#### News and views

### Operational/Market Research for Campaigning Groups - the example of Survival International.

#### Paul Marchant

In the Radical Statistics survey on members' interests, I expressed mine as the above title. It seems to me that campaigning is hard work and it might as well be done as effectively as possible. It also seems that much is done on the gutfeeling basis and results may not be monitored that closely. I would be pleased to hear from anyone who has similar interests, although I must confess that I don't have a great deal of time to be greatly involved in a Radical Statistics subgroup. I am rather busy with other things - not least working with my chosen cause - Survival International.

Survival International is a worldwide movement which works to support tribal peoples. It stands for their right to decide their own future and helps them protect their lands, environment and way of life. Survival is a registered charity and in 1989 won the Right Livelihood Award. Readers may have seen the organisation mentioned in the press at the end of 1991, as Survival International was instrumental in persuading the Brazilian government to set up a 'park' to offer some protection to the Yanomami Indians.

In recent years the Yanomami have suffered terribly and have been decimated by outsiders encroaching on to their traditional lands in pursuit of gold.

A project that I am working on is an analysis of the UK membership figures. The data I have is the number of Survival members in each of the 120 post code areas of England, Scotland and Wales, I have combined this with a file of Census data (1981) which contains 20 variables for each of the postcode areas. I have used the total number of inhabitants to calculate the number of Survival members per hundred thousand of population, i.e. the membership density, and have ranked this. The density of membership has been mapped, see accompanying figure. The computations were done with SPSS/PC+ and the maps drawn using the interface to 'Map-Master'.

#### Survival International



The membership density tends to be highest in the South (and West) with a band of high density across England at around the latitude of Leeds. (Leeds is in the top 20%). Scotland tends to be rather low on whole. Of all the variables of the census data, the membership is most highly correlated with number of furnished private rented accommodations.

There is an upward trend of number of members with population size - not at all surprising, but the membership density decreases with population size.

I should be pleased to hear if anyone can tell me if there is a standard classification of the various post code regions (e.g in terms of urban/rural), so that membership may be related to this standard reduced set of variables. I should also like to find the areas (in square-km) of the post code regions. I eagerly await the new (1991) Census information and also the 1992 membership figures to see how things have developed.

I believe that, although this work will give valuable insights (as 'information is light'!), none-the-less campaigning is 99% perspiration and 1% inspiration.

I should be pleased to hear from anyone who is interested in the general area of helping campaigners work more effectively.

Paul Marchant, Computing Services, Leeds Polytechnic LS1 3HE Tel 0532-832600 X3074 or 0532-787131 (Answer Phone).

# Hands up all those who are absent ...

The Department of Health has a technical working group to liaise with Local Authorities on personal social services statistics. Last year the local authority representatives succeeded in dissuading the Department of Health from attempting to collect data on 'The whereabouts of absconders from children's homes' ...

### Northern Group report: Information for accountability

'Accountability and Information - the NHS and Local Government', a discussion led by Peter Smith at our meeting on 30th January and reported in full earlier in this issue, stimulated the Northern Group to focus in on performance indicators. To this end we are currently working on a publication - 'Caring by Numbers'.

It will be a critique of performance indicators using Peter's principal agent model: he defines the principal(s) as 'those whose capital is used to finance an undertaking', agents as 'those who act on their behalf'. In terms of public sector accountability it is not clear who fulfils which role. Ordinary tax-paying citizens or central government could each be interpreted as the principal, Councillors or management as the agent.

With the provider-client dichotomy in Community Care and in the NHS, the ordinary citizen enters the chain of accountability twice as tax-payer and as consumer. This is crucial when considering the underlying purpose behind performance indicators in accountability. It is essential to 'unpack' exactly what performance indicators are indicating, and to whom they are measurements of accountability. Further we need to ask whether selection of preferred performance indicators pre-empts the implementation of other arguably more selective measurements.

Against an historical socio-political context, 'Caring by Numbers' will offer a critique of performance indicators via individual case studies. Our positive thesis will put forward recommendations towards measurement systems of greater complexity, placing quality as the baseline for the success of any performance.

We need examples of the use of performance indicators supposedly to improve accountability, and quotes about them and their use. Do you have any? Send to Anthony Staines, Northern Group (address on inside cover).

The April meeting discussed statistics available for measuring community care needs and services, led by Colin Cryer.

The September meeting will probably take place on the 24th.A reminder is usually sent to all members living in Yorkshire and Humberside, the North or the North west.

Laura Strathearn

#### RSS Council: elections...

This year, unusually, there is an election to the Royal Statistical Society's national Council. Six members, peeved at the omission of a statistician from the pharmaceutical industry, have proposed a Mr Grieve to compete with the Council's own recommended list of nine members to fill the nine spaces this year.

The result of the election is as yet unknown, but it highlights what some feel is the undemocratic practice of the Council avoiding elections by each year nominating a slate to fill the vacant seats.

Elections were also called for by Deborah Ashby, Alison Macfarlane and Steve Simpson in the May issue of News and Notes. They argued not just that elections were a healthy practice, but that Council lacked those who were willing to tackle the "nitty gritty' of statistics as they are used in Society", and furthermore that the number of women on Council was insufficient. They openly asked for others who shared these concerns to consider with them whether "early preparation for next year's elections" is relevant to these concerns.

The issue of women's place in the RSS has been recently raised in different ways by others in RSS News and Notes. In March, Margaret Rangecroft criticised the RSS conference planners in inviting solely male speakers, while in May Lindsay Paterson complained that the Social Statistics section of the RSS had gained a good gender balance on its committee, it was being somewhat thwarted that the News and Notes editor had used the term Chairman in their report expressly against their wishes.

#### Troika news

First of all, the 1993 Conference in Birmingham. Make a note of the date -27th February, and read the plans for it on page 4 of this issue.

# News from the health group

In the run up to the general election, the health group had a flurry of activity on issues related to NHS statistics, in contrast to last year when public health was our main focus. As well as activities we initiated ourselves, we had a series of requests from other groups for material to put in their publication and to circulate to their members and others.

A document 'NHS reforms: the first six months', published in January by the NHS Management Executive used four arguments, three of which involved dubious use of statistics, to claim that the NHS changes introduced on April 1 1991 are a great success. We got ourselves commissioned to write an article in the British Medical Journal, taking apart the way that document used statistics about NHS activity, waiting lists and vaccination. The whole process of the BMJ's acceptance of our offer to write the article, writing it, refereeing, revision and preparation for publication took place in just under two weeks!

The day after the article was accepted in its final typeset form, a Department of Health Statistical Bulletin, containing data which would have been useful for it, was published. In fact, the bulletin appeared quietly on a day when William Waldegrave made a high profile speech containing statistics which were more flattering to the government. We wrote an appendix which we sent out with our press release and which is reproduced here. You can read the article itself on pages 705-709 of the BMJ dated March 14 1992. Its title is 'For

debate: NHS reforms the first six months proof of progress or statistical smokescreen'.

One of the problems we encountered when writing this article was trying to interpret the NHS Management Executive's 'fast track' management statistics, which it collects very quickly to get limited but up to date figures. These do not necessarily use the same definitions as the more detailed statistics compiled more slowly by Department of Health Statistical Divisions. The 'fast track' figures are not routinely published, as their main use is to brief ministers. Of course, as we saw with waiting list statistics, some are published if it suits the minister!

An article we had written for 'Health' matters' about waiting list statistics was published at the end of March on pages 12-13 of issue number 10, with the title 'Waiting lists: the long and short of it'. As it had been written a few weeks earlier, it was not quite up to date, because of the appearance of various 'fast track' figures. the latest of which related to the end of February and were 'published' on March 25. 'Publication' took the form of a table sent with a press release with no comments from the Department of Health, and a triumphal 'response' from Conservative Central Office, which at least one national newspaper received before the data it was responding to.

Again we did an update based on these data and similar figures for January and December, and sent this out with a press release, anticipating a miraculous announcement that no one would be waiting more than two years by April 1 1992. This was sent out, with a copy of the article by health Rights. In some cases, the material was sent out by fax from the

NHS Federation, who have links with Health Rights.

On April 2, the miraculous announcement duly appeared, proclaiming that almost no one was waiting more than two years. A journalist kindly faxed on a copy straight away. A second press release and an updated table was an attempt at an almost instantaneous response, again faxed out by the NHS Federation. We have no idea whether this had any impact, as most of the press continued to trumpet the 'good news'!

On May 12, well after the election, Virginia Bottomley released fuller figures for people waiting on March 31. These showed that, while the numbers of people waiting more than two years had reached a minimal level, as a result of spending a lot of money on overtime payments and operation in private hospitals, and the numbers waiting 1-2 years had decreased, the numbers waiting under 1 year had increased. These figures have been added into the table we sent out with the two press releases, and the revised table is included below.

On each occasion, we questioned the comparability of the two sets of statistics, particularly the question of people who had

allegedly 'self deferred'. We also questioned the emphasis placed on waiting time, pointing out that people who had been waiting for under a year for an operation for a disabling condition may be in greater need for immediate treatment than some people waiting for much longer periods.

In March, we also did an extremely rapid potted update of chapter three of 'Facing the figures', in the form of a broadsheet on 2 sides of A4. This told the our much repeated story of how to see through the time honoured claims that money has been poured into the NHS, which is employing record numbers of staff to treat record numbers of patients ..... The Socialist Health Association circulated it very widely, and other organisations such as COHSE distributed it with election briefings.

In the post election period, it is obvious that cuts in spending are on the way and rationing of health care is on the agenda. There is increasing interest in the methods being used to decide what to cut and we are planning to get together with other organisations to do something on the subject. Anyone interested is invited to contact Allyson Pollock on 081 983 8316 (home).

## Total numbers on in-patient and day case waiting lists, England Data from Korner returns 'Fast track' figures

	Sept '89	Mar'90	Sept '90	Mar'91	Dec'91	Jan '92	Feb '92	Mar '92	
Time waiting	•		•						
Under 1 year	662,800	704,900	703,700	730,300	779,000	817,494	826,487	834,511	
1 - 2 years	129,976	126,991	131,592	118,747	119,000	93,384	87,968	79,496	
2 years or more	88,124	80,909	71,108	51,053	29,000	20,490	11,208	1,600	
Total, less 'self deferred'									
	880,900	912,800	906,400	900,100					
'Self deferred'	48,100	46,100	51,200	48,100					
Overall total	929,000	958,900	957,600	948,200	943,000	932,151	925,663	915,607	
								,	

Source: 'Korner' data from Department of Health Statistical Bulletins and Hansard October 14 1991, col 75-80 'Fast track' data from Department of Health press release H92/127 and H92/155and The Independent, March 6, 1991.

# Figures for 1990/91 show a slowing down in acute hospital activity

Hospital activity figures for 1990-91, published on March 5 1992 in Department of Health statistical bulletin 2(1)92 showed a slowing down in the increase in hospital activity seen in the 1980s. This means that any increases in 1991/92 are likely to appear more favourable than they would otherwise, and emphasises the need for comparison with earlier years.

The table below compares average annual changes over the period 1979-86, the last seven years before major changes were made in NHS hospital data collection systems, with annual changes from the financial year 1988/89 to 1989/90 and from 1989/90 to 1990/91. A number of points emerge:

- 1 In the acute sector, growth between 1989/90 and 1990/91 was much less than both that in the previous year and the average for the early 1980s. There was a decrease in numbers of out-patients and zero growth in numbers of in-patient finished consultant episodes.
- 2. If in-patient consultant episodes are added to day cases, on the assumption that people who would have been admitted as in-patients in the past are now admitted as day cases, then the year to year increase is still smaller from 1989/90 to 1990/91 than it had been over previous years.
- 3. Adding geriatric to acute sector activity figures turns the zero growth in inpatient activity into an increase of 0.4 per cent and makes the decreases in numbers of out-patients smaller.

Comparison of annual percentage changes in hospital activity in England since 1989-90 with average annual increase over the period 1979-86

	Percentage change						
	Acute G	Acute and					
			geriatric				
			combined				
Y							
In-patients		7.5	0.0				
1979-86	2.3	7.5	2.6				
88/89-89/90	1.3	8.5	1.8				
89/90-90/91	0.0	4.8	0.4				
Day cases							
1979-86	8.6						
88/89-89/90	14.4						
89/90-90/91	8.4						
In-patients pl	us day cs	ISPS .					
1979-86	3.2	1363					
88/89-89/90	3.2						
	1.4						
89/90-90/91	1.4						
Total out-pati	ent atten	dances					
1979-86	1.7	7.2	1.8				
88/89-89/90	0.5	2.4	0.6				
89/90-90/91	-0.9	9.7	-0.7				
New out-patie	ents						
1979-86	2.1	7.3	2.1				
88/89-89/90	1.0	3.4	1.1				
89/90-90/91	-0.5	19.9	-0.3				
07/70 70/71	0.5		0.0				

Source: Derived from data in DH Statistical bulletins 2/10/90 and 2(1)92

Note: The comparisons of in-patient activity are based on SH3 data for discharges and deaths over the period 1979-86 and finished consultant episodes for 1989/89 onwards.

### **Book Reviews**

New Developments in Statistics for Psychology and the Social Sciences, Vol 2. Edited by P. Lovie and A.D. Lovie BPS Books, 1991.

I reviewed the first volume in this series (published 1986) a couple of years ago; if anything this book is even better, although some of the criticisms which I addressed then apply equally to this volume. There are 11 chapters, covering a wide range of topics:-

Non-parametric Methods for Complex Data Sets

Graphical Methods for Exploring Data Computationally Intensive Statistics Classification Trees

Regression Diagnostics: A rough guide to safer regression

Unbalanced Designs

Repeated Measures: Groups X Occasions
Designs

Time Series

Latent Variable Methods

Compositional Data Analysis

A short History of Statistics in Twentieth Century Psychology

The Lovie husband and wife team—one employed in a psychology department, the other in a mathematics department, are making an attempt to bridge the gap between statisticians and psychologists involved in research and undergraduate

teaching. Excluding the chapters authored by the Lovies, only two originate from within psychology departments or the like; the other five are from mathematics or statistics departments.

The chapters provide very different types of information to researchers. Many of the techniques will probably be completely new to most readers of the book. Others, such as P. Lovie's chapter on regression diagnostics is an exposition of many techniques probably already known to researchers, but taken further than is the case in most textbooks, both at a theoretical and practical level.

The chapters range in their degree of mathematical sophistication from those with little or no formulae (the graphical methods or historical chapters, for instance) to some that require a considerable confidence in mathematics, which would unfortunately deter or exclude many of the psychological researchers that could make good use of the techniques described.

It is my belief that very often psychologists and other social scientists hold very different "cognitive maps" of the very same statistical techniques. For instance, thinking in terms of "vectors" and "matrices" is typical of a mathematician, whereas terms which relate to how the data was collected (ie "variables" and "rectangular datasets") mean more to researchers. If the editors had hoped that researchers would read and incorporate the innovations described in this book more attention could have been paid to softening

those gaps between academic disciplines.

Describing advanced statistical techniques in a form readily digestible by the majority of social science researchers is no small undertaking, but if more effort had been put into editing the book in that direction its impact might be greater. Instead, I believe, an intermediate layer of "translators" will have to become involved in the trickle-down of the innovations in this book from mathematicians to social scientists.

Brendan Burchell, Faculty of Social and Political Sciences, University of Cambridge.

## Poverty and Health: Working with families, Clare Blackburn. OUP, 1991

This book is oriented towards professionals/practitioners working with families and is particularly concerned with families with young children. It addresses the (central) question 'Does poverty affect the health of those who experience it, and if so, how?'.

Different chapters explore a number of alternative (but not mutually exclusive) routes via diet, housing conditions, stress coping and health behaviour, and, finally, impact on the nature of care for children's health.

The organisation and writing of the book is clear and each chapter has an

introduction and an 'implications for practice' section. In particular a number of quotes from parents are illuminating and add to the book's impact and readability.

Poverty is conceived of as a relative concept and is operationalised in terms of household income (Hilary Graham's definition 'being in poverty means not having a level of income to sustain health and being out of poverty means having a level of income which is compatible with health' - which appears to rely on a consensus on the monotonicity of the relation of poverty to health and involves an obvious element of circularity - is fastened on in constrast to a definition, for example, in terms of an 'acceptable way of life'). Income is hypothesised as a mechanism whereby differences in key social positions (social class and 'race') are related to health. In particular, the author points to research linking social class mortality differences to trends in relative poverty (with a minimum difference between social classes in recent times in the 1950's) and documents the increase in poverty since 1979. She examines three processes. physiological, psychological and behavioural, by which poverty affects health.

Deficiences in research are identified in the social support needs of Black and ethnic minority families, and in the social and economic issues influencing how they care for their health and, generally, on the distribution of resources within the family.

Common explanations for the impact of poverty on health are discussed and rejected using research evidence: of poor knowledge of healthy behaviours, undesirable health attitudes and inefficient

health budgeting. The neccesity for compromises of the health needs in carers in poverty between themselves and their children is stressed.

The final chapter concentrates on implications for policy and practice.

Amongst those recommended are: improving employment and wage practices (with particular reference to women), improving income maintenance through the social security systems, a recognition of the extra costs involved in bringing up children (in particular, numbers of school children eligible for free school meals has fallen over the past two decades, now only children from families eligible for income support count

as eligible), and a recognition of the costs of caring for the disabled. Any health and welfare strategy, it is argued, should have as its central components, family poverty, inter-agency cooperation, and a recognition of parents desire to care for family health, in partnership with health and welfare workers.

Whilst invaluable to its intended audience the book is likely to be useful, enjoyable and stimulating to all health researchers and, in particular, to those concerned with social policy issues.

Russell Ecob, MRC Medical Sociology Unit, Glasgow.

#### A caring government...

#### Part 2

#### On immigration...

Continued from page 29

"Under a Labnour government, this country would be swamped with immigrants of every colour and race, and on any excuse of asylum or bogus marriage, or just plain deception.". Sir Nicholas Fairburn, Tory MP, April 1992.

#### On a classless society...

"A cheap and cheery service at one moment in the day for typists, and perhaps a more luxurious service for the civil service and businessmen who might travel earlier or later than the typists." transport minister Roger Freeman's blueprint for the rail service, January 1992.

#### On compassion...

"Ison't recall asking the Kurds to mount this particular insurrection." Mr Major's response to the Gulf Waraftermath, april 1991.

#### On having the right priorities...

"When I am Wrime Minister, I shall have jelly all the time." John Major to Jeffrey Archer, on winning the leadership election, November 1990.

With thanks to the New Statesman and Society, 10 April 1992.

Barker, Walter (1991) Reflections on field research and evaluation in the Health Service Radical Statistics No.49 32-37 Winter

Frater, Alison and Costain, David (1992) Any better? Outcomes measures in medical audit *British Medical Journal* 304 519-520 29 February

Kennedy, Ian (1981) The Unmasking of Medicine London: George Allen and Unwin

McKeown, Thomas (1979) The Role of Medicine Oxford: Basil Blackwell

NHS/DHSS Steering Group on Health Services Information (1982-1983) Reports 1 to 6

Potrykus, Christina (1992) Paying the price of community care *Health Visitor* 65 3 p.66 March

#### A caring government...

Part 1

#### On homelessness...

"We've put the homeless into homes but some just go back on the street begging. They are the people you step on when you come out of the opera." Sir George Young, Hosuing Minister, June 1991.

#### On unemployment...

"A price well worth paying". Norman Lamont, February 1991.

#### On the NHS...

"We can't afford to have people lingering around for a recuperative holiday... We want the minimum beds necessary. We probably still have more than we need." Virginia Bottomley, then the Helath Minister, February 1992.

#### On blacks...

"He should have been a candidate in .. Wolverhampton, where his colour would have been more appropriate." Dudley Aldridge, former tory Mayor of Cheltenham, on the town's black tory candidate, John taylor, January 1992.

Part 2 on page 51