

# **A Crisis of Number? Some recent evidence from British sociology**

*Malcolm Williams, Liz Hodgkinson and Geoff Payne*

## **Introduction – Is there a problem of number in social science and why does it matter?**

Deliberate or accidental distortion of statistics has been a familiar complaint in *Radical Statistics* throughout its history. A statistically literate social scientific community and public would presumably go a long way to addressing these complaints and in the process produce a more open and egalitarian society. Until that is achieved, a radical approach to statistics can only be viable if it has a solid foundation of the necessary numeracy in the social scientific community to engage with the technical aspects of critique.

An initial premise of this paper and the research it reports is that social scientists should be numerate. This is not to suggest that every social scientist should be a statistical expert, but that a minimum level of skill in at least interpreting numeric data is more than useful – it is necessary. This is not just that social scientists may do their jobs more competently, but also and perhaps more importantly so that the overall level of social statistical literacy in society is as high as possible. That this is not the case was lamented by the 2003 Commission on the Social Sciences (CSS 2003). That report was critical of the lack of social scientific literacy, particularly amongst the media and especially in quantitative data. This in turn, they maintained, led to misunderstanding and misrepresentation of issues in the media. The broader societal consequences of this are obvious to *Radical Statistics* readers.

For some time (certainly in the experience of the present authors) there has been disquiet in the social science community about issues of ‘number’. This concern has been about both publication output and input in the form of teaching and the abilities and enthusiasm of students for statistics and quantitative methods more generally. This has been specifically a concern amongst sociologists, but seems to extend to most other social science disciplines, with the exception of economics. This paper explores the current situation in sociology, bringing empirical evidence to bear on the supposed problem of ‘number’. It therefore seeks to go beyond recent well-intentioned

research council reports (ESRC 2000; 2001), which have relied somewhat more on judgement than evidence.

Sociology as much or more than any other discipline, has had a radical (even turbulent) history, particularly in respect of method and methodology and at times this has been extraordinarily destructive, particularly in attitudes toward numeric methods, so often denounced as 'positivism' (Williams 2000: Chapter 5). Although nowadays the discipline more publicly embraces methodological pluralism [Payne and Payne 2004: 148-51) there remains a perception that the 'anti-positivist' backlash had done serious damage to the discipline's analytic and numeric credentials.

Evidence for concern has been mostly unpublished anecdote, but commentators such as Gorard (2003) and Blane (2003) have specifically claimed that there is a shortage of social scientists with the necessary skills, expertise or willingness to engage with large data-sets. Specific studies of the 'quantitative problem' are rare. Two recent exceptions were a study by Rice et al (2001) of the use of numeric data-sets in teaching, and Murtonen and Lehtinen (2003), a study of the difficulties experienced by education and sociology students taking quantitative methods modules. The findings of neither were optimistic. In the first the overall conclusion was that such data-sets were under-used. In the second case, many students 'dread' statistics modules, finding quantitative methods and statistics more difficult than qualitative methods.

These concerns contrast with earlier periods, at least in sociology. Although there were dissenters, until the 1960s and especially in the USA, sociology was mostly regarded as a scientific discipline underpinned by quantitative methods and causal-statistical analysis (Madge 1963; Platt 1996). Since that time this belief has been eroded, particularly in Britain and largely as a result of the anti-positivist backlash since the 1960s (Williams 2000: chapter 5). The positivist versus anti-positivist dispute has cooled somewhat in recent years, it now usually being held (and perhaps increasingly so) that sociology is open to the use of a wide range of methods; the discipline is methodologically pluralist. However this has been disputed. Blane (2003), for example, maintains that there is a widespread belief in Britain that sociology is primarily a theoretical and qualitative discipline and this has led to a neglect of quantitative skills, whilst the formal sociologist, Skvoretz, has claimed that sociology more generally might contain 'some anti-mathematical bias' (Skvoretz 2000: 510). He writes of the frustrations faced by mathematical sociologists in the discipline, claiming that

The general sociological audience will give its attention to discursive theoretical treatments, even in the absence of clear empirical payoff, since the impression of understanding is generated by shared linguistic conventions (Skvoretz, 2000: 516).

The concerns expressed in the literature and anecdotally led a small team of researchers, at the University of Plymouth, to undertake a modest investigation into the status of quantitative methods in sociology. This article reports the results of the first four phases of the study, with the intention of providing evidence on the extent of the problem. This information is a necessary step before moves are made from the assumption that improvements in social scientific numeracy may be needed, towards formulating policies to achieve such desirable improvements. We conclude with a few suggestions about the need for, and the direction of, future research into social science numeracy.

The research itself was exploratory and aimed to assess whether there was a case to answer that a crisis existed either in the discipline's output or in the process of 'production'. Firmer evidence to establish the extent or detailed nature of such a crisis would require a broader study, or indeed studies.

The research had four phases. The first of these was an analysis of output from the leading British sociology journals over a two year period. The second was an inventory of what kind and how much quantitative research is taught in British universities and higher education colleges. The third was a survey of participants at the annual British Sociological Association Conference in 2003. The fourth phase was qualitative and consisted of two open consultation days held in the summer and autumn of 2003.

This paper *summarises* the findings of each phase of the study in turn. A fuller report on the first stage can be found in Payne et al (2004) and on the other three stages in Williams et al (2004). The first and final phases in particular produced a great deal more data than there is space to discuss in the present paper.

## **Evidence from sociological 'production'**

A way of testing at least part of the claim that sociology has a bias against numerically based methods is to look at the 'output' of the discipline. The first stage of the research was a content analysis of 244 papers published in the leading mainstream British sociology journals<sup>i</sup>

from the years 1999 and 2000 along with 102 papers from the BSA Annual Conference in 2000 (Payne, Williams and Chamberlain 2004). The research sought to establish the balance of methods used in British sociology, as represented by these journals. Table 1 shows the distribution of methods used in the published papers. The categories were derived as follows: those designated non empirical had content which was wholly theoretical or conceptual/ methodological with no discussion of primary or secondary data. Qualitative papers presented only qualitative findings (for example interview findings, discourse analysis, field research etc). Those designated quantitative papers presented at least univariate primary or secondary data. This was liberally defined and could be as little as a discussion of one table. When any doubt existed the paper was designated as 'quantitative'. Mixed quantitative and qualitative papers were defined as minimally presenting some qualitative and quantitative content relating to primary or secondary data. The consistency of the classification was checked by a cross re-coding of an unmarked sub-sample by each of the three researchers and showed an almost 100% agreement.

**Table 1 Research methods used in 3 groups of publications  
(percentages rounded to nearest whole numbers).**

<b>Data-set</b>	<b>Non-empirical</b>	<b>Qualitative</b>	<b>Mixed Q. &amp; Q.</b>	<b>Quantitative</b>
Mainstream Journals	38	41	7	14
BSA Conference	36	47	7	11
<i>WES</i>	4	40	17	38

Only *Work, Employment and Society* (WES) could be said to be methodologically pluralist with a healthy balance of quantitative, qualitative and mixed methods papers. The other 'mainstream' journals and BSA Conference fared much worse on this criterion. There were three times more qualitative than quantitative papers in the former and four times as many in the latter.

For this classification, quantitative methods were defined very liberally and could consist of just univariate analysis. Indeed, not many of the papers were methodologically sophisticated. Of the conference papers only 2% (of the total) used bivariate analysis and none used multivariate analysis. Of the mainstream journals the figures were 5% and 6% respectively (Payne et al 2004: 159).

Perhaps these outlets do not fully represent the range of methods used in British sociology, but if they do not, British sociology is not properly representing its activities through its leading journals. If, as is more likely, the journals are representative of British academic sociology, then this content analysis study provides evidence of a crisis of number, at least in terms of output.

## **Consumers and Producers**

The next phases of the research were baseline studies of the views of the *producers* (sociologists), and what the *consumers* (in this case students) are getting. The first part of this was a survey of quantitative methods provision in sociology ‘units’ (departments, divisions, groups, etc.). The second part was a self-completion survey of delegates to the 2003 BSA Conference, and discussion groups with sociologists.

### *The Departmental Survey*

The survey consisted of telephone interviews with UK Higher Education Institutions (HEIs) where sociology was offered as a single honours degree, or as a major pathway within a modular scheme. The survey was mainly descriptive and had the limited aim of an audit of the amount and nature of quantitative methods taught. 82 of 90 eligible sociology units responded (91% response rate).

The majority of sociology courses in British universities (69 out of our sample of 82) are modular and use a ‘credit’ system, comprising 360 credits in England and Wales and 480 in Scotland<sup>ii</sup>. Using the credit system we calculated the total percentage of all course content given over to quantitative methods teaching. On this basis, in just over a quarter of universities quantitative methods account for less than five per cent of the curriculum (Table 2). However in 68% of cases, 5% to 15% of the curriculum is quantitative methods with just a few degrees teaching more than 15%, so it does seem to be the case that in most degrees quantitative methods are well represented.

**Table 2 Compulsory quantitative methods as a percentage of sociology degrees**

<b>Percentage of curriculum containing quantitative methods</b>	<b>Percentage of courses (percentages rounded)</b>
<5	26
5-10	49
11-15	20
16-20	4
26-30	1
n=	69

Over half the courses had an equal balance of quantitative and qualitative teaching, though 30% had more qualitative than quantitative methods content. A relatively small number of courses had separate compulsory modules in survey method, data analysis or statistics (19%, 15% and 16.5% respectively) and 86% of teaching was in a mixed methods environment. However, though compulsory quantitative methods are well represented, 65% of sociology courses offered no additional optional/elective quantitative methods teaching. 41% of respondents believed that there had been an *increase* in quantitative methods taught in the last five years, 13% thought it had decreased in their department and 46% thought it had stayed the same (Williams et al 2004: 11-12).

The survey could not show the level to which quantitative methods were taught, how well they were taught, or how students reacted or performed, but it seems fairly clear that in the majority of cases British sociology students are being taught some quantitative methods and in a large proportion of institutions quantitative methods accounts for a sizeable proportion of teaching.

### *The BSA Conference Survey*

The survey of delegates to the BSA Conference produced a disappointing response rate of only 13% despite heavy publicity and a reminder questionnaire sent by email two weeks after the conference. In itself this may be evidence of the level of interest or concern amongst the delegates: those that did respond may not be representative and not too much should be read from these results. Indeed that all respondents were positively inclined toward quantitative methods (Table 3), seeing them as necessary in at least some contexts, seems at odds with the paucity of quantitative output

in the society's main journal (and other journals). This may therefore indicate that there was a great deal of self selection in the sample<sup>iii</sup>. Nevertheless, even if this was so, the divergence of other views within the sample is interesting and worth reproducing even if they may only serve as an initial comparator in any future similar work.

Despite the overall positive attitude toward quantitative methods over 70% of the sample believed it was difficult to be a proficient quantitative researcher and nearly half the respondents thought that such research fetishises number. The majority of respondents thought that insufficient quantitative researchers were being trained and that students chose sociology to avoid number. At the time of the survey the data on the journal outputs had not been published in *Sociology*, so it is interesting to note that 67% thought British sociology equally uses quantitative and qualitative methods.

**Table 3 Attitudes toward the use and teaching of quantitative methods**  
(percentages rounded)

	<b>Strong-ly Agree</b>	<b>Agree</b>	<b>Dis-agree</b>	<b>Strong-ly Dis-agree</b>	n=
Quantitative methods are necessary in many research contexts	32	69	0	0	54
It is difficult to be a proficient quantitative researcher	4	68	29	0	54
Quantitative research fetishises number	9	31	35	24	53
Quantitative research has more legitimacy with the public than qualitative research	51	40	9	0	53
Quantitative research has more legitimacy with government than qualitative research	26	47	26	0	53
Quantitative research is more expensive to conduct than qualitative research	11	65	24	0	54
I would like to see more quantitative research being undertaken in British sociology	27	23	48	2	48
We are not training enough quantitative researchers in Britain	27	44	29	0	48
British sociological research equally uses quantitative and qualitative methods	30	37	33	0	43
The ESRC should do more to	41	54	5	0	39

promote quantitative research in Britain					
Too much emphasis is placed on the teaching of quantitative methods in Britain	9	13	62	17	47
Students choose sociology courses to avoid number	20	57	22	0	49
British sociology students are numerate	9	26	47	19	47
Quantitative methods are important to a balanced curriculum	29	71	0	0	51
I enjoyed learning about quantitative methods	30	33	37	0	54
Quantitative methods texts are too difficult	6	48	28	18	50
The BSA should more energetically promote quantitative methods teaching	4	70	21	4	47

### *The Consultations*

The consultations were one-day events held in London and Edinburgh during the summer and autumn of 2003. They were open to all through conventional academic notification, so that participants were a self-selected sample. However, each event did attract nearly 30 people with a variety of institutional roles and at different levels of seniority in the discipline. The format was that of group discussions, each event having sessions on the undergraduate curriculum, the postgraduate curriculum and professional practice.

There seemed to be universal agreement about the importance of quantitative methods, both in sociology as a discipline and as crucial transferable skills for graduates. Space does not permit a full report: on the one hand there were several areas of optimism and a great deal of evidence of good practice in teaching quantitative methods, especially statistics and data analysis, at all levels. On the other, there was also consensus that all is not well with quantitative methods and there is indeed a crisis.

Most participants agreed that students, particularly first year undergraduates, view quantitative research negatively. The following views and characteristics were attributed to students:

- ‘quantitative research is unfashionable’
- ‘quantitative researchers are number crunchers’
- ‘quantitative research produces ‘lies, damn lies, and statistics’’



‘it is not possible to pursue sociological theory through quantitative research’

‘quantitative methods are not perceived as “cool”’

‘people who do quants are just techies in the lab’

‘quantitative research is less valid than qualitative research’

‘it’s not important to be numerate in social science’

‘qualitative research is an easier option as you do not have to learn all the procedures associated with, for example, different types of reliability and validity’

The discussions about the undergraduate curriculum produced a number of ideas about what the barriers to the successful teaching of quantitative methods might be. We summarise the principal ones below:

- **Problems of level and language:**  
Many of the perceptions of students with regards the difficulty of quantitative research may be reinforced by the technical language of quantitative research (cohort, longitudinal, random sampling, internal/external validity, reliability).
- **Is the curriculum too ambitious?**  
It was suggested that a common problem for students is that we try to teach them too much, too quickly. They can become overwhelmed with all the aspects of quantitative research if they are taught them rapidly – students need time for to reflect on and engage with the topics taught.
- **Mixed methods:**  
Some participants maintained that students do not get enough out of ‘mixed method’ courses because the quantitative aspect is very much the minor component.
- **How well do we teach quantitative methods?**  
The ability of staff to teach quantitative methods, especially statistics, came in for criticism. The teaching of quantitative research is often taken on by staff with reluctance and can often end up being ‘dull’. Staff (often quite junior) are aware of student ‘resistance’ to quantitative methods and this is discouraging for them.
- **Staffing levels:**  
‘Teaching data analysis to a huge room full of students sitting at computers, pressing wrong buttons and panicking is a huge disincentive to any lecturer’. The situation is made worse by the

general lack of staff (and post graduates) in sociology departments who do quantitative research. Thus the 'quantitative person' often takes on all the teaching and is sought after to answer all 'quantitative' queries. Related to this is the issue of staff-student ratios. Successful teaching, of data analysis, in particular, requires a ratio of no more than 15: 1, a ratio well exceeded on many courses.

Virtually all of these barriers also existed at postgraduate level, but were supplemented by others. However one item of good news for the ESRC was that most (though not all) participants were quite positive about the new ESRC training guidelines and the 1+3 (1 year taught, plus 3 independent research) programme. Even if some further review might be desirable, the fact that there was a focus on rigorous methods teaching for postgraduates was welcomed.

Nevertheless the new regime has increased already existing pressures and problems. For example the ESRC curriculum has been adopted by many taught programmes for all students, yet the intake to those programmes is very much more diverse than ESRC, or even PhD, students. Needs and abilities of students on taught programmes vary enormously. Students may be PhD candidates, or taking a Masters degree full or part time. Some students require methods training for their PhD research, while others require a methods training more suited to their professional practice. Some postgraduates come from professions with an 'anti-number' culture and where there are fears and prejudices that can adversely affect students' studies. Ability can range from those who had received a sound undergraduate methods and statistics training, to students who have no background or experience in this area at all. The 'one size fits all' approach carried with it the danger of the temptation for staff 'just to get students through'.

At each consultation day a final shorter session was held on professional practice, in particular the challenge of attracting and keeping good numerate social scientists. There was no dissent at all on this issue: there is a shortage of such people. It was suggested that such researchers can attract a premium in salary, because their skills are in demand. However, it was felt that university funding regimes and career structures produce problems of recruitment and retention of researchers and teachers in academia. Salaries are higher in both the private sector and the public sector outside of academia, and many who work in the latter area are on short term contracts with very little job security. Many researchers work in research centres, which are seen only as a handy source of 'taxation' by universities

with little regard to the future development of such centres and their staff.

Finally, the confused situation about the public understanding of social science was identified as an area deserving of much more attention. On one hand, it was suggested that statistical data still carry authority amongst journalists and some policy makers. On the other hand, scientific social science is a victim of a more general mistrust of science by the public and a lack of research literacy amongst many policy makers. ‘Why commission a large sample survey when you can have a couple of focus groups?’ asked one participant. Of course, this phase of the present research is perhaps also open to that very charge, but the value of the consultations lay in exploring in detail the kinds of issues currently facing sociologists who are teaching and/or carrying out quantitative research.

## **Is there a crisis?**

Certainly among quantitative researchers and those who teach quantitative methods, a regular topic of conversation seems to be that there is a crisis of number in the social sciences and it manifests itself variously. Such *talk* of a ‘crisis’ does require some clarification, lest this become simply a moral panic. In this article we have rhetorically used the terms ‘output’, ‘production’, ‘producer’ and ‘consumer’. As an illustrative one it helps to indicate some measurable outcomes, but there may be a better analytic strategy, and we need to clarify some of the limitations of terminology.

First, production might be seen as either academic output, or output in a wider public arena, say public policy. Output might also be graduate students who do not themselves become social scientists, but use their social science training in other fields. Second, producers might be those who do research or train others to do research, or they could even be putative future producers in the form of students at different levels. The latter are probably more straightforwardly thought of as consumers, who make choices, within constraints, about our ‘product’ of quantitative social science. They may also – and this is crucial for radical statistics – later become an informed lay public who rely on us to produce data upon which they can make informed political choices.

As far as sociology is concerned (and as our research findings came from within sociology, we can only properly extend our conclusions to that discipline) there is firm evidence that there is a crisis of production in *academic* sociology. Nowhere near half of the papers

published in the sample years had any quantitative content. However, we want to enter a significant caveat. *WES*, though treated for analysis purposes as a general sociology journal, is in fact a journal in a more specialist area and had methodological parity in respect of production output. This raises the question of whether quantitative sociology has migrated to more specialist areas within the discipline, or to its fringes – say within social statistics. Our first phase research might be usefully extended to more specialist journals, or ‘sociological’ output outside of academic sociology. While it might seem reassuring to find quantitative methods alive and well in these more specialist locations, this would still leave mainstream areas of the discipline with a less than satisfactory quantitative input. A further possible extension would be to carry out complementary studies in sister disciplines.

Nonetheless, there is some firm evidence in sociology that the quantitative methods production process within academia is well established, although how well it functions is less well known. The ‘departmental’ survey showed that institutions have at least established a framework within which quantitative methods can be taught. From the survey itself, we can know nothing of the quality and effectiveness of the modules taught.

We do have a wealth of qualitative data from the consultation days, but while this provides a mixed picture of quality and effectiveness, it suffers from the same drawbacks as other discussion group data (Barbour and Kitinger, 1999). Thus, a second important investigative project would be to look more closely at the producers and production process by focussing in a more detailed way on how and what goes on in the teaching environment. This might consist of a larger scale, more attitudinally focused survey of academic staff and/or it may be a survey of the students as consumers (e.g. Payne and Lewis 1993). However, researching other colleagues’ students involves entering the minefield of being perceived as investigating their teaching practices and professional competence.

Nevertheless, lack of research on the consumers (students, policy makers etc.) is the biggest gap and the one that needs to be filled before we can propose measures to combat the crisis. While the ESRC guidelines (actually *directions*) are generally to be applauded, ironically they have been introduced without much evidence, other than anecdotal, about the methods issues they attempted to address. This in turn may indicate that the ‘guidelines’ and the regime they heralded would be a good subject for evaluative research.

Our illustrative language of output, production, producer and consumer may inadvertently suggest discrete divisions between these categories and divert attention from a wider and deeper process of the issue of number in society generally and social science in particular. That there is a societal problem of numeracy, demonstrated in the difficulties of recruiting to science and technology disciplines (Mason, 1999; Curtis, 2002; Elliot Major, 2002; Canovan, 2003) seems now well established. Inference to the best explanation would suggest that it would be highly unlikely that the social sciences would not equally suffer. However, unlike science and technology, the social sciences have been slow even to ask if there is an issue to be addressed. This may reflect that many of those who practice social 'science' care little for the power of number (which may also be the explanation for the high non-response rate in the BSA Conference survey).

Perhaps much of the foregoing is one step removed from the core concerns of radical statistics, but if it is the case that our ability in society to produce good statistics, or indeed, statistics at all in some areas<sup>iv</sup>, is at risk, then we are left only with rhetoric and not data.

## **References**

- Barbour, S and Kitzinger, J (eds.) (1999) *Developing Focus Group Research: Politics, Theory and Practice*. London: Sage.
- Blane, D. (2003) 'The use of quantitative medical sociology', *Sociology of Health & Illness*, Vol. 25, Silver Anniversary Issue 2003.
- Canovan, C. (2003) 'Boys desert maths and physics', *Times Education Supplement*, January 17, 2003.
- Curtis, P. (2002) 'Science in schools fails to inspire', *The Guardian*, July 11, 2002. <http://education.guardian.co.uk>.
- Commission on the Social Sciences (2003) *Great Expectations: the social sciences in Britain*. London: CCS.
- Dorling, D and Simpson, S (1999) (eds.) *Statistics in Society: The Arithmetic of Politics*. London: Arnold.
- ESRC (2000) *Strategy for Underpinning Social Science Research*. Swindon: ESRC/Research Resources Board.

- ESRC (2001) *Postgraduate Training Guidelines*, 3<sup>rd</sup>. edn. Swindon: ESRC.
- Elliot Major, L. (2002) 'Students abandon science for arts', *The Guardian*, Thursday January 31, 2002.
- Gorard, S. (2003) 'Understanding Probabilities and Re-Considering Traditional Research Training', *Sociological Research Online*, Vol. 8, no.1, <http://www.socresonline.org.uk/8/1/gorard.html>
- Humphries, B. (2003) 'What else counts as evidence in evidence-based social work?', *Social Work Education*, Vol 22, no.1, 2003, pp.81-91.
- Irvine, J; Miles, I and Evans, J (Eds.)(1979) *Demystifying Social Statistics*. London: Pluto.
- Madge, J (1963) *The Origins of Scientific Sociology*. London: Tavistock
- Mason, G. (1999) 'The Labour Market for Engineering, Science and IT Graduates: are there mismatches between supply and demand?', *DfEE Research Brief No. 112*, March 1999.
- Murtonen, M. and Lehtinen, E. (2003) 'Difficulties Experienced by Education and Sociology Students in Quantitative Methods Courses', *Studies in Higher Education*, Vol. 28, 2 pp171-185.
- Payne, G. and Lewis, J. (1993) 'Statements About Statistics: Students' Experience of Learning Quantitative Methods', BSA Annual Conference, Essex.
- Payne, G., Williams, M. and Chamberlain, S. (2004) 'Methodological Pluralism in British Sociology' *Sociology* Vol 38 1 pp XX.
- Payne, G and Payne, J (2004) *Key Concepts in Social Research*. London: Sage
- Platt, J. (1996) *A History of Sociological Research Methods in America 1920-1960*. Cambridge: Cambridge University Press.
- Rice, R., Burnhill, P., Wright, M. and Townsend, S. (2001) *An enquiry into the use of numeric data in learning & teaching: Report and*

*Recommendations for UK higher education.* Edinburgh: University of Edinburgh.

Skvoretz, J. (2000) 'Looking Backwards into the Future: Mathematical Sociology Then and Now', *Sociological Theory*, 18:3, November 2000.

Williams, M (2004-in press) 'Definition, Measurement and Legitimacy in Studies of Homelessness' in Romero, M and Margolis, E (eds) *Social Inequalities* (Blackwell Companion to Sociology Series) Malden, Mass.: Blackwell.

Williams, M (2000) *Science and Social Science: an introduction.* London: Routledge.

Williams, M; Collett, T and Rice, R (2004) *Baseline Study of Quantitative Methods in British Sociology.* Birmingham/ Durham C-SAP/BSA <http://www.britsoc.org.uk>

The authors are grateful to the BSA, C-SAP and the Department of Sociology, University of Plymouth for funding the research. The authors are also grateful for the comments of three anonymous referees on a first draft of this paper. The views expressed are those of the authors.

## **Notes**

---

<sup>i</sup> The journals were: *Sociology*, *British Journal of Sociology*; *Sociological Review*, and *Sociological Research Online*. A further sample from *Work, Employment and Society (WES)* was analysed.

<sup>ii</sup> Thirteen of the responding units did not use a system of academic credits and a percentage could not be calculated. See Table 2. Scottish degrees were 'weighted' to an English/Welsh equivalent.

<sup>iii</sup> Conversely this may just be evidence of a commitment to methodological pluralism in principle, if not practice!

<sup>iv</sup> A good example of this might be homelessness research. Despite the continued efforts of a few social statisticians to develop and encourage rigorous ways of counting homeless populations, there has been a dumbing down of this activity in most countries to simple and inaccurate headcounts (see Williams 2004 for a discussion of this).

### **Malcolm Williams**

*School of Sociology, Politics & Law,  
University of Plymouth,  
Plymouth  
PL12 4EA  
Tel 01752 23 32 17  
M.Williams@plymouth.ac.uk*

### **Liz Hodgkinson**

*Peninsula Medical School  
liz.hodgkinson@pms.ac.uk*

### **Geoff Payne**

*University of Plymouth  
G.Payne@plymouth.ac.uk*