Clear, rigorous and relevant: publishing quantitative research articles in Work, Employment and Society

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According to the recent benchmarking review of the discipline, UK sociological research is predominantly based around qualitative research methods (BSA/HaPS/ESRC 2010: 23). Further, evidence suggests that the overwhelming majority of empirical articles published in mainstream UK sociology journals are qualitative in their focus (Payne 2007: 903). In this context, WES has always been something of an outlier within UK sociology in that a relatively high proportion of articles published in the journal employ quantitative analysis (Rainbird and Rose 2007: 212; Stuart et al 2013:382). However, one consequence of the relative neglect of quantitative methods within UK sociology is that there is a lack of shared understanding about what constitutes appropriate ways of framing and presenting quantitative sociological analysis. This lack of shared understanding can then create problems for researchers seeking to publish articles based on quantitative research, because in contrast to social science disciplines where quantitative analysis is the norm, there is no clear, well established template or set of expectations for quantitative sociological research articles.

Given this problem, the first aim of this editorial is to elucidate an epistemological rationale for quantitative sociological research. We do not set out to convince those sceptical about the value of quantitative sociological analysis of its benefits, such a task would lie outside of what might reasonably be achieved in the editorial format, but to make explicit the often unspoken assumptions that we believe underpin most good quantitative sociological research. Second, in the light of this rationale, we develop specific guidance on what we as editors expect from articles reporting quantitative research. This is important, because the proliferation of data and computing power to analyse it with increases the risks that researchers may produce spurious and misleading results. Finally, despite recent death notices for the social survey based on probability sampling (Burrows and Savage 2007) we believe that more high quality social survey data related to work and employment are available for secondary analysis now than ever before, while advances in computing power and software development make analysing these data more straightforward than ever before. These resources, combined with the growing potential of 'big data' offer unprecedented opportunities for advances in sociological analysis, which we wish to encourage.

Sociological approaches to quantitative analysis

Empiricism

To set out an empiricist approach to quantitative analysis in sociology, we turn to John Goldthorpe, arguably the pre-eminent British sociologist undertaking research using quantitative methods, and a powerful advocate of an empiricist approach to quantitative data analysis. Goldthorpe (2001) makes the case that there are three broad approaches to quantitative analysis, each based on a set of assumptions about epistemology. He argues that two of these approaches 'causation as robust dependence' and 'causation as consequential manipulation' are unsatisfying from a sociological perspective, but that a third approach 'causation as generative process' offers a better way forward for sociological research.

To briefly outline Goldthorpe's argument; 'causation as robust dependence' relates to a positivist or neo-positivist approach to statistical analysis still much used in work psychology and related areas of business and management studies. The key idea in this approach is that while correlation does not necessarily equal causation, there can be no causation without correlation, therefore an absence of correlation can be used to falsify a theory. Inferences about causality are then made on the basis of theory that is not falsified by the analysis. The problem here is that there are often numerous partially overlapping theories that might explain an observed correlation. Therefore the researcher risks ending up in a tautological position where statistical analysis informed by theory is structured in a way that means results seem to support that theory. However it isn't actually possible to directly test the causal relationships specified by the theory with the available data. While it is possible to reject a theory on the basis of this type of analysis, theoretical complexity means that is it often not possible to deduce causal explanations from it.

By contrast, 'causation as consequential manipulation' is designed to overcome these weaknesses. It involves using randomised control trials or natural experiments to draw stronger inferences about causality by directly observing the effects of causes. In recent years, this approach has become the dominant research paradigm within labour economics. Goldthorpe identifies five key problems with this approach. First, there may be ethical issues that prevent an experimental design being employed to investigate many sociologically interesting questions. Second, adequately measuring all of the factors that might influence the outcome of the experiment is tricky in practice and these factors may not be independent of one another. Therefore results may be biased as a result of these omitted variables and failure to account for interdependence. Third, variables (e.g. race and gender) that cannot easily be manipulated via an experiment have causal powers too, but this approach does not allow them to be observed or measured. Fourth, the approach obscures the role of human agency behind the experimental manipulation of structure so it isn't possible to decide the extent to which causal powers rest with structure compared to agency. Fifth, because the experiment takes place in a very specific social context which is itself affected by the experiment, the extent to which results can be generalised to other social contexts is not clear. For these reasons, Goldthorpe argues that this experimental approach is unlikely to occupy more than a marginal position in sociological research.

Goldthorpe labels the third approach 'causation as generative process'. The essential idea is that there are causal mechanisms operating at a 'more microscopic level' which generates the causal effects observed through statistical analysis, although these mechanisms might not themselves be observable at the time of the analysis. Therefore no set of statistical analyses to establish causal relationships will ever be definitive, as there is always scope for more fine-grained analysis that tests the underlying causal mechanisms. The challenge for researchers seeking to explain the cause of things is to both identify statistical relationships between variables that might suggest causality, and also to identify and test for the underlying generative processes that cause the statistical relationships.

On the basis of this approach, Goldthorpe elucidates what he sees as a distinctly sociological methodology for undertaking statistical analysis. He identifies three stages, which may in practice overlap with each other. First, establish evidence that the phenomena posited by theory exist and are common enough to have causal effects. The first phase requires essentially descriptive analysis using techniques that may be similar or identical to those used by researchers working in the

positivist research tradition. However, rather than using the results of this analysis for developing causal explanation as a positivist would, causal explanation comes from the next two stages of the process. The first stage is important because it prevents causal analysis based on mistaken suppositions (ie. it allows inadequate theories to be falsified) and because it may establish previously unappreciated empirical regularities which require explanation. Second, to hypothesise the generative processes at the level of social action by spelling out as fully as is practical the causal mechanisms that might explain the regularity. Third, test the hypotheses. This stage involves looking for a new set of empirical regularities at a different level of analysis which would either support or falsify the hypothesised generative mechanisms. Even if support were found, it would 'suggest' rather than 'confirm' that the hypothesised generative process was the cause of the original empirical regularity, because new evidence may yet falsify the hypothesis or suggest alternative generative mechanisms.

To spell out the difference between this sociologically informed approach and the dominant positivist and neo-positivist models of quantitative research in psychology or economics; in the latter disciplines, the usual starting point is a theoretical model that is then tested so allowing causality to be inferred. By contrast, following Goldthorpe's approach the starting point is to use statistical analysis to identify empirical regularities that confirm the existence of a sociologically interesting phenomena, then to develop and test a theory that might explain the regularity in a provisional way.

Critical realism

Critical realism as a philosophy of social science is critical of empiricist and positivist approaches to quantitative research on ontological grounds. However, in contrast to post-structuralist ontologies, critical realists maintain that the scientific study of society is possible. The starting concern of critical realism is Bhaskar's (1975) observation that much scientific activity was centred around the search for 'constant conjunctions' (universal regularities), but that such constant conjunctions do not in fact exist. Consequently the realist critique rests on the observation that there are no universal rules of social behaviour, therefore there is no point seeking universal theories to explain social behaviour. If experiments to uncover the causes of social behaviour are based on the flawed assumption that there are universal rules, results will be wrongly interpreted as revealing universal rules, when in fact they are contingent on a specific social context which might not be replicable and which it may not be possible or feasible to measure and model accurately. Furthermore, it is not possible to accurately measure all causal factors through survey analysis, because causes are not always directly observable (Kemp and Holmwood 2003: 66; Olsen and Morgan 2005: 256).

It is immediately apparent that there is a high degree of sympathy between critical realist critiques of positivism and Goldthorpe's critiques of 'causation as robust dependence' and 'causation as consequential manipulation'. However, a shared critique of specific approaches to quantitative and statistical analyses does not necessarily mean that there is a shared understanding of the way in which quantitative and statistical analysis can contribute to sociological analysis. Indeed, many critical realists have been weary or dismissive of quantitative analysis as a research methodology (e.g. Sayer 1992; Lawson 1997; Fleetwood 2001). In response, Kemp and Holmwood (2003) and Olsen and Morgan (2005) have advocated distinctively critical realist approaches to quantitative analysis within sociology, which we believe overlap to a considerable extent with the approach advocated by Goldthorpe. Specifically, there is a clear overlap is between Goldthorpe's position and Kemp and

Holmwood (2003: 178), who argue that statistical analysis can be used to identify partial regularities (demi-regs in the language of critical realism) and that these demi-regs may provide a basis for testing theories of the causal power of social structures by falsifying theories that do not explain the demi-regs. Similarly, Olson and Morgan's (2005: 278) stress the importance of looking inside the 'black box' to identify causal processes that explain statistical associations, an argument compatible with Goldthorpe's focus on identifying and testing generative mechanisms.

Despite these areas of agreement, Olson and Morgan's critical realist position contains important points of difference with Goldthorpe's empiricism. First, there is a more strongly developed sense of scepticism about the ability of survey data to represent complex social realities. Olson and Morgan argue that surveys capture 'ficts' – attempts to represent reality which may be untrue or subject to error, rather than facts (2005:276). Nevertheless, they argue survey data are useful in providing traces and outlines of an underlying reality. Because of this scepticism about survey data, Olsen and Morgan go further than Goldthorpe in arguing for a mixed methods approach and the use of induction from qualitative research in developing causal explanations and identifying causal mechanisms. Despite these differences, there is a shared belief in the need to establish and test for the underlying causal mechanisms and (if for different reasons) the provisional and contingent nature of research results between Olsen and Morgan and Goldthorpe. Therefore, despite differences over ontology, in practice there is a strong degree of overlap in ideas about what constitutes good quantitative research between Goldthorpe's empiricism and critical realist advocates of quantitative analysis.

From these areas of overlap we can deduce six principles to guide quantitative sociological research: First, sophisticated statistical analysis of survey data can be used to describe empirical regularities in order to confirm the existence of and investigate associations between different social phenomena; second, on the basis of this description it is possible to test and reject theories which do not correspond to the empirical regularities; third, to explain what causes the empirical regularities, it is necessary to look inside the' black box', to hypothesis what the causal mechanisms might be and then test these empirically. This may involve induction and mixed methods research; fourth, research programmes constructed in this way will always be provisional in their conclusions. New empirical regularities or new evidence on potential causal mechanisms may lead to revised conclusions. Limitations of data or measurement, specifically the difficulties involved in accurately representing complex, multi-layered social realities through survey data, may prevent all potential generative mechanisms from being tested; fifth, therefore researchers should display a critical awareness of the limitations of their data and analysis, in terms of sample, schemes of classification, measurement instruments and methods; sixth, given these limitations, it is important to be transparent in explaining and justifying methods by considering the robustness of results to changes in module specification or statistical technique.

We do not expect the preceding analysis to win over sceptics who doubt that complex social realities can be adequately categorised and measured through survey data, but we note in passing that the perspective outlined above is not merely an abstract exercise in summarising epistemological reasoning, but an approach that is being used by sociologists of work and employment. For example, it closely corresponds with the approach that Leslie McCall has advocated and employed in the study of intersectionality, work and employment (McCall 2005), and the approach can be seen in operation in any number of recent articles published in WES, for example Brynin and Guveli's (2012)

analysis of the ethnic minority pay gap in Britain and Morgan et al's (2013) mixed methods study of job satisfaction among frontline healthcare workers. What are the practical implications of this approach for our expectations of articles submitted to WES?

1. Contribution to sociology

One of the major reasons why quantitative articles are rejected is that reviewers and editors judge that they do not make sufficient contribution to sociology. Articles that are essentially works of labour economics, social psychology or atheoretical industrial relations are unlikely to be accepted. In a number of areas (e.g. unemployment and its effects, issues of wages and skill, the relationships between work, health and well-being) the boundaries between the sociology of work and other social science disciplines and fields are fuzzy. In these circumstances, articles often fail because although it is possible to discern a relevance to the sociology of work and employment within them, this is left implicit or hidden behind a facade of theory from other disciplines. In order to be judged to make a clear contribution to sociology, articles need to be framed in explicitly sociological terms or to be able to demonstrate a clear relevance to sociology. There needs to be evidence of sustained engagement with sociological theory or with sociologically interesting questions and existing sociological research throughout the article. Articles may be grounded firmly in sociological theory (e.g. Gallie et al 2012; White 2012) or consider sociological theories alongside theories from other disciplines and fields in order to answer sociologically interesting questions (e.g. Reekens and van Oorschot 2012; Holman 2013; Jones and Wass 2013).

2. Data: clarity on sample, population and measures

It is essential that articles include a succinct and clear description of the data. When research is based on a survey, the most important pieces of information to include are how the sample was drawn and response rates, specifically whether or not the sample was drawn randomly, and the population from which the sample was drawn. This information is essential if readers are to understand the extent to which the results can be generalised. It is important to remember that large-scale social surveys tend to have potentially problematic issues with aspects of their design and execution. It is important that limitations arising from these issues are acknowledged and discussed (Timming 2010). It is unlikely that articles which are based on samples of convenience will be accepted for publication, because with samples drawn in this way, we cannot know the extent to which results can be generalised beyond the sample. A possible exception to this rule would be if a researcher is seeking to test a specific generative mechanism, so has constructed a convenience sample where that mechanism is more likely to be observed. Articles based on whole populations, administrative data or other forms of 'big data' captured from company records of workers real time behaviour are also welcomed. It is also important that measures used in the analysis are clearly and concisely explained, possibly in the form of a summary table, so that the reader can make a judgement about how well measures and categories used are likely to capture the complex social reality that they seek to measure. This is particularly important when key measures take the form of multi-item scales. Authors must be clear about the analytical procedures used to generate the scale, for example which form of factor analysis was used, and why this method was selected. Results of factor analyses used in data reduction should be included so that readers can understand the process. Robinson and Pendleton (2010) provide an example of where this has been done particularly clearly and effectively.

3. Appropriate methods, clearly explained

Statistical methods need to be appropriate to the type of data being analysed. For example, if research is based on regression analysis, then the models estimated must be appropriate to the form of dependent variable. Ordinary Least Squares (OLS) regression is appropriate when the independent variable is continuous and normally distributed. If the dependent variable is dichotomous, probit or logit estimation are more appropriate, while if the dependent variable takes the form of an ordered scale, ordered probit or logit would normally be the appropriate analytical method. Other forms of regression analysis may be used depending on the form of the independent variable (e.g. poisson, interval regression, tobit). If OLS analysis is used when an ordinal dependent variable is being analysed, authors must provide a clear rationale for this, and be able to demonstrate through sensitivity analyses that their results are not an artefact of the statistical method. Panel econometric methods should be used when analysing panel data.

Regression analysis is one of the more commonly used statistical methods, and it is one that the majority of the WES readership will have some familiarity with. If an article uses an alternative form of statistical or econometric analysis, for example structural equation modelling, multi-level modelling or more unusual or novel forms of regression analysis including panel analysis, it is important to give the reader information on what the method tells us and why this method has been used, i.e. what does it tell us that a more typical regression analysis would miss or get wrong? Panel analysis, SEM and multi-level modelling can, if used appropriately, be used facilitate careful exploration of causal complexity, and can therefore contribute to the development of causal understanding over and above what can be achieved by simpler forms of analysis, but the reasons for using these methods need to be clearly explained so that the reader can judge the value that they add. An example of where this is done effectively is Schober and Scott's (2012) an analysis of attitude-practice dissonance in the transition to parenthood. A large part of the WES readership are not expert in quantitative methods, therefore it is important that methods are explained in language accessible to a general reader without a background in statistics or econometrics. Some econometric notation may be desirable to communicate succinctly and precisely the form of the analysis, but this should be kept to a minimum. Notation is not a substitute for clear and accessible prose explanations.

We would particularly encourage the submission of articles or research notes that outline and explain the benefits of novel quantitative methods to sociological research. Similarly, articles or research notes that provide a critical perspective or re-evaluate existing widely used quantitative research methods are welcome (e.g. Mood 2010).

4. Transparency and replication

In an era where it is perceived that the pressure to publish is resulting in increasing numbers of academic journal articles with results that are not robust enough to be replicated by other scientists (The Economist, 2013) it is important to explain methods transparently so that they can be replicated by other interested researchers. All variables included in a model must be clearly explained (perhaps in the form of a summary table) so that another researcher making reasonable assumptions and working on the same data could construct them. Correlations between variables and standard errors should be reported (if this is not possible because of space constraints, this information should be included in an appendix made available via the WES website) so that results

can be included in meta-analysis studies. Authors should specify the software and, where relevant, the commands used to generate results. Authors should be prepared to make their data and syntax used to code and analyse the data available to other interested researchers (or in the case of licensed or restricted data, the syntax only). Intermediate stages in the analysis (e.g. factor analysis to identify latent variables and create scales) should be reported.

5. Concise and clear results

It is important that articles report meaningful analysis and tell a clear story. As most quantitative research projects will have produced far more results outputs than could possibly be accommodated in an 8000 word journal article, or be easily digested by a reader, it is necessary to be judicious in the selection of results to report in the article. Authors should focus on reporting those results that are theoretically relevant and which therefore add to the story or argument that the article is developing. However, this selection process should not obscure the wider research process that underpins the results; for example results that do not accord with initial hypotheses should be acknowledged. Additional analysis, particularly sensitivity analyses which check the robustness of the results should be referred to in the text. If both dependent and independent variables in an analysis are from the same respondent and particularly if they are based on similar types of scale responses (for example an analysis of the relationship between self-reported effort and self-reported autonomy), it is important to acknowledge this limitation and it is good practice to explain the steps taken to account for or check for the influence of common method bias (see Podsakoff et al 2003; Lindell and Whitney 2001 for reviews of the relevant statistical methods). Where scale variables are used following factor analysis or other forms of data reduction, the sensitivity of results to alternative approaches to data reduction should be investigated and described. Authors should have these additional analyses available in the form of an appendix that can be supplied to other interested researchers or published on the journal website alongside the article.

All results tables should be easily interpretable without reference to the text, i.e. variable labels in table should readily understandable (e.g. 'unemployment rate' not U_rate), table titles should be descriptive of the contents of the table, model diagnostic statistics and indicators of statistical significance should be included within the table and notes explaining any aspects of the table not readily understandable to the reader should be added beneath it. Results included in tables should be reported in a form that can be interpreted by a general reader. For example, coefficients from probit or ordered probit analyses are not easily interpretable, so should be transformed to marginal effects, odds ratios or exponentiated coefficients as appropriate. Graphical representation of results is encouraged if it makes them clearer and easier to understand. Robinson and Smallman (2013) provide an exemplary case of how to present data and results concisely and clearly.

6. Re-engagement with theory and issues of causality

Following presentation of results, papers should re-engage with the theory(s) that motivated them. The crucial point, following from the analysis of epistemology above, is that researchers need to move beyond simple empiricism and crude positivism to consider both what their results say for the plausibility of theory, and the additional theoretical and empirical work required to advance causal understanding further.

Social Surveys related to work and employment

Despite a recent and influential argument that there is a coming crisis of empirical sociology, with the probability survey being supplanted by 'big data' (Burrows and Savage 2007), we are currently living through something of a golden age for micro-data from nationally representative sample surveys, with a variety and richness of social surveys available for secondary analysis which previous generations of researchers could only dream of. While it is certainly true that new forms of 'big data' are becoming a ubiquitous part of the marketing toolkit of contemporary capitalism, and that academic sociologists are by and large not active in the collection or analysis of this data, something which the ESRC are seeking to address through their 'Big Data' initiative, it is also the case that there are unprecedented opportunities for sociologists of work and employment to study sociologically interesting questions with social survey data. The representative nature of social survey data also offer sociologists working with these data opportunities to have an impact on the development of policy (it is interesting to note that while Burrows and Savage decry the lack of influence of sociologists on the policy agenda, the research of applied micro-economists has never had more influence or impact, in part because of economists' skill in coming up with policy relevant research based on analysis of nationally representative social surveys). How long this golden age will continue is an open question; declining response rates for several of the large social surveys described below suggest that it may indeed be coming to an end (although note that the Australian HILDA survey has done a much better job of sustaining high response rates than either of the equivalent British or German household panel surveys, suggesting perhaps that the problem of declining response rates can be overcome with sufficient resources and a close attention to survey management). This uncertainty means that it is even more important sociologists make use of these data sources while they are there, as well as developing expertise in the emerging area of 'big data' analysis.

Of the available social surveys, the Workplace Employment Survey series is likely to be well known to the readership of WES already, due to the extensive use that employment relations researchers have made of this data source (see for example Robinson and Smallman 2013). Nevertheless, we would urge readers to examine the latest (2011) wave of this survey with fresh eyes, because methodological innovations in the design of the panel (so that an employee questionnaire is now included in both waves of the panel of workplaces that participated in both 2004 and 2011) so that within workplaces changes in job quality and employee attitudes over time can now be investigated, and the fact that WERS collects data from multiple respondents in the same workplace (the manager responsible for employment relations, up to 25 employees and the senior union rep and senior non-union worker representative if either are present in the workplace) mean that although not without its limitations (Timming 2010) WERS remains an exciting source of data for exploring the social processes of human resource management and employment relations at a workplace level. Data collected from multiple respondents also reduce the risks of common method bias that may be present in the surveys discussed below.

After WERS, the Skills and Employment Surveys are Britain's longest running series of sociologically informed social surveys focused on work and employment. Waves of the survey were conducted in 1997, 2001, 2006 and 2012. The survey is designed to measure the skills that workers have and the skill requirements of the jobs that they do and also ask about several other aspects of job quality like wages, working time, autonomy, control and work strain. A further three surveys (the Social Change and Economic Life Initiative or SCELI, 1986; Employment in Britain, 1992; Working in Britain, 2000) include a core of questions common to all seven surveys. All but SCELI are based on stratified random samples of workers aged between 20 and 60 who live to the south of the Caledonian canal

(SCELI is based on a sample from specific local labour markets rather than a national sample, but the properties of the data mirror closely those of a national stratified random sample), and contain data from between 2,500 and 8000 workers each. All sevens urveys are available from the ESRC data archive as a single data file with harmonised variables labels. Consequently they can be used to investigate sociologically interesting questions about changing divisions of labour, job quality and employee experiences of work over a 26 year period, recent examples published in WES include White (2012) and Gallie et al (2013).

In addition to these two resources, there are two further UK surveys worth remarking on, which although not specifically focused on work, include enough questions on this topic to make them of interest to sociologists of work and employment. These are the British Household Panel Survey (BHPS) and the UK Household Longitudinal Survey (UKHLS). Both have a fine sociological pedigree, being directly descended from the household survey carried out by Ray Pahl and his research team on the Isle of Sheppey (Pahl 1984). The BHPS was originally a stratified random sample of adult (16+) residents of 5,538 households. Automatic replenishment rules mean that as households split, either as a result of relationship breakdown or children leaving home, the new household(s) enters the sample so that it should remain broadly representative of the wider population of households (although migrants to the country after 1991 are outside of the surveys scope). Additional households from Scotland and Wales were added in 1999 and Northern Ireland in 2001. The BHPS in its original form came to an end in 2008, but continues as part of the UKHLS. Although the measures of work within the BHPS are rather thin, confined to variables like occupation, working time and wages, the long time period covered and the household structure of the data means that it is useful for investigating many sociologically interesting questions, for example, changing patterns of work over the life-course and changing divisions of labour within the household (see for example Schober and Scott 2012). Therefore BHPS offers an almost unrivalled opportunity to examine trends in work and employment over time. Its rivals come in the form of similar household panel surveys from other countries. Here two stand out: the German Socio-economic Panel (GSOEP) and the Household, Income and Labour Dynamics Ausralia (HILDA), both of which are similar in structure and content to the BHPS. The availability of three broadly comparable surveys offers the opportunity for questions related to changing patterns of work and employment and changing divisions of labour to be investigated from a comparative perspective.

The UK Household Longitudinal Study: Understanding Society (UKHLS) began in 2009 as an annual survey of the residents of 26,089 households. An additional 5,257 ethnic minority households participated in an 'ethnic minority boost survey' (EMBS). Seventy six per cent of households continued to participate in wave 2 (67% of the EMBS). Basic questions about work and employment are included in all waves of the survey, with additional questions on working conditions, commuting and domestic labour included in included in waves 2 and 4 and scheduled to be included again in wave 6, 8 and 10 (wave 4 should be available for analysis in November 2014). Additionally a detailed health assessment was carried out on around 10,000 participants in wave 2 of the survey (health assessment data should also be available for analysis in November 2014). Although the questions on work are not as extensive as those used in the Skills and Employment Surveys, the large sample size of the main survey combined with the EMBS offer an unparalleled opportunity for sociologists to investigate differences in the experiences of work and employment by occupation, class, gender and ethnicity and to investigate issues of intersectionality and employment in a way that has not been possible before.

Opportunities for comparative and macro-sociological research also come from the European Social Survey (ESS) and the European Working Conditions Survey (EWCS). Waves 2 (2004) and 5 (2010) of the ESS contain questions on family, work and well-being, which were developed with considerable input from sociologists (Gallie 2013). The surveys provide data from approximately 17,000 respondents in 19 European countries participating in both waves. Reeskens and van Oorschot (2012) offer an example of research based on the ESS published in WERS. The EWCS were conducted in 1990, 1995, 2000, 2005 and 2010. Initially covering the 12 countries that were EU members in 1990, its geographical coverage has expanded as the EU has grown, so that the 2010 wave covered 44,000 workers across the 27 member states of the EU. It aims to provide a comprehensive picture of the everyday realities of work in Europe, themes covered include employment status, working time duration and organisation, work organisation, learning and training, physical and psychosocial risk factors, health and safety, work-life balance, worker participation, earnings and financial security, work and health. When conducting comparative quantitative analysis, it is particularly important that researchers exercise caution in the way that they interpret responses to attitudinal questions (for example job satisfaction), because similar answers may mask considerable cross-country differences in social norms against which subjective evaluations are made (Brown et al 2012), nevertheless these European resources offer rich pickings for sociologists seeking to understand the way in which different national approaches to economic and social policy affect the experience of work.

Conclusion

This editorial has been written with two aims. First, to encourage more sociologists of work and employment to consider undertaking research that utilises quantitative methods. To this end we have sought to make explicit the often taken for granted epistemological assumptions of quantitative sociological research, and in doing this, have elucidated an approach to quantitative research which is likely to contribute to sociological knowledge. We have also given a brief overview of some of the social surveys available for analysis which have the potential to extend sociological knowledge in the area of work and employment. This list is not exhaustive, for example we have not touched on time-use surveys (e.g. Craig et al 2012), but space constraints prevent us discussing more. Second, to make the jobs of authors and reviewers of quantitative articles easier by offering clear guidance on our expectations for quantitative articles published in WES. We have done this in the spirit of seeking to encourage methodological pluralism rather than seeking to privilege or elevate one specific methodological approach over others. At a time when the Nuffield Foundation, ESRC and HEFCE are seeking to enhance the capacity of British sociology for quantitative research, and the ESRC are seeking to encourage interdisciplinary research on ‘big data’, we hope that this will contribute to the development of quantitative research capacity within British sociology and beyond.

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