

The Extent of Poverty in the UK

How Many People are Poor and Deprived and How Do We Know?

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Poverty and Social Exclusion in the UK





PSEUK Headline findings

Almost 18 million people cannot afford adequate housing conditions; 12 million people are too poor to engage in common social activities; one in three people cannot afford to heat their homes adequately in the winter and four million children and adults aren't properly fed by today's standards.

One in every six (17 per cent) adults in paid work are poor

The percentage of households who fall below society's minimum standard of living has increased from 14 per cent to 33 per cent over the last 30 years, despite the size of the economy doubling.

Hunger in the UK

There is widespread public agreement on what constitutes a minimally acceptable diet. Over 90% agree that, for children, this means: three meals a day; fresh fruit and vegetables; and meat, fish or a vegetarian equivalent at least once a day.

Yet well over half a million children live in families who cannot afford to feed them properly.

*'I go without for the children so they have proper meals.
I can live on one meal a day.'* Jennie, single parent of 3 children

Our research shows that, in households where children go without one or more of these basic food necessities:

In 93% at least one adult skimp on their own food 'sometimes' or 'often' to ensure others have enough to eat.

Drawing the Poverty Line

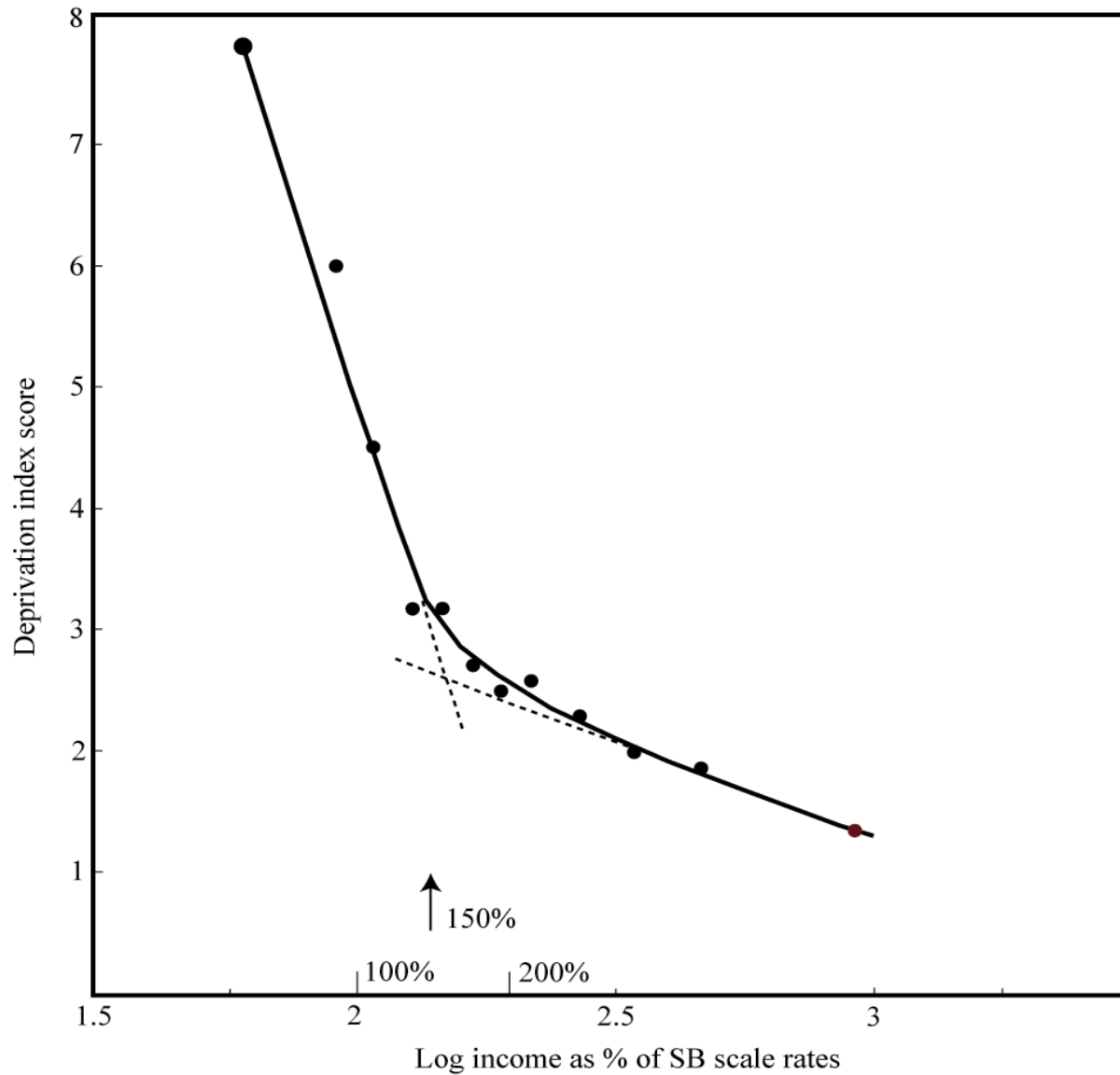
Townsend's Scientific Definitions of Poverty

Poverty can be defined as;

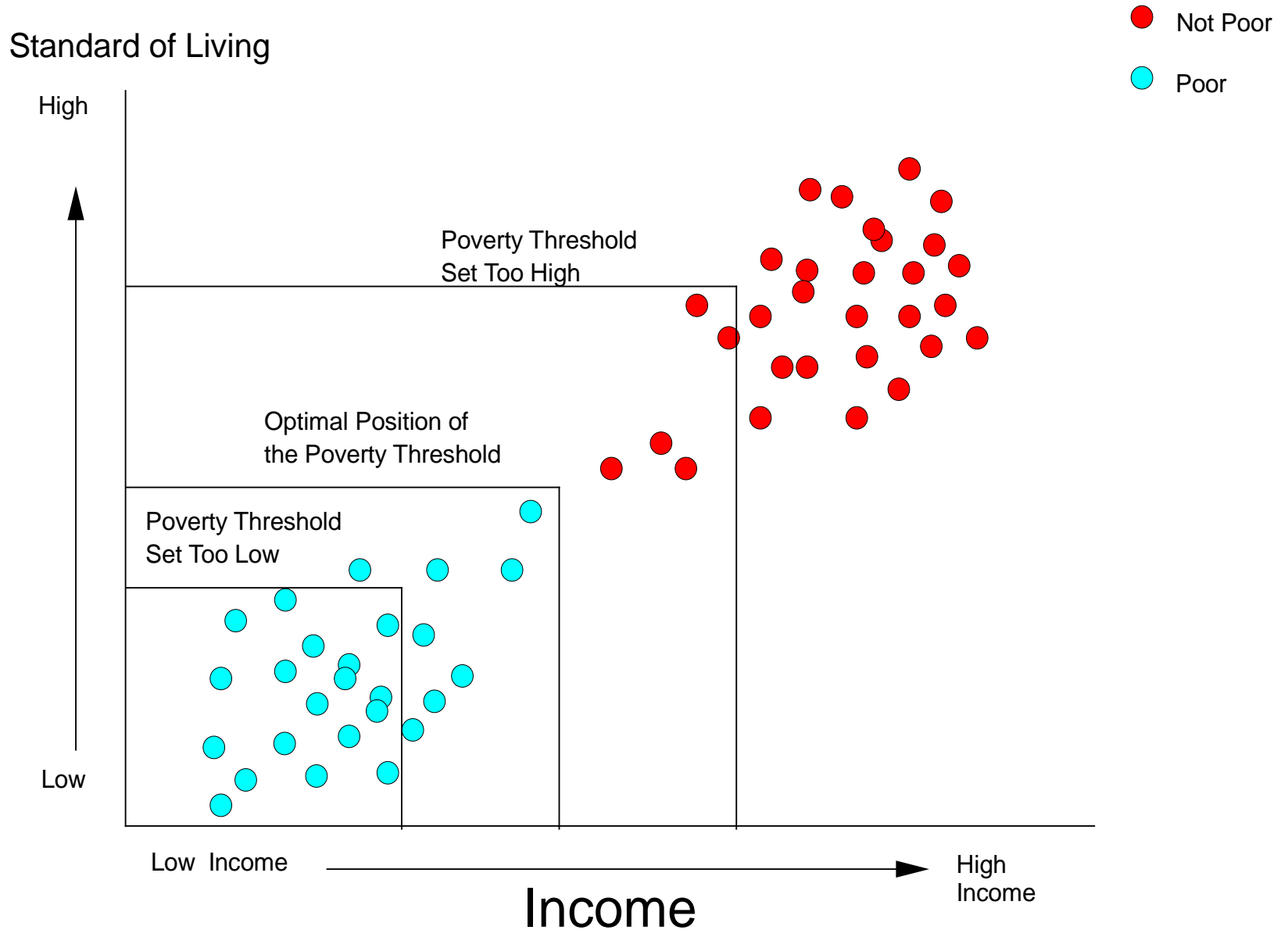
Command over insufficient resources over time

The result of poverty is *deprivation*

Modal Deprivation by Logarithm of Income as a Percentage of Supplementary Benefit Scale Rates (Townsend, 1979)



Definition of poverty



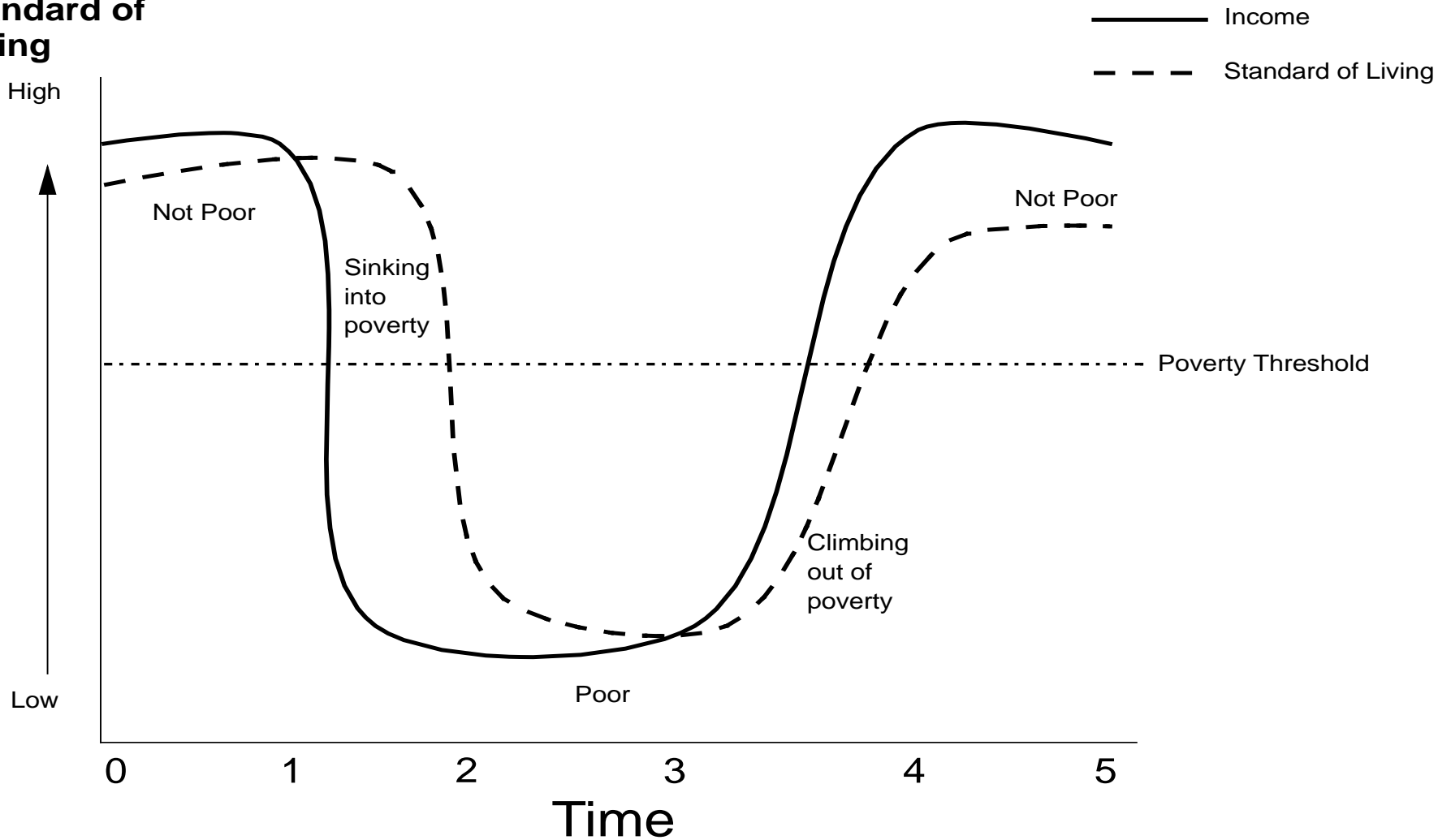
Peter Townsend's concept of dynamic poverty

“poverty is a dynamic, not a static concept... Our general theory, then, should be that individuals and families whose resources over time fall seriously short of the resources commanded by the average individual or family in the community in which they live . . . are in poverty.”

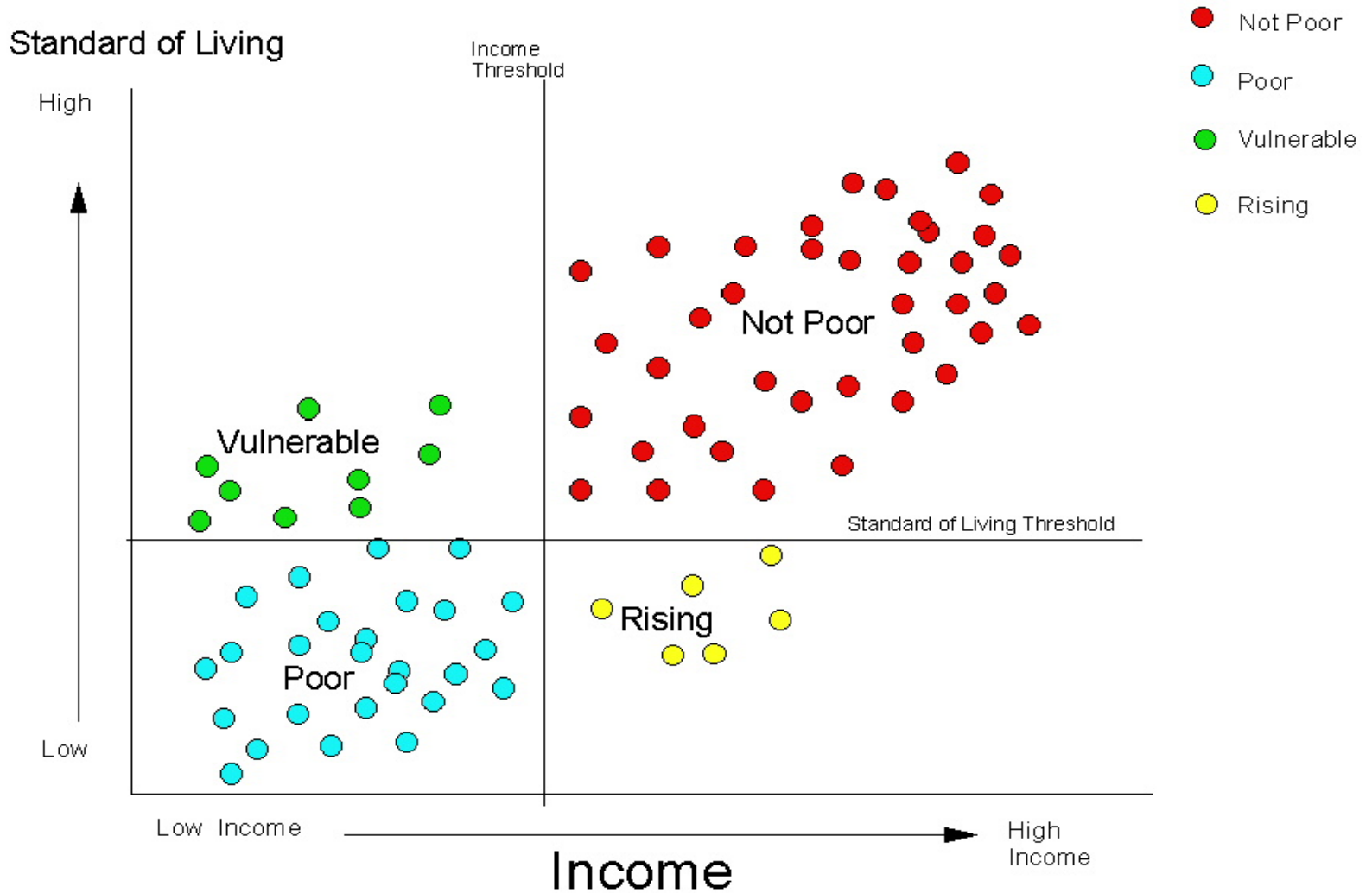
Townsend (1962, p 219)

Theoretical model of the dynamics of poverty in rich societies

**Income and
Standard of
Living**



Poverty Groups



Poverty Rate in the UK (PSEUK 2012 Survey)

	%
Poor	22
Rising	1
Vulnerable	10
Not Poor	67

Subjective poverty in the UK (2012)

		%
Household income needed to avoid poverty		
	Above that level of income	54
	About the same	21
	Below that level of income	25
Felt embarrassed because of low income		
	Yes	22
	No	77

Measuring Deprivation

Primary Analytical Aim

To identify one optimal deprivation index with age and gender appropriate measures to allow comparisons of living standards between and within households – a single all persons deprivation index (age 0 to 80+)

Each deprivation measure needs to be;

1. Widely approved (50+% - democratic/consensual threshold)
2. Valid
3. Reliable
4. Additive

Widely Approved – More than 50% consider the item/activity to be a necessity

Validity – Logistic Regression of each deprivation indicator by Subjective Poverty (3 measures) and General Health (controlling for age & gender)

Reliability – Classical Test Theory and Item Response Theory

Additivity – first order and second order interactions of deprivation items by equivalised disposable household income

A common analytical framework was agreed based on an updating of the 1999 Poverty & Social Exclusion Survey deprivation index construction methodology (Pantazis *et al*, 2006) as modified by Guio *et al* (2012).

Adult Items	%	Adult Activities	%
Heating to keep home adequately warm	96	Visiting friends or family in hospital or other institutions	90
Damp-free home	94	Celebrations on special occasions such as Christmas	80
Two meals a day	91	Attending weddings, funerals and other such occasions	79
Replace or repair broken electrical goods such as refrigerator or washing machine	86	A hobby or leisure activity	70
Fresh fruit and vegetables every day	83	Taking part in sport/exercise activities or classes	56
Washing machine	82	Friends or family round for a meal or drink at least once a month	46
All recommended dental work/treatment	82	A holiday away from home for one week a year, not staying with relatives	42
A warm waterproof coat	79	Going out socially once a fortnight	34
Telephone at home	77	Attending church, mosque, synagogue or other places of worship	30
Meat, fish or vegetarian equivalent every other day	76	Visits to friends or family in other parts of the country 4 times a year	27
Curtains or window blinds	71	A meal out once a month	25
Household contents insurance	70	Holidays abroad once a year	18
Enough money to keep your home in a decent state of decoration	69	Going out for a drink once a fortnight	17
Appropriate clothes to wear for job interviews	69	Going to the cinema, theatre or music event once a month	15
A table, with chairs, at which all the family can eat	64		
To be able to pay an unexpected expense of £500	55		
Two pairs of all-weather shoes	54		
Regular savings for rainy days	52		
Regular payments into an occupational or private pension	51		
Television	51	20 items above 50% threshold	
Presents for friends or family once a year	46	5 activities above 50% threshold	
Replace worn out clothes with new ones	46		
Car	44		
A small amount of money to spend each week on yourself, not on your family	42		
Internet connection at home	41		
Mobile phone	40		
Home computer	40		
Replace any worn out furniture	39		
An outfit to wear for social or family occasions such as parties and weddings	38		
A roast joint once a week	36		
Hair done or cut regularly	35		

Validity

Odds Ratios for Can't afford Necessities by Poor Health Variables

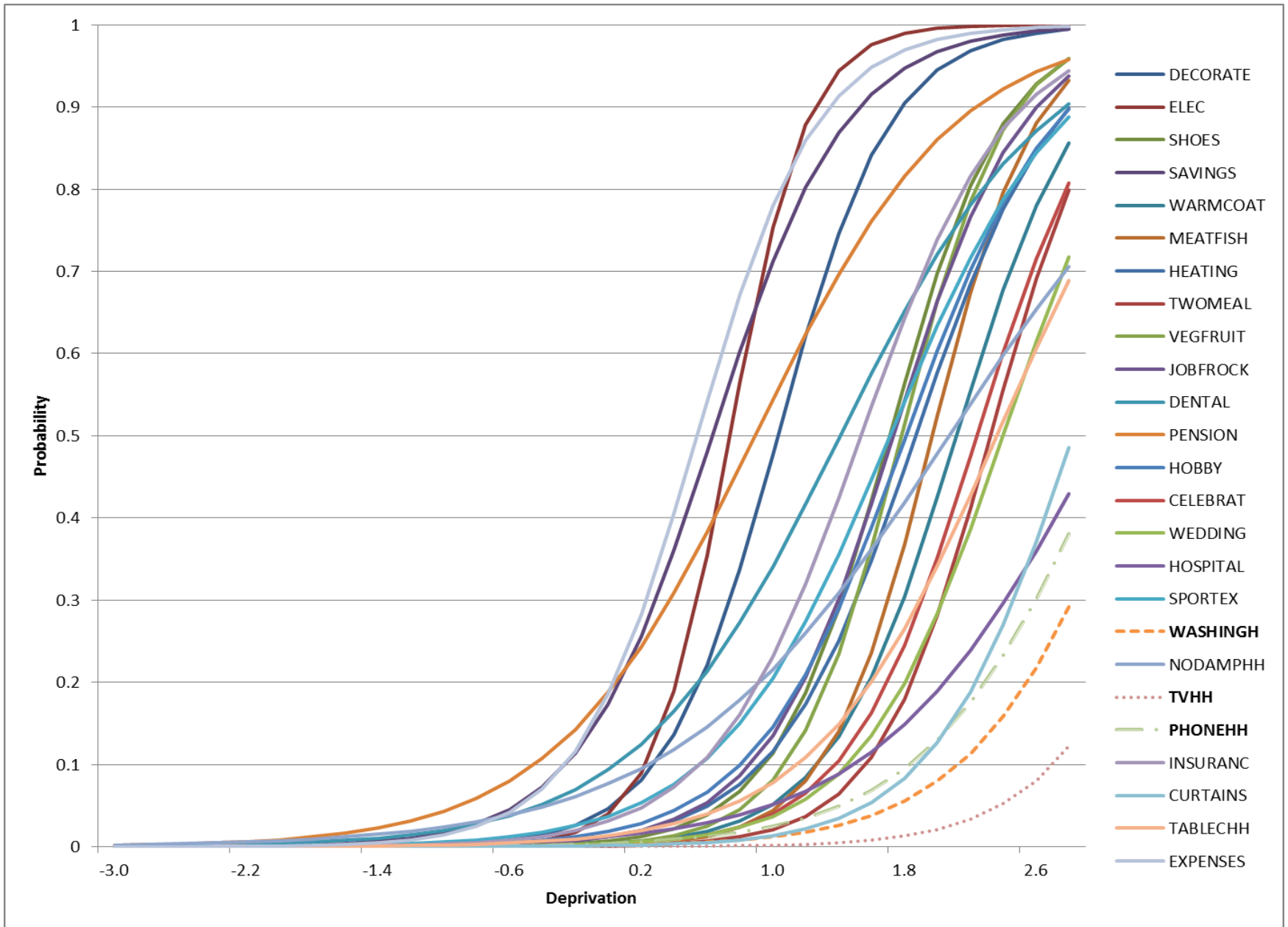
Item/Activity	General Health	Long Term Illness
Meat, fish or vegetarian equivalent every other day	7.5	3.2
Attending weddings, funerals and other such occasions	7.1	3.9
Fresh fruit and vegetables every day	6.8	3.6
Two pairs of all-weather shoes	6.7	3.1
Presents for friends or family once a year	6.6	2.5
Heating to keep home adequately warm	6.4	3.4
Replace worn out clothes with new (not second hand) ones	5.7	2.9
Two meals a day	5.6	3.1
Curtains or window blinds	5.6	2.4
A table, with chairs, at which all the family can eat	5.3	2.8
A warm waterproof coat	5.3	2.7
Celebrations on special occasions such as Christmas	5.2	4.0
Appropriate clothes to wear for job interviews	5.2	2.7
Washing machine	5.1	3.4

Reliability

Classical Test Theory Model

Deprivation Items for Adults and Children	Cronbach's Alpha if Item Deleted
Enough money to replace or repair broken electrical goods such as a fridge or washing machine	.823
Could your household afford to pay an unexpected, but necessary, expense of £500?	.824
Enough money to keep home in a decent state of decoration	.825
Regular savings (of at least £20) for rainy days	.828
Home Insurance	.828
Two pairs of all-weather shoes	.829
Appropriate clothes for job interviews	.829
Heating to keep home adequately warm	.830
Fresh fruit and vegetables everyday	.830
A hobby or leisure activity.	.830
Taking part in sport/exercise activities or classes	.830
All recommended dental work/treatment	.831
A warm waterproof coat	.832
Meat, fish or vegetarian equivalent every other day	.832
Regular payments into an occupational or private pension	.832
Celebrations on special occasions, such as Christmas	.833
Damp-free home	.833
Table and chairs at which all the family can eat	.833
DEPRIVATION SCALE ALPHA	.837

IRT Item Characteristic Curves for Adult and Household Deprivations



Cluster 1 – Four deprivation which asked about financial deprivation i.e. the ability to make regular payments/savings and afford to repair broken electrical goods/decorate.

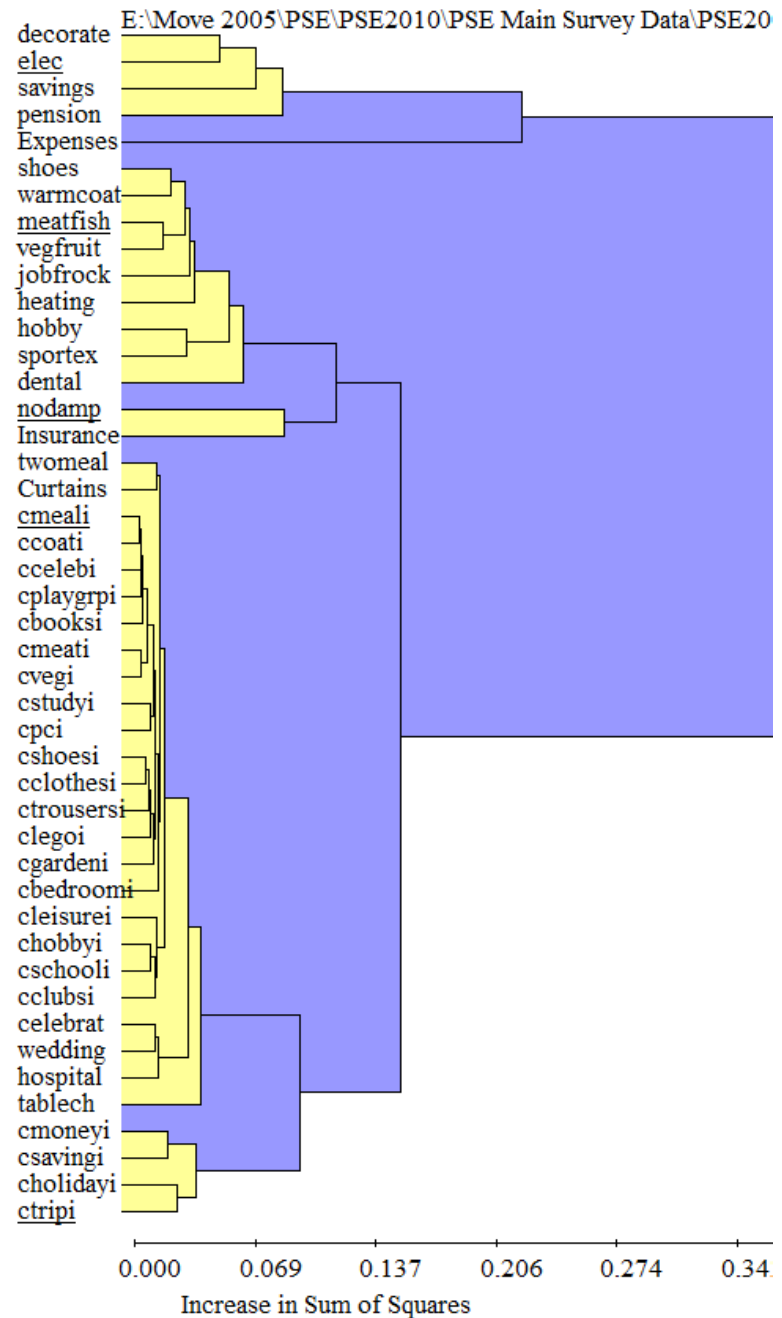
Cluster 2 – only contains the item ‘Expenses’ and it is associated with the Cluster 1.

Cluster 3 – this cluster contains nine deprivation questions answered by all adults in the household which relate to personal deprivations e.g. diet, keeping warm, dental care, etc

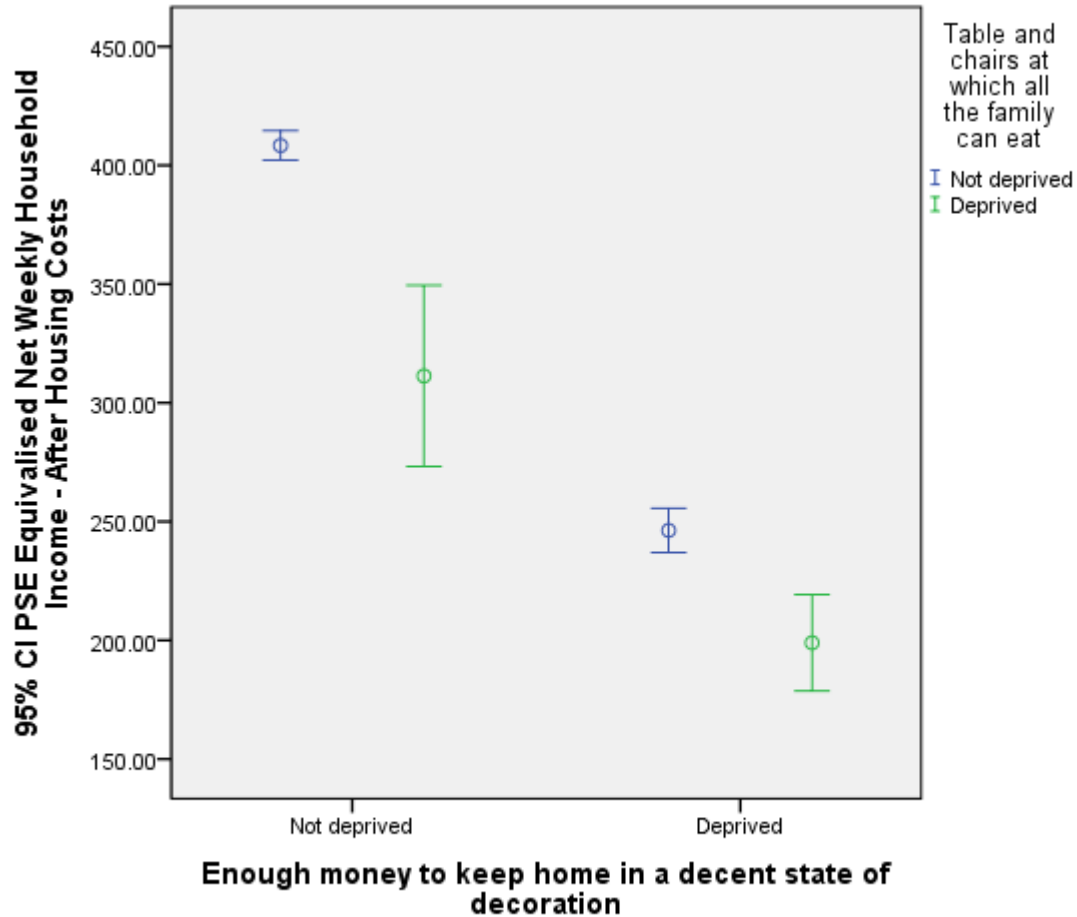
Cluster 4 – contains two housing items – no damp and contents insurance

Cluster 5 – contains 25 children’s and family life deprivation items

Cluster 6 – contains children’s financial deprivation (pocket money and savings) and two leisure items (school trips which cost money and holidays).



Additivity



Cases weighted by Normalised PSE Individual weight - use this weight for individual level analyses

Deprivation Items which failed the tests

Five out of 49 deprivation items which received 50% or more support from the population (consensual deprivation) have been excluded from the final deprivation index for the following reasons;

Validity & Reliability Criteria

Television

Validity Criteria

Indoor games suitable for their ages

Reliability Criteria

Washing machine

Telephone

Additivity Criteria

Construction toys such as Lego

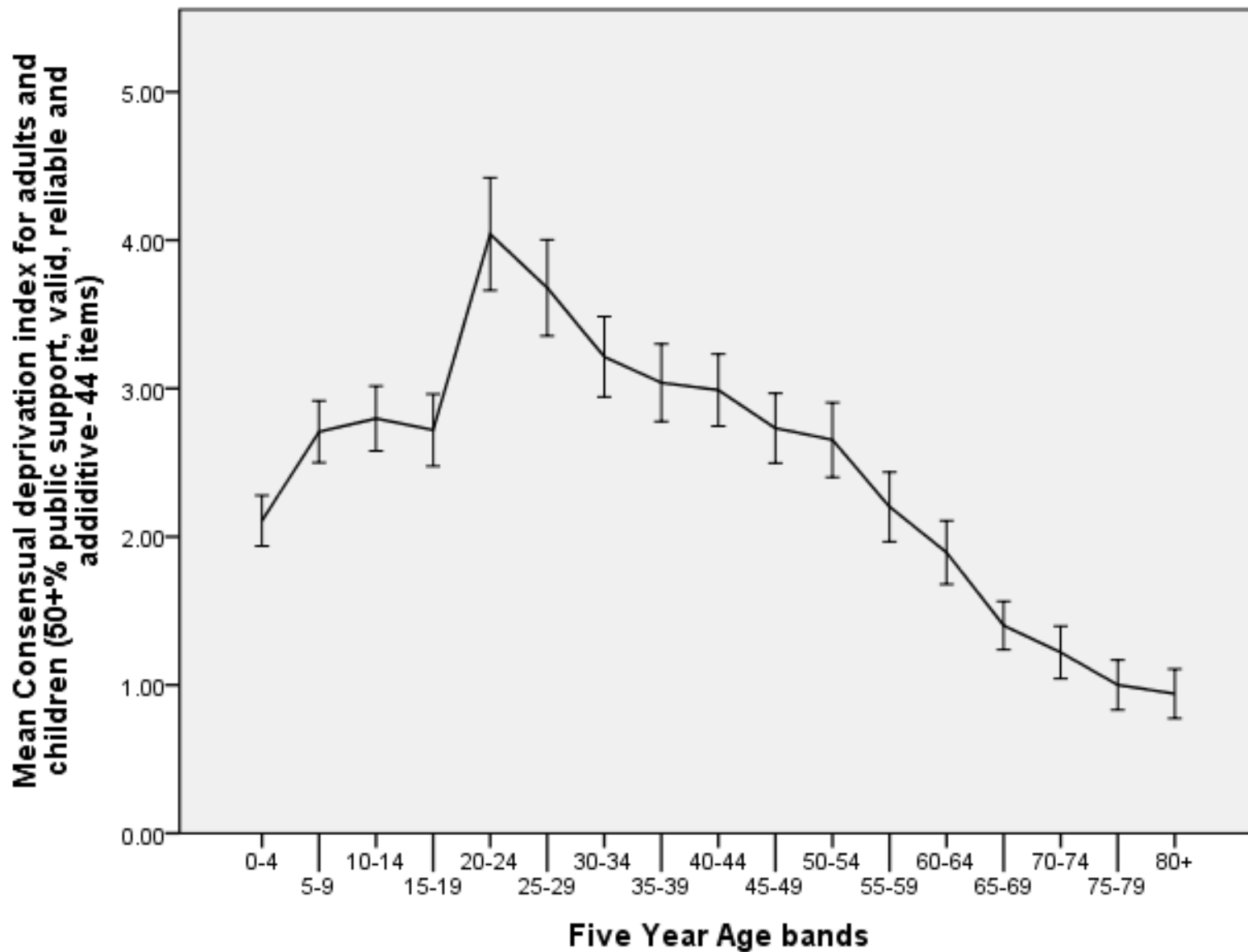
The final index includes 22 adult and household deprivation items and 22 children's deprivation items. Adults score zero for all children's deprivation items and vice versa. Both adults and children can suffer from all household deprivation items (e.g. a damp home). The following age appropriate criteria were used for the children's deprivation items

- 10-17 for Bedrooms for every child of different sex 10 or over.
- 5-17 for Place to study, Computer & Internet for homework, Hobby or leisure activity, Going on a school trip, Savings and Pocket money.
- 2-17 for Suitable books for age and Children's clubs/activities.
- Under 5 for Toddler/nursery or playgroup.
- All other child deprivations are 0-17.

Thus, the theoretical maximum possible deprivation index score by age group was;

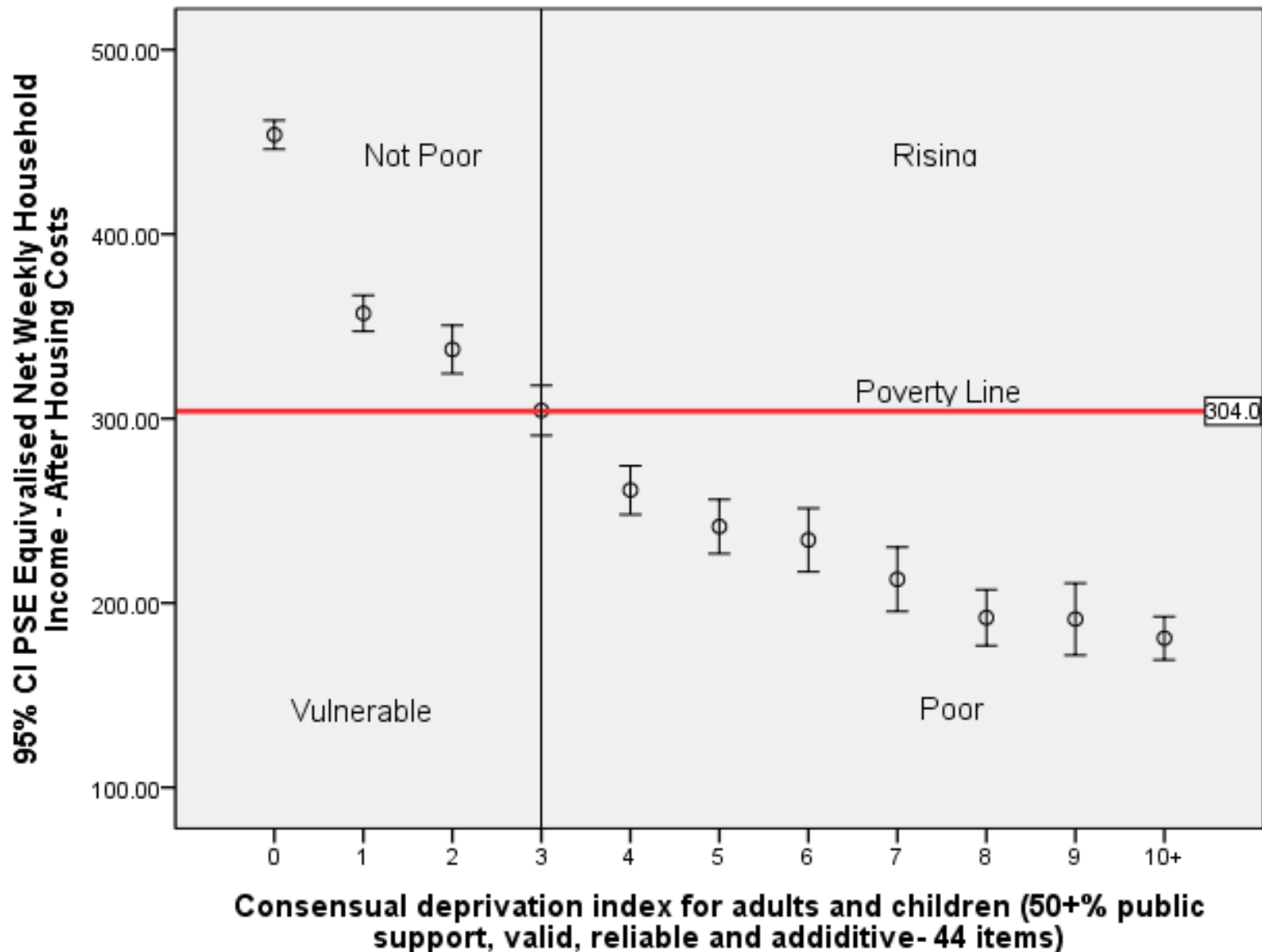
Age Group	Max Score
Adults (18+)	22
Children (10 to 17)	26
Children (5 to 10)	25
Children (2 to 4)	21
Children (0 to 1)	19

PSEUK: Average Deprivation Score by Age



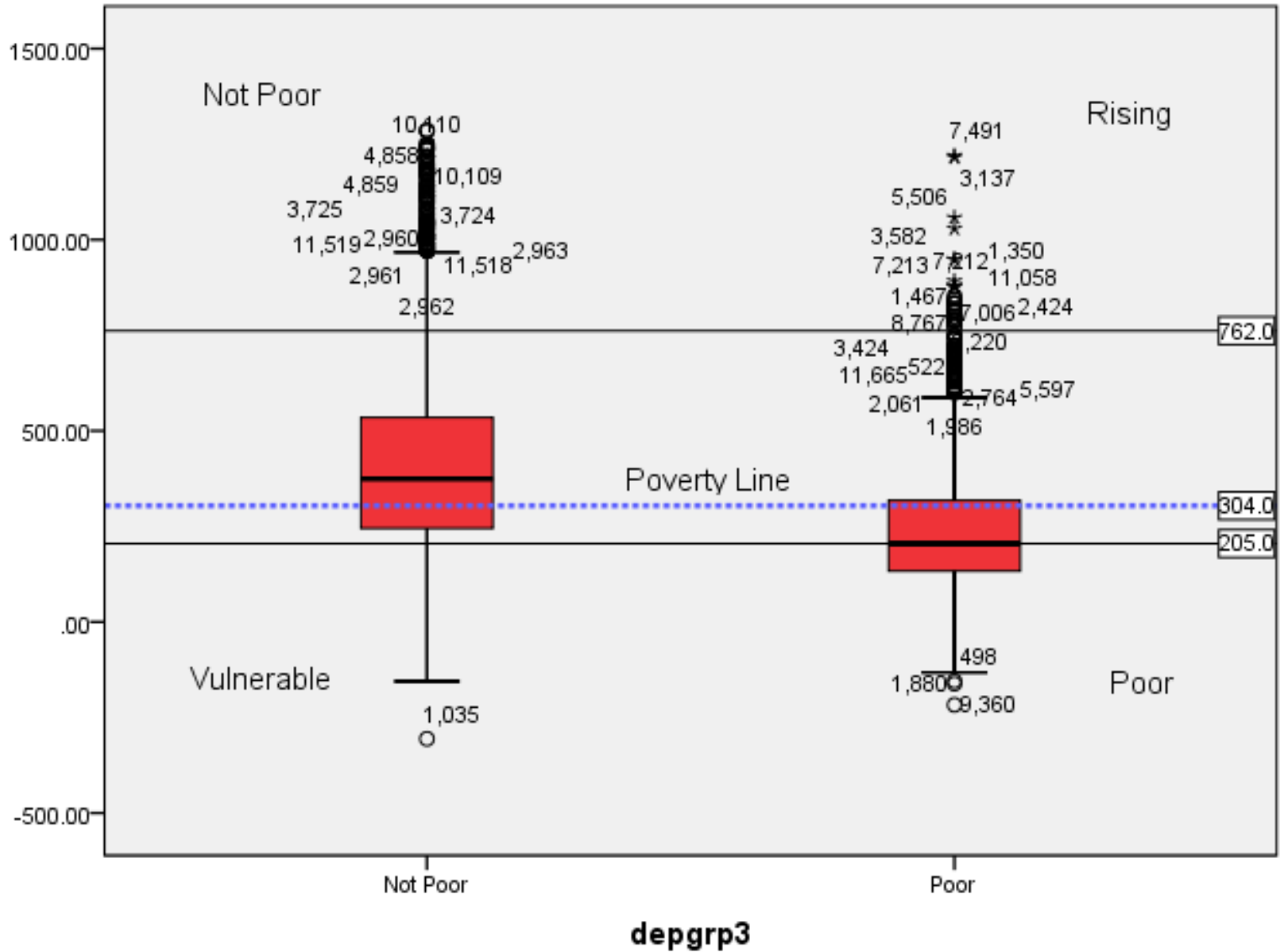
Error Bars: 95% CI

PSEUK: Optimal Poverty Line and Deprivation Thresholds



Cases weighted by Normalised PSE Individual weight - use this weight for individual level analyses

Refining the Income Thresholds for the Poverty Groups



Cases weighted by Normalised PSE Individual weight - use this weight for individual level analyses

Child Poverty is Increasing

CPA poverty measure results for children (under 18)
PSE2012 compared with HBAI 2011/12

CPA Measure	PSE2012 %	HBAI 2011/12 %
Relative income	20	17
Absolute income	25	20
Combined low income and material deprivation	12	12
Severe low income and material deprivation	4	3

Note: the PSE2012 children are a subsample from the HBAI 2011/12
i.e. except for new babies they are mostly the same children one year older.