2 in that the sub-group:

- Analysed Labour Force Survey data on employment relations and conditions in order to operationalise the NS-SEC.
- Produced a series of NS-SEC Derivation Matrices for use with ONS datasets with varying specificity of the key variables and a bridge to the existing ONS classifications.
- In conjunction with other experts, replicated the validation studies of Phase 2 with the final SOC90 version of the NS-SEC.
- Key research output – Rose and O'Reilly (1998).

Phase 4, July 1999–September 2000: Phase 4 consolidated and extended the work of Phase 3 and importantly rebased the NS-SEC on the new Standard Occupational Classification (SOC2000). To do this, the sub-group:

- Refined the specification of the NS-SEC in both conceptual and operational terms, partly induced by the structure of SOC2000.
- Rebased the NS-SEC on SOC2000 and produced a new series of Derivation Matrices and a new bridge to the existing ONS classifications.
- Conducted new validation studies using the SOC2000 based NS-SEC.
- Key research outputs – Rose and Pevalin (2002), Rose and Pevalin (2003), Rose and Pevalin (2005).

Key personnel:

David Rose – Professor and PI

Karen O'Reilly – Senior Research Officer, at Essex 1996 to 1999

David Pevalin – Senior Research Officer, at Essex 1999 onwards

In addition Professor David Lockwood made an important intellectual contribution to the research as Chair of the Review Committee.

3. References to the research

Rose, D. and K. O'Reilly (Eds.) (1997) *Constructing classes: Towards a new social classification for the UK*. Swindon and London: ESRC and ONS. ISBN 0-86226-254-2

Rose, D. and K. O'Reilly (1998) *The ESRC review of Government social classifications: Final report*. London: The Stationery Office. ISBN 1-85774-291-5 <http://www.ons.gov.uk/ons/guide-method/classifications/archived-standard-classifications/ns-sec/publication-and-contact-details/index.html>

Rose, D. and D. J. Pevalin (2002) The National Statistics Socio-Economic Classification: Unifying official and sociological approaches to the conceptualisation and measurement of social class in the United Kingdom. *Sociétés Contemporaines*, 45: 75-106. DOI 10.3917/soco.045.0075 http://www.cairn.info/article.php?ID_ARTICLE=SOCO_045_0075

Rose, D. and D. J. Pevalin (Eds.) (2003) *A researcher's guide to the National Statistics Socio-Economic Classification*. London: Sage. ISBN 0-7619-7322-2

Rose, D. and D.J. Pevalin (with K. O'Reilly) (2005) *The National Statistics Socio-Economic Classification: Origins, development and use*. London: Palgrave Macmillan for ONS and ESRC. ISBN 1-4039-9648-2. <http://www.ons.gov.uk/ons/guide-method/classifications/archived-standard-classifications/ns-sec/publication-and-contact-details/index.html>

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Research funding

The underpinning research was funded by four ESRC grants (totalling £452,111) to David Rose:

<u>Project Title</u>	<u>Start date</u>	<u>End date</u>	<u>£</u>
Review of OPCS Social Classification: Phase I	1.11.94	31.3.95	21,130
Review of ONS Social Classification: Phase II	1.6.95	31.3.97	184,510
Review of ONS Social Classification: Continuation	1.4.97	31.3.98	118,985
Review of Government Social Classification	1.7.99	30.9.00	127,486

4. Details of the impact

The impact of this research started prior to 2008 as the NS-SEC was introduced as the new sole official government socio-economic classification in 2001 for use in the Census and all ONS surveys. The impact of this research has continued during the period 2008-13, mostly in government departments and agencies. The examples below cover some of the main uses of the NS-SEC during this period and focus largely on the use of NS-SEC by the ONS.

Use of the NS-SEC by the ONS

The National Statistician has confirmed that “NS-SEC is an essential tool for generating national statistics, particularly to establish the prevalence and magnitude of inequalities in health across the UK population. The classification is used on all major national surveys conducted by ONS including the 2011 Census” [corroborating source 1]. Questions in the 2011 Census were explicitly designed to be able to derive NS-SEC for use in analysis of the Census data. The Census Order, which includes details of the questions, was laid before Parliament in October 2009, with Parliament making the final decisions on the questions that would be asked. The Census questionnaires form part of the Census Regulations, which were approved by Parliament in Spring 2010 [corroborating source 2]. The NS-SEC was rebased on the new Standard Occupational Classification 2010 (SOC2010) in preparation for the 2011 Census and all government surveys from 2011 onwards [3]. The National Statistician states:

“From my perspective as National Statistician the research carried out with the University of Essex to develop the NS-SEC was an excellent example of co-operation that drew on the skills of statisticians within ONS and the theoretical and empirical skills of the research team at the University of Essex. NS-SEC is a vital tool for ONS and more generally for the policy research community and is a measure that is widely used for critical elements of social policy” [1].

The NS-SEC, as the official UK Government social classification, is a vital means through which the ONS establishes the prevalence and magnitude of inequalities in health. The NS-SEC continues to be used as measure of socio-economic position to describe inequalities in, for example, child mortality [4]. In 2011 the ONS launched two consultations on the life expectancy time series and infant mortality statistics proposing to only use the NS-SEC and discontinue producing statistics using the former socio-economic classifications. Both consultations resulted in the sole use of NS-SEC for future official statistics in these two areas [5] [6] [7]. In addition, The 2010 Marmot Review of Health Inequalities used the NS-SEC in its analysis of the state of health inequality in England [8].

The use of NS-SEC in producing statistics in higher education

The Higher Education Funding Council for England’s (HEFCE) Aimhigher programme is a key component of government policy to widen and so increase participation in higher education. The Guidance to Aimhigher partnerships for 2008-11 uses, as one of its criteria, the Full-Time Young Participation by Socio-Economic Classification (FYPSEC) measure. The FYPSEC shows the participation rates of young people from the top three (NS-SEC 1 to 3) and bottom four (NS-SEC 4 to 7) socio-economic classes. Statistics on both groups inform the widening participation debate, as does, more importantly, the gap that exists between the two participation rates [9].

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The Higher Education Statistics Agency's (HESA) annual widening participation performance indicators provide comparative data on the performance of higher education institutions in recruiting entrants from various under-represented groups. The criteria include the use of the NS-SEC classes 4 to 7 [10]. In addition to this, the Department for Business, Industry and Skills also uses the FYPSEC measure to assess government targets on widening access [11].

The use of NS-SEC in measuring economic inequalities

The independent National Equality Panel was set up in October 2008 at the invitation of the Rt. Hon. Harriet Harman MP, Minister for Women and Equality. The Panel was asked to investigate the relationships between the distributions of various kinds of economic outcome on the one hand, and people's characteristics and circumstances on the other. The report addresses questions on matters such as how far up or down people from different backgrounds typically come in the distributions of earnings, income or wealth. The report uses NS-SEC to describe and analyse these relationships [12].

5. Sources to corroborate the impact

All documents are available from HEI on request.

[1] National Statistician.

[2] ONS (2009) The 2011 Census: Final questionnaire content for England and Wales.

[3] ONS (2010) Standard Occupational Classification 2010. Volume 3.

<http://www.ons.gov.uk/ons/guide-method/classifications/current-standard-classifications/soc2010/soc2010-volume-3-ns-sec--rebased-on-soc2010--user-manual/index.html>

[4] ONS (2011) Child Mortality Statistics 2009. England and Wales.

<http://www.ons.gov.uk/ons/rel/vsob1/child-mortality-statistics--childhood--infant-and-perinatal/2009/index.html>

[5] Johnson, B. (2011) Deriving trends in life expectancy by the National Statistics Socio-Economic Classification using the ONS Longitudinal Study. *Health Statistics Quarterly*, 49.

<http://www.ons.gov.uk/ons/rel/hsq/health-statistics-quarterly/spring-2011/index.html>

[6] ONS (2012a) Response to the public consultation on replacing the time series on life expectancy by Social Class. <http://www.ons.gov.uk/ons/about-ons/consultations/closed-consultations/2012/replacing-time-series-on-life-expectancy/index.html>

[7] ONS (2012b) Response to the ONS review of infant mortality statistics.

<http://www.ons.gov.uk/ons/about-ons/consultations/closed-consultations/2011/review-of-infant-mortality-statistics/index.html>

[8] Marmot, M. (2010) Fair Society Healthy Lives: The Marmot Review: Strategic Review of Health Inequalities in England Post 2010. <http://www.instituteofhealthequity.org/projects/fair-society-healthy-lives-the-marmot-review>

[9] HEFCE (2008) Guidance for Aimhigher partnerships.

http://www.hefce.ac.uk/pubs/hefce/2008/08_05/

[10] HESA website. Performance Indicators in Higher Education in the UK. Indicators for Widening Participation and Non-continuation. www.hesa.ac.uk/pi

[11] BIS (2009) Full-time Young Participation by Socio-Economic Class (FYPSEC) 2009 Update.

<http://www.bis.gov.uk/assets/biscore/corporate/migrateddd/publications/f/fypsec-paper-2009.pdf>

[12] Hills, J. et al. (2010) An anatomy of economic inequality in the UK: report of the National Equality Panel. CASEreport60, ISSN 1465-3001. Government Equalities Office.

<http://eprints.lse.ac.uk/28344/1/CASEREport60.pdf>