#### **CURRICULUM VITAE**

Name Paul Simon Clarke

#### Qualifications

1998 PhD in Social Statistics

Department of Social Statistics, University of Southampton

1993 MSc in Statistics

Institute of Mathematics and Statistics, University of Kent

1992 BSc in Statistics

Department of Mathematics, University College of Wales, Aberystwyth

# **Employment History**

Since Sep 2013: *Professor of Social Statistics*, Institute for Social & Economic Research, University of Essex

Aug 2007 to Aug 2013: *Senior Lecturer*, Centre for Market & Public Organisation, School of Economics, Finance & Management, University of Bristol

Apr 2005 to Jul 2007: *Lecturer* then *Senior Lecturer*, Infectious Disease Epidemiology Unit, London School of Hygiene & Tropical Medicine

Jul 2003 to Mar 2005: *Research Fellow*, Department of Infectious Disease Epidemiology, Imperial College London

May 2000 to Jul 2003: *Research Statistician*, Departments of Epidemiology & Public Health and Statistical Science, UCL

Feb 1999 to May 2000: *Researcher*, Survey Methods Centre, National Centre for Social Research Aug 1998 to Feb 1999: *Temporary Statistical Officer*, Labour Market Division, Office for National Statistics

Oct 1993 to Aug 1998: *Research Assistant* then PhD student, Department of Social Statistics, University of Southampton

## **Successful Grant Applications**

- 2019-24 The Research Centre for Micro-Social Change (MiSoC), £7.8M, ESRC (ES/S012486/1), Transition Funding, co-investigator with Brewer M (PI), Barban N, Bhalotra S, Delavande A, Del Bono E, Harkness S, Grundy E, Luthra R, Rabe B, Samothrakis S
- 2018-23 Understanding Society: The UK Household Longitudinal Survey Wave 12, £15.7M, ESRC (ES/N00812X/1), co-investigator with Benzeval M (PI), Crossley T, Burton J, Harkness S, Jackle A, Kumari M, Lynn P, Rabe B, Platt L, Payne J
- 2016-21 Understanding Society: The UK Household Longitudinal Survey Waves 9-11, £32.1M, ESRC (ES/N00812X/1), co-investigator with Benzeval M (PI), Burton J, Jackle A, Kumari M, Lynn P, Pudney S, Rabe B, Saggar S, Platt L, Crossley T, Buck N
- 2015-8 How can biomarkers and genetics improve our understanding of society and health?, £1.86M, ESRC (ES/M008592/1), co-investigator with Benzeval M (PI), Chandola T, Jones A, Kumari M, Mitchell R, Pudney S
- 2014-9The Research Centre for Micro-Social Change (MiSoC): Understanding individual and family behaviours in a new era of uncertainty and change, £5.78M, ESRC Centre (ES/L009153/1) co-investigator with Brewer M (PI), Bhalotra S, Del Bono E, Devalande A, Pudney S, Voas D
- 2013-6 The use of interactive electronic books in the teaching and application of modern quantitative methods in the social sciences, £820k, co-investigator with Browne WJ (PI), Goldstein H, Moreau L, Steele F
- 2013-6 Developing methods for understanding mechanism in complex interventions, £540k, MRC Methodology Research Strategic Grant Programme (MR/K006185/1), coinvestigator with Landau S (PI), Emsley R, Pickles A, White I, Wykes T

- 2011-4 Longitudinal effects, multilevel modelling and applications (Lemma 3), ESRC (RES-576-25-0032), £1.4M, co-investigator with Steele F (PI), Browne WJ, Charlton CJ, Goldstein H, Jones K, Leckie G
- 2010-2 Interrelationships between housing transitions and fertility in Britain and Australia, ESRC (RES-062-23-2265), £600k, co-investigator with Steele F (PI), Haynes M, Ermisch I, Kulu H
- 2010 Social science and bad behaviours: causes, consequences, solutions, ESRC Festival of Social Science (RES-622-26-0263), £1.8k, lead applicant with Andrews H, Dickson M, Scholder S, Washbrook E
- 2007-8 Estimating the basic reproduction number from outbreak data, MRC Capacity Building Studentship, co-investigator with Ghani AC (PI)
- 2004-9 Socio-economic status and pathways, US National Institutes of Health, National Institute on Aging (AG13196), \$2M, co-investigator with Marmot MG (PI) et al
- 2003-4 Pathways between education and health: a causal modelling approach, ESRC (RES-000-22 -0290), £40k, co-investigator with Chandola T (PI), Blane D
- 1996-7 Nonignorable nonresponse models for categorical survey data, ESRC Research Studentship (R00429614273), £6k

## **Published in Peer-Review Journals**

- 1. Lynch T, Hempel RJ, Whalley B, Chamba R, Clarke P, Clarke S, Kingdon DG, O'Mahen H, Remington B, Rusbrook SC, Shearer J, Stanton M, Swales M, Watkins A, Russell IT (2019) Refractory depression Mechanisms & Efficacy of Radically Open Dialectical Behaviour Therapy (RefraMED): findings of randomised trial on benefits and harms. *British Journal of Psychiatry* (published online https://doi.org/10.1192/bjp.2019.53).
- 2. Bao Y, Clarke PS, Smart M, Kumari M (2018) Assessing the robustness of sisVIVE in a Mendelian randomization study to estimate the causal effect of body mass index on income using multiple SNPs from Understanding Society. *Statistics in Medicine* **38**(9), 1529-42.
- 3. Steele F, Clarke PS, Kuha J (2018). Modeling within-household associations in household panel studies. *The Annals of Applied Statistics* **13**(1), 367-392.
- 4. Steele F, Clarke P, Leckie, G, Allen J, Johnston D (2017) Multilevel structural equation models for longitudinal data where predictors are measured more frequently than outcomes: an application to the effects of stress on the cognitive function of nurses. *Journal of the Royal Statistical Society* Series A **180**(1), 263-283
- 5. Hanly M, Clarke P, Steele F (2016). Sequence analysis of call record data: exploring the role of different cost settings. *Journal of the Royal Statistical Society* Series A **179**(3), 793-808.
- 6. Lynch T, Whalley B, Hempel R, Byford S, Clarke P, et al. (2015). Mechanisms and evaluation of radically open dialectical behaviour therapy (RO-DBT) [REFRAMED]: protocol for randomised trial. *BMJ Open* **5**, e008857
- 7. Clarke PS, Palmer TM, Windmeijer F (2015). Estimating structural mean models with multiple instrumental variables using the generalised method of moments. *Statistical Science* **30**(1), 96-117
- 8. Clarke P, Crawford C, Steele F, Vignoles A (2015). Revisiting fixed and random effects models: some considerations for policy-relevant education research. *Education Economics* **23**(3), 259-277
- 9. Washbrook E, Clarke PS, Steele F (2014). Investigating non-ignorable dropout in panel studies of residential mobility. *Applied Statistics* **63**(2), 239-266
- 10. Steele F, Clarke P, Washbrook E (2013). Modeling household decisions using longitudinal data from household panel surveys with applications to residential mobility. *Sociological Methodology* **43**, 220-271
- 11. Szmaragd C, Clarke P, Steele F (2013). Subject specific and population average models for binary longitudinal data: a tutorial. *Longitudinal & Lifecourse Studies* **4**(2), 147-165
- 12. Clarke PS, Windmeijer F (2012). Instrumental variable estimators for binary outcomes. *Journal of the American Statistical Association* **107**(500), 1638-1652

- 13. Griffin J, Garske T, Ghani AC, Clarke PS (2011). Estimating the basic reproduction number with incomplete data. *Biostatistics* **12**(2), 303-312
- 14. Chadeau-Hyam M, Clarke PS, et al. (2010). An application of Hidden Markov models to the French vCJD epidemic. *Applied Statistics* **59**(5), 839-853
- 15. Clarke PS, Windmeijer F (2010). Identification of causal effects on binary outcomes using structural mean models. *Biostatistics* **11**(4), 756-770
- 16. Clarke P, Will RG, Ghani AC (2007). Is there the potential for a self-sustaining epidemic of variant Creutzfeld-Jakob disease via blood transfusion in the UK? *Journal of the Royal Society Interface* **4**(15), 675-684
- 17. Pearson SC, Clarke P (2007). Changes in British men's use of family planning services from 1991 to 2000. *Journal of Family Planning & Reproductive Health Care* **33**(3), 183-187
- 18. Garske T, Clarke P, Ghani AC (2007). The transmissibility of highly pathogenic avian influenza in commercial poultry in industrialized countries. *PLoS ONE* **2**(4), e349
- 19. Clarke PS, Ghani AC (2007). A note on parameter estimation for variant Creutzfeldt-Jakob disease epidemic models. *Statistics in Medicine* **26**(3), 546-552
- 20. Garske T, Ward HJT, Clarke P, Will RG, Ghani AC (2006). Factors determining the potential for transmission of vCJD via surgical instruments. *Journal of the Royal Society Interface* **3**(11), 757-766
- 21. Pion SDS, Clarke P, et al. (2006). Co-infection with Onchocerca volvulus and Loa loa microfilariae in central Cameroon. *Parasitology* **132**(6), 843-854
- 22. Chandola T, Clarke P, Morris JN, Blane D (2006). Pathways between education and health: a causal modelling approach. *Journal of the Royal Statistical Society* Series A **169**(2), 337-359
- 23. Clarke PS (2005). Analysing change using two measures taken under different conditions. *Statistics in Medicine* **24**(22), 3401-3415
- 24. Clarke PS, Smith PWF (2005). On maximum likelihood estimation for log-linear models with non-ignorable non-response. *Statistics & Probability Letters* **73**(4), 441-448
- 25. Sacker A, Clarke P, Wiggins RD, Bartley M (2005). The social dynamics of health inequalities: a growth curve analysis of self-assessed health in the British Household Panel Study 1991-2000. *Journal of Epidemiology & Community Health* **59**(6), 495-501
- 26. Clarke P, Ghani AC (2005). Projections of the future course of the primary vCJD epidemic in the UK: inclusion of subclinical infection and the possibility of wider genetic susceptibility. *Journal of the Royal Society Interface* **2**(2), 19-31
- 27. Chandola T, Clarke P, Wiggins RD, Bartley M. (2005). Who you are and where you live: setting the context for health using multiple membership multilevel models. *Journal of Epidemiology & Community Health* **59**(2), 170-175
- 28. Bartley M, Sacker A, Clarke P (2004). Employment conditions, employment status and limiting illness: prospective evidence from the British Household Panel Survey 1991-200. *Journal of Epidemiology & Community Health* **58**(6), 501-506
- 29. Clarke PS (2004). Causal analysis of individual change using the difference score. *Epidemiology* **15**(4), 414-421
- 30. Clarke PS, Smith PWF (2004). Interval estimation for log-linear models with one variable subject to non-ignorable non-response. *Journal of the Royal Statistical Society* Series B **66**(2), 357-368
- 31. Clarke P, Sproston K, Thomas R (2003). An investigation into expectation-led interviewer effects in health surveys. *Social Science & Medicine* **56**(10), 2221-2228
- 32. Sacker A, Wiggins RD, Clarke P, Bartley M (2003). Making sense of symptom checklists: a latent class approach to the first 9 years of the British Household Panel Survey. *Journal of Public Health Medicine* **25**(3), 215-222
- 33. Singh-Manoux A, Clarke P, Marmot M (2002). Multiple measures of socioeconomic position and psychosocial health: proximal and distal effects. *International Journal of Epidemiology* **31**(6), 1192-1199
- 34. Clarke PS, Tate PF (2002). An application of non-ignorable non-response models for gross flows estimation in the British Labour Force Survey. *Australian & New Zealand Journal of Statistics* **44**(4), 413-425

- 35. Brunner EJ, Hemingway H, Walker BR, Page M, Clarke P, et al. (2002). Adrenocortical, autonomic, and inflammatory causes of the metabolic syndrome: nested case-control study. *Circulation* **106**(21), 2659-2665
- 36. Clarke PS (2002). On boundary solutions and identifiability in categorical regression with non-ignorable non-response. *Biometrical Journal* **44**(6), 701-717
- 37. Lynn P, Clarke P (2002). Separating non-contact and refusal bias: evidence from UK national surveys. *The Statistician* **51**(3), 319-333
- 38. Smith PWF, Skinner CJ, Clarke PS (1999). Allowing for non-ignorable non-response in the analysis of voting intention data. *Applied Statistics* **48**(4), 563-577
- 39. Clarke PS, Chambers RL (1998). Estimating labour force gross flows from surveys subject to household-level nonignorable nonresponse. *Survey Methodology* **24**(2), 123-129

## **Book Chapters**

- 1. Clarke P, Hardy R (2007). Methods for handling missing data. In: Pickles AR, Maughan B, Wadsworth MEJ (eds), *Epidemiological Methods in Life Course Research*, 157-179. Oxford: Oxford University Press
- 2. Lynn P, Clarke P, Martin J, Sturgis P (2002). The effects of extended interviewer efforts on non-response bias. In: Groves RM, Dillman DA, Eltinge JL, Little RJA (eds), *Survey Nonresponse*, 135-148. New York: John Wiley

#### **Commentaries**

- 3. Clarke P (2012). Commentary on 'Social class returns to higher education' by Bukodi and Goldthorpe. *Longitudinal & Lifecourse Studies* **3**(2), 285-288
- 4. Smith PWF, Clarke PS (2005). Contribution to discussion of 'Local model uncertainty and incomplete data bias' by Copas & Eguchi. *Journal of the Royal Statistical Society* Series B **67**(4), 499-500

#### **Other Published Work**

- 5. Bao Y, Clarke P, Smart M, Kumari M. (2018). A comparison of robust methods for Mendelian randomization using multiple genetic variants. ISER Working Paper 2018-08. Institute for Social & Economic Research, University of Essex, Colchester, UK.
- 6. Clarke PS, Palmer TM, Windmeijer F. (2011). Estimating structural mean models with multiple instrumental variables using the generalised method of moments. CMPO Working Paper 11/264. Centre for Market & Public Organisation, University of Bristol, UK
- 7. Clarke P, Crawford C, Steele F, Vignoles, A. (2010). The choice between fixed effects and random effects models: some considerations for educational research. CMPO Working Paper 10/240. Centre for Market & Public Organisation, University of Bristol, UK
- 8. Clarke P, Windmeijer F (2009). Identification of causal effects on binary outcomes using structural mean models. CMPO Working Paper 09/217. Centre for Market & Public Organisation, University of Bristol, UK
- 9. Clarke P, Windmeijer F (2009). Instrumental variable estimators for binary outcomes. CMPO Working Paper 09/209 (see also WP 10/239). Centre for Market & Public Organisation, University of Bristol, UK
- 10. Ghani AC, Clarke P (2006). Variant Creutzfeldt-Jakob disease and the risk from blood transfudsion. *Behind the Medical Headlines* (http://www.behindthemedicalheadlines.com/articles/cjd.shtml)
- 11. Ferguson N, Ghani A, Clarke P, Donnelly C (2004). Extension of the 2003 OTM risk assesddsment. Report for Food Standards Agency
  - (http://www.food.gov.uk/foodindustry/meat/otmreview)
- 12. Clarke PS, Smith PWF (2003). Results on point and interval estimation for log-linear models with non-ignorable non-response. S<sup>3</sup>RI Methodology Working Paper M03/23. Southampton Statistical Sciences Research Unit, University of Southampton

- 13. Clarke P, Lynn P (2001). Using information on call-backs to correct for non-response bias in face-to-face interview surveys. In: *Proceedings of the Fifth International Conference on Logic and Methodology*. Opladen: Leske and Budrich
- 14. Lynn P, Clarke P (2000). An experiment with advance letters on the Scottish School Levers Survey. *Survey Methods Newsletter* **20**(2), 8-12. London: National Centre for Social Research
- 15. Clarke PS, Tate PF (1999). Methodological issues in the production and analysis of longitudinal data from the Labour Force Survey. *GSS Methodology Series No. 17*. London: Office for National Statistics
- 16. Clarke PS, Tate PF (1999). Weighting versus modelling in adjusting for nonignorable nonresponse in the British Labour Force Survey. In: *Proceedings of the Statistics Canada Symposium 98: Longitudinal Analysis of Complex Surveys*, 51-57. Ottawa: Statistics Canada

## **Professional Activities & Other Relevant Experience**

- Member, Editorial Board, SAGE Research Methods Foundations Quantitative (since 2018)
- Chair, local organising committee, UK Causal Inference Meeting, Colchester, April 2017
- Judging Panel, Jon Rasbash Prize (since 2016)
- Research Fellow, Centre for Evaluation & Development, University of Mannheim (since 2016)
- Associate Editor, *Applied Statistics* (2014-7)
- Advisory Board member, CMIST, University of Manchester (since 2013)
- Member, ESRC Grant Assessment Panel (2013-14)
- Member, Steering Committee, European Causal Inference Meeting (since 2012)
- Member, RSS Conference Board (2011-2014)
- Member, RSS General Applications Section (2010-11; Secretary 2012-13; chair 2014)
- Member, Society of Longitudinal and Lifecourse Studies (since 2010)
- Affiliated fellow, Centre for Multilevel Modelling, University of Bristol (since 2010)
- Attached member, ESRC International Centre for Life Course Studies (since 2010)
- Academic reviewer, ESRC Peer Review College (since 2010)
- Member, MRC Mental Health Research Network, Methodology Research Group (2009-14)
- Associate Editor, Journal of the Royal Statistical Society Series A (2008-11)
- Fellow, Royal Statistical Society (since 1999)
- Consultant to Office for National Statistics on Labour Force Survey non-response (1997–98)
- I have refereed for the following statistics journals: Journal of the Royal Statistical Society Series A (Statistics in Society), Series C (Applied Statistics), and Series B (Statistical Methodology), Biostatistics, Journal of the American Statistical Association (Theory & Methods and Applications & Case Studies), Statistics in Medicine, The Annals of Statistics, Biometrika, International Journal of Biostatistics, Statistics & Computing, Journal of Statistical Planning & Inference, Journal of Statistical Software, Statistics, Journal of Educational and Behavioral Statistics, Journal of the German Statistical Society, and Methodology. I have also refereed for the following other journals: Longitudinal & Lifecourse Studies, Oxford Bulletin of Economics & Statistics, Empirical Economics, Survey Research Methods, Sociological Methodology, Interdisciplinary Science Computational Life Sciences, British Journal of Psychiatry, International Journal of Social Research Methodology, Mathematical Biosciences, American Journal of Public Health, Journal of Epidemiology & Community Health, Social Science & Medicine, CNS Drugs, Preventative Veterinary Medicine, Health Education Research, Tropical Medicine & International Health, and The Lancet (as a statistical reviewer)