Chapter 10

Adapting the consensual definition of poverty

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Introduction

The *consensual definition of poverty*, developed by Mack and Lansley (1985), represents one of the most important contributions to modern poverty research. The approach has several advantages compared to traditional 'expert definitions'. Firstly, a definition based on value judgements held by the population would probably reflect poverty as a social phenomenon in a more appropriate way. Secondly, there may be a better chance of getting broad public support for the definition. Thirdly, it is likely that poverty research based on a widely accepted definition will have a greater impact on political decisions and ultimately on social policy.

The purpose of this chapter is to develop this 'consensual definition of poverty'. The original Mack and Lansley approach will be compared with a new method developed by Halleröd (1994a and 1994b), using Swedish data but applied for the first time in an analysis of the data collected in the 1990 Breadline Britain Survey.

The original study was, to a large extent, a development and refinement of the theoretical and empirical work of Townsend (1979). Thus, the study was conducted in the tradition of direct measurement of poverty and Mack and Lansley defined poverty as 'enforced lack of socially perceived necessities' (1985, p39).

'Necessities' were restricted to a set of consumption items and people were regarded as 'poor' if they could not maintain a standard of consumption that was perceived as necessary by a majority of the population. Their empirical approach was based on two steps - identifying the necessities and identifying those who could not afford them (see Chapter 1).

The way Mack and Lansley defined, measured and finally identified those in poverty has been labelled 'the consensual poverty line'. Whilst the approach has had a vast impact on poverty research, the term 'consensual' is problematic and causes some confusion. The first attempt to develop a consensual poverty line was made by Goedhart, Halberstadt, Kapteyn and Van Praag (1977). They tried to establish an economic poverty line based on public opinion. Thus, the consensual poverty line was first used as a label for an indirect definition of poverty. The indirect approach has been further developed in several studies and is widely applied (see, for example, Van Praag *et al*, 1980; Haganaars, 1986; Saunders and Matheson, 1992). Another problem, to be addressed later, is that Mack and Lansley's definition does not reflect a state of consensus within the population. This can also be said of the indirect consensual poverty line (Saunders and Matheson, 1992, p47).

Critique of Mack and Lansley

The researchers have gone further than any of their predecessors in an effort to relate the definition of poverty to the view of public opinion and to reduce the impact of arbitrary decisions.

> ".....we have aimed to exclude our own personal value judgements by taking the consensual judgement of society at large about people's needs. We hope to have moved towards what Sen describes as 'an objective diagnosis of condition' based on 'an objective understanding of 'feelings'." (Mack and Lansley, 1985, p46)

There were nevertheless several arbitrary aspects and decisions remaining in their approach. These decisions are partly connected with the design of the survey and partly with the interpretation of the data.

Firstly, the way a study is designed will always have an important impact on the results. The results will therefore always reflect the researchers' interpretation of poverty. The core of the study was to identify necessities and those who went without them, using a list of 44 items selected by Mack and Lansley. They argued that the items 'on the one hand distinguished between the 'poor' and others, and on the other hand, to be of some significance to many people' (Mack and Lansley, 1985, p50). The argument is not that the goal was not achieved but that it was Mack and Lansley themselves who made the ultimate decision as to which items could be regarded as necessities. So, although the respondents decided which items on the list were necessary, they did not decide which items should be included on the list.

However, the reliability analysis demonstrated that, even if Mack and Lansley had chosen a completely different set of questions about necessities, the results they obtained would have been effectively identical (see Chapter 1).

Secondly, the term 'consensus' refers to a situation where everyone has the same opinion. A consensual definition of poverty should therefore refer to a definition that everybody accepts and that reflects 'the views of society as a whole' (Mack and Lansley, 1985, p42). That is, however, not the case in Mack and Lansley's study. They decided that an item was a necessity if more than 50% of the population perceived it as such. Whilst it is seen as reasonable to let the majority decide what is necessary, 'majority' is not the same as 'consensus' and there are no theoretical reasons to take the level for 'necessities' as 50% rather than 30% or 70% or any other level. The decision is ultimately arbitrary.

The classification of consumer items into necessities and non-necessities is problematic if the consensual approach is interpreted as a ranking of preferences, as shown by the following example. Analysis of the 1990 Mack and Lansley data shows that, of the 44 items on the list, 32 items were identified as necessities by at least 50% of respondents. Let us imagine that a person X has an order of preferences identical to the standard preferences held by public opinion and also imagine that X wants to consume all the items on the list but can only afford 32 of them, namely those regarded as necessities by the majority of the population. X is a very rational human being so she or he does consume all the necessary items but nothing more. X will, if Mack and Lansley's approach is used, not be deprived at all and certainly not be 'poor' because she or he does not lack any of the necessities. The fact that she or he cannot afford anything else does not change that picture.

Let us then imagine Y who has quite a different order of preferences. Y also wants to have all the items on the list but the difference is that Y can afford all but three of them. Since Y's order of preferences is different from the majority of the population, these three are regarded as necessities and Y, in lacking them, is perceived to be 'poor' even though her or his actual consumption reflects choice and not constraint.

Although X and Y are unlikely to exist in the real world, they highlight an unresolved dilemma in Mack and Lansley's approach. The closer a person's order of preferences is to the aggregated preferences held by general public opinion, the more likely it is that she or he will try to consume in accordance with these aggregated preferences. The consequence of this, other things being equal, is that the closer a person's choices are to the average choice, the less likely that person is to be seen as deprived or 'poor'.

A third problem in this consensual definition of poverty is the important conclusion that there is a high degree of homogeneity in people's opinions of necessary consumption (see Chapter 3). Necessities were accounted as such by a majority of the population, independent of differences in demographic and social composition. However, these results do not imply that there are no differences in the extent to which different parts of society classified consumption as necessary. It only means that it is unusual that these differences change majority conditions. The point is best illustrated by a dressing gown! The 1990 Breadline Britain data shows,

for example, that as only 42% of the population regard a dressing gown as necessary, it is not a necessity. However, older people classify a dressing gown as necessary to a much higher degree than younger people - 78% of female single people and 85% of female respondents in couples over 75 years of age considered a dressing gown as necessary. The proportion for both single people and childless couples under 20 years of age is zero. Mack and Lansley's approach would still lead to the conclusion that a dressing gown is not a necessity even though the difference between the age groups is so significant. It is also significantly different by age and family composition.

The UK data show that there are statistically significant differences (at the 0.01 level) between age groups, men and women and different types of household on 19 of the 44 consumer items listed. These differences are hidden if Mack and Lansley's approach is used.

Finally, Mack and Lansley (1985, p39) did, as mentioned above, define poverty as 'enforced lack of socially perceived necessities'. They decided that people who could not afford three or more of the necessities were 'poor'. It could be argued that the poverty line should have been set at a score of one if a necessity is really a necessity. This raises the bigger and more general question of the need for a poverty line at all.

Poverty in an advanced society is not just a question of 'obvious want and squalor', it is also a question of being able to keep up with the ordinary lifestyle of that society. This was the main point made by Townsend (Abel-Smith and Townsend, 1965; Townsend, 1970, 1979). To relate poverty to ordinary lifestyle means that the centre of attention is moved from subsistence to social integration. Mack and Lansley's concept of poverty is more strict than Townsend's and poverty is still based on the notion of deviation from ordinary lifestyle and not just a matter of starvation and malnutrition. This is because 'socially perceived necessities', by definition, are related to the ordinary lifestyle of a society and it is this connection which makes Mack and Lansley's definition relative.

The question then is, how big should this deviation be before it is called poverty? Both Townsend (1979) and Mack and Lansley (1985) argued that poverty is the outcome of accumulated deprivation. Thus, deprivation is not the same as poverty. This is not to say that a small amount of deprivation is totally unproblematic for the deprived but the term 'ordinary lifestyle' refers to a mean value for the total population and the fact that most people tend to deviate to some degree from 'ordinary' is not a problem. The implication is that enforced lack of socially perceived necessities must be concentrated on a relatively small part of the population before there can be talk of poverty. It is hard to argue that poverty equals an exclusion from ordinary lifestyle if this is not the case. Necessities are necessary because they are a normal part of daily life for most people. What defining poverty is all about is finding indicators which separate people suffering from multiple deprivation and hardship from people who live more or less ordinary but not necessarily totally unproblematic lives. How many problems and how much hardship must a person suffer before they are regarded as 'poor'?

It will be argued here that a poverty line serves a purpose if the definition of poverty is indirect, i.e. poverty is understood to be a lack of economic resources. The poverty line can be applied straightaway in these cases or can at least be used as guidance in social policy programmes but the value of the poverty line diminishes if the poverty is defined directly. This is especially the case when the deprivation index is restricted to a set of consumer items. To abolish poverty defined as 'lack of socially perceived necessities' would mean that the authorities would have to provide the 'poor' with these necessities. Such a policy implies 'planned consumption' and does not appear to be a realistic option. Furthermore, strict application of Mack and Lansley's poverty line would mean that a family lacking three necessities, for example a garden, a roast meat joint or its equivalent once a week and a washing machine, should have the right to be provided with these things. A family lacking just two necessities, for example heating to warm living areas of the home if it's cold and indoor toilet, should not have the same right because they are not below the poverty line. Direct observation of living conditions must be seen as indicators of poverty, not absolute evidence of poverty.

Mack and Lansley do not suggest that the 'poor' should be provided with the necessities they lack. They suggested instead a more common approach and proposed a guaranteed minimum income equivalent with 150% of the norm for social benefits. To use findings based on a direct definition of poverty to suggest income transfers directed to people at the lower end of the income distribution is, however, not enough. The aim of a direct definition is to identify people who are actually suffering hardship. There are, as mentioned above, several studies that have shown that the overlap between direct and indirect poverty is small (Heikkile, 1991; Hallerod, 1991, 1995; Van den Bosch, 1992; Muffels *et al*, 1992; Bradshaw *et al*, 1993; Nolan and Whelan 1995; Kangas and Ritakallio 1995). Thus, a guaranteed minimum income would only help a part, not necessarily the major part, of the population suffering the severest hardship. Direct definitions of poverty are mainly used because a straightforward relationship between economic resources and standards of living can be questioned. There are other components to the social fabric which affect people's living conditions and influence standards of living. To identify these components is one of the most important tasks for poverty research, a task that can only be solved by using direct definitions of poverty.

The proportional deprivation index

An alternative way to measure poverty is labelled the 'proportional deprivation index' (PDI). The PDI is based on the same basic assumptions as Mack and Lansley's original approach and poverty is still seen as a 'lack of social perceived necessities'. The aim of the PDI is to deal with shortcomings in their deprivation index and thereby strengthen the relationship between the preferences of consumption held by public opinion and a direct definition of poverty. It could be argued that the PDI is more theoretically appealing than the deprivation index (Majority Necessities Index) used by Mack and Lansley because it is less sensitive

to the consumer items included in the list, does not make arbitrary classifications of necessary and non-necessary consumption, decreases the sensitivity to individual preferences and takes account of significant differences in preferences between demographic and social categories.

The PDI is not based on a classification of consumption of necessities and non-necessities. Instead of dividing consumption into two groups, each item is given a weight based on the proportion of the population that regards it as necessary. This approach makes it possible to include every item on the list in the deprivation index and gives each item a value based on the proportion of the population that sees it as necessary. The immediate advantage of this procedure is that we do not need an arbitrary classification of necessities. It can therefore be argued that the PDI gives a better reflection of preferences held by public opinion.

The MNI is sensitive to the items included on the list and this sensitivity increases when necessary consumption is defined. One list of consumer items may result in just a few items being defined as necessary while another may result in several. The number of consumer items defined as necessities will have an impact on the result. The PDI also depends on a choice of consumer items but the sensitivity is smaller because the choice will only affect the relative importance of each item, not the number of items on which the deprivation index is based.

Public opinion weighting has been further adjusted to reflect the differences between the various social and demographic groups. Thus, the PDI approach takes account of these differences by adjusting the weighting for each consumer item according to significant differences within the population. Account could be taken of the variation in the preferences of any number of different social or demographic groups but we have chosen three important characteristics - sex, age and family composition (whether they are single or couples with or without children).

Empirical analysis

The main purpose of the empirical analysis is to compare the outcomes of the PDI and the MNI regarding (a) the extent to which they are targeting the same part of the population and (b) whether the causes of poverty differ depending on the index used. The analysis can be seen as a validation for the robustness in Mack and Lansley's approach to direct consensual poverty definition. The reliability of the definition will increase if the differences between the indexes are small and decrease if the opposite is true.

Necessary consumption and lack of consumption

The list of consumer items, the proportion of the population regarding them as necessary and the proportion of the population that cannot afford them are presented in Table 10.1.

There are ten items in the list which 90% or more of the participants in the 1990 study regard as necessities:

- Two meals a day
- Heating to warm living areas of the home if it is cold
- Refrigerator
- Indoor toilet, not shared with another household
- Bath, not shared with another household
- Beds for everyone in the house
- Damp free home
- Warm waterproof coat
- Three meals a day for children
- Enough money to keep house decently decorated

There are 32 items that over 50% of the population regard as necessities including those mentioned above and these are the items on which the Majority Necessities Index (MNI) is based.

Table 10.1
Proportion of the population regarding consumer items as necessary and proportion of the population that cannot afford them (n=1831)

Consumer item	Necessary, should be able to afford (%)	Would like to have, can't afford (%)
Two meals a day	90	1
Meat/fish/vegetarian every other day	77	4
Heating to warm living areas of home if it is cold	97	3
A dressing gown	42	2
Two pairs all weather shoes	74	5
New, not second hand clothes	65	4
A television	58	1
A roast joint/vegetarian equiv. once a week	64	6
Carpets in living room and bedrooms	78	2
Telephone	56	7
Refrigerator	92	1
Indoor toilet, not shared with another household	97	0.1
Bath, not shared with another household	95	0.2
Beds for everyone in household	95	1
Damp-free home	98	2
A car	26	18
A night out once a fortnight	42	14
A packet of cigarettes every other day	18	5
A hobby or leisure activity	67	7
A holiday away one week a year, not with relatives	54	20
Celebrations on special occasions e.g. Christmas	74	4
Presents for family/friends once a year	69	5
Friends/family for meal once a month	37	10
A warm waterproof coat	91	4
A 'best outfit'	54	8
A washing machine	73	0.4
3 meals daily for children	90	0.4
Toys for children e.g. dolls, models	84	1
Leisure equipment for children e.g. bicycle	61	2
Own bedroom for all children 10+ of different sex	82	2
An outing for children once a week	53	4
Children's friends for tea/snack once a fortnight	52	3
A dishwasher	4	18
A meal in restaurant once a month	17	22
Regular savings (£10/month) for rainy day	68	30
A video	13	10
Enough money to keep house decently decorated	92	15
Holidays abroad once a year	17	32
Coach/train fares to visit family/friends 4 times a year	39	19
Insurance contents of dwelling	88	10
Fruit and vegetables every day	88	6
A home computer	5	16
Money to pay for special lessons e.g. music	39	6
Money to participate in out of school activities	69	3

Accumulated deprivation

The distribution of MNI is shown in Table 10.2. (Note that, for technical reasons, this analysis has had to be undertaken on the unweighted data file which means that the results will be slightly different from those elsewhere in this book which are based on the weighted data file.) Nearly half of the population do not lack any of the items regarded as necessities by the majority of the population. About 17% lack one necessity and about 8% lack two necessities. The remaining 28%[i] lack three or more necessities and can be regarded as suffering from accumulated deprivation or living in poverty.

Table 10.2
The population distributed in accordance with values on the MNI (n=1831)

Score on the MNI	0	1	2	3	4	5	6	7	8+
Share of population	47.5	16.7	7.8	5.6	4.9	3.3	2.5	2.5	9.2

The Proportional Deprivation Index (PDI) depends on specific weights which have been given to each item. The score on the PDI is therefore the outcome of the number of items a person says he or she wants to have but cannot afford and the specific weight assigned to each item using the demographic variables outlined above (the weightings are summarised in Appendix I). The distribution of deprivation according to the PDI is shown in Table 10.3 and compared with MNI.

Table 10.3
Distribution of PDI and MNI in deciles. Mean value of PDI and MNI by decile and share of total deprivation in each decile

Percentile	Mean PDI	Mean MNI	Percent PDI	Percent MNI
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0.6	0
5	1.19	0	2.7	0
6	2.39	1	4.6	7.5
7	3.50	2	8.4	7.0
8	3.90	3	14.4	7.8
9	5.42	5.2	23.8	30.9
10	6.95	11.2	45.6	46.7

Given the way it is derived, PDI is distributed more widely in the population with PDI scores appearing in some of the lower decile groups. However, only a slightly lower proportion of PDI is concentrated in the top decile.

The overlap between MNI and PDI

The main purposes of poverty research are to define a poverty line and count the 'poor'. In this case the purpose is not to estimate the number of people classified as 'poor', but to see to what extent different definitions identify the same people as 'poor'. For this purpose three poverty lines based on the MNI are constructed - one based on a score of three or more on the deprivation index (labelled MNIa), one at a score of four or more (MNIb) and one set at a score of five or more (MNIc). According to these the poverty lines 28.1%, 22.2% and 17.4% respectively of the population are 'poor'. The poverty lines based on the PDI are fixed at levels that will create the same proportion of people in poverty and are accordingly labelled PDIa, PDIb and PDIc. Thus the same number of people are classified as 'poor' whichever index is used. The crucial question is whether these definitions are targeting the same groups of people.

Table 10.4a
Overlap between PDI and MNI. Percent of population and percent of poor (in brackets)

	Poor according to at least one poverty line	Poor according to both MNI and PDI	Poor MNI only	Poor PDI only
PDIa & MNIa	29.8 (100)	26.5 (89.0)	1.6 (5.4)	1.6 (5.4)
PDIb & MNIb	24.0 (100)	20.6 (86.3)	1.6 (6.8)	1.6 (6.8)
PDIc & MNIc	18.3 (100)	16.5 (90.0)	0.9 (5.1)	0.9 (5.1)

The overlap between poverty defined via the MNI and PDI is, as can be seen in Table 10.4a, very substantial. Thirty percent of the survey sample falls under the first poverty lines and 89% of that group is 'poor' according to both definitions. Twenty four percent of the population are 'poor' according to the second set of poverty lines and over 86% are 'poor' according to both definitions. The third group contains over 18% of the population and the pattern is confirmed -the overlap is 90%.

The overall large overlap is to be expected since the underlying approach for both definitions is the same. Table 10.4a shows that although there may be substantial differences in the ranking of deprivation between the PDI and the MNI,

most of those who fall below the PDI poverty lines also fall below the MNI lines. Nevertheless, between 14% and 10% of those defined as 'poor' by one definition are 'not poor' by the other and the results also indicate that the overlap is greatest at the most severe poverty definition (c).

One of the possible objections to the PDI index is that it incorporates some items that Mack and Lansley included in the 1990 study which were not poverty indicators but luxury items used to provide a spread of responses and not necessarily to measure deprivation. If these items are measuring deprivation, then including them in the PDI index will make it a less accurate measure, though if they are not considered to be necessities they will only have a small weighting. There are twelve such items:

- Dressing gown
- Monthly meal in a restaurant
- Car
- Video
- Night out once a fortnight
- Holidays abroad once per year
- Pack of cigarettes every other day
- Coach/train fares to visit others
- Ask others to a meal once a month
- Home computer
- Dishwasher
- Child's music/dance/sport lessons

Table 10.4b explores the overlap between the two measures with these twelve items excluded from the PDI measure. It can be seen that there are only very small changes in the proportion defined as 'poor' by at least one of the measures. The proportion defined as 'poor' according to both definitions increases for both a, b and c. So although PDI appears to be closer to MNI when the twelve items are excluded, because the difference is not very great we continue the analysis with all the items included in PDI.

Table 10.4b
Overlap between PDI and MNI. Percent of population and percent of poor (in brackets), excluding 'luxury' items

	Poor according to at least one poverty line	Poor according to both MNI and PDI	Poor MNI only	Poor PDI only
PDIa & MNIa	28.5 (100)	27.6 (97.1)	0.4 (1.5)	0.4 (1.5)
PDIb & MNIb	22.8 (100)	21.7 (95.2)	0.5 (2.4)	0.5 (2.4)
PDIc & MNIc	18.1 (100)	16.7 (92.1)	0.7 (3.9)	0.7 (3.9)

Lack of social perceived necessities and other indicators of bad living conditions

One important finding by Mack and Lansley (1985) was that people with low material standards also tend to have other problems. This corresponds with Townsend's work in the late 1960's and is confirmed by the results of the 1990 Breadline Britain survey (Gosschalk and Frayman 1992) (see Chapters 3, 6, and 7).

In Table 10.5, we compare the proportion of those having other problems with those who are PDI poor and MNI poor. The comparison is restricted here to a and b levels. In general, both measures give very similar proportions with other problems. Where there are differences it is usually the MNI measure which gives a higher proportion with other problems. Thus, more MNIb poor are short of money for food, isolated for lack of money, borrowing from family or friends, believe they are genuinely poor and so on. In contrast, more of the PDIb poor are unemployed, have houses in a poor state of repair and are receiving housing benefit.

Overall, the results show that lack of socially perceived necessities and other forms of deprivation are closely connected. Those suffering material hardship suffer from other problems to a much higher degree than those who live above the poverty lines. Labelling those as 'poor' who lack three or more items, considered as necessities by over 50% of the population, is justified by the self appraisal of those so identified but the PDI measure might be still better.

Table 10.5
Self-evaluation of material standard and reported difficulties in making ends meet

		PDIa poor %	PDIb poor %	MNIa poor %	MNIb poor %
Short of money for food	Yes	68.7	60.2	70.7	61.4
	No	21.6	16.0	20.9	15.9
Isolated for lack of money	Yes	64.5	56.1	66.0	58.6
	No	17.7	12.4	16.9	11.9
Borrow from friends/family	Yes	55.3	45.9	56.4	47.5
	No	18.2	13.6	17.5	13.0
Borrow from money lenders	Yes	58.7	56.0	60.0	56.0
	No	26.8	20.8	26.5	20.8
Genuinely poor	Always	68.9	60.4	70.3	61.3
	Sometimes	43.2	34.2	43.2	34.5
	Never	10.0	6.3	9.2	6.2
Ever lived in poverty	Never	12.9	8.5	12.3	9.1
	Rarely	22.2	19.5	24.1	18.8
	Occasionally	38.6	29.7	37.4	28.0
	Often	59.7	49.5	59.1	51.1
	Most of time	69.7	60.6	69.7	64.6
Been depressed in last month	Yes	19.7	14.5	19.4	14.9
	No	60.4	51.6	60.7	50.8
Worried about relationships with friends	Yes	27.5	21.6	27.3	21.7
	No	51.8	46.3	50.0	44.4
Worried about relationships with family	Yes	26.3	20.6	26.1	20.8
	No	60.4	49.1	59.4	49.1
Being bored	No	23.2	17.8	22.5	17.8
	Yes	53.5	44.9	55.8	45.5
Not having enough money	No	20.3	14.9	20.0	14.9
	Yes	68.2	59.6	68.5	60.3
Feeling looked down on	No	25.7	19.9	25.2	20.0
	Yes	68.8	59.6	72.5	60.6
Feeling a failure	No	25.3	20.0	25.1	19.8
	Yes	65.9	52.3	65.9	55.3
Lack of hope	No	22.8	17.9	23.0	17.8
	Yes	61.2	49.2	58.5	50.4
Letting down family	No	24.1	18.8	24.0	18.5
	Yes	62.0	50.5	60.5	54.0
None of these	No	50.8	41.0	50.6	41.3
	Yes	10.2	7.4	10.0	7.3
Problems at school	Yes	27.2	21.2	26.8	21.1
	No	34.2	28.4	34.9	29.8
State of repair	Good	16.4	11.1	16.0	12.7
	Average	37.0	30.5	37.0	28.6
	Poor	58.6	51.8	59.5	50.5
Victim of crime	Yes	38.0	30.3	38.3	30.1
	No	23.8	18.6	23.3	18.9
Respondent unemployed	Yes	34.9	33.7	38.4	31.4
	No	14.5	10.6	14.8	10.8
Spouse employed	Yes	42.2	40.0	44.4	37.8
	No	15.1	12.4	15.9	12.2
How long unemployed over last 10 years	Never	12.5	9.3	11.6	9.1
	Less 2 months	21.3	17.5	22.5	17.5
	2-6 months	24.3	16.5	26.1	16.5

	7-12 months	35.3	30.9	36.8	25.0
	12+ months	54.1	46.3	52.8	45.9

Table 10.5 (continued)

		PDIa poor %	PDIb poor %	MNIa poor %	MNIb poor %
Respondent has long-standing illness	No	26.0	20.7	25.9	20.9
	Yes	37.5	28.9	36.7	28.6
Other household member with long-standing illness/disability	No	26.4	20.5	26.3	20.6
	Yes	36.4	30.4	35.8	30.4
Registered disabled (respondent)	No	27.4	21.8	27.2	21.9
	Yes	39.8	29.7	39.8	29.7
Registered disabled (other household members)	No	27.4	21.6	27.2	21.5
	Yes	40.0	32.2	40.0	35.7
Not registered disabled	No	36.2	28.0	36.2	29.3
	Yes	27.0	21.4	26.8	21.3
Receiving unemployment benefits	Yes	58.9	50.3	56.8	48.6
	No	24.8	19.1	24.8	19.4
Receiving Sickness	Yes	45.9	36.1	43.6	34.6
Benefit	No	26.9	21.2	26.8	21.4
Receiving Invalidity Benefit	Yes	38.1	29.9	34.7	27.9
	No	27.4	21.6	27.4	21.9
Receiving Income Support	Yes	59.9	52.2	60.4	53.8
	No	20.4	14.9	20.0	14.6
Receiving Family Credit	Yes	57.1	49.2	57.1	47.6
Receiving Family Credit	No	27.2	21.3	27.0	21.5
Receiving Housing Benefit	Yes	59.7	48.8	58.8	50.2
	No	18.5	14.1	18.5	13.8
Receiving Poll-Tax Benefit	Yes	51.0	41.3	49.9	42.4
	No	18.6	14.3	18.8	14.0
Receiving Attendance Allowance	Yes	41.6	32.6	41.6	31.1
	No	26.7	21.1	26.4	21.4
Receiving State Pension	Yes	23.7	15.0	22.6	15.8
	No	29.5	24.3	29.5	24.2
Receiving Private Pension	Yes	24.0	16.2	22.8	15.0
Receiving Private Pension	No	29.2	28.6	29.2	24.0
Time spent on Income Support	< 3 months	48.6	45.7	45.7	40.0
	<6 months	42.9	38.1	42.9	42.9
	<12 months	61.8	58.2	61.8	54.5
	1+ year	68.3	58.1	68.7	60.4
	No	20.0	14.5	19.8	14.5
Have you ever had Income Support	In last year	45.3	41.3	48.0	41.3
	Last 5 years	33.3	29.5	32.6	28.7
	Over 5 years	22.8	12.7	22.8	15.2
	No never	16.6	11.3	16.4	11.2
Do you contribute to an occupational/private pension scheme	Yes	11.0	7.3	11.6	7.5
	No	21.7	16.9	21.5	17.3
	Don't know	16.7	16.7	25.0	16.7
How do you vote	Conservative	9.7	8.0	10.7	8.0
	Labour	29.2	22.3	28.0	23.1
	Liberal Dem	15.8	11.6	15.8	11.6
	Green	20.8	18.9	20.8	18.9
	Other	25.0	18.8	25.0	20.8
	None/DK	36.4	29.1	36.3	28.8

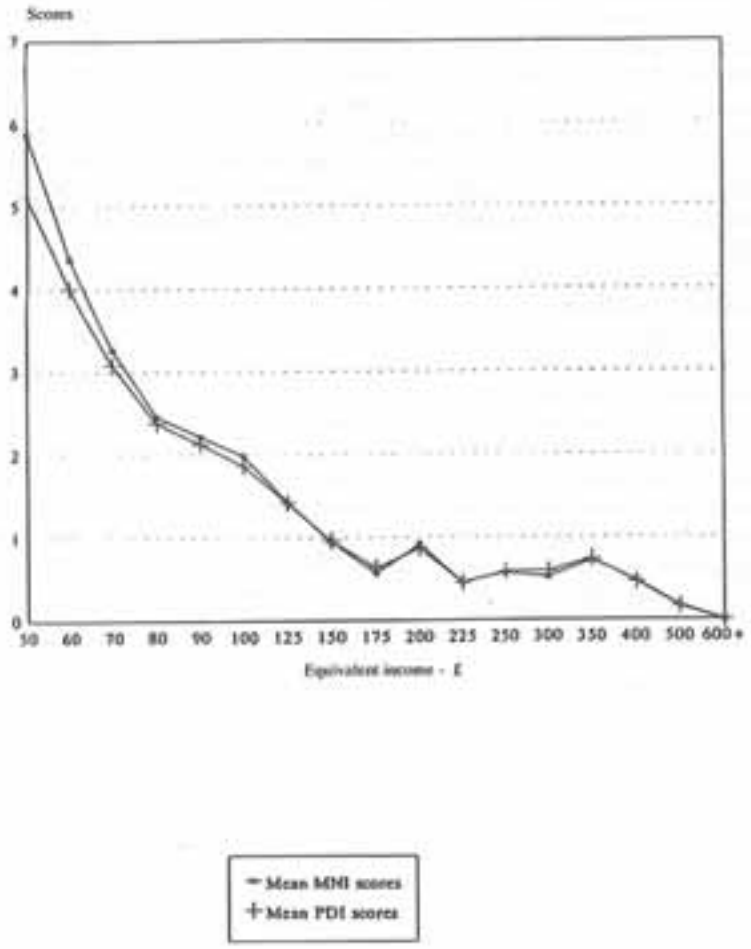
Deprivation and income

The reason for using direct measurement of poverty is the assumption that financial resources do not reflect a standard of living in an acceptable way. People have different abilities to transform equal amounts of money into equal living standards. People live under different circumstances and so need different amounts of money to gain the same standard. Although the connection between the two is important, both MNI and PDI are based on the assumption that lack of consumption is due to a shortage of economic resources. The problem is that 'shortage of economic resources' does not correlate perfectly with the size of income - people who, for one reason or another, have to spend a lot of money will soon run out of money even if they have a relatively high income. However, it is easier to run out of money if the income is small from the beginning. A correlation between income and deprivation should therefore be expected.

The income data used here is based on information collected at interview and it is not totally satisfactory. Respondents were asked to place their net weekly household income (after deduction of tax and national insurance) within a range of incomes provided. For the purposes of the analysis, we have assumed that their income falls in the middle of the range they identified.

Chart 1 shows the relationship between both MNI, PDI and equivalent net disposable income. Both MNI and PDI scores increase as income falls and there is clearly a threshold, at about £150 per week where decreasing income leads to an accelerated increase in deprivation. These results correspond with earlier findings - both Mack and Lansley (1985) and Townsend (1979) argued that deprivation accelerated at a certain income level and both estimated that income level to be approximately 150% of the level of UK Supplementary Benefit.

Figure 10.1
Relationship between equivalent household income and MNI and PDI



In Table 10.6, the population has been divided into income deciles based on net disposable income and the percentage in each decile which falls under the poverty lines PDIa, PDIb, MNIa, and MNIb is shown. The table shows a strong relationship between income and poverty.

Table 10.6
Percentage of the population living in poverty
by income decile of net disposable income
(The percentage of poor in each decile is shown in brackets) (n=1119)

Decile	PD1a (%)	PD1b (%)	MN1a (%)	MNIb (%)
1 Lowest	56.3	47.7	57.8	(46.1
	(19.6)	(20.5)	(20.2)	(19.5)
2	54.4	44.1	54.4	47.8
	(20.2)	(20.1)	(20.2)	(21.5)
3	48.4	41.9	46.8	41.9
	(8.2)	(8.7)	(7.9)	(8.6)
4	41.7	32.1	39.9	34.5
	(19.1)	(18.1)	(18.3)	(19.1)
5	42.9	37.4	42.9	35.2
	(10.6)	(11.4)	(10.6)	(10.6)
6	31.2	23.7	30.1	23.7
	(7.9)	(7.4)	(7.6)	(7.3)
7	16.5	13.9	19.0	12.7
	(3.5)	(3.7)	(4.1)	(3.3)
8	12.8	10.3	14.5	11.1
	(4.1)	(4.0)	(4.6)	(4.3)
9	14.9	9.9	14.0	9.9
	(4.9)	(4.0)	(4.6)	(4.0)
10 Highest	5.6	4.8	5.6	4.8
	(1.9)	(2.0)	(1.9)	(2.1)

More than half of the population in the lowest decile falls below the poverty lines MNIa and PDIa and over half in the second decile. The pattern of the relationship between income and MNI and PDI is very similar; however it can also be seen that neither measure has all the poor concentrated in the bottom deciles. Indeed both (a) measures have about 7% of the poor in the upper two deciles.

The relationship between income and deprivation is complicated. Table 10.6 is based on the household's net disposable income and no adjustment has been made for household composition. This problem is usually tackled by the use of an

equivalence scale which adjusts the household's income according to its composition. The purpose of an equivalence scale is to construct a formula which assigns the same level of 'well being' to households of different sizes with the same equivalent income. The equivalence scale used here is based on the concept that a single person needs 70% of the income of a couple to achieve the same living standard and a couple or single parent with children needs 50% more than a childless couple for each child. The effect that the application of this equivalence scale to income will have on the results can be seen in Table 10.7.

Table 10.7
Percentage of the population living in poverty
by income decile of equivalent income
(The percentage of poor in each decile is shown in brackets) (n=1119))

Decile	PD1a (%)	PD1b (%)	MN1a (%)	MNIb (%)
1 Lowest	71.0	61.8	73.3	63.4
	(25.3)	(27.2)	(26.2)	(27.4)
2	68.0	62.0	68.0	61.0
	(18.5)	(20.8)	(18.5)	(20.1)
3	51.9	42.5	48.1	41.5
	(15.0)	(15.1)	(13.9)	(14.5)
4	37.3	28.8	36.4	26.3
	(12.0)	(11.4)	(11.7)	(10.2)
5	28.8	20.5	27.4	23.3
	(5.7)	(5.0)	(5.4)	(5.6)
6	24.8	19.5	25.5	20.1
	(10.1)	(9.7)	(10.4)	(9.9)
7	24.3	13.1	22.4	15.9
	(7.1)	(4.7)	(6.5)	(5.6)
8	6.5	3.7	7.5	5.6
	(1.9)	(1.3)	(2.2)	(2.0)
9	9.1	7.4	10.9	7.0
	(3.0)	(3.0)	(3.8)	(3.0)
10 Highest	4.7	4.7	5.1	5.1
	(1.4)	(1.7)	(1.4)	(1.7)

The main difference between Tables 10.6 and 10.7 is that poverty is more concentrated in the lowest income deciles when equivalent income is used and the PDI measures give a slightly lower proportion of the bottom deciles being 'poor'. The proportion of the 'poor' in the top two deciles is reduced.

It is hard to justify that such a high percentage of the population in the two highest net disposable income deciles are 'poor'. This problem diminishes if the poverty lines are given less importance and the lack of socially perceived necessities

are seen as indicators of poverty. The proportion of the population falling under the poverty lines can then be seen as being at risk of being 'poor'. This makes the interpretation of Tables 10.6 and 10.7 easier - people living in households with few economic resources have a high risk of being 'poor'. This risk decreases substantially as income increases and so the lack of socially perceived necessities is to a high degree the outcome of insufficient economic resources.

The fact that some people living in households in the upper end of the income strata fall under the poverty lines can be interpreted in two ways. Firstly, both the PDI and the MNI are, as has been pointed out earlier, sensitive to people's preferences. The priority that different people give to different consumer items and their expectations of possessing them does affect the results. Thus 'rich' people can fall under a poverty line because their preferences and expectations are odd in comparison to the rest of the population.

Secondly, the incomes used here are, as in most poverty studies, household incomes. The basic assumption behind this is that resources are equally shared within the household. This is not necessarily the case, or, to put it more strongly, it is certainly not the case in all households. The questions on which the PDI and MNI are based are answered by the respondent, not the household. It is possible for the respondent to be 'poor' even though she or he lives in a household with a high income simply because she/he does not have access to or influence over the money. The results used here could be the outcome of a 'poor' respondent living in a wealthy household.

Who is poor?

Even when poverty is defined directly, the prevalence of poverty is generally seen as an effect of lack of money and the poor are, as shown above, over represented in the lower end of the income distribution. Limited access to economic resources is therefore one of the main explanations for poverty. However, although the size of income is an important factor in making ends meet in a household's economy, it is not the only one and there are several other factors which influence the prevalence of poverty. It is obvious that long term low income causes bigger difficulties than short term low income and one problem is the lack of information about the duration of low income. Neither does income, as measured here, give any information about the households' assets. It will clearly make a large difference if a household owns a house and has money in the bank or if it is in debt and completely dependent on its weekly income. It is also important to acknowledge differences in the way households manage their income and expenditure. Differences in capabilities to transform money into consumption will lead to variance in living standard among households with equivalent incomes (Sen, 1988). Our data make it possible to analyse the impact of a number of variables, besides income, on the risk of falling under one of the poverty lines. The results are summarised in Table 10.8.

It has long been argued that there is an ongoing feminisation of poverty (Goldberg and Kremen, 1987). Women have a weaker position in the labour

market. Also, there is the breakdown of the traditional two parent family and the increasing number of sole parents, usually women. Women also tend to be poorer in retirement. It can be seen that a higher proportion of women are 'poor' by both measures and by both measures they form a majority of the 'poor'.

Gender is of course related to household composition. The highest risk of being in poverty is being a lone parent family but the largest group in poverty are couples with children. The family type with the lowest chance of being in poverty and the lowest proportion of poor households are childless couples. The results are very similar for both MNI and PDI measures but PDI gives rather lower poverty rates for single people, lone parents and couples with children and rather higher rates for couples with no children. This finding, together with the results on gender above, may suggest that PDI is more sensitive to female evaluations of necessities. Another interesting result is the difference between men and women in the group couple with children. The risk that the household will be counted as 'poor' increases if the respondent is a women. This result was also found in Sweden (Halleröd, 1995) and clearly indicates differences between men and women in the conception of the households needs and how well they are meet. It also gives some initial support to the thesis of an unequal intra household distribution of recourses (Pahl, 1989).

The more children there are, the greater the chances of being 'poor' - families with three or more children have twice the chance of being 'poor' as families without children. Nevertheless, about three quarters of all families in poverty only have one or two children. The MNI measure gives slightly higher poverty rates for large families. The largest group of families with children in poverty are couples with three or more children.

About half of all those who are divorced are living in poverty. Another important variable is age. Poverty is traditionally connected with old age but relieving old people from poverty has been an important concern in most developed countries with a modern welfare state and there is probably no other area where welfare states have had so much success (Rowntree, 1942; Rowntree and Lavers, 1951; Vogel, 1987). Today, the highest chances of being in poverty are among the 20-35 age group (probably because these are child rearing years with only one breadwinner). They also form the largest proportion of the 'poor'. The second highest chance of being in poverty under both measures is the 35-45 age group, only then followed by the over 75's.

About two thirds of the unemployed are living in poverty and they form nearly a quarter of the 'poor'. The chances of poverty increase as social class status falls. Over half of social class E are in poverty and nearly half the 'poor' are concentrated in this class. Finally, there are clearly higher risks of poverty in some racial groups than others, with Afro-Caribbeans and the Irish having the highest poverty rates and Asians the lowest. However, over 90% of the 'poor' are white UK citizens.

Table 10.8
Proportion of population in poverty according to PDIa and MNIa

Category of Respondent	PDIa % poverty	PDIb % poor	MNIa % poverty	MNIa % poor
Man	24.8	41.8	23.7	40.2
Woman	31.4	58.2	32.0	59.8
All single, no child	31.0	17.8	32.3	18.7
All single with child	66.7	13.9	69.4	14.6
All couples, no child	16.8	12.4	15.0	11.1
All couples, no child	32.4	32.1	33.0	32.9
Other	23.1	23.8	21.8	22.6
Man, single, no child	30.4	10.7	29.7	10.3
Woman, single, no child	31.4	12.7	34.6	13.9
Man, single + child	50.0	1.0	50.0	1.0
Woman, single + child	68.0	17.3	71.0	17.9
Man, couple no child	15.3	8.4	12.5	6.8
Woman, couple no child	18.8	7.9	18.2	7.6
Man, couple + child	30.3	17.5	30.3	17.4
Woman, couple + child	34.2	24.6	35.2	25.2
0 child	23.0	54.0	22.2	52.4
1 child	33.7	12.8	33.2	12.7
2 children	35.2	17.2	36.8	18.1
3 or more children	48.5	16.1	50.3	16.8
Single,1 child	58.3	8.8	55.6	8.2
Single, 2 or more children	70.8	21.4	76.4	22.5
Couple, 1child	28.1	18.9	28.1	18.4
Couple, 2 children	26.1	22.7	27.1	23.0
Couple 3 or more children	46.2	28.2	46.9	27.9
Divorced	50.7	13.2	51.5	13.5
Not divorced	24.5	86.8	24.2	86.5
Age 16-20	22.1	5.2	22.1	5.7
Age 20-35	33.3	37.3	34.8	39.4
Age 35-45	30.4	18.8	30.7	19.1
Age 45-55	23.2	11.0	20.7	9.9
Age 55-65	25.0	11.4	22.0	10.1
Age 65-75	24.5	10.3	24.1	10.1
Age 75+	27.7	6.0	27.7	6.0
Social Class E	60.6	48.2	60.3	48.3
Social Class D	33.6	26.9	33.6	27.1
Social Class C2	17.0	14.9	17.0	15.0
Social Class C1	12.7	9.1	12.2	8.8
Social Class AB	2.7	1.0	2.2	0.8
Unemployed	66.1	22.6	65.0	22.4
Not unemployed	21.8	77.4	21.7	77.6
Afro-Caribbean/African	44.7	4.1	38.3	3.5
Asian	15.4	0.8	15.4	0.8
Irish	41.4	2.3	41.4	2.3
White UK	28.1	91.7	28.1	92.4
Other	17.6	1.2	14.7	1.0

Conclusion

The purpose of this chapter has been to extend the consensual measure of poverty developed by Mack and Lansley by first including the whole range of social indicators they used (not just those considered necessities by more than half the population) and, secondly, by taking account of the diversity of the judgements of what is a necessity by different groups in society. Thus a new Proportional Deprivation Index was developed which was a function of all items lacking, weighted by the proportion of that particular sex, age, family type considering them a necessity.

The results broadly confirm the robustness and reliability of the Mack and Lansley consensual measure. There is considerable overlap between the two measures - over three quarters are 'poor' by both measures and both measures relate very similarly to other indicators of hardship and income and both provide very similar estimates of the characteristics of the 'poor'.

Nevertheless, between 5% and 7% of the 'poor' are missed by one or other measure and there are quite strong theoretical reasons for using a consensual measure that does not use an arbitrary cut off point of 50% and does take account of the variety of judgements different types of people in society consider as necessities.

Notes

[i] Note that 28% of the unweighted sample lacked three or more necessities and can be defined as 'poor'. When the sample is weighted to reflect the British population this figure is reduced to 20.8%.