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Subjective measures of quality of life in Britain: 1971 to 1975
Some developments and trends

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During its short, but fruitful, life, the Social Science Research Council (SSRC) Survey Unit conducted one small pilot survey and three reasonably large surveys of the adult general population as part of its research programme to develop subjective indicators of quality of life. The pilot was conducted with a national quota sample (N=213) in March 1971 and the first of the major studies with a quota sample (N=593) in seven major conurbations during October and November 1971. Two further national surveys using probability samples drawn from the electoral register were conducted in urban areas of Great Britain in October–December 1973 (N=966) and March–May 1975 (N=932). A fifth survey, intended to re-interview in 1976 a sample of respondents from the 1973 and 1975 surveys, was cancelled, partly as a result of the decision by SSRC to close the Survey Unit, and partly because of cut-backs in expenditure. The 1973 survey was replicated simultaneously in Stoke-on-Trent (N=753) and Sunderland (N=770). Preliminary findings have already been published in earlier issues of *Social Trends* and accounts of other work or justification for research using subjective indicators have been published by the SSRC Survey Unit (Abrams, 1973 and 1976; Hall, 1973 and 1976; Hall and Perry, 1974; Hall and Ring, 1974).

An extremely important application for subjective indicators is that of measuring changes in attitudes over time. One of the major justifications cited by Campbell for this kind of work was to measure the 'psychological correlates of social change'. Since some of the measures were used in more than one survey, it is now possible to compare two, and in some cases three or even four, points in time.

In considering changes in indicators over time, it should be remembered that change may take place only slowly, if at all, in some areas; whilst in others it may take place rapidly, either in one direction or in many. Thus subjective measures in some domains might be expected to be stable across time, in others less so. The data from our surveys would appear to support such a view. This means that satisfaction with domains such as health, housing, and education may remain relatively unchanged within specific categories of healthiness, tenure, or educational experience; whereas in domains such as finance or politics we might expect changes in income or government to be reflected in changes of satisfaction, and such indeed appears to be the case. Of course, even the most reliable and valid indicators of satisfaction would have to take into account changes in expectations or in values as possible sources of variation.

It is relatively easy to demonstrate a stable relationship between a subjective measure and a related objective condition for certain domains such as housing, environment, and health. To some extent, the same kinds of relationships can be demonstrated in domains where objective indicators are more difficult to define and measure (eg education, leisure, and work). The really difficult task is to determine such relationships when the relevant domain is intangible. We have no difficulty in obtaining satisfaction ratings with the 'level of freedom and democracy' in a country, but we face practically insuperable problems, either of measurement when there is consensus of definition, or of definition when there is not, of what constitutes equity, or tolerance, or acceptable censorship. Again, we may have no difficulty

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obtaining *satisfaction with* equality or tolerance, but how does one measure the *amount of* justice or tolerance in a society, or the equity of pay differentials? If there are measurable objective changes in a country's social or economic conditions, how does one determine whether changes in subjective measures are related to these changed conditions? And if a relationship can be demonstrated, can a directional causality be determined? It is not proposed to answer such questions in this article but results from our surveys begin to throw some light on the problems involved.

The subjective measures used in the surveys are broadly:

direct measures of satisfaction using single items (the majority);

indirect measures in that they involve some measure of discrepancy between a perceived and a desired state of affairs;

some measures including an element of perceived time (in that respondents were asked to give ratings for past, present, and future situations);

and another type of measure represented by various global indices of psychological well-being.

Examples of the behaviour of the various subjective measures over time to be described in this article will focus on areas of life for which there already exist highly developed and much used objective indicators (material standard of living, health, and housing), on areas for which perceptual measures cannot at present be avoided (the British polity and the equity of differential material rewards), and on general measures of well-being. Any programme of research in this area should test new measures or set new baselines, and consequently some measures are reported which have only one time point in the hope that they will be replicated later. As well as the tables in this article, various sections of *Social Trends* include satisfaction indicators by objective conditions drawn from our surveys.

What is 'Quality of Life'?

The late Tom Harrisson, founder of Mass Observation, once wrote 'You cannot, yet, take a census of love in Liverpool, or random sample the effect that fear of the future has on the total pattern of contemporary life in Leeds'. For several years now a number of researchers on both sides of the Atlantic have been trying to do just that. Bradburn in Chicago; Campbell, Converse, and Rodgers and Andrews and Withey in Michigan; Allardt in Helsinki; Abrams and Hall in London: all have severally and jointly been working towards the definition and measurement of 'quality of life' as experienced by individual human beings rather than as indexed by some cash value such as GNP or by official statistics derived from censuses. The work abroad has had a distinctly psychological flavour, often venturing into such realms as music, love, fresh air and sunshine, and being with or near nature. The SSRC work has tended more towards social policy areas, since, although we are aware that the non-policy areas may be better determinants of a sense of well-being, it is the policy areas which allow of intervention to correct inequalities and injustices.

In the 1975 survey we asked a fully-probed open-ended question to elicit respondents' own definitions of 'quality of life'. (*There's a lot of talk these days about the 'Quality of Life' in Britain and in other countries. Of course, 'Quality of Life' means different things to different people. What does it mean to you? – What sort of things do you think of now when you hear the words 'Quality of Life'?*)

Definitions of 'Quality of Life' ranged from single-word answers to philosophical treatises, and seem to vindicate the life-domains approach adopted in the earlier surveys. The largest single category of references was to family, home-life, marriage, etc. (23 per cent). A large number of respondents (19 per cent) were unable to be specific and referred to simply being contented, happy, or 'being satisfied inside yourself'. Money and prices were specifically mentioned (18 per cent) as also was standard of living or decent conditions of life (17 per cent). Of these last, a strikingly large number of answers specifically *excluded* luxuries. Social values, social *mores*, and decent standards of behaviour (16 per cent) comprised the only other areas referred to by more than 15 per cent of respondents. At the other end of the scale the fewest references were to social equality and social justice (2 per cent), altruism (2 per cent), complaints and negative statements about others (2 per cent), and worries, cares, or mental health (2 per cent) (Table I).

Men and women tended to give similar replies, but there were some notable differences. Women were more likely to mention home-life and health, and to give the generalised non-specific answer. Men were more likely to mention living standards, work, and freedom. Younger people were more likely to mention money, living standards, and work; whilst older people referred more to values and to the past. Middle class people tended to think of social relationships, living standards, environment, freedom, and leisure, and to give a greater number of answers than did working class people, who were more likely to refer to money, or to give 'don't know' replies.

Table I Definition of 'Quality of Life', 1975

Great Britain Percentages

	All	Sex		Age groups				Social class of head of household				
		Men	Women	18–29	30–44	45–59	60+	AB	C1	C2	D	E
Reference to:												
Family and home life	23	18	26	22	24	26	21	26	20	25	22	20
General contentment	19	17	21	26	15	18	18	16	18	22	20	18
Money and prices	18	18	18	28	21	13	12	15	18	20	21	12
Living standards	17	23	13	20	23	19	8	22	19	16	17	13
Social values and standards	16	14	17	7	11	22	21	16	20	14	17	12
Personal beliefs, religion	11	10	12	9	11	12	11	12	10	10	13	10
Social relationships	10	9	11	10	8	10	12	18	12	7	8	7
Housing	10	9	10	12	11	10	8	13	10	9	12	7
Health	10	8	11	8	12	12	7	10	9	10	14	3
Work	9	12	6	14	12	8	2	10	8	12	8	1
Freedom of all kinds	7	9	5	7	9	5	6	12	7	7	2	5
Leisure, holidays, travel	6	8	5	6	12	5	3	9	7	7	5	3
Environment, nature	4	4	4	5	4	4	3	11	4	3	2	1
Education and culture	4	2	4	4	5	2	4	7	5	4	1	0
Comparison with past and other countries	4	4	4	2	1	3	7	5	4	3	3	4
Consumer goods, luxuries	3	4	3	6	2	5	1	5	3	4	2	2
Pressures of life	3	3	3	4	3	3	2	3	4	4	2	1
Worries, cares, mental health	2	2	3	2	2	2	2	0	4	2	4	2
Negative statements	2	2	3	2	2	2	4	2	2	2	2	4
Altruistic statements	2	2	2	1	1	2	3	3	3	1	0	3
Equality and justice	2	2	2	2	2	1	2	1	2	1	2	4
Other	3	4	3	5	1	3	3	3	7	2	2	3
Don't know	10	8	11	11	8	8	11	3	5	10	13	18

Quality of life in Britain and other countries

Because of the referendum campaign and the cross-national nature of the research, a new section was included on perceived quality of life in Britain and in other countries. This was also designed to provide a baseline for time trends, and perhaps to encourage other countries to produce similar data. Thus, after defining their own meanings for 'Quality of Life', our respondents were asked to rate the quality of life in different countries using an eleven-point scale on which *0* represented the 'lowest possible' and *10* represented the 'highest possible'.

After careful consideration nine countries were selected. These represented the third world (India), the EEC (France, Germany, Holland), a European social democracy with a high standard of living (Sweden), Eastern Europe (Russia), North America (USA), and the Old Commonwealth (Australia), plus, of course, Britain. Australia was ranked the highest (7·7) and India the lowest (2·5). After Australia came Sweden (7·5), Germany and Holland (7·4), with Britain (7·2) following. Second and third lowest were Russia (4·9) and France (6·4). The USA was rated 7·1.

Perceived trends in Quality of Life

As well as rating the 'Quality of Life' in Britain now, respondents also gave ratings for 'Quality of Life' 5 years ago, 'Quality of Life' in 5 years time, and what people thought they deserved. The general picture is of a country sliding rapidly down from 8·0 5 years ago, through 7·2 now, to 6·0 in 5 years time. This contrasts with individual respondents' estimations of their personal standard of living (which seem to be maintained at about the same level of 6·6 over the reference period) and of life-satisfaction (perceived to be on the increase, from 7·3 through 7·8 to 8·1) (Table II).

When asked what was the *one* thing they would most like to change to improve the quality of life in Britain today, respondents made most references to prices and inflation (11 per cent) closely followed by government and politics (10 per cent). Trade unions could claim third place since 6 per cent thought there were too many strikes and 3 per cent thought the unions had too much power. Seven per cent thought people should be made to work and 6 per cent that people were too greedy or selfish. A further 6 per cent wished to reduce levels of crime and violence. Whatever the others thought, 6 per cent wanted to change nothing: for them Britain was definitely best.

Table II Perceived trends of 'Quality of Life': 1975

Great Britain — Various units

	Mean[1] rating	Grouped scale ratings Percentages (0–4)	(5–7)	(8–9)	(10)	DK	Total sample (=100%)
(a) Level of 'Quality of Life' in Britain							
5 years ago	8·0	3	29	49	17	2	932
Now (1975)	7·2	7	43	38	11	2	932
5 years time	6·0	25	39	22	9	5	932
Entitled	8·9	1	9	40	47	3	932
(b) Level of 'your own standard of living'							
5 years ago	6·5	12	54	26	6	2	932
Now (1975)	6·6	8	60	28	3	1	932
5 years time	6·7	12	42	34	7	5	932
Deserved	8·0	–	28	52	17	2	932
(c) Satisfaction with 'your life as a whole'							
5 years ago	7·3	7	40	36	16	1	932
Now (1975)	7·8	3	29	48	20	1	932
5 years time	8·1	3	22	46	25	4	932
Entitled	8·8	–	10	50	38	2	932

[1] 0–10, 0=lowest possible, 10=highest possible.

Self-reported satisfaction

The list of domains for which global satisfaction ratings were obtained between 1971 and 1975 is shown with the mean satisfactions and other measures in Table III. Not all domains were used in each survey, and the October 1971 survey ratings have been recalculated to 0–10 from the 1–7 scale actually used for comparability with a sister study in the USA (Campbell, Converse, and Rodgers, 1976). This makes it difficult to compare ratings from 1971 with those for 1973 and 1975, especially since both the 1971 samples were of the quota-type, and neither was designed to represent urban Great Britain. With these reservations it seems reasonable to claim that the rank order of mean satisfaction ratings has remained fairly stable; that satisfaction with family life, leisure, health, and job has remained steady; and that satisfaction with standard of living, general financial situation, and the level of freedom and democracy in this country has improved. There would also appear to be a modest improvement in satisfaction with education received. If genuine, some of these improvements may be due simply to the passage of time (eg later samples will include people with longer education in better facilities); others may well be due to changes in personal or national circumstances, such as increases in real income and changes in the composition and policies of central and local government. In 1975 lowest satisfaction was with 'The Quality of Life in Britain today'. In view of the economic crisis, cut-backs, and unemployment rates experienced in Britain during 1976 the absence of data from the planned follow-up survey seems unfortunate.

Table III Satisfaction with major life domains and with life as a whole (1971–1975)

Great Britain — Various units

	Mean satisfaction rating			Proportion dissatisfied			Proportion completely satisfied			Correlation with overall life satisfaction		
	1971	1973	1975	(1–3) 1971	(0–4) 1973	(0–4) 1975	(7) 1971	(10) 1973	(10) 1975	1971	1973	1975
Marriage	9·2	..	..	3	..	..	68	..	..	0·23	..	..
Family life	8·5	..	8·8	5	..	4	52	..	55	0·39	..	0·37
Job[1]	8·3	8·3	8·0	5	2	2	41	32	29	0·34	0·46	0·42
Town	..	7·8	8·1	..	8	6	..	32	36	..	0·31	0·25
Health	7·9	7·7	7·8	10	10	8	41	31	27	0·25	0·35	0·38
District	7·9	7·5	7·9	6	11	9	29	28	33	0·23	0·27	0·28
Being a housewife[2]	7·9	..	8·1	11	..	7	42	..	38	0·34	..	0·54
Leisure	7·6	7·5	7·7	11	7	6	34	22	27	0·41	0·41	0·52
House	7·4	7·8	7·8	8	7	8	26	28	28	0·18	0·35	0·37
Standard of living	6·9	7·4	7·7	13	7	5	19	19	23	0·37	0·56	0·53
Education	6·5	6·7	6·9	17	13	13	20	14	18	0·27	0·34	0·23
Democracy	6·1	6·7	7·3	18	9	6	12	9	13	0·26	0·22	0·23
Financial situation	5·5	6·6	7·3	30	15	10	10	12	19	..	0·51	0·52
Life in Britain	..	..	6·5	..	..	15	..	..	10	..	..	0·32
Life as a whole	7·8	7·6	7·8	4	4	3	26	19	20	–	–	–

[1] All working including part-time. [2] All full-time housewives.

Relationship between objective and subjective measures

Some idea of the relationship of subjective satisfaction measures to actual or reported differences in objective circumstances can be obtained from the data on housing and health shown below. Any strong and systematic linear relationships should be revealed by differences in mean scores in that we would expect higher scores for 'better', advantageous, or desirable circumstances and lower scores for the less advantageous or desirable. The inclusion of objective and subjective measures in linear models to predict variation in satisfaction with housing, local district, or life as a whole is reported elsewhere (Hall and Ring, 1974; Hall, 1975).

At sub-domain levels there is a high degree of sensitivity of reported satisfaction with a specific aspect of a domain to measurable differences in that aspect. At the global level of domain satisfaction these differences remain, but tend to be smaller; and at the level of satisfaction with life as a whole they may disappear altogether. A question for researchers would be to ask whether there exists a set of objective circumstances which will give the enormous differences in reported satisfaction with life as a whole as, for instance, not having a bath in the house makes to reported satisfaction with facilities for baths. Whilst we ourselves have not yet mounted a search for such objective measures, we doubt that we shall find them in our data.

What do make for big differences in life satisfaction are large differences in subjective measures. It may well be that subjective measures are as objective as 'objective' measures and can be used in the same way by policy makers and policy-evaluators. But if not, at least subjective indicators may be used to weight objective indicators when decisions need to be made in a *ceteris paribus* situation. A crude example would be that, subjectively, it is much worse not to have a bath at all than to have to share one, but sharing a kitchen is just as bad, subjectively, as not having a kitchen at all. A more complex example might indicate that expensive improvements to immediate environment will make no difference to community satisfaction if every other house in the neighbourhood has 3 children under 5 years old living in it. Whilst it may be difficult to attach a money cost to these situations, it seems plausible to attach a satisfaction or distress cost.

Housing

In addition to the global measures of satisfaction with 'your house or flat' and 'local district', satisfaction ratings were obtained in 1973 and 1975 for a number of aspects of each, some specific, some more generalised. The aspects chosen for study were mostly derived from the more frequent responses to open-ended questions in the 1971 studies, but items were also deliberately constructed to represent the various need-levels outlined by Maslow (1954) even if these may not have been present in earlier responses. Respondents were thus encouraged to think of their housing and their immediate local environment in wider terms than might otherwise have been the case. The 1975 survey was deliberately used to collect substantial and detailed information on housing and health with the specific intention of investigating the relationship of objective and subjective measures.

The items eventually used in the list for housing satisfaction and the results obtained are shown in Table IV.

Table IV Satisfaction with house or flat, 1973–1975

Great Britain

	Mean satisfaction rating with specified aspect		Zero-order correlation with overall housing satisfaction	
	1973	1975	1973	1975
Number of rooms	8·3	8·2	0·41	0·50
Baths or showers	8·1	8·4	0·47	0·52
Keeping it clean and tidy	8·1	8·2	0·42	0·46
Privacy from neighbours	7·9	8·3	0·41	0·41
Damp and condensation	7·3	7·6	0·49	0·51
Warmth in winter	7·1	7·0	0·46	0·52
Noise	7·0	8·1	0·38	0·35
View from windows	6·7	7·2	0·46	0·42
Kitchen	6·7	6·7	0·47	0·49
Cost	6·6	6·5	0·34	0·23
Size and shape of rooms	..	7·9	..	0·57
Internal repair and decoration	..	7·7	..	0·58
External appearance	..	7·4	..	0·58

In both 1973 and 1975 the average house-satisfaction rating for the whole sample was 7·8, with 28 per cent indicating complete satisfaction. In addition to the subjective satisfaction ratings for the various aspects of housing, we have hard data relating to the dwelling itself. These data together with multivariate analysis offer some validation of the subjective measures and the final global rating as an overall measure of housing satisfaction. The hard measures show expected association with both the overall satisfaction with dwelling and, where obtained, satisfaction with the relevant aspect. Owner-occupiers are more satisfied than council tenants who in turn are more satisfied than private-unfurnished tenants (Table V).

As would be expected, those who do not have, or have to share, a bath, a toilet, or kitchen are much less satisfied with their dwelling than those who

Table V Housing tenure and housing satisfaction, 1971–1975

Great Britain Means and numbers

	1971a	1971b	1973	1975
Mean satisfaction with house or flat				
Owners	8·2	7·6	8·7	8·6
Mortgagees			8·2	8·2
Council rented	6·9	7·2	7·2	7·4
Rented unfurnished	7·5	6·9	6·8	6·9
Number in sample	213	593	966	932

have exclusive use. Sharing a toilet or kitchen, or not having a separate kitchen, is associated with particularly low levels of dwelling satisfaction. Those who have a garden, garage, or central heating are, naturally, more satisfied than those who have not.

Occupants of detached houses score higher than those in semi-detached, who in turn score higher than those in terraced houses, and these latter are more satisfied than people who live in flats or maisonettes.

More internal evidence of validity is given by the enormous differences in satisfaction with particular aspects of their housing of those for whom the relevant objective condition differs. In houses with no fixed bath or shower, satisfaction with facilities for baths or showers was 1·5 in 1973 and 2·2 in 1975 as against 8·6 and 8·7 in houses with exclusive use of fixed baths. In houses without inside flush WCs the figures were 3·3 and 4·5 as against 8·6 and 8·7. In 1975 those who had piped hot water for their baths scored 8·8 but those who had to heat water in a kettle or pan scored only 3·9 (Table VI).

The detailed data on other housing circumstances for 1975 show a similar pattern to those for standard amenities; but the relationships between satisfaction ratings and related conditions, whilst consistent, are not in all cases so strongly marked. Thus respondents living in houses built before 1945 are generally, but only slightly, less satisfied with 'the general state of repair and decoration inside' than are those living in more modern houses. Those who live in detached houses are more satisfied with 'its appearance from the outside' than are those who live in other types of housing. The greater the cost of rent or mortgage payments plus annual repairs and maintenance costs, the less satisfied people are with housing costs. Central heating is associated with higher satisfaction for 'keeping it warm in winter' than other types of heating (in the main living room). Those whose houses front open country or residential areas with gardens and trees are more satisfied with 'the view from your windows' than those who look out into treeless or gardenless housing, factories, or shops and offices.

Table VI Mean satisfaction ratings for specified housing conditions, 1975[1]

Great Britain Means

	Mean overall satisfaction with house	Mean satisfaction with specific aspect	Satisfaction item
Building type			
Detached	(8·7) 8·6	8·4	'Its appearance
Semi-detached	(8·1) 8·1	7·9	from the
Terrace	(7·4) 7·4	6·9	outside'
Flat or maisonette	(7·3) 7·3	6·6	"
Fixed bath or shower			
None	(5·8) 5·5	(1·5) 2·2	'Facilities for
Shared	(7·3) 7·3	(7·1) 6·9	baths or
Exclusive	(8·0) 8·0	(8·6) 8·7	showers'
Inside flush toilet			
None	(6·4) 6·5	(3·3) 4·5	"
Shared	(7·2) 6·9	(6·9) 6·7	
Exclusive	(7·9) 8·0	(8·6) 8·7	
Hot water for bath or shower			
Piped	8·1	8·8	
Geyser	7·5	8·2	
Kettle	6·0	3·9	
Method of heating living-room in winter			
Central heating	8·3	8·4	'Keeping it
Electric storage	8·9	8·1	warm in
Solid fuel	7·9	6·8	winter'
Gas fire	7·6	6·5	
Electric fire	7·1	5·4	
Other	6·4	4·5	
Cost of rent, rates, etc.			
Under £5 p.w.	7·7	7·2	'The cost of
£5 under £10	7·6	6·4	(rent/mort-
£10 under £15	7·7	5·9	gage) rates,
£15 under £25	7·8	6·0	repairs, etc.'
£25 under £35	8·0	4·9	
£35 or more	8·1	5·3	
Date of construction			
1899 or earlier	7·5	7·2	'The general
1900–1918	7·7	7·9	state of repair
1919–1944	7·8	7·6	and decoration
1945–1964	8·1	8·3	inside'
1965 or later	8·2	8·0	
View from front			
Open country, trees	7·8	8·4	'The view
Gardens, trees	8·1	7·6	from your
No gardens or trees	7·4	6·4	windows'
Industrial	7·2	5·4	
Commercial, shops	7·4	5·4	
Other	7·7	3·9	

[1] 1973 figures in brackets.

One promising type of subjective indicator tried out in 1975 seems to be strongly related to satisfaction ratings and may well be more acceptable to sceptics, while retaining the essentially *experiential* component. Respondents were asked to indicate the extent to which, during the past few weeks, they had been bothered by ten types of nuisance, five of which related to noise and five to other sources of nuisance. Those who claimed to have been bothered 'a lot' or 'a great deal' by noise from neighbours or industry were least satisfied (5·6) with their housing. Noise from children or traffic and trains was associated with slightly less dissatisfaction (6·5, 6·7), but noise from aircraft does not appear to be associated with anything like the same degree of dissatisfac-

tion (7·3). Satisfaction with 'noise' in the neighbourhood drops significantly for those claiming to be bothered by noise, and again noise from industry seems to generate greatest dissatisfaction (3·0) and noise from aircraft the least (5·9) (Table VII).

Housing satisfaction ratings associated with high levels of other nuisances were 5·4 for damp, 5·6 for 'rats or mice', 6·3 for 'insects getting in the house' and 'smoke, soot, fumes, smells, dirt or dust in the air outside', and 6·6 for 'condensation or ventilation problems'. A *Housing Nuisance Index* was derived from these items which has a striking association with levels of housing satisfaction. Respondents not bothered at all by any kind of nuisance scored 8·5 whereas those reporting four or more sources scored 2.8. (Noise items were collapsed to a single measure for this purpose.)

Table VII Housing nuisance index, 1975

Great Britain Means and percentages

	Percentage bothered 'a lot' or 'a great deal'	Mean satisfaction with house
Component items:		
Noise from:		
Traffic or trains	13	6·7
Children	11	6·5
Neighbours	5	5·6
Aircraft	4	7·3
Industry	2	5·6
Other:		
Condensation	20	6·6
Air pollution	12	6·3
Damp	11	5·4
Insects	3	6·3
Vermin	2	5·6
	Percentage in category	**Mean satisfaction with house**
No. of sources of nuisance: (Noise once only)		
None	57	8·5
One	25	7·6
Two	11	6·7
Three	4	6·1
Four or more	3	2·8
Total	100	7·8

Health

The second area in which we examined the relationship between subjective and objective indicators was health. Most people would agree that good health is a prerequisite in any index of individual or national well-being. All our surveys included the question *Do you yourself have any long-standing physical disability or health trouble?* (IF YES) *Does it keep you from doing things you might like to do?* This yields three categories of self-reported disability: first, those reporting no long-term disability; second, those reporting such disability but who do not feel limited by it; third, those who claim to be limited in their normal activities by some long-standing disability or health problem. In all three surveys satisfaction with health is highest for the first group and lowest for the third.

Table VIII Health condition and health satisfaction

Great Britain Means and percentages

	Percentage in category			Mean satisfaction with health		
	1971	1973	1975	1971	1973	1975
No chronic problem	72	68	74	8·7	8·6	8·6
Problem, not limiting	12	7	8	6·9	7·5	7·3
Limiting problem	16	25	19	4·9	5·4	5·2

Partly on the grounds of providing more 'objective' measures of health, and partly as a means of measuring stress, the 1975 survey included the battery of health symptoms used by Bradburn (1969) with three extra items added. From these it is possible to construct general indices of poor physical health and of anxiety. Since a great deal of work in the mental health field purports to show high diagnostic value of scores on such scales for identifying persons possibly in need of psychiatric help, such a scale, if it were robust, valid, and reliable, should provide a major 'objective' tool for the measurement of quality of life.

At least half the sample were free of each symptom, except for 'aches and pains' (44 per cent), and more than three-quarters were free of some of the more severe symptoms. Seventeen per cent were bothered 'a lot' or 'a great deal' by 'aches and pains' and 'getting to sleep', 14 per cent by 'nervousness', and 13 per cent by 'headaches', 'cold or flu', or 'feeling run down'. Of the more severe symptoms, only 3 per cent had been bothered by skin rashes, 4 per cent by rapid heart-beat, and 5 per cent by sweating hands. The highest correlations with health satisfaction were for 'feeling run down' (0·55) and 'nervousness' and 'aches and pains' (0·49); the lowest were for 'cold or flu' (0·15) and 'skin rashes' (0·17) (Table IX).

An index of poor physical health was calculated as the sum of endorsements of the five items 'Dizziness', 'General aches and pains', 'Hands sweating and feeling damp and clammy', 'Headaches', and 'Rapid heart-beat'. An index of anxiety was calculated in the same way from the three items 'Nervousness or tenseness', 'Trouble getting to sleep at night', and 'Not having enough energy to do all the things you would like to do'.

As in the case of housing, the single item measuring satisfaction with health is highly sensitive to differences in the number of symptoms admitted and on indices derived from the symptoms.

Table IX Health symptoms, 1975
'To what extent, if any, were you bothered by . . . . . during the past few weeks?'

Great Britain Various units

	'Not at all'	'A little'	'Quite a lot' and 'A great deal'	Total in sample (=100%)	Zero-order corr. with overall sat. with health
Percentage bothered by:					
Aches and pains	44	38	17	924	0·49
Headaches	53	34	13	930	0·30
Feeling run down	55	33	13	930	0·55
Cold or flu	56	31	13	922	0·15
Nervousness	56	30	14	930	0·49
Trouble getting to sleep	65	18	17	931	0·42
Upset stomach	71	22	7	930	0·34
Trouble staying asleep	75	13	12	930	0·37
Shortness of breath	77	15	7	930	0·43
Dizziness	82	12	6	929	0·34
Twitching or trembling	82	12	7	929	0·34
Rapid heart-beat	85	11	4	928	0·35
Sweating hands	86	9	5	928	0·25
Skin rashes	89	8	3	928	0·17

Differences in health indices are also associated, but less strongly, with differences in self-reported life-satisfaction. Respondents with high levels of symptom admission are more likely to have consulted their doctors within the last four weeks and to have taken medication prescribed by a doctor (Table X).

Table X Health indices, 1975

Great Britain Various units

		Mean satisfaction with health	Percentage taking prescribed medicine	Total in sample
Number of the five symptoms[1] indicating poor health exhibited	None	9·1	13	237
	One	8·2	32	280
	Two	7·5	43	231
	Three	6·9	51	113
	Four	5·6	68	47
	Five	4·8	88	24
Number of the three symptoms[1] indicating anxiety exhibited	None	9·1	15	320
	One	8·3	34	287
	Two	6·8	48	203
	Three	5·1	73	122
Index of limitation by recent illness or chronic disability	None	8·8	18	562
	No limitation	7·6	48	92
	Some limitation	6·0	68	275
Most recent consultation with doctor: within last 7 days		7·1	67	111
„ „ 4 weeks		7·0	69	214
„ „ 3 months		7·7	39	173
„ „ 12 months		8·1	14	220
a year or more ago		8·9	5	205

[1] As defined in paragraph above.

Satisfaction with health fell steeply, from 9·1 for those with none of the symptoms in either index, to 4·8 for those with all five symptoms of poor health and 5·1 for those with all three symptoms of anxiety. Similarly, the proportion of respondents taking medication prescribed by a doctor climbed steeply, from 15 per cent and 13 per cent to 88 per cent and 73 per cent respectively.Those who had experienced no recent illness or chronic disability scored 8·8 for satisfaction with health, and 18 per cent of them had taken prescribed medication; but those whose activities were limited by recent or chronic ill-health scored only 6·0, and 68 per cent of them were on prescribed medication. The longer the interval since the last visit to a doctor the higher the satisfaction with health and the lower the proportion taking prescribed medication. As with housing, it would seem that the health symptom index might substitute for satisfaction ratings and overcome the scepticism of some policy-makers.

Perceived equity in standard of living

Instead of attempting to measure evaluations directly, it is sometimes useful to measure indirectly by obtaining some measure of distance from a desired or ideal condition. Using a scale in which the top represented 'highest possible' and the bottom 'lowest possible' we asked respondents in both 1973 and 1975 to estimate the present standard of living[3] of fourteen broadly defined occupational groups and one ethnic group. This measure gave both a comparative ranking of public perception of each group's present standard of living and a ranking of its perceived comparative deprivation. The scale was also used to obtain ratings of the respondents' perceptions of their own standard of living, not only present and deserved, but also past and anticipated. From these data all manner of relative deprivations and advantages can be calculated, and changes in rank over time can be measured. Since we also asked respondents which of the groups they themselves came in, or were closest to, we can obtain a measure of how closely they

[3] *Standard of living* had been defined thus: 'The things that people can buy and do – their housing, furniture, food, cars, recreation, and travel – make up their standard of living'.

identified themselves with the fortunes of the group they said they were in.

In terms of present standard of living the groups emerge clearly ranked, with professional and executive groups at the top and welfare recipients and pensioners at the bottom. The top five ranks and the bottom three were the same in both 1973 and 1975. In our respondents' ideal society the rank orders would remain largely the same, but with some exceptions. Investors and shareholders would be demoted from second place to seventh or eighth, and pensioners would be promoted from fourteenth to ninth. Uniformed public service workers improved their rank from eighth to sixth in present standard of living and from fourth to equal second in entitlement. Skilled workers ranked fifth for present and second for deserved standard of living in both surveys. Thus, even though changes in absolute levels appeared desirable, these only marginally affect the relative placings of the groups. Coloured people living in Britain were perceived as having a low place both in present and deserved standards of living (Table IX).

In 1975 most groups were perceived to be closer to their entitlement than in 1973, usually because of a perceived increase in present ratings. However, the shortfall between present and entitlement was seen to have widened for two groups. In the case of shopkeepers and small proprietors this was due to a drop in present ratings, and in the case of professional people such as doctors and lawyers to an increase in entitlement. It should be remembered that, during the 1975 fieldwork, the hospital consultants were working to rule. Three groups apparently closer to their entitlement had achieved this by a reduction in perceived entitlement in the eyes of the public: these were students, welfare recipients, and coloured people.

Examination of the perceptions each group had of the standard of living of the other groups reveals one potentially alarming trend. In 1973 only two groups were thought to be getting more than they deserved, not only by the whole sample but also by each of the other groups; these were 'investors and shareholders' and 'company directors and business executives'. In 1975, as things began to get tight in Britain, negative shortfalls began to appear elsewhere, and this may be evidence of scape-goat seeking and incipient polarisation. Civil servants were thought to be overprivileged by labourers, company executives, professional people, policemen, and welfare recipients; labourers and unskilled workers were thought to be so by company executives. Welfare recipients enjoyed too high a standard of living for company executives, civil servants, small proprietors, and policemen; and coloured people's standard of living was too high for policemen and labourers. In view of the recent electoral advances of ultra-right candidates and increased community tensions, such as seen during the Notting Hill Carnival, 1976, it seems unfortunate that no replication of the survey was available for mid-1976.

Perceptions of trends in personal standard of living have changed so that people, instead of expecting a steady and significant improvement as in 1973, had switched to a steady but maintained level in 1975. Had data been available for 1976 it is possible that these would have shown a steady, but significant, decline.

Table XI Comparison of perceived levels of living in 1973 and 1975

	Great Britain				Means	
	Now		Deserved		Shortfall	
	1973	1975	1973	1975	1973	1975
(a) – Mean ratings of standard of living ascribed to various groups by whole sample:						
Directors and executives	9·1	9·0	8·4	8·5	−0·7	−0·5
Doctors and lawyers	8·9	8·5	9·2	9·4	0·3	0·9
Investors and shareholders	8·7	8·4	7·6	7·7	−1·1	−0·7
Civil servants	7·4	7·6	7·8	7·7	0·4	0·1
Skilled workers	7·2	7·4	8·4	8·5	1·2	1·1
Teachers	6·9	6·7	8·1	8·0	1·2	1·3
Small businessmen	6·9	6·6	8·0	8·1	1·1	1·5
Uniformed public service	6·4	6·7	8·3	8·5	1·9	1·8
Clerks	6·2	6·3	7·4	7·4	1·2	1·1
Personal service	5·4	5·5	7·3	7·3	1·9	1·8
Labourers	5·2	5·6	7·0	6·9	1·8	1·3
Students	5·0	5·3	6·3	6·1	1·3	0·8
Welfare recipients	4·6	5·0	5·6	5·4	1·0	0·4
Pensioners	3·8	4·5	7·4	7·4	3·6	2·9
Coloured people	5·3	5·7	6·5	6·2	1·2	0·5
Yourself	6·4	6·6	8·0	8·0	1·6	1·4

(b) – Perceived trends in personal standard of living:	1973	1975
5 years ago	6·0	6·5
Now	6·4	6·6
5 years time	7·0	6·7
Entitled	8·0	8·0

Perceived political equity

It is a central tenet of a social democracy that a just society is necessary for human fulfilment. A number of items were included from 1971 onwards intended to measure perceptions of various aspects of the British political system. In 1971 a numbered scale, ranging from 'None or not at all' to 'A very great deal', was used to ask people how much they thought there was in Britain of certain elements assumed to be desirable. In 1973 and 1975 the number of elements was increased and the metric extended to ask not only how much people thought there was at the present time, but also how much they thought there *ought* to be.

Table XII Comparison of perceived levels of freedom and democracy in Britain

Great Britain Means and proportions

	Mean rating[1]							Proportion stating			
	Now			Ought to be		Shortfall		Should be at least one point less		Should be at least two points more	
	1971	1973	1975	1973	1975	1973	1975	1973	1975	1973	1975
Freedom of speech	7·8	7·5	8·3	8·9	9·1	1·4	0·8	6	8	28	13
Democracy	6·1	6·9	7·3	8	8·9	1·9	1·6	3	5	35	26
Pride in being British	..	..	6·9	..	9·4	..	2·5	..	1	..	44
Equality for women	..	..	6·9	..	8·6	..	1·7	..	7	..	32
Government information	..	..	6·4	..	5·2	..	−1·2	..	47	..	9
Tolerance	5·9	5·7	6·4	8·3	8·4	2·6	2·0	6	9	50	38
Social equality	..	5·5	6·0	8·6	8·4	3·3	2·4	2	3	58	45
Censorship	..	..	5·3	..	6·2	..	0·9	..	22	..	30
Easy to understand politics	5·1	5·3	5·2	8·9	8·9	3·6	3·7	–	1	64	63
Influence of voters	3·6	4·8	5·3	8·8	8·7	4·0	3·4	–	1	67	58
Respect for law and order	..	..	4·8	..	9·4	..	4·6	..	–	..	78

[1] On 0–10 scale.

The two measures can then be compared and a discrepancy measure generated for each element.

From 1971 to 1975 there were improvements in perceived levels of freedom of speech, tolerance, democracy, and influence of voters. However, ease of understanding politics and government remained depressingly low throughout. There was a small increase in perceived social equality between 1973 and 1975. All improvements were due to perceived increases of the present levels, since the desired levels remained steady. It is the shortfalls between present and desired levels which are important, since a low value for a particular element may be highly desirable to some people or even to many. Thus, voter influence and understanding of politics were still a long way short of ideal; and there was a fair way to go for social equality, tolerance, and democracy in spite of improvements between 1973 and 1975. To judge by the items asked only in 1975, there was nowhere near enough respect for law and order, nor was there sufficient pride in being British. Women's equality had a little way to go, censorship was about right, and the government should have collected and kept less information on individual citizens (Table XII).

Any set of political values is bound to have dissidents as well as adherents. Thus, even in 1975 there were those who thought there should be less tolerance (9 per cent), less freedom of speech (8 per cent), and less equality for women (7 per cent), that Britain should be less democratic (5 per cent), and that the government should collect and keep more information on individuals (9 per cent). Censorship is the most contentious issue since, although its shortfall of 0·9 is the second smallest, the 22 per cent who thought there should be less were outnumbered by the 30 per cent who thought there should be a lot more.

Small area data

In recent years there has been a great deal of interest in small area indicators (Holtermann, 1975) and some of the standard census indicators have been subjected to great scrutiny in order to identify areas of privilege and deprivation. An advantage of the subjective approach is that it becomes possible to measure people's feelings about the areas they live in and to relate these to census indicators. Subjective indicators may then be used to modify the interpretation of objective measures and perhaps suggest priorities for intervention or new types of objective indicators.

Hall and Ring (1974) appealed for survey interviews to be coded by geographical location so that sociological and psychological measures could be mapped in space and related to other variables. Whilst they did not expect the 1-metre National Grid references already used by some local authorities, they did suggest a practicable goal of always coding the wards of local authorities in which the interviews were conducted.

An advantage of this is that in those areas where government and local authorities collect and publish statistics at ward level, every survey is immediately open to enrichment by the addition of known data about the locality in which it took place. Moreover, it also enriches the stock of data on wards themselves which can then become units of analysis. Localised social indicators are already submitted to regression analysis to determine the needs element of the Rate Support Grant and subjective indicators have been used to inform and evaluate social policy in Cleveland, Newcastle-upon-Tyne, Strathclyde, and Thamesdown.

Table XIII Relationship of satisfaction with local district to variations in level of census indicators

Sunderland, Nov. 1973–Feb. 1974 Various units

	Level of indicator	Mean satisfaction with district (of respondents living in wards with specified level of indicator)
Census indicator (percentages unless shown)		
Population		
Aged 0–4	Less than 8%	8·5
	8% or more	7·0
Children aged 0–4 per 1,000 women aged 15–44	Less than 420	8·3
	420 or more	7·0
Aged 0-14	Less than 25%	8·1
	25% or more	7·3
Aged 60 or over	Less than 19%	7·2
	19% or more	8·2
Single person households	Less than 17%	7·6
	17% or more	7·9
Households with 6 or more persons	Less than 7%	8·1
	7% or more	7·3
Households at more than $1\frac{1}{2}$ persons per room	Less than 3%	8·1
	3% or more	7·1
Other		
Households in owner-occupation	Less than 26%	7·3
	26% or more	8·0
Households renting from local council	Less than 30%	8·1
	30% to 59%	7·8
	60% to 79%	7·8
	80% or more	6·8
Households with exclusive use of basic amenities	Less than 76%	7·4
	76%–90%	8·3
	91% or more	7·5
Households with access to car	0%–30%	7·1
	31%–40%	8·1
	41% or more	8·5
In Social Class I or II	Less than 5%	6·7
	5%–9%	7·6
	10%–19%	7·9
	20% or more	9·3
In Social Class IV or V	Less than 20%	9·3
	20%–29%	7·7
	30%-34%	7·3
	35% or more	7·2

The 1973–74 Sunderland Quality of Life survey[4] was enriched in this way by the addition of census and planning data available at ward level. Whilst there is a problem that wards tend to be quite large in area and that we have no smaller sub-divisions for which data are available, it is encouraging that, even at this crude level of precision, the relationships which emerge between hard measures and subjective survey responses, though unsurprising, are quite striking.

[4] The SSRC Survey Unit was contracted by the Department of the Environment to replicate the Quality of Life survey in Stoke-on-Trent and Sunderland simultaneously with the national urban survey in 1973 (Contract No. DGR/B/44). The report to the DOE on the leisure aspects has been published separately (Hall & Perry, 1974).

Sunderland is a much surveyed town, and the Birmingham University study of perception of local areas in 1973 outlines the problems of measuring associated with words such as 'area' and 'district' (Donnelly, Goodey, and Menzies, 1973). Whilst we are aware that ward boundaries in no case ever coincide with the boundaries of 'this local district', and that indeed most people will not know where ward boundaries are, the overall satisfaction rating for district appears to be sensitive to differences in the characteristics of wards as measured by census indicators. Differences in satisfaction with specific aspects of local district are also consistently and systematically related to ward census indicators, especially those related to class or wealth, or to the indicators used as measures of social malaise.

Thus, higher satisfaction with local district is expressed by those living in wards with low proportions of young children, higher proportions of older people, lower proportions of large households, and lower levels of overcrowding. Those living in wards with high levels of home and car ownership, with high proportions of professional and managerial workers and corresponding lower proportions of semi-skilled and unskilled workers, are more satisfied than their less well endowed counterparts. However, the proportion of single person households and level of household amenities does not seem to be associated with satisfaction in the same way. A selection of indicators and associated satisfaction levels is given in Table XIII. It remains to be seen whether a similar pattern emerges for the national survey or for the parallel survey of Stoke-on-Trent.

Global measures of well-being

Of course, 'satisfaction' is only one dimension of the many needed to give a full account of human fulfilment and happiness, and satisfaction can change its meaning depending on its context. McKennell (1973) has already isolated cognitive and affective (roughly intellectual and emotional) components in data from Britain and the USA. Awareness of this led us to include other measures designed to tap a general sense of well-being, such as the extent to which people feel they wish to change their present lives, or have choice and control over the way life has turned out for them. They have also been asked how much they worried 'these days', how well they felt they were doing in achieving life's goals, and also how happy they felt. Other more complex measures were used in 1975 to measure personal efficacy, disposition to trust other people, and the balance of positive over negative mood states during the recent past. These latter were the ten item 'Affect Balance Scale' described by Bradburn (1969), and a three item 'Trust in Others' scale together with a four

Table XIV Measures of affect and syndromes, 1975

Great Britain — Various units

a. Endorsement of items composing scales (percentages)

Positive affect		*Negative affect*	
Excited	40	Restless	24
Proud	43	Lonely	18
Pleased	60	Bored	28
On top of the world	41	Depressed	24
Things going your way	60	Upset	14

b. Scores on subscales

	0	1	2	3	4	5	Sample total (=100%)	Mean
	(percentages)							
Positive affect	15	16	20	20	17	12	*932*	2·5
Negative affect	45	25	14	10	5	1	*932*	1·1

c. Affect balance (positive affect minus negative affect)

−5	−4	−3	−2	−1	0	+1	+2	+3	+4	+5	Sample total (=100%)	Mean
(percentages)												
0	1	3	6	7	14	18	19	16	12	4	*932*	1·4

d. Personal competence (4 equals high)

0	1	2	3	4	Sample total (=100%)	Mean
(percentages)						
13	25	29	24	9	*932*	1·9

e. Trust in others (3 equals high)

0	1	2	3	Sample total (=100%)	Mean
(percentages)					
18	19	28	35	*932*	1·8

item 'Personal Competence' scale used by the University of Michigan in 1971 (Campbell, Converse, and Rodgers, 1976).

The Affect Balance Scale consists of five positively-worded and five negatively-worded items, the endorsements to which are summed to yield two measures, 'positive affect' and 'negative affect'. Affect Balance is calculated as the extent to which positive affect is greater or less than negative affect. Scores on the two components have been found to be completely uncorrelated in the USA, and this finding is replicated in the British data (Pearson product moment coefficient = 0·002). The distribution of scores for positive affect was very flat, but that for negative affect closely resembled a Poisson distribution. The distribution of affect balance appeared to be approximately normal, with a slight skew towards a positive score, and a long tail for high negative scores.

Personal competence levels were evenly spread in the centre of the range, with only 13 per cent scoring zero and only 9 per cent the maximum score of five. Trust in others tended to be high, with 35 per cent obtaining the maximum score, but nonetheless 18 per cent remaining very untrusting. Whilst affect balance scores varied markedly according to age, sex, or class, there was no such variation for competence or trust. All three types of measure were strongly and systematically related to other subjective measures. Detailed analysis of these measures is reported elsewhere (Hall, 1976). The Affect Balance Scale was particularly sensitive to differences in personal circumstances and may well be preferable to other measures as a dependent variable. Only further fieldwork will test its robustness and reliability (Table XIV).

A word of caution

In pursuing the development and application of sophisticated and complex indicators, or the use of advanced scaling techniques, it is important not to overlook the simple indicators which can be of equal if not greater relevance to the quality of life as experienced by individual Britons. Loneliness can often be relieved by the reassuring presence of a pet, and holidays are well known for their tonic value.[5] Large numbers of our citizens still live in bad housing conditions, have dirty or dangerous jobs, suffer from poor health or other disabilities, and face a daily struggle to survive in spite of the availability of state benefits. Of those whose weekly household incomes were less than £15 in 1975, only half had had a holiday in the previous twelve months and 15 per cent had not had one

[5] For objective data see the Leisure section, pages 173 to 183.

for ten years or more. In contrast, four fifths of those with household incomes of £80 a week or more had had a holiday in the last year and only 2 per cent not for ten years. Of those whose heads of households were in the higher social grades, 26 per cent had had a holiday abroad in the last twelve months, 3 per cent no holiday for ten years, and there was not a single case of anyone in that category who had never had a holiday: the corresponding figures for those dependent on welfare benefits and state pensions were 4 per cent, 14 per cent, and 10 per cent. These and other indicators show clearly how it is better to be middle-class or highly paid in Britain today (Table XV).

Table XV Holidays, class, and income, 1975

Great Britain Percentages and numbers

	Year of most recent holiday				
	1974/75		1965 or earlier	Never had a holiday	Sample size (=100%)
	Abroad	Britain			
Social class of head of household: (percentages)					
AB	26	54	3	–	152
C1	12	55	3	1	187
C2	10	49	3	5	295
D	10	44	8	6	173
E	4	42	14	10	125
Gross household income: (percentages)					
Under £15	4	46	15	7	68
£15 but under £25	1	47	9	8	106
£25 ,, ,, £35	9	38	8	6	88
£35 ,, ,, £45	8	45	4	4	104
£45 ,, ,, £60	14	56	3	3	148
£60 ,, ,, £80	15	57	3	2	112
£80 or more	30	49	2	3	113

Conclusions and proposals for future

If one were to think in terms of a 'best buy' in the subjective indicators field from among those reported here, it would seem to be valuable to emphasise the Housing Nuisance Index and the Health Symptom Index as potentially useful policy tools. For the political scientists the concept of equity shortfalls in democracy and material rewards for occupational groups seems to offer rich pickings, and the measures described appear to be sensitive to changes in national mood. For the psychometricians the Affect Balance Scale and the syndrome measures afford many analytical possibilities, together with various semantic differential techniques tried out between 1971 and 1975. The 'satisfied–dissatisfied' metric appears to be reasonably efficient, but the length of the scale needs to be investigated, as does the semantic content of each pole. Responses on 1–7 scales tend to bunch at the upper end, and those on 0–10 scales are unevenly distributed in peaks and troughs. The Ornauer and Galtung 1–9 scale[6] appears to avoid bunching and also to yield distributions approaching a normal curve. Unfortunately Cantril omitted Britain from his large cross-national study and so it is still necessary to ask the British what, for them, constitute the best possible and the worst possible futures (Kilpatrick and Cantril, 1960).

The range of life-domains needs expanding to include role-performance, self-fulfilment, personal relationships, culture, and other areas not yet investigated in Britain. We have consciously avoided any attempt at measurement of intelligence or sexual behaviour and satisfaction, or at psychiatric diagnosis, believing these to be properly the sphere of other professional competences than our own. However, joint investigations relating such areas to our own indicators would be more than welcome.

The programme of research followed by the SSRC Survey Unit on a limited budget and with limited resources has demonstrated both the feasibility of subjective indicators and their legitimacy, not only as an area of academic social research, but also as an integral part of policy formulation and evaluation. It is important to have a degree of flexibility to be able to react to external events. The social researcher, unlike the laboratory scientist, is unable to manipulate the context in which he carries out his research. Sometimes an event occurs which materially affects his results, and if he is able to monitor the situation before and after such an event this is a useful bonus: for example, Bradburn was conducting a survey in 1963 when President Kennedy was assassinated, and was able to measure attitudes before and after that event.

While the 1973 survey was in the field, Mr Heath decided to go to the country in the General Election of February 1974. If fieldwork could have been extended through the hustings it would have been possible to have obtained an additional 1,000 interviews for around £7,000. However, the money was not available. In early and mid-1976 Britain faced its toughest economic crisis since the 1930s, unprecedented publicity was given to falling standards of living, there were campaigns to 'Save it', and coloured immigration flared up as an ugly issue in by-elections and in the shape of race-killings. A further £9,000 would have given readings on subjective indicators for 1976 from 1,000 of our 1973 and 1975 respondents, and incidentally have transformed our respondents into a panel to yield genuine time measures. In this case also the money was not available

[6] As used in a survey 'Images of the World in the year 2000', 1967, by H Ornauer and T Galtung. Data deposited at SSRC Survey Archive, University of Essex.

because of the very economic crisis which would have made the survey valuable to academics and policy makers alike.

What is needed now is guaranteed funding[7] for a programme of data collection over a period of at least ten years with large samples, preferably a panel, together with sufficient staff to work full time on development, analysis, and reporting. Such a programme would be likely to cost upwards of £250,000; but it would provide not only a rich source of data for years to come to enhance our understanding of society but also assist in the development of a scientific approach to formulation and evaluation of social policy, something we badly need at the present time.

[7] The 1971 British pilot surveys cost £460 and £1,600 respectively; in contrast the American pilot survey was funded to the tune of $250,000 and a Canadian study has just been awarded almost $1,000,000.

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