Chapter 1

Measuring poverty: Breadline Britain in the 1990s

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1 Measuring poverty: Breadline Britain in the 1990s

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Poverty and politics

During the 1980s the 'poverty debate' became much more politically sensitive than in the past. John Moore (who was then Secretary of State for Social Security) in his speech on 11.5.89 at St Stephen's Club claimed that poverty, as most people understood it, had been abolished and that critics of the government's policies were:

> "not concerned with the actual living standards of real people but with pursuing the political goal of equality ... We reject their claims about poverty in the UK, and we do so knowing that their motive is not compassion for the less well-off, it is an attempt to discredit our real economic achievement in protecting and improving the living standards of our people. Their purpose in calling 'poverty' what is in reality simply inequality, is so they can call western material capitalism a failure. We must expose this for what it is ... utterly false.
>
> – it is capitalism that has wiped out the stark want of Dickensian Britain.
> – it is capitalism that has caused the steady improvements in living standards this century.
> – and it is capitalism which is the only firm guarantee of still better living standards for our children and our grandchildren."

A senior Civil Servant, the Assistant Secretary for Policy on Family Benefits and Low Incomes at the Department of Health and Social Security (DHSS), had made the same point more succinctly when he gave evidence to the Select Committee on Social Services on 15.6.88. He stated "The word poor is one the government actually disputes."

Yet, despite the government's claim that poverty no longer exists, social attitude surveys have shown that the overwhelming majority of people in Britain believe that 'poverty' still persists. Even the 1989 British Social Attitudes survey, conducted at the height of the "Economic Miracle" found that 63% of people thought that "there is quite a lot of real poverty in Britain today" (Brook *et al,* 1992). The 1986 British Social Attitudes survey found that 87% of people thought that the government 'definitely should' or 'probably should spend more money to get rid of poverty'. In 1989, the European Union-wide Eurobarometer opinion survey found that British people thought the 'fight against poverty' ranked second only to 'world peace' in the list of great causes worth taking risks and making sacrifices for (Eurobarometer, November 1989). This view was widely held across the 12 member countries of the European Union, as shown in Table 1.1.

Table 1.1
Worthwhile great causes

Question: "In your opinion, in this list which are the great causes which nowadays are worth the trouble of taking risks and making sacrifices for?"

In order of preference	UK (%)	12 EC Countries (%)
World peace	71	75
The fight against poverty	57	57
Human rights	55	60
Protection of wildlife	48	57
Freedom of the individual	43	39
Defence of the country	41	30
The fight against racism	32	36
Sexual equality	25	25
My religious faith	18	19
The unification of Europe	9	18
The revolution	2	5
None of these	2	1
No reply	1	2

Some aspects of the increase in poverty in the 1990s have become very conspicuous. The 'problem' of homelessness is very visible; young people can be seen begging on the streets of virtually every major city in Britain. Sir George Young (then Housing minister) even noted that homeless beggars in London were "the sort of people you step on when you came out of the Opera" (Guardian 29.6.91 p.2). Similarly, the Prime Minister (John Major) claimed that

> "the sight of beggars was an eyesore which could drive tourists and shoppers away from cities" and "it is an offensive thing to beg. It is unnecessary. So I think people should be very rigorous with it" (Bristol Evening Post 27.5.94 p.1-2)

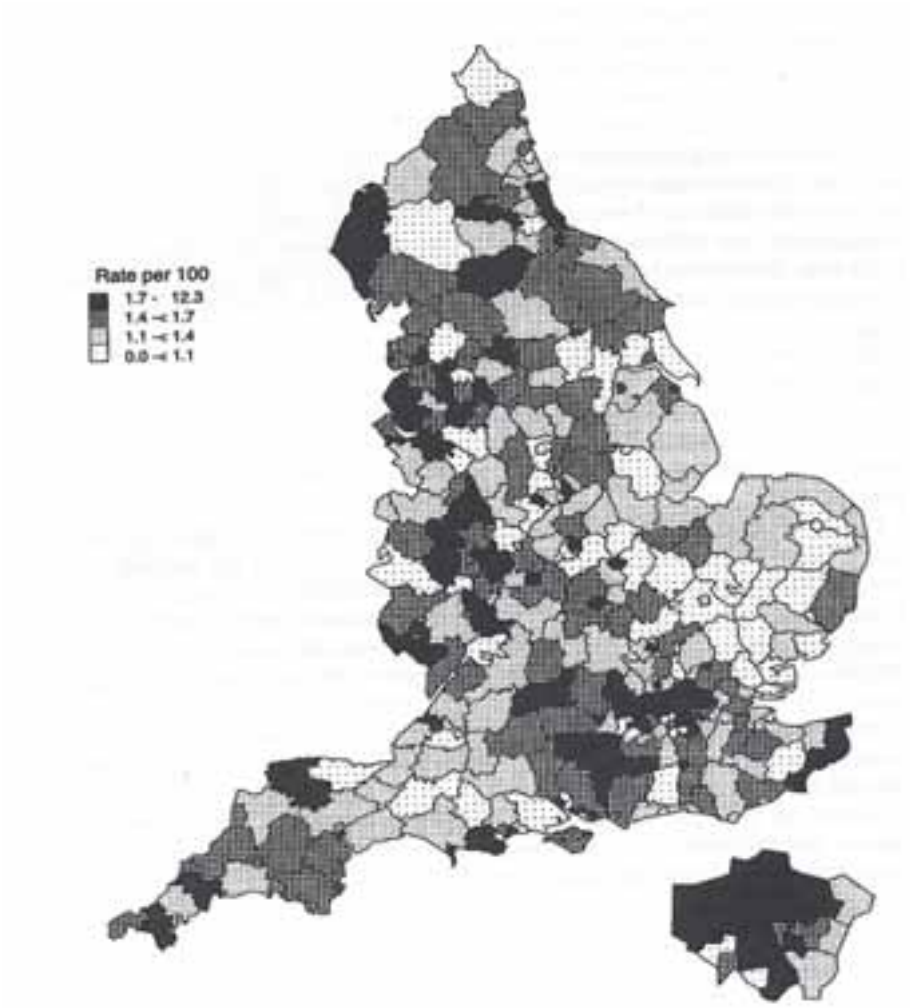
A Department of Environment survey of 1,346 single homeless people in 1991 found that 21% of people sleeping rough said they had received no income in the previous week (Anderson, Kemp and Quilgars, 1993). The median income of those sleeping rough from all sources was only £38 per week, despite this only one fifth tried to beg. People who begged often encountered problems and begging was seen as an uncertain or precarious source of income (Anderson, Kemp and Quilgars, 1993).

The 'poverty' of the homeless people sleeping on the streets is shocking. An analysis of the coroner's court records in Inner London[i] indicated that the average age at death of people with 'no fixed abode' was only 47 (Keyes and Kennedy, 1992). This is lower than the average estimated life expectancy of people in any country in the world (not at war) with the exception of Gambia, Guinea, Guinea-Bissau, Mali , Niger and Sierra Leone (UN 1991,UNDP 1992).

The 1991 Census recorded the numbers of homeless people in Hostels, Bed and Breakfast and Sleeping rough on census night;[ii] it also estimated the numbers of 'concealed' households. Figure 1.1 shows the rate of homelessness/housing need per 100 people (divided into quartiles) for each of the 366 local district authorities of England. A clear pattern is evident; there are high rates of homelessness in the Metropolitan districts and also in the more rural areas with little council housing, particularly in the South East (Gordon and Forrest, 1995).

Detailed analysis of the 1991 Census returns has shown that these homeless figures are just the 'tip of the iceberg'. There are between 200,000 and 500,000 additional people with no permanent home. They are largely young men (aged 18-36), mainly in the inner cities, who move frequently and stay with friends or relatives, probably sleeping on the sofa or in a spare bed. This phenomenon of 'hidden homelessness' was not found in the 1981 Census (Brown, 1993).

Figure 1.1
Homeless people in hostels, Bed and Breakfast, sleeping rough and concealed households



To understand the reasoning that allows the government to claim falsely that poverty does not exist, we must examine the debate surrounding the concept and measurement of poverty.

The concept of poverty

The concept of poverty has evolved over the past sixty years from an 'absolute' to a 'relative' conception. In the 1940s, the 'subsistence' idea was adopted by Beveridge (1942) as the basis for setting new benefit rates. Beveridge stated:

> "In considering the minimum income needed by persons of working age for subsistence during interruptions of earnings, it is sufficient to take into account food, clothing, fuel, light and household sundries, and rent, though some margin must be allowed for inefficiency in spending."

Around 6% of the total estimated requirement was allowed for this 'margin'. The 'subsistence' idea followed from the pioneering work of Rowntree in York, whose ideas on 'primary poverty' were based on the minimum needed for the 'maintenance of physical health' and 'physical efficiency'.

> "A family living upon the scale allowed for must never spend a penny on railway fare or omnibus. They must never go into the country unless they walk. They must never purchase a half penny newspaper or spend a penny to buy a ticket for a popular concert. They must write no letters to absent children, for they cannot afford to pay the postage. They must never contribute anything to their church or chapel, or give any help to a neighbour which costs them money. They cannot save nor can they join a sick club or trade union, because they cannot pay the necessary subscriptions. The children must have no pocket money for dolls, marbles or sweets. The father must smoke no tobacco and drink no beer. The mother must never buy any pretty clothes for herself or her children, the character of the family wardrobe as for the family diet being governed by the regulation 'nothing must be bought but that which is absolutely necessary for the maintenance of physical health and what is bought must be of the plainest and most economical description'." (Rowntree, 1922)

The subsistence approach to the definition of poverty is an 'absolute' concept of poverty; it is dominated by the individual's requirements for physiological efficiency. However, this is a very limited conception of human needs, especially when considering the roles' men and women play in society. People are not just physical beings, they are social beings. They have obligations as workers, parents, neighbours, friends and citizens that they are expected to meet and which they themselves want to meet. Studies of people's behaviour after they have experienced a drastic cut in resources show that they sometimes act to fulfil their social

obligations before they act to satisfy their physical wants. They require income to fulfil their various roles and participate in the social customs and associations to which they have become habituated and not only to satisfy their physical wants (Townsend and Gordon, 1989).

Poverty can be defined as where resources are so seriously below those commanded by the average individual or family that the 'poor' are, in effect, excluded from ordinary living patterns, customs and activities. As resources for any individual or family are diminished, there is a point at which there occurs a sudden withdrawal from participation in the customs and activities sanctioned by the culture. The point at which withdrawal escalates disproportionately to falling resources can be defined as the poverty line or threshold (Townsend, 1979 and 1993a).

This 'relative' concept of poverty is now widely accepted (Piachaud, 1987); even Rowntree used a less comprehensive concept of relative poverty in his second survey in York in 1936 (Veit-Wilson, 1986). The working papers of the Beveridge Committee show that they were well aware that their proposed benefit scales were insufficient to meet human social needs (Veit-Wilson, 1992).

In 1975, the Council of Europe adopted a relative definition of poverty as:

> "individuals or families whose resources are so small as to exclude them from the minimum acceptable way of life of the Member State in which they live" (EEC, 1981)

and, on 19 December 1984, the European Commission extended the definition as:

> "the poor shall be taken to mean persons, families and groups of persons whose resources (material, cultural and social) are so limited as to exclude them from the minimum acceptable way of life in the Member State in which they live" (EEC, 1985).

The Church of England's *Faith in the City* report also adopted a 'relative' definition of poverty that included notions of social exclusion, equity and justice. In the past, the British Government has strongly supported a 'relative' definition of poverty. In 1979, the Supplementary Benefit Commission stated:

> "Poverty, in urban, industrial countries like Britain is a standard of living so low that it excludes and isolates people from the rest of the community. To keep out of poverty, they must have an income which enables them to participate in the life of the community. They must be able, for example, to keep themselves reasonably fed, and well enough dressed to maintain their self-respect and to attend interviews for jobs with confidence. Their homes must be reasonably warm; their children should not be shamed by the quality of their clothing; the family must be able to visit relatives, and give them something on their birthdays and at Christmas time; they must be able to read newspapers, and retain their television set and their membership of trade

> unions and churches. And they must be able to live in a way which ensures, so far as possible, that public officials, doctors, teachers, landlords and others treat them with the courtesy due to every member of the community." (Supplementary Benefit Commission, 1979, p2).

Two senior economic advisers at the DHSS made the government's position very clear:

> "it should be clear that EAO[iii] is using a strong version of the 'relative' concept of poverty in it work on standards of living. We take the view that 'absolute' concepts of poverty are unrealistic and not very useful in the policy context" (Isherwood and Van Slooten, 1979)

Relative and absolute poverty

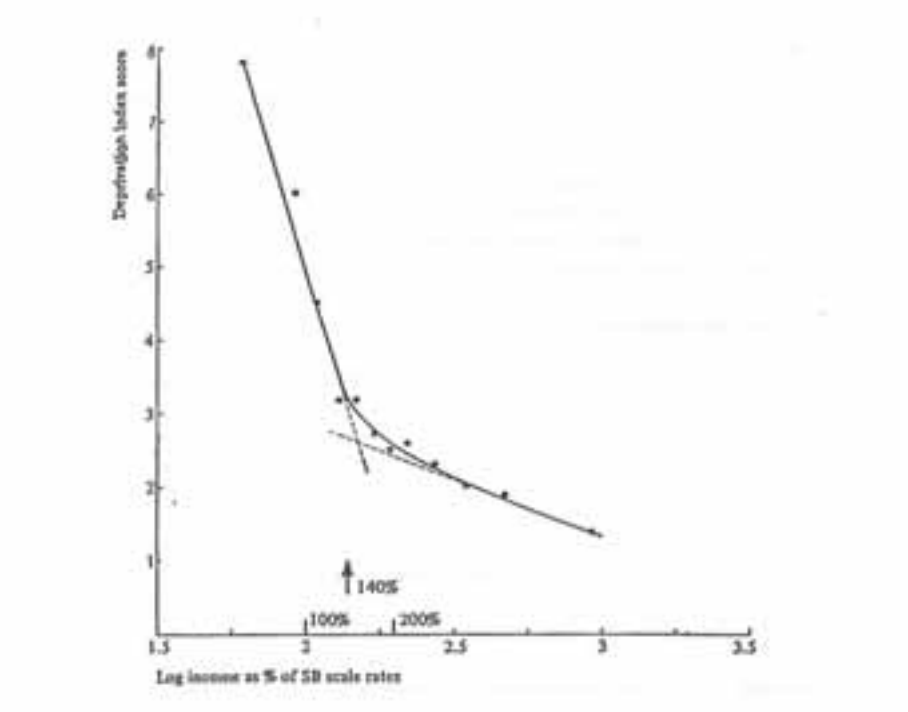
The only serious challenge to the concept of 'relative' poverty has come from Sen (1983). However, examination of the discussion between the two main protagonists (Professors Sen and Townsend)[iv] reveals that much of the debate is semantic, revolving around their differing definitions of 'relative' and 'absolute'. For the purpose of scientifically measuring poverty the difference between 'absolute' and 'relative' poverty is a chimera. Indeed Sen (1985) concluded that:

> "There is no conflict between the irreducible absolutist element in the notion of poverty ... and the 'thoroughgoing relativity' to which Peter Townsend refers."

The scientific 'objective' measurement of poverty

Although the 'relative' concept of poverty is now widely accepted, there is considerable debate about how to apply this theory to produce scientific measurements of poverty. It is not easy to measure 'poverty' directly (Atkinson, 1985a and 1985b; Lewis and Ulph, 1988) but it is possible to obtain measures of 'deprivation'. These two concepts are tightly linked and there is general agreement that the concept of deprivation covers the various conditions, independent of income, experienced by people who are 'poor', while the concept of poverty refers to the lack of income and other resources which makes those conditions inescapable or at least highly likely (Townsend, 1987).

Figure 1.2
Modal deprivation by logarithm of income as a percentage of Supplementary Benefit scale rates



Townsend (1979) devised 60 indicators of deprivation based on a detailed study of people's style of living and resources conducted in 2000 households between 1968-1969. These 60 indicators could be summed to create a single composite deprivation index score for each household. By plotting deprivation score against the log of income as a percentage of the Supplementary Benefit rates that existed then (Figure 1.2), Townsend determined, by eye, that a poverty threshold might exist at around 150% of the Supplementary Benefit standard. This result has since been confirmed by weighted regression analysis and canonical correlation analysis which placed the threshold at 160% of the Supplementary Benefit standard (Desai, 1986; Desai and Shah, 1988).

The Department of Social Security maintains that poverty cannot be 'objectively' measured although they have presented no analyses to substantiate this viewpoint. However, serious and detailed criticisms have been made by Professor Piachaud (1981; 1987) who argued that:

- The deprivation indicators used by Townsend (1979) did not allow for the identification of the effects of personal choice from those of constraint (i.e. those who could not afford an item and those who did not want an item).
- The goal of objective, scientific measurement of poverty was not attainable.
- The poverty threshold does not exist. He postulated that there may not be a marked change in deprivation below a certain level, only a continuum.

Piachaud's first criticism, relating to the separation of choice from constraint, was overcome by the 1983 and 1990 Breadline Britain studies which identified both those households/people who "don't have but don't want" and those who "don't have and can't afford" an item. However, it must be noted that the results of Townsend's (1979) study were relatively robust (Desai, 1986). The 'rich' rarely choose to live like the 'poor' and the choices the 'poor' can make are generally constrained.

Piachaud's second criticism is, of course, key. If the objective, scientific measurement of poverty is unattainable, then surveys such as the Breadline Britain studies are of only limited academic value. In addition, poverty could never be conquered since it could never be adequately measured and the requisite steps taken to alleviate it. Fortunately, the Department of Social Security and Piachaud are wrong. The scientific measurement of poverty is both possible and attainable.

The problem of 'experts'

The reasoning behind many claims that poverty cannot be measured 'objectively' is that, in order to measure deprivation, a selection of questions must first be drawn up by 'experts'. There is no 'objective' way of selecting these questions. They are just the experts' opinion of what is important. Even if a subset of these questions is also selected as important by the general population (the methodology of the Breadline Britain survey), this selection can be made only on the basis of the larger group of questions the experts first chose. There may be better questions for measuring poverty that were not chosen and, if they had, a different result might have been obtained.

There are two separate issues here that will be dealt with in turn:

- Can the answers to a selection of deprivation questions, chosen by experts, ever form the basis of the scientific, objective measurement of poverty?
- If a different set of questions were asked, would the results be the same, i.e. is the measurement of poverty reliable?

Scientific measurement

There are a number of widely held but incorrect beliefs about science, for example:

Science is objective.

Scientific knowledge is reliable knowledge because it is objectively proven knowledge.

Scientific theories are derived from observation of the facts or by objective experimentation.

Personal opinion and speculation play no part in science.

None of these statements is true: the idea that scientific theories are based on the study of objective facts is critically flawed. The 'inductive' idea of science, that correct theories will somehow 'bubble' to the surface once enough pure facts have been generated and sifted, is untenable. This inductive idea of science is attributed to the work of Francis Bacon and reached its apogee in the 1930s with the Logical Positivist School of Ayre (1936, 1955) and his co-workers. The work of Godel[v], Popper, Russell, Lakatos, Musgrave, Kuhn and many other modern philosophers and sociologists of science[vi] has shown that scientific theories cannot be proven by inductive logic. Furthermore, all observations/measurements are theory-dependent. None can be independently objective. All measurement, whether it be the height of a person, the charge on an electron or the level of poverty, is dependent on the theory and not the converse. There can be no objectively true value to these measurements that are independent of the theories that are used to measure them.

Neither scientific theories nor scientific measurement are 'objectively true'. However, for a theory to be scientific, it must not only be logically internally consistent but also fulfil a number of strict criteria.

1 The theory must be falsifiable, e.g. it must be capable of being shown to be untrue. The existence of a Loving God and Freudian psychology are unfalsifiable theories and therefore unscientific.

2 The theory must be testable.

3 The theory must have predictive value.

4 The results of the theory must be reproducible. Other people using the same methods will reach the same results.

These criteria are known to philosophers as the Falsificationist View of science and are attributable to the work of Karl Popper (1968, 1972). They contain the idea of a logical asymmetry that a theory can never be proved only falsified. This work has been extended by Imre Lakatos (1974), who claimed that scientific research programmes must also:

5 Possess a degree of coherence that involves the mapping out of a definite programme for future research.

6 Lead to the discovery of novel phenomena, at least occasionally.

Modern sociology often fulfils the second of Lakatos' requirements but rarely the first. For the measurement of poverty to be scientifically 'objective', the theory

on which the measurement is based must fulfil the criteria of Popper and Lakatos. The 'relative' theory of poverty can make this claim.

1 The relative theory of poverty can be falsified. If a survey finds that there are no people/households whose resources are so low that they are excluded from the ordinary living patterns, customs and activities of their culture, then no poverty exists. For example, Kibbutz societies would have no poverty and several Scandinavian countries have little poverty.

2 Surveys, such as the Breadline Britain studies, have provided tests of the relative poverty theory.

3 Numerous predictions are made by the relative poverty theory. For example, the 'poor' will experience a disproportionate 'fear of crime' (relative to their experience of crime) because of the greater consequences of crime for the 'poor' (see chapter 5).

4 Several deprivation surveys have produced similar results, both in Britain and in other countries. Therefore, conclusions based on the relative poverty theory are reproducible.

5 Since Townsend's (1979) initial work, extensive research on relative poverty has been carried out by many researchers in several countries. This research has extended and developed the concepts and findings of the relative poverty model. (For example, see the studies referenced Townsend and Gordon, 1989 and Grayson *et al,* 1992).

6 A number of novel phenomena, predicted by the relative poverty theory, have been confirmed. The identification of poverty/deprivation as a major cause of ill health of equal or greater consequence to genetic, pathogenic and behavioural factors, has led to:

   (i) the recognition of the effects of stress on health, particularly cardiovascular disease (Marmot *et al,* 1987; Blaxter, 1990);

   (ii) the identification of some of the mechanisms by which poor housing conditions cause disease (Strachan, 1988); and

   (iii) the use of deprivation indicators in conjunction with workload factors as the best method for health resource allocation (Carstairs, 1981; Jarman, 1983).

Indeed, Sir Donald Acheson, in his final report as the Chief Medical Officer, *On the State of the Public Health*, for 1990, said:

> "the issue is quite clear in health terms: that there is a link, has been a link and, I suspect, will continue to be a link between deprivation and ill health" and "analysis has shown that the clearest links with the excess burden of ill health are:
>
> - *low income;*
> - *unhealthy behaviour: and*
> - *poor housing and environmental amenities.*"

More generally, Jacobson (1993) has stated that:

> "Two out of three women around the world presently suffer from the most debilitating disease known to humanity. Common symptoms of this fast-spreading ailment include chronic anaemia, malnutrition and severe fatigue. Sufferers exhibit an increased susceptibility to infections of the respiratory tract. And premature death is a frequent outcome. In the absence of direct intervention, the disease is often communicated from mother to child with markedly higher transmission rates among females than males. Yet, while studies confirm the efficacy of numerous prevention and treatment strategies, to date few have been vigorously pursued."

The disease she is referring to is poverty. These insights are unlikely to have been made without the foundation of the 'relative' poverty theory.

Since the 'relative' poverty theory meets all the criteria of Popper and Lakatos, the measurement of poverty by deprivation studies is, by definition, scientific. The important question, then, is: are these measurements reliable?

Reliability

All measurement is subject to error which can take the form of either random variations or systematic bias (Stanley, 1971, lists many causes of bias). Random errors of measurement can never be completely eliminated. However, if the error is only small relative to size of the phenomena being studied, then the measurement will be reliable. Reliable measurements are repeatable, they have a high degree of precision.

The theory of measurement error has been developed mainly by psychologists and educationalists and its origins can be traced to the work of Spearman (1904). The most widely used model is the Domain-Sampling Model, although many of the key equations can be derived from other models based on different assumptions (see Nunnally, 1981, Chapters 5-9, for detailed discussion). The Domain-Sampling Model assumes that there is an infinite number of questions (or, at least, a large

number of questions) that could be asked about deprivation. If you had an infinite amount of time, patience and research grant, you could ask every person/household all of these questions and then you would know everything about their level of deprivation, i.e. you would know their 'true' deprivation score. The 32 questions used in the Breadline Britain in the 1990s study can be considered to be a subset of this larger group (domain) of all possible questions about deprivation.

Some questions will obviously be better at measuring deprivation than others, however, all of the questions that measure deprivation will have some common core. If they do not, they are not measuring deprivation by definition. Therefore, all the questions that measure deprivation should be intercorrelated such that the sum (or average) of all the correlations of one question, with all the others, will be the same for all questions (Nunnally, 1981). If this assumption is correct, then by measuring the average intercorrelation between the answers to the set of deprivation questions, it is possible to calculate both:

1 an estimate of the correlation between the set of questions and the 'true' scores that would be obtained if the infinite set of all possible deprivation questions had been asked; and

2 the average correlation between the set of questions asked (the deprivation index) and all other possible sets of deprivation questions (deprivation indices) of equal length (equal number of questions).

Both these correlations can be derived from Cronbach's Coefficient Alpha which, when transformed for use with dichotomous questions, is known as KR-20, short for Kurder-Richardson Formula 20 (Cronbach, 1951and 1976; Cronbach *et al,* 1971; Kurder, 1970).

Cronbach's Coefficient Alpha is 0.8754 for the 32 questions used in the Breadline Britain in the 1990s study. This is the average correlation between these 32 questions and all the other possible sets of 32 questions that could be used to measure deprivation. The estimated correlation between the 32 Breadline Britain questions and the 'true' scores, from the infinite possible number of deprivation questions, is the square root of Coefficient Alpha, i.e. 0.9356.

Nunnally (1981) has argued that

> "in the early stages of research ... one saves time and energy by working with instruments that have modest reliability, for which purpose reliabilities of 0.70 or higher will suffice ... for basic research, it can be argued that increasing reliabilities much beyond 0.80 is often wasteful of time and funds, at that level correlations are attenuated very little by measurement error."

Therefore, the Alpha Coefficient score of 0.87 for the Breadline Britain questions indicates that they have a high degree of reliability and also that effectively similar results would have been obtained if any other reliable set of 32 deprivation questions had been asked instead.

Coefficient alpha can also be used to test the reliability of individual questions, Table 1.2 shows how the Alpha Coefficient would change if any single question was deleted from the deprivation index. There are only three questions (highlighted in bold) which would yield an increase in Alpha if they were removed and this increase would be in the fourth decimal place only.

However, it is important to examine the reasons why these three items are not reliable measurers of deprivation. The possession of a bath/shower and/or an indoor toilet not shared with another household has a long history of use as a deprivation measure. These questions have been asked repeatedly in the national Censuses, in order to identify the areas with poor housing conditions. These Census results then helped form the basis for the slum clearance programmes. These programmes have been so successful that the 1991 Census recorded that only 1.25% of households, containing only 0.8% of residents in households, still suffered from not having exclusive use of a bath/shower and/or an indoor toilet. Many of these households are likely to be student households in bedsit accommodation; and these student households are often not multiply deprived.

It is due to the triumph of the slum clearance and council house building programmes since the second World War that the possession of exclusive use of a bath/shower and/or an indoor toilet is no longer a good measure of deprivation. 'Poor people' now often have housing which includes these facilities.

Table 1.2
Reliability analysis on the deprivation questions from Breadline Britain in the 1990s that more than 50% of the population thinks are necessary and people should be able to afford

		Corrected Item-Total Correlation	Alpha if Item Deleted
1	A damp-free home	.3672	.8726
2	**An Inside Toilet (not shared with another household)**	**.0824**	**.8761**
3	Heating to warm living areas of the home if it's cold	.4031	.8720
4	Beds for everyone in the household	.2422	.8749
5	**Bath not shared with another household**	**.0512**	**.8763**
6	Enough money to keep your home in a decent state of	.5735	.8673
7	Fridge	.2100	.8752
8	A warm waterproof coat	.5072	.8696
9	Two meals a day (for adults)	.2648	.8746
10	Insurance of Contents of Dwelling	.5816	.8669
11	Fresh fruit and vegetables every day	.4853	.8698
12	Carpets in living rooms and bedrooms in the home	.2701	.8743
13	Meat or fish or vegetarian equivalent every other day	.3662	.8726
14	Celebrations on special occasions such as Christmas	.4306	.8713
15	Two pairs of all-weather shoes	.5600	.8680
16	Washing machine	.2578	.8746
17	Presents for friends or family once a year	.5227	.8689
18	Regular savings of £10 a month for "rainy days" or	.5002	.8723
19	A Hobby or Leisure Activities	.4703	.8701
20	New, not second-hand clothes	.4582	.8706
21	A roast joint or its vegetarian equivalent once a week	.4566	.8705
22	**Television**	**.1478**	**.8757**
23	Telephone	.3746	.8729
24	An annual week's holiday away, not with relatives	.5717	.8681
25	A "best outfit" for special occasions	.5460	.8680
Extra Questions for Families with Children			
1	Three meals a day for children	.2875	.8745
2	Toys for children e.g. dolls or models	.3200	.8740
3	Separate bedrooms for every child over 10 of different sexes	.2540	.8747
4	Out of school activities, e.g. sports, orchestra, Scouts	.4718	.8703
5	Leisure equipment for children e.g. sports equipment or a bicycle	.4263	.8715
6	An outing for children once a week	.5012	.8694
7	Children's friends round for tea/snack once a fortnight	.4799	.8703
Coefficient Alpha for the 32 Questions = 0.8754			

The possession of a television is a controversial indicator of deprivation; 51% of the Breadline Britain respondents thought that a television was a necessity in the 1983 study as did 58% in the 1990 study. In response to the 1983 study, S. Turner of Wolverhampton wrote to the Sunday Times (28.8.83):

> "Anyone who visits low-income families has experience of homes which are lacking in carpets, furniture, or decent clothing for children, but contain a large colour TV" (Mack and Lansley, 1985)

However, the importance of television to some 'poor' people was explained by Pamela in the 1983 study (Pamela was a lone parent with a nine month old child, living on Supplementary Benefit in an attic flat):

> "I watch TV from first thing in the morning till last thing at night, till the television goes off. I sit and watch it all day. I can't afford to do other things at all. The only thing I can do is sit and watch television. I can't go anywhere, I can't go out and enjoy myself or nothing. I should be able to take my daughter out somewhere. I would take her to the zoo and things like that. Places she's never been, or seen, and half the places I haven't seen in London myself. Things that I can't afford to do" (Mack and Lansley, 1985)

Given this importance of television, why is the possession of one not a reliable indicator of deprivation in the 1990 Breadline Britain Survey? Televisions are a consumer durable that have reached saturation point. The General Household Survey (GHS) shows that 98% of households have a television and this situation has persisted since the mid-1970s. Since some households have more than one television, there are probably more televisions than there are households in Britain. This saturation is evident from the second-hand prices of televisions. 21" colour televisions typically sell at auction for between £20 and £30 and black and white televisions for between £1 and £10. Televisions are not expensive, however, a television licence is.

The Breadline Britain Surveys have shown that poverty has increased during the 1980s (see Introduction). If these findings are correct, it would be expected that there would be a concomitant increase in the number of households that could not afford to buy a TV licence during the 1980s. Figure 1.3 shows the changes in the number of prosecutions for TV licence offences between 1980 and 1992. A massive four-fold increase in prosecutions has occurred. Part of this increase might be due to more effective policing of the Wireless Telegraphy Act or even to an increase in "wickedness" in the population, although there is little evidence for either (Wall and Bradshaw, 1987). However, at least some of this massive increase in prosecutions probably results from greater numbers of households being unable to afford a TV licence.

Figure 1.3
Total number proceeded against under the Wireless Telegraphy Acts (TV Licence) 1980-91

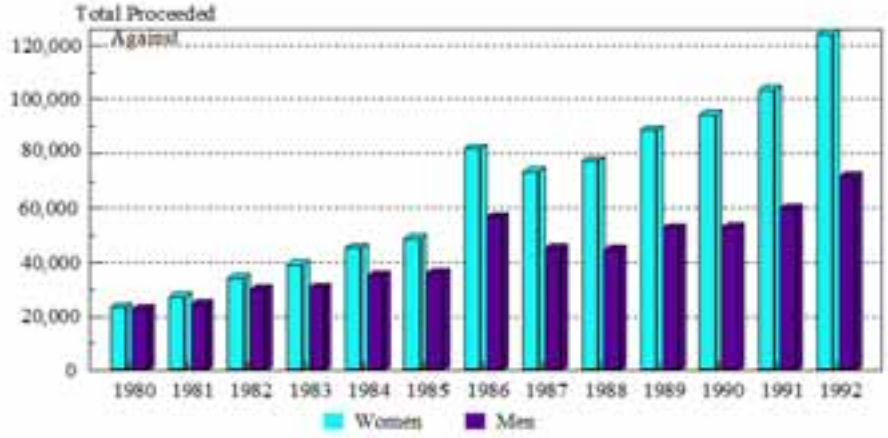
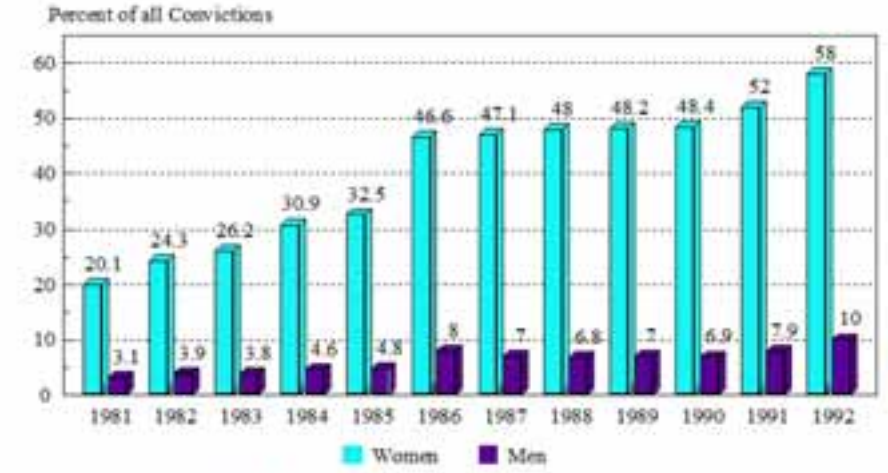


Figure 1.4
Convictions under the Wireless Telegraphy Acts as a percentage of all convictions 1981-91



All Summary Motoring Offences are Excluded

In 1992, 58% of all convictions[vii] of women for criminal offences were for Wireless Telegraphy Act offences (Figure 1.4). If the TV licence were abolished, female criminal convictions would fall by more than half. Between 1981 and 1992, criminal convictions for women increased by 42,000 (32%). However, Wireless Telegraphy convictions increased by 63,000 in the same period. If TV licence offences are excluded, then female criminal convictions fell during the 1980s. This is clearly a situation where poverty seems to be primarily responsible for a large part of the recorded increase in female crime during the 1980s.

The poverty threshold/line

Piachaud's final major criticism of the 'relative' theory of poverty relates to the problem of identifying the poverty threshold/line; he considered that a continuum may exist. Piachaud (1981) comments that:

> "The combination of two factors - that there is a diversity in styles of living, and that poverty is relative: mean that you would *not*, in fact, expect to find any threshold between the 'poor' and the rest of society."

Townsend (1979) originally identified the poverty line/threshold at 150% of the Supplementary Benefit standard by observing the position of the break of slope on a graph of Deprivation Index plotted against the logarithm of income as a percentage of the Supplementary Benefit Scale that then existed (see Figure 1.2).

Regression analysis of Townsend's data showed that, statistically, the best position for the poverty line/threshold was at 160% of the Supplementary Benefit standard (Desai, 1986; Desai and Shah, 1988). Piachaud (1987) argued that the poverty line/threshold was a statistical artefact resulting from the transformation of the income data (the reciprocal of income equivalised by the Supplementary Benefit scale was used). Piachaud objected to the reciprocal transformation (1 ÷ Income) rather than to the equivalisation procedure used (the 1968 Supplementary Benefit scale). Even though, the 1968 Supplementary Benefit scale was based largely on political rather than scientific criteria.

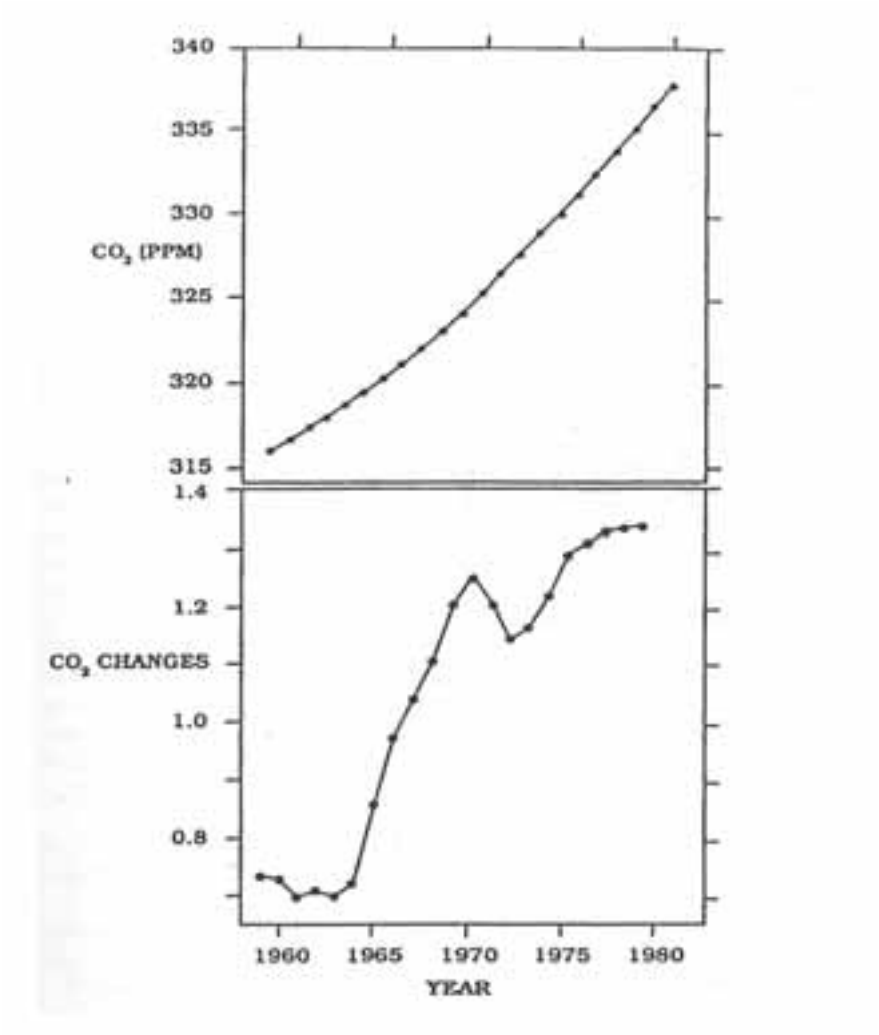
There are three main problems with using these methods to determine the poverty line/threshold (Gordon and Townsend, 1990):

1. the size of changes in the slope of a graph is dependent on the transformations used for the axis (Figure 1.5, Kolata, 1984).

2. there is no universally agreed statistical definition of how large a change in slope is required to define the poverty 'threshold'; a number of different thresholds are possible.

3. the use of a single composite deprivation index results in information loss from the data.

Figure 1.5
Slope is hard to judge



Note: The visual impression from the top panel is that the rate of change of atmospheric CO_2 is constant from 1967 to 1980. But in the bottom panel, where the yearly changes are graphed, it can be seen that there is a dip in the rate of change around 1970.

Discriminant analysis is one of the multivariate techniques that can be used to surmount these problems since it does not require a pre-defined poverty 'threshold'. Discriminant analysis allows the differences between two or more pre-defined groups to be studied with respect to several variables (Klecka, 1980). There are two required assumptions:

1 that two groups exist, a generally smaller 'multiply deprived' group ('poor') and a larger group that suffers from less deprivation ('non-poor').

2 that deprivation increases at a faster rate, as income falls, at lower income levels than at higher income levels

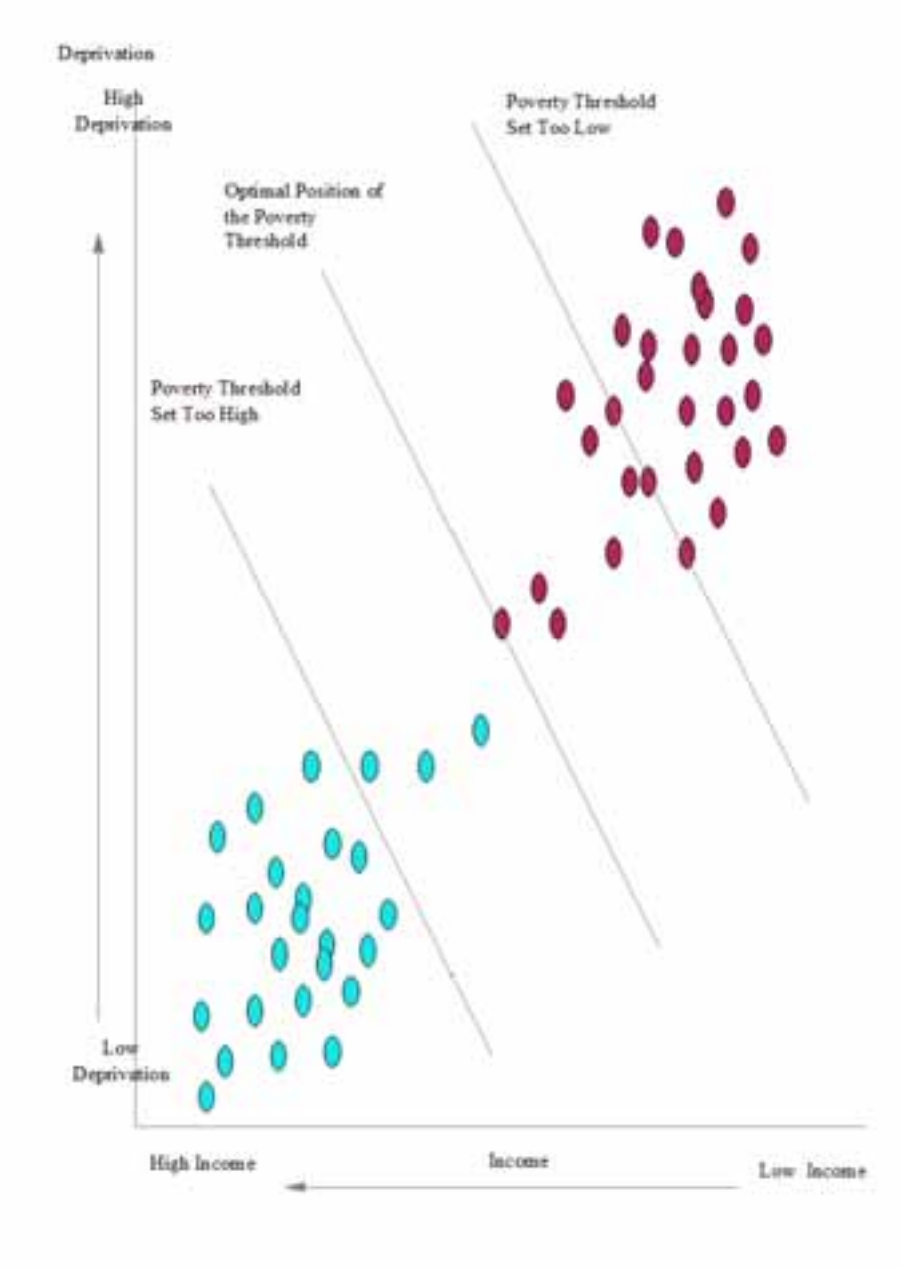
However, there is agreement that both these assumptions are valid. Piachaud (1987) states "that there is genuine and severe poverty" (i.e. a group of people/households which can be defined as 'poor'); he also agrees that "In essence there is no dispute that deprivation increases as income falls, nor that, at low income levels, deprivation increases more rapidly as income falls than at higher income levels". Once these two key points are accepted the identification of a poverty line becomes a purely technical matter about which level of income best separates the two groups.

The level of income (or narrow band of income) at which the 'poor' and the 'not poor' groups (multiply deprived and less deprived) can best be separated is considered to be the poverty line/threshold. Obviously, there will never be perfect separation between these two groups since, even when a marked threshold exists, there will always be some overlap. For example, there are people with reasonable incomes who suffer from multiple deprivation owing to historic circumstances. They may only recently have got a job or paid off large debts. There are also people currently on low incomes who suffer little deprivation due to previously accumulated wealth. Other reasons for overlap turn on the comprehensiveness of the definition of the income variable; some people with a low cash income may also depend on subsidised meals or other benefits from an employer or be meeting some of their costs from savings. However, a good analysis will correctly classify the majority of cases (Gordon and Townsend, 1990).

The situation where two groups exist with a number of intermediate (noise) cases is a common problem to many subject areas. It is known statistically as 'chaining' and an example is shown in Figure 1.6 (Wishart, 1969; Everitt, 1993).

There are a large number of established statistical techniques that can be used to determine the best point of separation between such groups. These provide 'objective' means by which the poverty line/threshold can best be determined.

Figure 1.6
Two well separated groups (the poor and the non-poor)
with intermediate 'noise' points



A simple but more 'subjective' way of measuring the poverty line/threshold is to ask people how much they would need to avoid poverty. The 1985-86 Booth Centenary Survey of Londoner's Living Standards asked "How many pounds a week do you think are necessary to keep a household such as yours out of poverty?". Interviewers were instructed to stress that income to be estimated must be total disposable income (i.e. income after taxes and deductions). From each individual estimate actual expenditure on housing per week was deducted (Townsend *et al*, 1987). A similar question was also asked in a related study carried out by MORI in Islington on behalf of the council (MORI, 1988). Table 1.3 shows the comparison between the Discriminant analysis poverty line and the self assessed weekly levels of income required to avoid poverty (Gordon and Townsend, 1989);

Table 1.3
Weekly income (in £s) required to surmount multiple deprivation
(Self-assessment and Discriminant analysis methods compared)

Household type	Self-assessment		Discriminant Analysis
	Greater London 1985-86	Islington 1987	Greater London 1985-86
Single person over 60	64	75	60
Couple under 60	104	107	75
Couple plus 2 children	109	132	110
Couple plus 3 children	118	121	125
Single parent plus 1 child	81	93	80

With the exception of the results for couples under 60, there is remarkably close agreement between these two methods. This demonstrates the possibility that by using statistical methods such as Discriminant analysis it may be possible 'objectively' to calculate a 'poverty line' for most household types that would correspond with the judgement of the majority of the population.

The American approach

There has been an official 'poverty line' in the United States of America (USA) since the mid 1960s, which is used by Federal Agencies to determine eligibility for benefits. In early 1992, the Committee on National Statistics of the National Academy of Sciences convened a panel of academic experts to conduct a 30 month study, requested by Congress, that includes an examination of the statistical issues involved in measuring and understanding poverty. The seriousness with which the

US Government treats the concept of poverty contrasts sharply with the attitude of the British Government which has consistently refused to identify any 'official' poverty thresholds.

In the USA, poverty thresholds are currently issued by the Bureau of the Census and were first developed in 1963/64 by Mollie Orshansky, an economist working for the Social Security Administration (Fisher, 1992). The poverty threshold is calculated for a family of any given size by multiplying the cost of the relevant 'economy food plan' by 3, for families of 3 or more, and by 3.7 for families of 2 people. The 'economy food plan' was developed by the Department of Agriculture for *"temporary or emergency use when funds were low"*. The multipliers of 3 and 3.7 are derived from the 1955 Household Food Consumption Survey, which showed that families of 3 or more typically spent a third of their after-tax income on food and families of 2 typically spent 27% of their after-tax income on food. The cost of the 'economy food plan' is adjusted by the Consumer Price Index (the American equivalent of the Retail Price Index).

The assumptions behind these poverty thresholds are: as income falls, all expenditure (food and non-food) is reduced proportionately until the amount spent on food is equal to the cost of the 'economy food plan'. At this point, non-food expenditure is considered to be minimal but adequate. These assumptions are obviously simplistic, however, Orshansky (1965) argued that, while they may not be sufficient "to state unequivocally how much is enough, it should be possible to assert with confidence how much, on average, is too little".

Although the American method for setting poverty lines is crude by modern standards, they at least have made an attempt to define 'objective' and meaningful poverty thresholds as a basis for benefit payments. By contrast, the British Income Support levels are based almost exclusively on political and historical criteria. For example, in the early 1980s, the basis for the uprating of State Retirement Pensions was changed from a link to average earnings to a link to the Retail Price Index. This change was largely political and not based on any assessment of the actual needs of pensioners, dependent on State Retirement Pensions.

Equivalisation

Equivalisation presents one of the major problems when determining the poverty line/threshold. Indeed, equivalisation is a major problem with all aspects of deprivation studies. It is self evident that the larger the household the more income will be needed to maintain the same standard of living. It is also clear that economies of scale exist within a household i.e. it does not cost a family of 4 twice as much as a family of 2 to maintain the same standard of living. However, it is not self-evident how much extra larger households need to have the same standard of living as smaller households.

There is general agreement that 'standard of living' like 'poverty' is only measurable 'relative' to society. McClements (1978) states:

> "living standards describe the material well-being of the household or family unit as perceived by it and society as a whole, rather than personal happiness *per se*."

Likewise, Jensen (1978) states:

> "standard of living of a household is not an objectively defined function of its level of consumption, rather it is specified by the general consensus amongst members of the society about what the household's pattern of consumption is judged to represent in terms of material well-being."

Despite this agreement on definition, there is currently no methodology that allows the objective determination of equivalence scales in the same way that deprivation can be objectively measured. Many equivalence scales are unscientific because they are based on tautological reasoning.[viii] The McClements' (1977) equivalence scale, used by the Department of Social Security for low income statistics, suffers from this problem (Muellbauer, 1979, 1980, Bardsley and McRae, 1982).

Whiteford (1985) has argued that, while no objective equivalence scales have been derived, several proposed scales could be rejected on logical grounds. He stated:

> "equivalence scales should be plausible, generally rising with the size of the household but showing economies of scale. A priori, it is implausible that a single individual requires only 49% of the income of a couple, as suggested by Podder, or that an individual requires 94% of the income of a couple, as suggested by Lazear and Michael. Similarly, the detailed basic equivalence scales derived by SWPS and ABS, using the ELES method, are implausible when they imply that the costs of a sole parent with two children are less than the costs of a sole parent with one child. What is a plausible estimate of the costs of a child is more difficult to determine. It can be suggested, however, that Seneca and Taussig's estimate that a child adds only 1% to the cost of a couple is implausible as is Habib and Tawil's estimate that a child adds 47%. Similarly, the pattern of additional costs implied by the detailed basic ELES equivalence scales is implausible - where the head works and the wife does not, the first child adds 11%, the second 6%, the third 16%, the fourth 3% and the fifth 17%. It is difficult to conceive of the reasons why this should be so."[ix]

However, even after many proposed equivalence scales have been rejected on grounds of implausibility, numerous plausible scales remain (for example, Whiteford (1985), lists 59 scales, of which over half are plausible). This is

problematic because the results obtained from a poverty study are sensitive to the equivalence scale used (Bradbury, 1989; Weir, 1992). Both the household composition of the 'poor' and the position of the poverty line can be influenced by equivalisation. Therefore, in order accurately to determine the numbers of different sized households living in poverty, the likely position of the poverty line should be estimated before any equivalisation scales are applied.

The Breadline Britain approach

In the 1983 study, it was assumed that

> "poverty is a situation where such deprivation has a multiple impact on a household's way of life affecting several aspects of living thus, a family which just about manages but to do so does without an annual holiday, is deprived by today's standards; in our judgement, however, it is not in poverty. Deprivation has to have a more pervasive impact to become poverty."

Two criteria were identified for determining at what point multiple deprivation was likely to be causing poverty.

1 The poverty line should be drawn where the overwhelming majority of those who lacked necessities[x] have low incomes in the bottom half of the income range.

2 Their overall spending pattern should reflect financial difficulty rather than high spending on other goods.

By examining a large number of tables carefully, Mack and Lansley (1985) decided that: "A level of lack of one or two necessities is largely enforced though not overwhelmingly ... a level of lack of three or more necessities is, by contrast, overwhelmingly enforced".

The 'three or more necessities lacked' poverty line was later confirmed by regression analysis (Desai, 1986). Both the regression analyses and the examination of tables essentially do the same thing. They divide the surveyed households into two groups: the 'multiply deprived' and the 'less deprived', at the point which maximises the variation in income between the two groups and minimises the variations in income within the groups, i.e. the point where the overwhelming majority of the 'poor' group have low incomes and the overwhelming majority of the 'not poor' group have higher incomes.

A problem with the methods used in the 1983 study was that equivalisation was applied to allow a single analysis. As discussed in the previous section, equivalisation often distorts the data and make the results hard to interpret. Therefore, in the 1990 study, we attempted to identify the poverty threshold before equivalisation. The discriminant analysis procedure[xi] of Townsend and Gordon

(1989) was applied to all household types for which there was a sufficiently large sample size.[xii] The optimum position for the poverty threshold was again found to be at the 'three or more necessities lacked' level.

Figure 1.7 shows the clear separation between the average incomes of the 'poor' and 'not poor' groups at the 'three or more necessities lacked' level by household type. The mean (average) incomes for each group are marked with a square and the bars represent the 95% confidence interval of the mean. The sample sizes for both groups, for each household type, are shown along the *x* axis. The 95% confidence intervals do not overlap for any household type except couples with one child. The overlap in this group is due to 3 households with very high incomes and deprivation scores of 3 or 4. These cases are, statistically, outliers and, if they are excluded, then the overlap disappears. However, as discussed previously, we would not expect perfect separation between the 'poor' and 'not poor' groups (these three households may only recently have achieved a high income) so we have not altered the data.

Figure 1.7 also illustrates the problem of equivalisation. There are clear differences in the average incomes of the 'poor' and 'not poor' groups for both retired and younger couples without children. However, there is a degree of overlap between the incomes of the 'poor' non-retired couples and the 'not poor' retired couples. The overlap is probably due to a number of causes; firstly, the income measure does not adequately take account of the wealth of retired households (their 'real' income has been underestimated), and, secondly, non-retired couples generally require a higher income than retired couples to maintain the same 'standard of living' because of the extra costs they incur when working. An equivalisation index that did not take account of the increased costs associated with working[xiii] would clearly yield biased results; which would underestimate the numbers of 'poor' non-retired couples and overestimate the numbers of 'poor' retired couples.

A good test of the reliability of the 'three or more necessities lacked' poverty line is to compare this 'objective' measure of poverty with people's opinion of whether they are genuinely 'poor'.

Table 1.4 shows that the group of households that answered that they are 'never poor' or 'don't know' have mean and median deprivation scores (number of lack of necessities) well above the poverty line (three plus). The households that consider they are 'poor all the time' have mean and median scores well below the objective poverty line. The 'sometimes' poor group has a mean score just above the poverty line, 63% of this group have a deprivation score of less than three. As would be expected, the 'sometimes poor' group contains many households who can objectively be measured to be on the margins of poverty or 'just poor'. It is clear that the objective categorisation of households into 'poor' and 'not poor' groups by the discriminant analysis method corresponds closely with people's own interpretation of their own circumstances. It should also be noted that 35% of respondents thought that their households were genuinely 'poor' now either 'all the time' or 'sometimes'.

Figure 1.7
Average net income of multiply deprived and less deprived households

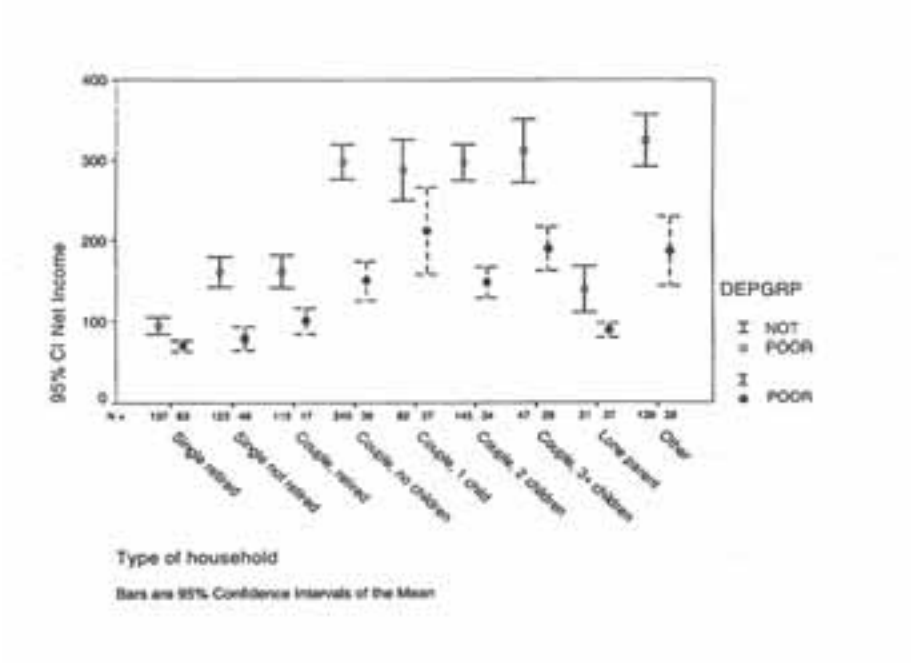


Table 1.4
Question 16: "Do you think you could genuinely say you are poor now, all the time, sometimes, or never?"

Are you genuinely poor? *(n=1831)*	Respondents (%)	Mean Deprivation Score	Median Deprivation Score
All the time	10	5.4	4
Sometimes	25	2.6	1
Never	64	0.6	0
Don't know	01	1.0	0

This emphasises the large number of people who have experienced at least a period of living in poverty recently. Only 1% of households had no view about whether they were genuinely 'poor' now: this again emphasises that 99% of respondents had some view about their own level of poverty.

Time and poverty

The division of the population into two groups, the 'poor' and 'not poor' is obviously an over-simplification which takes no account of the length of time spent living in poverty. Research in Europe and America has shown that, although at any one time a large number of households may experience poverty, for many this experience might be for only a relatively brief period.[xiv]

Table 1.5 shows that there are marked differences between European and North American countries in both the poverty rate and the likelihood of escaping from poverty. In Ireland, Luxembourg, The Netherlands and Sweden virtually no families with children lived continuously in poverty for the whole of a three-year period. In contrast, the majority of the poor in Canada and the United States remained in poverty for most of a three-year period. However, even in the United States, Bane and Ellwood (1986) found that about 60% of poverty spells lasted one or two years and only around 14% lasted eight or more years. It must be noted that these are single spells, some of which would have been followed rapidly by subsequent periods of poverty. Duncan *et al* (1993) have suggested that:

> "the static dichotomy of poor Vs not poor is very misleading and needs to be replaced by at least four dynamic categories of economic position - persistent poverty, transition poverty, the economically vulnerable and the financially secure."

Duncan *et al* (1993) also found, unsurprisingly, that transition rates out of poverty were higher the closer the households' incomes were to the poverty threshold. These studies of poverty dynamics lead to the prediction that those households who suffer from continuous or repeated spells of poverty are likely to be more deprived than households which suffer only from occasional or rare periods of poverty.

Table 1.5
Poverty rates and transition out of poverty for families with children with poverty defined as an equivalised income below 50% of the median income for the population (modified from Duncan *et al*, 1993)

Country	Poverty rate (% with income below 50% of median income of the whole population)	Transition out of poverty rate (% per year of the poor becoming non-poor)	Three year poverty rate (% of the population with incomes below 50% of median in all 3 years of a 3 year period)
Europe			
France	4.0	27.5	1.6
Germany (all)	7.8	25.6	1.5
German residents	6.7	26.9	1.4
Foreign residents	18.0	20.0	4.0
Ireland	11.0	25.2	N/A
Luxembourg	4.4	26.0	0.4
The Netherlands	2.7	44.4	0.4
Sweden	2.7	36.8	N/A
North America			
Canada	17.0	12.0	11.9
United States (all)	20.3	13.8	14.4
US white residents	15.3	17.0	9.5
US black residents	49.3	7.7	41.5

Table 1.6 shows that, in the Breadline Britain in the 1990s survey, there was a clear association between a respondent's history of poverty and their households current level of deprivation. The majority of respondents who have lived in poverty 'often' or 'most of the time' can currently be objectively described as living in poverty i.e. they have both mean and median deprivation scores of three or more. It should be noted that 46% of respondents had lived in poverty at some time in the past and also that only 1% of respondents had no views about their history of poverty.

Table 1.6
Question 17 : "Looking back over your adult life, how often have there been times in your life when you think you have lived in poverty by the standards of the time?"

Have you ever lived in poverty? (n=1831)	Respondents (%)	Mean Deprivation Score	Median Deprivation Score
Never	53	0.7	0
Rarely	15	1.4	0
Occasionally	19	2.3	1
Often	8	4.5	3
Most of the time	4	5.1	4
Don't know	1	2.0	0

In Table 1.7, the 'poor/multiply deprived' group has been further sub-divided by their history of poverty. The 'long term poor' group has been defined as households who have a deprivation score of three or more (objective poverty), consider that they are genuinely poor now 'all the time' (subjective poverty) and also have lived in poverty in the past either 'often' or 'most of the time'. Just over 4% of households are 'long term poor' and, as predicted, they have very high mean and median deprivation scores. However, the majority of the 'poor' group will probably not live in continuous poverty. For them, poverty is a transitory stage encountered due to temporarily adverse circumstances. The characteristics of this group are similar to those of the rest of the population and the composition of the 'poor' group will be discussed in detail in Chapter 3.

Table 1.7
Long term poverty/multiple deprivation

	Number of Households (%)	Mean Deprivation Score	Median Deprivation Score
Not poor	79.2	0.4	0
Poor	16.7	5.8	5.0
Long term poor	4.1	8.3	8.0

Common objections to poverty studies

There are a number of objections to poverty studies such as the Breadline Britain surveys, which are commonly voiced, particularly by those on the 'Right' of the political spectrum. These objections can be grouped into two main categories:

Anecdotal Denial This group of objections usually follow an argument such as "I know a family that can't afford three of the items in the Breadline Britain survey but they are not poor. Therefore, the Breadline Britain results cannot be correct." Objections of this type misunderstand the nature of scientific measurement. As previously discussed, we would not ever expect to be able to establish a poverty line that would correctly classify one hundred per cent of the population as 'poor' or 'not poor'. Inevitably, there will be some overlap and therefore there will be a small number of cases in which households lacking three or more items are incorrectly classified as 'poor'. These facts, however, do not negate the results which refer to the population as a whole and not to individual cases.

The Undeserving Poor This type of argument has a myriad of forms but generally assumes that "the households that lack three or more items are not really poor, they are lazy and shiftless and/or have chosen to waste their money on drink, cigarettes, drugs, gambling ....."[xv] The main thrust of this argument is to show that the poor are poor only because of their own fecklessness and providing them with any extra resources would only encourage them in their reprehensible ways.

The attempt to divide the 'poor' into the 'deserving' (i.e. those who are poor through no fault of their own) and the 'undeserving' has a long history dating back at least to Elizabethan times. Indeed, it was concern about the 'residuum' (the Victorian name for the 'underclass'), that resulted in the establishment of the social sciences in the 19th century. The residuum were the 'dangerous poor', the group of undeserving poor people who were 'criminally inclined and detached from the values of 'right-thinking society' (Stedman-Jones, 1984). The idea of a group of criminal, feckless poor people whose pathological culture and/or genes transmitted

their poverty to their children, can be traced from the Victorian residuum through theories of pauperism, social problem groups and multiple problem families to the underclass arguments of today (Macnicol, 1987; Mazumdar, 1992). The problem of poverty was blamed on 'bad' genes before the Second World War and on 'bad' culture after the discrediting of the eugenics movement by the end of the War.[xvi] The underclass are currently claimed to suffer from a pathological 'culture of poverty/dependency' which causes their poverty (Bagguley and Mann, 1992).

These ideas are unsupported by any substantial body of evidence. Despite almost 150 years of scientific investigation, often by extremely partisan investigators, not a single study has ever found any large group[xvii] of people/households with any behaviours that could be ascribed to a culture or genetics of poverty. This failure does not result from lack of research or lack of resources. For example, the Transmitted Deprivation Programme of the 1970s lasted over 10 years, commissioned 23 empirical studies and cost over £3m at 1992 prices: the Pauper Pedigree Project of the Eugenics Society lasted over 20 years (1910-1933): the Social Survey of Merseyside Study lasted 5 years and the Problem Families Project started in 1947 and eventually petered out in the 1950s[xviii]. Neither these nor any other British study has ever found anything but a small number of individuals whose poverty could be ascribed to fecklessness or a 'culture/genetics of poverty/dependency'.

The 'culture of poverty/dependency' thesis requires that there is a significantly large, stable and relatively homogenous group of 'poor' people in order for a culture to develop that is different from the culture of the rest of society. The evidence we have on the prevalence and dynamics of poverty contradicts this thesis. As previously discussed (Table 1.6), 46% of respondents have experienced at least a brief spell of living in poverty at some time in their lives and 20% of households can 'objectively' be described as 'poor'. However, only 4% of households are currently 'poor' and also have a long history of poverty. The experience of poverty is a widespread but, for the large majority, relatively brief phenomenon. It is, therefore, unsurprising that there is little evidence that the 'poor' have a different culture from the rest of society. The ten year Transmitted Deprivation Programme concluded, from a comprehensive review of the literature, that "problem families do not constitute a group which is qualitatively different from families in the general population". (Rutter and Madge, 1976, p255) and, from the results of the 37 Transmitted Deprivation research projects, that "all the evidence suggests that cultural values are not important for the development and transmission of deprivation" (Brown and Madge, 1982, p226).

More recently Bagguley and Mann (1992) commented "what puzzles us is why both 'left' and 'right' academics find the concept of an emergent ...underclass so attractive when it has been so thoroughly destroyed by social scientific analysis."

Public attitudes to the poor

Despite the lack of evidence for the 'undeserving poor' thesis, there is still a fairly widespread view that the 'poor' spend a lot of their money on drink and cigarettes. No British deprivation study has attempted to measure the amount that multiply deprived households spend on alcohol. However, very detailed expenditure data are available from the annual Family Expenditure Survey (FES), which can be broken down by equivalised income.

Table 1.8 clearly shows that the households in the bottom 20% of the income range typically spend less per week on alcoholic drink and tobacco than all other households. This is unsurprising; the poorest households spend less on everything than all other households as they have less money to spend.

Table 1.8
Household expenditure on selected items for the top and bottom quintile groups of income and all households

Average weekly household expenditure (£)
(Figures in brackets are % of total expenditure)

Selected Expenditures	Lowest 20% *(n=1484)*	Highest 20% *(n=1484)*	All Households *(n=7418)*
Alcoholic drink	3.00 (3.2%)	20.94 (4.1%)	11.06 (4.1%)
Tobacco	3.51 (3.7%)	5.15 (1.0%)	5.38 (2.0%)
Food	22.85 (24.3%)	73.82 (14.3%)	47.66 (17.5%)
Housing (gross)	33.73 (35.8%)	91.45 (17.7%)	54.12 (19.9%)
Fuel, Light and Power	10.23 (10.6%)	16.28 (3.0%)	13.02 (4.8%)
Clothing and Footwear	5.22 (5.5%)	30.95 (6.0%)	16.39 (6.0%)
Motoring and Travel	6.98 (7.4%)	92.62 (17.9%)	42.86 (15.8%)
Total Expenditure	**94.22 (100%)**	**516.28 (100%)**	**271.83 (100%)**

Source: 1992 FES, Table 8

The General Household Survey (GHS) provides information on smoking and drinking patterns every two years. Table 1.9 from the 1990 GHS[xix] shows that both men and women in households with gross weekly incomes of less than £100 drink less alcohol than the average household (Smyth and Browne, 1992).

Table 1.9
Alcoholic consumption level by sex and usual gross weekly household income (%)

(1 unit is approximately a glass of wine/half a pint of beer/single measure of spirits)

Persons aged 16 and over — Great Britain: 1990

Units per week	£0.01-£100.00	Over £500.00	Total
Men	*(n=655)*	*(n=1480)*	*(n=8097)*
Non-drinker	14	3	6
Very Low (Under 1)	17	3	9
Low (1 to 10)	35	33	36
Moderate (11 to 21)	15	26	22
High (22 to 51+)	19	35	27
Women	*(n=1378)*	*(n=1343)*	*(n=9424)*
Non-drinker	20	6	12
Very Low (Under 1)	34	13	23
Low (1 to 7)	32	46	40
Moderate (8 to 14)	9	19	14
High (15 to 36+)	5	16	11

The lack of evidence for the 'culture of poverty' thesis would tend to indicate that it is based on prejudice rather than established fact. If this is correct, then you would predict that:

- Those who have the greatest knowledge of poverty (through direct or indirect personal experience) will be the least likely to believe that poverty results from fecklessness.
- If poverty increases, the numbers believing that poverty results from fecklessness will fall since more people will have direct or indirect knowledge of poverty.

Conversely, if the primary cause of poverty is due to laziness or lack of willpower of the 'poor', then you would expect the belief in the 'undeserving poor' thesis to increase with increased personal experience of poverty.

The 1983 and 1990 Breadline Britain Surveys asked respondents: "Why, in your

opinion, are there people who live in need? Here are four opinions - which is the closest to yours?" A similar question had also been asked in a European Economic Community-wide survey in 1976 (EEC 1977) and these views are set out in the tables below.

Table 1.10
Why do people live in need? By all respondents (%)

	1976 EEC	1976 UK	1983 BBS (GB)	1990 BBS (GB)
Because they have been unlucky	16	10	13	10
Because of laziness and lack of willpower	25	43	22	20
Because there is much injustice in our society	26	16	32	40
It's an inevitable part of modern progress	14	17	25	19
None of these	6	4	5	3
Don't know	13	10	3	3

As the number of people living in poverty increased between 1976 and 1990, so the numbers of people who believed that the primary cause of poverty is 'laziness or lack of willpower' has fallen dramatically. In 1976, 43% of UK respondents considered that poverty was attributable to 'laziness or lack of willpower'. This was the highest figure of any EEC country. By 1990, only 20% of the British population still believed this. Conversely, the numbers of respondents considering that people live in need because 'there is much injustice in society' increased from 16% to 40% between 1976 and 1990. This shift in public attitudes is consistent with evidence that the primary causes of poverty are structural and not due to individual failings.

Tables 1.11, 1.12 and 1.13 show the response to Question 7 on the reasons why there are people who live in need, broken down by 'objective' and 'subjective' poverty. As expected, there appears to be a high correlation between a respondent's direct experience of poverty and their belief that the primary cause of poverty is injustice in society or misfortune rather than individual laziness or lack of willpower. This same pattern is found irrespective of whether objective (scientific) criteria or more subjective (individual perception) criteria are used to define poverty.

Table 1.11
The public's view of why people live in need by deprivation group (%)

Question 7: " Why, in your opinion, are there people who live in need? Here are four opinions - which is closest to yours?"

	Deprivation Group		
	Less Deprived	Multiply Deprived	Long Term Poor
	(n=1450)	*(n=306)*	*(n=75)*
Because they have been unlucky	10	10	18
Because of laziness and lack of willpower	21	17	9
Because there is much injustice in our society	39	44	48
It's an inevitable part of modern progress	18	22	16
None of these	4	2	1
Don't know	9	5	9

In Table 1.11, 21% of the 'less deprived' group (objectively 'not poor') consider that people live in need because of laziness and lack of willpower, as do 22% of respondents who consider they could never describe themselves as 'genuinely poor' (Table 1.12) and 20% of respondents who have 'never lived in poverty' (Table 1.13). Conversely, only 9% of the 'long term poor' group, 10% of respondents who consider that they are 'genuinely poor all the time' and 11% of respondents who have lived 'most of the time' in poverty in the past, attribute the primary cause of poverty to laziness and lack of willpower. These findings are remarkably consistent considering the different sample sizes and compositions of these groups.

An equally consistent pattern emerges amongst those who consider the primary reason that people live in need is because 'there is much injustice in our society'. Thirty nine per cent of the 'less deprived' group, 36% of the 'never genuinely poor' group and 38% of the 'never lived in poverty' group, attribute living in need to injustice in society, compared with 48% of the 'long term poor', 50% of the poor 'all the time' and 50% of the poor 'most of the time' groups.

Tables 1.11, 1.12 and 1.13 also show that those respondents with the greatest direct experience of poverty are more likely to attribute the causes of living in need to bad luck than those with less experience of poverty. However, there is no clear trend with the attribution of living in need to an 'inevitable part of modern progress' although the middle groups ('multiply deprived', 'sometimes poor' and 'occasionally poor in the past') had similarly high levels of response to this question (i.e. 22%, 20% and 23% respectively). The reasons for this require further research.

Table 1.12
The public's view of why people live in need by level of poverty (%)

Question 7: "Why, in your opinion, are there people who live in need? Here are four opinions - which is closest to yours?"

	Are you genuinely poor?		
	Never	Sometimes	All the time
	(n=1166)	*(n=459)*	*(n=177)*
Because they have been unlucky	10	9	14
Because of laziness and lack of willpower	22	17	10
Because there is much injustice in our society	36	46	50
It's an inevitable part of modern progress	19	20	15
None of these	4	3	2
Don't know	9	6	10

Table 1.13
The public's view of why people live in need by history of poverty (%)
Question 7: " Why, in your opinion, are there people who live in need? Here are four opinions - which is closest to yours?"

	Have you ever lived in poverty?				
	Never	Rarely	Occasionally	Often	Most of the time
	(n=977)	*(n=277)*	*(n=343)*	*(n=150)*	*(n=65)*
Because they have been unlucky	10	5	11	18	11
Because of laziness and lack of willpower	20	26	17	13	11
Because there is much injustice in our society	38	43	40	44	50
It's an inevitable part of modern progress	18	18	23	15	20
None of these	4	1	3	2	2
Don't know	10	7	6	8	6

The patterns found when the 'living in need' question is broken down by Head of Household social class (Table 1.14) are similar to those of the poverty questions but the trends are not as clear cut. This is as would be expected since, although experience of poverty is related to Head of Household social class (in general, the higher the social class, the less experience of poverty) this relationship is complex with numerous exceptions.

Table 1.14
The public's view of why people live in need by social class (%)

Question 7: "Why, in your opinion, are there people who live in need? Here are four opinions - which is closest to yours?"

	Social Class				
	AB *(n=265)*	C1 *(n=476)*	C2 *(n=421)*	D *(n=346)*	E *(n=323)*
Because they have been unlucky	10	8	10	10	14
Because of laziness and lack of willpower	24	18	20	20	18
Because there is much injustice in our society	39	40	37	43	43
It's an inevitable part of modern progress	15	24	20	16	16
None of these	4	4	3	3	2
Don't know	8	7	11	8	8

Table 1.15
The public's view of why people live in need by political orientation (%)

Question 7: "Why, in your opinion, are there people who live in need? Here are four opinions - which is closest to yours?"

	Political Orientation			
	Conservative *(n=395)*	Labour *(n=435)*	LibDems *(n=122)*	Green *(n=61)*
Because they have been unlucky	10	10	12	4
Because of laziness and lack of willpower	32	13	10	16
Because there is much injustice in our society	20	52	54	49
It's an inevitable part of modern progress	21	16	14	27
None of these	5	4	2	
Don't know	12	6	8	4

Table 1.16
The public's view of why people live in need by household type (%)

Question 7: "Why, in your opinion, are there people who live in need? Here are four opinions - which is closest to yours?"

	Household Type				
	Retired	Lone Parents	Other Families with Children	Single People	Others no Children
	(n=439)	*(n=73)*	*(n=458)*	*(n=201)*	*(n=659)*
Because they have been unlucky	11	19	10	12	8
Because of laziness and lack of willpower	27	15	19	11	18
Because there is much injustice in our society	35	43	40	49	40
It's an inevitable part of modern progress	14	14	24	16	20
None of these	4	2	3	4	4
Don't know	9	6	6	9	10

Beliefs about the causes of poverty are clearly related to a respondent's political orientation (Table 1.15). Conservatives are two and a half times less likely than Labour, Liberal Democrat or Green supporters to believe that need is caused by injustice in society. Conversely, 32% of Conservatives believe that poverty is caused by 'laziness or lack of willpower' compared with 13%, 10% and 16% of Labour, Liberal Democrats and Greens, respectively. Greens are the most likely group to attribute living in need to an 'inevitable part of modern progress' (27%), followed by Conservatives (21%).

Household Type (Table 1.16) does not appear to be a major determinant of attitudes towards the causes of living in need, although single people (non-retired) are more likely than pensioners to believe in injustice in society and less likely than pensioners to believe in laziness and lack of willpower as causes.

Conclusion

The scientific 'objective' measurement of poverty is both possible and attainable. Deprivation studies, such as the Breadline Britain in the 1990s survey, provide objective and reliable criteria by which levels of poverty can be determined. These 'objective' measures generally correspond closely with the more 'subjective' individual's perceptions of their own levels of poverty. The relative concept of poverty provides the theoretical framework that permits this measurement.

Poverty increased during the 1980s and, by 1990, 20% of households could objectively be classified as 'poor'. Thirty-five per cent of respondents considered they were 'genuinely poor now' either 'all the time' (10%) or 'sometimes' (25%) (Table 1.4). Forty-six per cent of respondents have experienced at least a brief period of poverty at some time in the past (Table 1.6). Fortunately, for the overwhelming majority, their experience of 'living in poverty' is relatively brief. Only 4% of households, which can objectively be described as 'poor', also have a long history of living in poverty.

The public's attitudes to the causes of poverty have changed significantly during the 1980s. The number of people who consider that 'people live in need' because 'there is much injustice in society' more than doubled between 1976 and 1990 (from 16% in 1976 to 40% in 1990). Attitudes to the causes of poverty appear to be related to both direct and indirect experience of poverty.

Notes

[i] Keyes and Kennedy (1992) examined all records of death between 1/9/1991 and 31/8/1992 notified to the coroners courts for Inner South London, Poplar, Westminster, St Pancras and Hammersmith. Additional information was obtained from the River Police.

[ii] The numbers of homeless people in Bed and Breakfast include a small number of people in a miscellaneous category, such as Lighthouse Keepers and people sleeping above fire stations.

[iii] The EAO was the Economic Adviser's Office at the Department of Health and Social Security

[iv] Sen (1983) has argued "there is ... an irreducible absolutist core in the idea of poverty. If there is starvation and hunger then, no matter what the relative picture looks like - there clearly is poverty." Examples of this absolutist core are the need "to meet nutritional requirements, to escape avoidable disease, to be sheltered, to be clothed, to be able to travel, to be educated ... to live without shame."
Townsend (1985) has responded that this absolutist core is itself relative to society. Nutritional requirements are dependent on the work roles of people at different points of history and in different cultures and foods available in local markets. Avoidable disease is dependent upon the level of medical technology. The idea of shelter is relative not just to climate but also to what society may use shelter for. Shelter includes notions of privacy, space to cook, work and play and highly cultured notions of warmth, humidity and segregation of particular members of the family as well as different functions of sleep, cooking, washing and excretion.

Much of the debate of absolute versus relative poverty revolves around the definitions of absolute and relative. Sen (1985) argued that "the characteristic feature of absoluteness is neither constancy over time nor invariance between societies nor concentration on food and nutrition. It is an approach to judging a person's deprivation in absolute terms (in the case of a poverty study, in terms of certain specified minimum absolute levels), rather than in purely relative terms vis a vis the levels enjoyed by others in society". This definition of absoluteness in non-constant terms is, from an operational point of view, effectively identical to the relative poverty concepts of Townsend and others.

[v] Kurt Godel's (1931) Incompleteness Theorem demonstrated that any system of mathematics within which arithmetic can be developed is essentially incomplete. Even if an infinite number of axiomatic rules are shown to be true there would still remain 'true' arithmetic statements that could not be derived from these axiomatic rules. No mathematical system can ever be complete, unknowns will always remain (Nagel and Newman, 1958).

[vi] Much of the original work of these philosophers is difficult to understand. However, there are a number of simpler summaries of their ideas; for example Chambers (1978), *The Economist* (1981), Medawar (1984), Papineau (1987).

[vii] Excluding all summary motor offences i.e. parking tickets, etc.

[viii] Equivalent income is determined from equivalent consumption patterns, but in order to know what equivalent consumption is, equivalent income must first be known.

[ix] The equivalence scales mentioned are described in Podder (1971), Lazear and Michael (1980a, 1980b), ABS (1981), Seneca and Taussig (1971), Habib and Tawil (1974), SWPS (1981).

[x] Lack of necessities refers to households that stated they did not have a necessity because they could not afford it and not to those households who lacked a necessity because they did not want it.

[xi] Discriminant analysis produces similar results to regression analysis and the examination of tables but involves much less effort in computing.

[xii] Household groups of one to four people, excluding lone parent households.

[xiii] Such as the McClements equivalisation index, used by the Department of Social Security.

[xiv] Data on the length of time that households spend living in poverty is generally confined to arbitrary, income-based definitions of poverty: such as the numbers below 50% of median income. However, it is possible that deprivation-based poverty studies might show broadly similar results on the dynamics of poverty spells if such data were available.

[xv] A long list of different items can be inserted here, depending upon what it considered to be reprehensible to the prevailing 'middle class' morality of the time.

[xvi] The eugenics movement was discredited both scientifically and politically by the late 1940s. Their arguments on differences in society resulting from the different genetic make-ups of groups did not stand up to the mathematics of the newly-emerging population genetics. The modern socio-biological attempts to revive eugenics arguments, likewise, do not stand up to close mathematical scrutiny (Gould, 1981; Kitcher, 1985; Maynard Smith and Warren, 1989). The revelations about the German Nazi concentration camps and the German mass-sterilisation programmes dealt eugenic theories a fatal political blow (Gould, 1985; Mazumdar, 1992). However the Bow Group of Conservative MPs is reported to have recently discussed the eugenic idea of breeding controls on the poor and criminal classes (*The Observer*, 28.11.93).

[xvii] i.e. more than 1.5% of the population.

[xviii] Key references for these studies are Brown and Madge (1982), Lidbetter (1933), Caradog-Jones (1934), Blacker (1937, 1952)

[xix] The 1990 GHS provides the most up to date data on drinking and smoking available at time of writing. Unfortunately, the published report did not contain information on smoking broken down by household income.