



## **Poverty and Social Exclusion in the UK**

### **Child poverty and social exclusion: Final report of 2012 PSE study**

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# Poverty and Social Exclusion in the UK

## Overview

The Poverty and Social Exclusion in the UK Project is funded by the Economic, Science and Research Council (ESRC). The Project is a collaboration between the University of Bristol, University of Glasgow, Heriot Watt University, Open University, Queen's University (Belfast), University of York, the National Centre for Social Research and the Northern Ireland Statistics and Research Agency. The project commenced in April 2010 and will run for three-and-a-half years.

The primary purpose is to advance the 'state of the art' of the theory and practice of poverty and social exclusion measurement. In order to improve current measurement methodologies, the research will develop and repeat the 1999 Poverty and Social Exclusion Survey. This research will produce information of immediate and direct interest to policy makers, academics and the general public. It will provide a rigorous and detailed independent assessment on progress towards the UK Government's target of eradicating child poverty.

### Objectives

This research has three main objectives:

- To improve the measurement of poverty, deprivation, social exclusion and standard of living
- To assess changes in poverty and social exclusion in the UK
- To conduct policy-relevant analyses of poverty and social exclusion

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**Poverty and Social Exclusion Study 2012**

**CHILD POVERTY AND SOCIAL EXCLUSION**  
**Gill Main and Jonathan Bradshaw**

**Introduction**

This paper presents an analysis of child poverty and social exclusion in the UK, drawing on data from the 2012 Poverty and Social Exclusion Survey. It is effectively the final report on this element of the PSE project. A previous paper (Main and Bradshaw, 2014) established the necessities of life for children. Here, we analyse the prevalence of lacking individual socially perceived necessities; rates of poverty based on low income, deprivation, and combined measures; the characteristics of poor children; intra-household sharing; and child poverty and social exclusion. We also (in Appendix A) provide some sensitivity testing for children's items and activities, comparing the enforced lack approach to children lacking items and activities for any reason.

**Socially perceived necessities**

Table 1 shows the proportion of children lacking each of the socially perceived necessities. It shows the proportion lacking each item and activity due to not wanting, due to being unable to afford, and due to other reasons. For reference, the second column shows the proportion of adults viewing each item/activity as a necessity for children. For most items and activities, less than 10% of children lack them due to their families being unable to afford them; exceptions are enough bedrooms (11%), pocket money (16%) and money to save (33%) for items, and day trips (21%) and holidays (26%) for activities.

**Table 1: Socially perceived necessities (%)**

<b>Items</b>						
	<b>% saying necessity</b>	<b>Has</b>	<b>Does not have, does not want</b>	<b>Does not have, can't afford</b>	<b>N/A</b>	
A warm winter coat	97	97	1	1	0	
Books at home suitable for their ages	91	97	1	2	0	
Three meals a day	93	97	2	1	0	
Indoor games suitable for their ages	80	95	2	1	1	
Fresh fruit or vegetables at least once a day	96	95	2	3	0	
Some new, not second hand, clothes	65	95	1	4	0	
Meat, fish or vegetarian equivalent at least once a day	90	94	1	3	1	
New, properly fitting shoes	93	94	2	4	1	
At least four pairs of trousers	56	93	1	5	1	
A garden or outdoor space nearby	92	92	2	5	1	
A suitable place at home to study or do homework	89	92	2	5	1	
Computer and internet for homework	66	90	2	6	2	
Enough bedrooms for every child of 10 or over of a different sex	74	84	4	11	1	
Outdoor leisure equipment	58	81	11	6	2	
Construction toys	53	70	23	5	3	
Pocket money	54	69	13	16	2	
Money to save	54	60	6	33	1	
<b>Activities</b>						
	<b>% saying necessity</b>	<b>Does</b>	<b>Does not do, does not want</b>	<b>Does not do, can't afford</b>	<b>Does not do, other</b>	<b>N/A</b>
Celebrations on special occasions	91	97	1	2	0	0
A hobby or leisure activity	88	86	5	6	3	0
Going on a school trip at least once a term	55	79	5	7	9	0
Toddler group, nursery or play group once a week	87	73	13	4	10	0
Children's clubs or activities	74	71	11	9	8	1
Day trips with family once a month	60	66	8	21	5	0
A holiday away from home at least one week a year	52	64	6	26	2	1

Shaded cells indicate fewer than 20 unweighted cases.

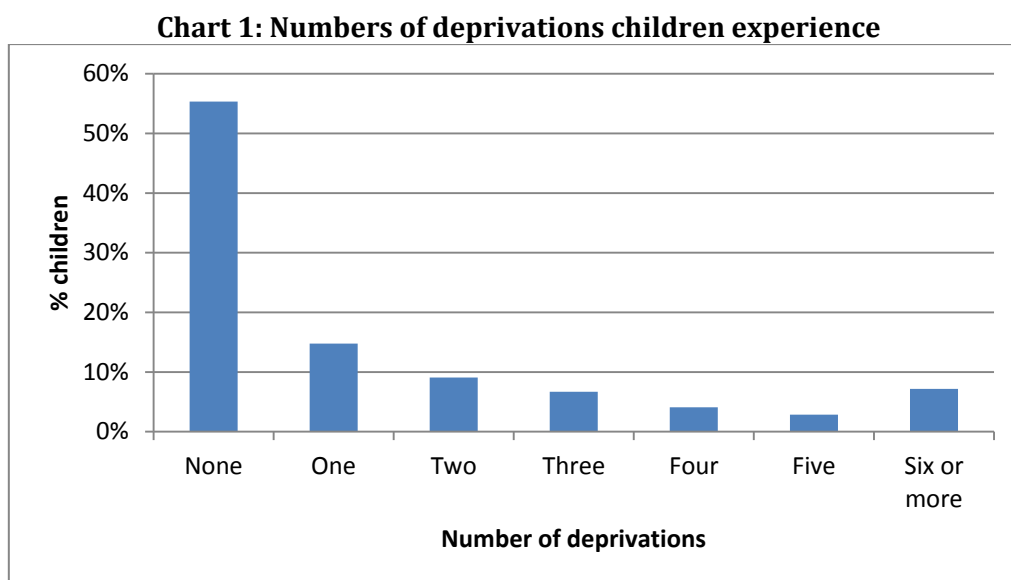
### Poverty: deprivation, low income and combined measures

The PSE2012 asks a range of questions relating to objective material well-being, including measures of income and deprivation. This allows a comparison of deprivation and income based poverty measures, and also their amalgamation into a combined measure (see Gordon and Nandy, 2012, for details of the methodology used to create a combined poverty measure).

Here, findings are presented based on deprivation and low income poverty measures, followed by the combined poverty measure.

#### Deprivation

Chart 1 shows the number of deprivations experienced by children. Over half – 55% - lack none of the socially perceived necessities identified in table 1. 30% of children lack two or more, and 7% lack six or more.



The socially perceived necessities can be grouped in order to identify deprivations in specific domains of children's lives<sup>1</sup>. These include food<sup>2</sup>, clothes<sup>3</sup>, participation<sup>4</sup>, development<sup>5</sup>; environment<sup>6</sup>, finance<sup>7</sup>, family<sup>8</sup> and individual<sup>9</sup>. Children are considered deprived within a domain if they experience an enforced lack (i.e. their family cannot afford) at least one item or activity within that domain.

Chart 2 shows the proportions of children deprived in each of these domains. The fewest children – around 5% - are deprived in the food domain. 35% of children are deprived in the participation domain.

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<sup>1</sup> These indices, as evident below, are not independent – i.e. they contain overlapping items.

<sup>2</sup> Comprising 3 meals; fruit; meat.

<sup>3</sup> Comprising coat; shoes; clothes; trousers.

<sup>4</sup> Comprising celebrations; hobby; clubs; day trips; holiday; leisure.

<sup>5</sup> Comprising books; study; games; computer; lego; school trips.

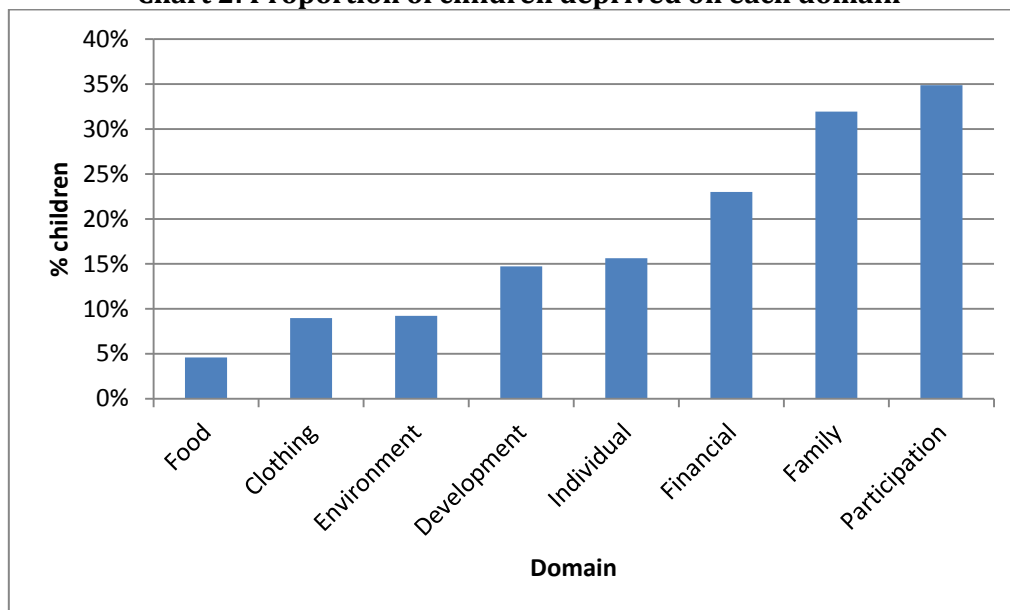
<sup>6</sup> Comprising garden; bedroom.

<sup>7</sup> Comprising pocket money; saving money.

<sup>8</sup> Comprising holiday; day trips; celebrations.

<sup>9</sup> Comprising hobby; clubs; school trips; leisure.

**Chart 2: Proportion of children deprived on each domain**



*Low income*

Household income was measured in the PSE2012 survey and equivalised using a scale derived from the UK Minimum Income Standards (<http://www.lboro.ac.uk/research/crsp/mis/>). Table 2 shows the median household incomes - first for individuals (overall, for adults, and for children), and then for households (overall, for households without children, and for households with children). Based on both before and after housing costs measures of income, children, and households containing children, have lower equivalent incomes than adults and households not containing children.

**Table 2: Median £ per week household incomes for different people and household types**

	After housing costs	Before housing costs
Individuals	316	386
Adults	337	398
Children	<b>262</b>	<b>346</b>
Households	326	384
Households without children	347	392
Households with children	<b>279</b>	<b>371</b>

As would be expected based on the findings presented in table 2, income poverty rates (defined as living in a household with an income below 60% of the PSE equivalised median) in Table 3 are substantially higher amongst children and households containing children, than amongst adults and households containing only adults. The income poverty rate for children is 33% compared to 23% for adults, and is 31% for households containing children, compared to 22% for households not containing children.

**Table 3: Income poverty rates for different people and household types (%)**

	At risk of poverty rate
Individuals	25
Adults	23
<b>Children</b>	<b>33</b>
Households	25
Households without children	22
<b>Households with children</b>	<b>31</b>

*Low income and material deprivation*

The combined PSE poverty measure incorporates both an income threshold and a deprivation threshold (see Gordon and Nandy, 2012, for details on the methodology used in calculating the measure). In addition to the child-specific deprivation items detailed above, the measure includes household deprivations. The measure allows for the creation of a single poverty indicator for adults and for children, but setting age-specific deprivations to 0 for those outside the relevant age group or category (i.e. adult-specific items are set to 0 for children, and child-specific items are set to 0 for adults, while household-specific items can be counted for both adults and children). The four household items, along with the proportion of children who have them, do not have and the responding adult does not want them, and do not have them because the responding adult cannot afford them, are shown in table 4.

**Table 4: Household items included in the combined poverty measure (%)**

	Has	Does not have, does not want	Does not have, can't afford	N/A
Damp-free home	71	7	19	3
Home insurance	73	8	18	1
Curtains or window blinds	97	1	2	0
Table and chairs at which all the family can eat	90	4	5	1

Shaded cells indicate fewer than 20 unweighted cases.

In addition to these four items, adults were asked to report whether their household could afford an unexpected but necessary expense of £500. This was also included in the combined poverty measure for children, and responses were provided in a yes/no format. 50% of children lived with adults who reported being unable to afford such an expense.

The combined low income and material deprivation measure allows for an assessment of who among the non-poor are likely to be vulnerable to poverty (experiencing low income but not deprivation), and those who are likely to be rising out of poverty (experiencing deprivation but not low income). These classifications are intended to capture the time lag between income and living standards – i.e. having a low income but not being deprived may indicate a recent drop in income which has not yet impacted living standards but may do so if not addressed; and being deprived but not having a low income may reflect a recent increase in income which may if sustained result in improved living standards (see Gordon, 2006 for more details). Table 5 shows the combined poverty rates for individuals, adults and children; and for households, adult-only households and households containing children. As for the previous poverty measures, rates of poverty among children (27%) and households containing children (33%) were higher than among adults (21%) and adult-only households (17%). Similarly low levels of 'rising' and 'vulnerability' were found amongst adults and children.

**Table 5: Combined poverty rates for individuals and households (%)**

		All (individuals)	Adults	Children	All (households)	HH only adults	HH with children
Poor		22	21	27	22	17	33
Not poor	Overall	78	79	73	78	83	67
	Rising	1	1	1	1	1	1
	Vulnerable	10	9	13	10	11	8
	Not poor	67	70	59	66	70	57

Table 5 shows overall poverty rates and compares adults and children. However, an advantage of the PSE poverty measure is that it allows for comparisons not only between households, but between individuals in the same household. So while it is established in table 5 that PSE poverty rates are higher among children than among adults, it is not clear whether rates differ for adults living in households with children compared to those living in households which do not contain children. This is examined in table 6. Here, the poverty rate for adults living in households without children is found to be much lower – at 15% - than the rate for adults in households with children – 32%. The rate for adults in households with children is higher than for children themselves (27%). This suggests that household-level poverty rates may obscure variations in how resources are shared within households, explored in the later section on intra-household sharing.

**Table 6: PSE poverty rates for children, adults living in households without children, and adults living in households with children (%)**

	PSE poverty
Overall	22
Adults (all)	21
<b>Children</b>	<b>27</b>
Adults (no children in HH)	15
<b>Adults (children in HH)</b>	<b>32</b>

### Summary

Based on low income and PSE poverty, table 7 summarises child poverty rates. These are fairly similar, but the rate is highest for low income (33%), second highest for child-specific deprivation (30%); and lowest for PSE poverty (27%).

**Table 7: Low income and PSE poor child poverty rates (%)**

	Children	Households with children
Low income	33	31
PSE poverty	27	33
Deprivation (child SPNs only, lacking 2+)	30	-

### Subjective poverty

In addition to the objective measures of poverty detailed above, the PSE survey included several questions assessing subjective poverty. Adults were asked to report whether they felt they:

- Had a household income below the minimum necessary to avoid poverty
- To rate their standard of living (from much higher than average to much lower than average)
- Were generally poor these days (always, sometimes or never)



- Had ever felt embarrassed as a result of having a low income
- Had ever felt small as a result of having a low income

Table 8 shows the proportions of children living in households where adults reported subjective poverty on these measures overall, and among the deprived, those in low income households, and those in PSE poverty. Where questions were asked of all adults in the child's household, the household was considered to be in subjective poverty if half or more of the adults reported subjective poverty on the measure.

The proportion of children in households where adults report subjective poverty ranges from 19% living in households reporting that their standard of living is lower than average, to 49% living in households reporting that they are generally poor these days. Children who are deprived, living in households on a low income, and in PSE poverty are significantly more likely to live in households reporting subjective poverty on all of the measures. For most measures of subjective poverty, the strongest association is with PSE poverty (feeling their standard of living is lower than average; feeling generally poor these days; feeling embarrassed due to low income). For feeling their household income below the minimum necessary, the strongest association is with deprivation; and for feeling small due to a low income the association is equally strong for low income and PSE poverty. This lends credibility to the PSE poverty measure as the one which best reflects respondents' lived experiences of poverty.

**Table 8: Subjective poverty rates (for households with children) and associations with objective child poverty measures**

	% overall	% if deprived	Odds if deprived	% if low income	Odds if low income	% if PSE poor	Odds if PSE poor
Household income below minimum necessary	31	62	9.3*	54	4.8*	64	8.4*
Standard of living lower than average	19	47	7.2*	38	5.6*	44	7.5*
Generally poor these days	49	84	8.0*	76	5.8*	85	9.9*
Embarrassed due to low income	34	65	5.3*	54	3.6*	63	5.6*
Feel small due to low income	23	42	3.5*	40	3.9*	41	3.9*

\* indicates statistical significance at p<0.05 level.

### Characteristics of the poor

The characteristics of the poor were assessed by examining rates of poverty and the composition of the poor across a range of socio-demographic variables, and using bivariate logistic regressions establishing who is at a significantly greater risk of poverty.

#### *Household employment status*

Deprivation rates were significantly higher among children in households where all adults work part-time (37%), and those where no adults work and the majority are either unemployed (42%) or inactive (42%). All household employment statuses other than all adults working full time represent a greater risk of low income, with the highest rates amongst children in households where no adults work and the majority are unemployed (77%) or inactive (57%). Similar household employment statuses predict an increased risk of PSE poverty as of deprivation, with those in households where all adults work part-time (43%), where no adults

work and most are unemployed (47%), and where no adults work and most are inactive (60%) experiencing a significantly greater risk.

In terms of poverty rates, then, statistically significant associations exist between household worklessness and the chances of experiencing poverty, and between part-time working and poverty. Looking at the composition of poor children, however, on all measures the majority of children in poverty live in households with at least some paid work (63% of deprived children, 65% of children in households on a low income, and 60% of children in PSE poverty). Between two fifths and a half of children living in poverty live in households with at least one adult in full time work – 45% of deprived children, 47% of children in low income households, and 43% of PSE poor children.

#### *Family type*

Compared to lone adults with one child, the deprivation rates among children living in households with two adults and one child (8%), two adults and two children (18%), or in 'other' family types (8%) were significantly lower. The same groups were at lower risk of low income – with rates of 24% amongst children in households with two adults and one child, 24% in households with two adults and two children, and 21% in 'other' household types. Whilst trends were similar for PSE poverty (statistically significant associations and rates of 18% for two adults and one child, 18% for two adults and two children, and 15% for 'other' household type), lone parents with three or more children were at a greater risk of PSE poverty, with a poverty rate of 80%.

The above findings indicate that children in lone adult families are at higher risk of poverty, and evidence based on the PSE poverty measure suggests that children in lone adult families with larger numbers of children (three or more) are at higher risk. However, the majority of poor children by all measures of poverty live in households containing two or more adults (62% of the deprived, 67% of those in low-income households, and 60% of those in PSE poor households); and the majority live in households containing only one or two children (at least 55% of deprived children, 54% of children in low-income households, and 52% of children in PSE poor households; children in 'other' household types excluded from these calculations).

#### *Child's age*

Children aged 5-10 (rate of 25%) and 11-15 (26%) face a significantly higher risk of deprivation than children aged 0-1. Age is not significantly associated with low income or PSE poverty.

#### *Ethnicity*

Children of Black Caribbean (rate of 45%), Black African (47%) and Pakistani/Bangladeshi (37%) ethnic origins were more likely than White British children to be deprived. Those from Asian Indian ethnic backgrounds (4%) were less likely. Black African children (52%) and Pakistani/Bangladeshi children (54%) were more likely to be in low-income households. Black Caribbean (44%) and Black African (44%) children were more likely to be in PSE poverty, and Asian Indian children (9%) were less likely.

Across all poverty measures, White British children formed the bulk of poor children – 77% of the deprived, 75% of those in low-income households, and 78% of those in PSE poverty.

#### *Tenure*

Across the poverty measures, children living in socially (43% deprivation rate; 59% low income rate; 57% PSE poverty rate) or privately (25% deprivation rate; 49% low income rate; 42% PSE poverty rate) rented accommodation were at higher risk than those in owner-occupied housing.

The majority of deprived children (55%) and PSE poor children (55%) lived in socially rented accommodation, as did nearly half of children in low-income households (47%).

Results are shown in table 9.

**Table 9: Poverty rates, compositions, and logistic odds of being poor, for different poverty measures (%)**

		Deprivation				Low income				PSE poverty				Total composition
		Rate	Composition	Odds	Sig	Rate	Composition	Odds	Sig	Rate	Composition	Odds	Sig	
<b>Household employment status</b>	All adults work FT	15	18	1.0		11	8	1.0		13	12	1.0		23
	Some FT and some PT work	11	8	0.7	NS	25	12	2.6	*	21	12	1.7	NS	15
	Some FT work, no PT work	12	19	0.8	NS	27	27	3.0	*	16	19	1.3	NS	30
	All adults work PT, no FT work	37	11	3.2	*	43	9	5.9	*	43	11	5.0	*	6
	Some adults work PT, no FT work	17	7	1.1	NS	35	9	4.3	*	18	6	1.5	NS	8
	Primarily unemployed (no work)	42	7	4.0	*	77	8	27.1	*	47	6	5.8	*	3
	Primarily inactive (no work)	42	30	4.1	*	57	27	10.5	*	60	34	9.8	*	14
<b>Family type</b>	One adult, one child	36	9	1.0		51	9	1.0		44	9	1.0		6
	One adult, two children	32	12	0.8	NS	45	10	0.8	NS	39	11	0.8	NS	7
	One adult, 3+ children	49	17	1.7	NS	67	14	2.0	NS	80	20	5.1	*	7
	Two adults, one child	8	6	0.2	*	24	12	0.3	*	18	10	0.3	*	16
	Two adults, two children	18	28	0.4	*	24	23	0.3	*	18	22	0.3	*	32
	Two adults, 3+ children	24	24	0.5	NS	40	25	0.6	NS	30	22	0.5	NS	21
	Other	8	4	0.2	*	21	7	0.3	*	15	6	0.2	*	11
<b>Age of child</b>	0-1	10	5	1.0		31	10	1.0		22	9	1.0		11
	2-4	15	13	1.7	NS	36	20	1.2	NS	28	18	1.4	NS	18
	5-10	25	39	3.1	*	36	35	1.3	NS	30	36	1.6	NS	32
	11-15	26	34	3.3	*	32	27	1.0	NS	29	29	1.4	NS	28
	16-17	19	9	2.1	NS	23	8	0.7	NS	19	7	0.8	NS	11
<b>Ethnicity</b>	White British	19	77	1.0		31	75	1.0		27	78	1.0		80
	White other	19	4	1.0	NS	27	3	0.8	NS	30	5	1.2	NS	4
	Black Caribbean/mixed	45	4	3.4	*	45	3	1.9	NS	44	3	2.1	*	2
	Black African/mixed	51	6	4.4	*	52	4	2.4	*	44	5	2.1	*	3
	Asian Indian	4	0	0.2	*	38	3	1.4	NS	9	1	0.3	*	3
	Pakistani/Bangladeshi	37	5	2.5	*	54	6	2.7	*	43	5	2.1	NS	3
	Asian other	16	2	0.8	NS	34	3	1.2	NS	16	2	0.5	NS	3
Other	26	2	1.5	NS	48	2	2.1	NS	28	2	1.0	NS	2	
<b>Tenure</b>	Owner	10	26	1.0		17	30	1.0		10	22	1.0		58
	Social renter	43	55	7.2	*	59	47	6.9	*	57	55	11.7	*	26
	Private renter	25	18	3.2	*	49	23	4.7	*	42	23	6.2	*	15
	Other	11	0	1.1	NS	4	0	0.2	NS	10	0	1.0	NS	1
<b>Total rate</b>		<b>21</b>				<b>33</b>				<b>27</b>				

Shaded cells indicate fewer than 20 unweighted cases; \* indicates statistical significance at the p<0.05 level.

### **Intra-household sharing**

A strong advantage of deprivation and the PSE poverty measure over income are that they allow for an examination of intra-household distributions of resources. As noted above, whilst poverty rates for children are higher than those for adults, using these individualisable measures poverty rates are high for children but even higher for adults living in households containing children.

That poverty rates are higher for adults in households containing children suggests intra-household distributions which favour children. One way of testing this is to explore the proportion of households in which adults are poor and children are not poor; and the converse of this – shown in table 10. While the deprivation and PSE poverty measures are individual, because of the data collection method (adults were asked to class all children as lacking items and activities which any child in their household lacked) it is not possible to distinguish the poverty status of different children within the same household. Age adjustments (mentioned above) mean that such children may have different classifications to one another, but this is an artefact of post-hoc adjustments rather than a reflection of genuine difference. Children within a household are therefore classed as poor if 50% or more of the children within their household are poor. For adults, because the measure is genuinely individual, two approaches are taken. Firstly adults are classed as poor if any adults in the household are poor; and secondly only if all adults in the household are poor.

Using these classifications, it is possible to identify four categories of children: those living in congruous non-poor situations (they are not poor and the adults they live with are not poor); congruous poor situations (they are poor and the adults they live with are poor); incongruous protected situations (they are not poor but the adults they live with are poor); and incongruous exposed situations (they are poor but the adults they live with are not poor).

Based on the PSE poverty measure, the majority of children live in congruous non-poor situations, and the second largest group in congruous poor situations. A substantial group of children (16%) are not poor and live with at least one adult who is poor; this drops to 7% of children who are not poor but all the adults they live with are poor. A very small proportion of children – 1% - are poor and live with no poor adults; slightly more, but still very few – 5% - are poor and live with any adults who are not poor.

The PSE poverty measure includes household income, reflecting the fact that household resources will impact children's living environments even though the extent of this impact is mediated by parental choices and behaviours. To test for the effect of this, similar analysis was conducted using the deprivation indicator. Based on this, the largest group of children were still congruous non-poor, but the second largest group were incongruous protected. Only 1% of children lived in incongruous exposed situations, even based on an adult poverty threshold whereby all adults had to be poor for adults in the household to be classed as in poverty. This may suggest that the inclusion of income in the PSE poverty measure obscures some of the efforts that adults make to protect children in their households; however it should be noted that even non-deprived children are likely to experience some of the disadvantages and stress associated with living on a low income and with parents who are going without.

**Table 10: PSE poor/deprived children and PSE poor/deprived adults (%)**

	Children not poor	Children poor
<b>PSE Poverty</b>		
No adults poor	56	1
Any adults poor	16	27
Any adults not poor	65	5
All adults poor	7	23
<b>Deprivation</b>		
No adults deprived	45	1
Any adults deprived	33	21
Any adults not deprived	53	1
All adults deprived	25	20

What is clear from this is that 16-25% of children (22-32% of children who are not poor) live with at least one adult who goes without themselves, whilst children do not go without. One explanation for this, supported in qualitative findings (for example see Ridge, 2002; Middleton et al, 1997), is that adults living with children prioritise children's needs and sacrifice their own to help meet these. Given that this group of adults has been very difficult to identify in previous research, and certainly in such large-scale surveys, the characteristics of adults who are themselves poor but who live with children who are not poor merits further exploration.

The characteristics of 'sacrificing' adults were examined through logistic regression analyses examining the associations between a range of characteristics and being a poor adult living with (a) non-poor child(ren), shown in table 11. 74% of adults living in households where children were not PSE poor but where at least one adult was PSE poor, were themselves PSE poor; the comparable rate for deprivation was 84%. Whilst most of these adults were parents, women, in employment, and White, the only statistically significant associations were that for PSE poverty, those aged 30-39 were more likely to sacrifice than those in other age groups (2.8 times, a rate of 86%); and for both PSE poverty (odds: 4.6; rate: 88%) and deprivation (odds: 3.2; rate: 92%), main carers were more likely to sacrifice their own needs.

**Table 11: Characteristics of 'sacrificing' adults (%)**

		Poverty			Deprivation			Total composition
		Rate	Composition	Odds	Rate	Composition	Odds	
Parent	No	55	8	1.0	70	8	1.0	50
	Yes	76	92	2.6 NS	86	92	2.5 NS	50
Sex	Male	68	43	1.0	81	41	1.0	48
	Female	80	57	1.9 NS	87	59	1.5 NS	52
Age group	18-29	70	28	1.0	83	32	1.0	25
	30-39	86	36	2.8*	90	35	1.9 NS	33
	40-49	68	30	0.9 NS	79	25	0.7 NS	32
	50-59	77	6	1.5 NS	87	7	1.3 NS	9
	60+	19	0	0.1 NS	52	1	0.2 NS	2
Main carer	No	63	47	1.0	78	49	1.0	75
	Yes	88	53	4.6*	92	51	3.2*	25
Employment status	Full time work	76	40	1.0	79	46	1.0	50
	Part time work	89	18	2.6 NS	88	14	1.9 NS	16
	Self employed	68	4	0.7 NS	82	5	1.2 NS	5
	Unemployed	85	12	1.7 NS	92	11	2.9 NS	7
	Looking after family	87	19	2.1 NS	91	16	2.7 NS	13
	Other	90	7	2.8 NS	91	8	2.7 NS	8
Ethnicity	White	75	76	1.0	85	81	1.0	79
	Not white	72	24	0.9 NS	80	19	0.7 NS	21
Total rate		74			84			

Shaded cells indicate fewer than 20 unweighted cases; \* indicates statistical significance at the p<0.05 level.

The inclusion of some similar socially perceived necessities for adults and children allows a further exploration of how resources are allocated within households. Table 12 shows the proportion of households with children in which children lack the item/activity. Next, the proportion of households within which at least one adult lacks the item/activity, and within which most adults lack the item/activity, are shown. The last four columns show the proportion of households in which at least one adult lacks items/activities if children lack them and the odds of at least one adult lacking the item/activity if children lack it; and then the same for if most adults lack the item/activity.

For all comparable items and activities, more households with children contain adults who lack them than contain children who lack them. Similar results are found for most adults in the household lacking items and activities, although the proportions of households in which most adults lack two/three meals, meat/fish, and celebrations are similar to the proportions of households in which children lack these. Proportions of households containing one adult who lacked the item/activity, and in which most adults lacked the item/activity, increased substantially when children in the households faced comparable deprivations. All associations were statistically significant – i.e. households containing children deprived of the items/activities were significantly more likely to contain adults lacking the items/activities.

**Table 12: Child and adult deprivation: specific items/activities (%)**

	Children lack	At least one adult lacks	Most adults lack	At least one adults lack if children lack	Odds of at least one adult lacking if children lack	Most adults lack if children lack	Odds of most adults lacking if children lack
Two/three meals	1	2	1	57	99.9*	43	96.2*
Fresh fruit/veg	4	9	5	78	50.5*	50	35.5*
Warm coat	1	9	5	75	34.5*	65	41.4*
Meat/fish	3	6	3	54	83.5*	52	83.6*
Hobby	6	18	8	70	14.0*	40	9.4*
Two pairs shoes	3	15	8	56	8.6*	47	12.6*
Celebrations on special occasions	2	4	2	31	15.5*	29	43.1*
Annual holiday	23	40	28	96	92.4*	81	32.4*

Shaded cells indicate fewer than 20 unweighted cases; \* indicates statistical significance at the  $p < 0.05$  level.

In addition to overall PSE poverty and deprivation rates, and individual deprivation items/activities, a suite of questions were asked of adults about economising behaviours. Respondents were asked, 'In the last 12 months to help you keep your living costs down have you...':

- Skimped on food yourself so that others in the household would have enough to eat?
- Bought second hand clothes for yourself instead of new?
- Continued wearing clothes/shoes that had worn out instead of replacing them?
- Cut back on visits to the hairdresser/barber?
- Postponed visits to the dentist?
- Spent less on hobbies than you would like?
- Gone without or cut back on social visits, going to the pub or eating out?

Answer options were 'often', 'sometimes' or 'never'.

Adults in households containing children who were PSE poor or deprived were significantly more likely than adults in households containing non-poor children to engage in all of these economising behaviours, shown in table 13. Economising on social visits was almost universal in households containing poor children (92% of adults in households containing PSE poor children, and 91% in households containing deprived children). Over a third of adults in households containing poor children skimped on their food 'sometimes' or 'often' to ensure others had enough (69% in households containing PSE poor children, 67% in households containing deprived children).



**Table 13: Economising behaviours of adults in households with children (%)**

		Often	Sometimes	Never	Any	Odds (any)
Skimped on food so that others would have enough	Children not poor	7	23	69	<b>31</b>	1.0
	Children poor	27	42	31	<b>69</b>	5.0*
	Children not deprived	8	25	67	<b>33</b>	1.0
	Children deprived	29	38	33	<b>67</b>	4.0*
Bought second hand clothes instead of new	Children not poor	9	22	69	<b>31</b>	1.0
	Children poor	24	32	44	<b>56</b>	2.8*
	Children not deprived	11	23	66	<b>34</b>	1.0
	Children deprived	22	32	46	<b>54</b>	2.3*
Continued to wear worn-out clothes	Children not poor	13	44	43	<b>57</b>	1.0
	Children poor	43	39	18	<b>82</b>	3.3*
	Children not deprived	16	44	40	<b>60</b>	1.0
	Children deprived	40	40	20	<b>80</b>	2.7*
Cut back on visits to hairdresser/barber	Children not poor	21	33	46	<b>54</b>	1.0
	Children poor	45	21	10	<b>66</b>	4.3*
	Children not deprived	24	33	43	<b>57</b>	1.0
	Children deprived	54	27	18	<b>82</b>	3.4*
Postponed visits to dentist	Children not poor	16	21	62	<b>38</b>	1.0
	Children poor	35	23	41	<b>59</b>	2.3*
	Children not deprived	18	21	61	<b>39</b>	1.0
	Children deprived	35	24	41	<b>59</b>	2.2*
Spent less on hobbies	Children not poor	26	44	30	<b>70</b>	1.0
	Children poor	60	27	13	<b>87</b>	2.9*
	Children not deprived	27	43	30	<b>70</b>	1.0
	Children deprived	65	22	12	<b>88</b>	3.0*
Cut back on social visits, going to the pub or eating out	Children not poor	33	42	25	<b>75</b>	1.0
	Children poor	68	24	8	<b>92</b>	3.6*
	Children not deprived	36	41	24	<b>76</b>	1.0
	Children deprived	66	26	9	<b>91</b>	3.3*

\* indicates statistical significance at the p<0.05 level.

### Child poverty, child social exclusion and children's outcomes

Access to children's services was covered in the PSE survey. Table 14 shows the proportion of children lacking services overall, amongst those in PSE poverty, and amongst the deprived. Lacking access to services was significantly associated with PSE poverty for all but public transport to school, and with deprivation for all but youth clubs and public transport to school. The strongest association was with lack of access to nurseries, playgroups or mother and toddler groups.

**Table 14: Access to services for poor children (%)**

	% lack overall	% lack if poor	Odds of lack if poor	% lack if deprived	Odds of lack if deprived
Facilities to safely play/spend time nearby	27	41	2.6*	47	3.1*
School meals	12	17	1.9*	19	2.2*
Youth clubs	26	34	1.8*	33	1.6 NS
After school clubs	12	20	2.4*	20	2.4*
Public transport to school	13	15	1.3 NS	16	1.4 NS
Nurseries /playgroups /mother and toddler groups	6	17	11.4*	23	11.2*

\* indicates statistical significance at the p<0.05 level.

Four negative outcomes for children were included – having had an injury or accident at home requiring A&E treatment; having been bullied; having special educational needs; and having been excluded from school. These questions were asked about all children within the household rather than about each child, so associations were explored between child poverty and living in a household where at least one child had experienced these outcomes. PSE poverty and deprivation were significantly associated with being bullied and being excluded from school, but not with requiring A&E treatment or having special educational needs. Results are shown in table 15.

**Table 15: Child poverty and negative child outcomes (%)**

	% overall	% if poor	Odds if poor	% if deprived	Odds if deprived
Injury or accident at home requiring A&E	20	23	1.2 NS	23	1.2 NS
Child has ever been bullied	34	44	1.8*	46	1.8*
Child has special educational needs	16	17	1.2 NS	20	1.6 NS
Child has ever been excluded from school	8	13	2.6*	15	3.0*

\* indicates statistical significance at the p<0.05 level.

Almost no significant associations were found between child poverty and a range of problems with schools which adults were asked to report on. Deprivation was significantly associated with reporting school buildings in a bad state of repair, but no other school problems were significantly associated with either PSE poverty or deprivation. Results are shown in table 16.

**Table 16: Child poverty and school problems (%)**

	% lack overall	% lack if poor	Odds of lack if poor	% lack if deprived	Odds of lack if deprived
Missed classes due to teacher shortage	6	6	1.0 NS	6	1.0 NS
Problems in obtaining school books	1	1	0.6 NS	1	0.7 NS
School does not have enough computers	2	2	1.1 NS	2	1.0 NS
Large class sizes (more than 30 pupils)	11	10	0.9 NS	11	1.0 NS
School buildings in bad state of repair	6	3	0.4 NS	2	0.3*
Inadequate school facilities	3	2	0.4 NS	1	0.3 NS
Poor teaching	5	7	1.5 NS	8	1.8 NS
Other problems with school facilities	5	7	1.5 NS	8	1.8 NS
More than one problem reported	11	11	1.0 NS	13	1.2 NS

Shaded cells indicate fewer than 20 unweighted cases. \* indicates statistical significance at the p<0.05 level.

Several parenting activities were asked about, and are examined in much more detail by Dermott and Pomati (2014). Significant associations were found with PSE poverty and deprivation for attending parents' evenings, doing sporting activities with children, and watching TV with children. Poor children were more likely to have parents who did not do sporting activities with them, but were less likely to have parents who missed parents' evenings or did not watch TV with them. Results are shown in table 17.

**Table 17: Child poverty and parenting activities (%)**

	% lack overall	% lack if poor	Odds of lack if poor	% lack if deprived	Odds of lack if deprived
Attending parents' evening once a term	4	8	0.3*	4	0.4*
Reading with children	15	17	0.8 NS	16	0.9 NS
Playing games with children	21	19	0.8 NS	21	1.0 NS
Doing sporting activities with children	31	39	1.6*	38	1.5*
Watching TV with children	6	3	0.3*	3	0.4*
Eating a meal with children	5	2	0.4 NS	2	0.5 NS
Helping children with homework	10	9	1.0 NS	10	1.0 NS

Shaded cells indicate fewer than 20 unweighted cases. \* indicates statistical significance at the  $p < 0.05$  level.

### **Child poverty and adult/household social exclusion**

In addition to associations with child-specific exclusion and outcomes, the wider environment within which children (including poor children) live impacts their well-being and well-becoming. Associations between child PSE poverty and experiences of exclusion within the child's household were examined, using the Bristol Social Exclusion Matrix as a framework. The results are summarised in Table 18.

#### ***Resources***

The resources domain of the B-SEM includes material and economic resources, access to public and private services, social resources, and education and skills.

#### *Material and economic resources*

Unsurprisingly, given that indicators of exclusion from material and economic resources in the B-SEM framework are not independent of those used to construct the PSE poverty measure, significant associations were found between child poverty and children's experience of exclusion on all indicators in this sub-domain. These incorporate income poverty, deprivation, arrears and debt, poverty over time, and subjective poverty.

#### *Access to public and private services*

Significant associations were found between children living in poverty, being excluded from public and private services specific to children's needs, and living in households with adults who were excluded from public and private services.

#### *Social resources*

Of the 'resources' domain, social resources showed the least convincing associations with child poverty. Poor children were more likely to live in households where the majority of adults completed full-time education at or before 16; where the majority of adults had less than monthly contact with relatives; and where the majority of adults had low levels of social support. However no evidence was found for links with other aspects of social resources, including adults having limited contact with friends and being dissatisfied with their personal relationships.

**Table 18: Child (PSE) poverty and social exclusion: resources domain (%)**

	% children	% poor children	Odds if child is poor
<b>Material and economic resources</b>			
At risk of poverty (<60% PSE-equivalised median income)	33	67	8.1*
At risk of poverty in PSE and FRS	23	48	6.0*
Majority of adults cannot afford 5+ SPNs	36	82	20.2*
Family cannot afford 5+ child SPNs	10	31	34.6*
HH in arrears on bills over the last year	34	68	7.8*
HH falling behind with bills	11	25	5.2*
HH had to borrow money from friends, family or elsewhere	40	77	10.2*
HH cannot afford unanticipated expense of £500	50	94	32.8*
HH does not own their home	42	78	9.0*
Majority of adults genuinely feel poor all the time	14	33	6.3*
Majority of adults say living standards below average	19	44	7.7*
Majority of adults have been poor mostly/often	15	32	4.7*
Child Poverty Act combined low income and material deprivation	12	40	36.2*
Child Poverty Act severe poverty	4	13	20.2*
Child Poverty Act deprived	22	65	28.4*
<b>Access to services</b>			
Adults lack access to three or more adult services	38	45	1.5*
Children lack access to two or more child services	14	23	2.6*
<b>Social resources</b>			
Majority of adults completed FT education aged 16 or less	54	73	3.1*
Limited language skills (non-native speakers)	10	12	1.5 NS
Majority of adults have less than monthly contact with friends	7	8	1.2 NS
Majority of adults speak to fewer than 3 friends per month	7	6	0.7 NS
Majority of adults have less than monthly contact with relatives	32	38	1.5*
Majority of adults speak to fewer than 3 relatives per month	36	36	1.0 NS
Majority of adults have less than monthly contact with friends or relatives	0	0	N/A
Majority of adults speak to fewer than 3 friends or relatives per month	2	3	1.7 NS
Majority of adults are not satisfied with their personal relationships	12	16	1.6 NS
Majority of adults have low levels of social support	7	11	2.1*

### **Participation**

#### *Economic participation*

Significant links existed between children being in poverty and the work status and job satisfaction of adults in their household; but no significant links existed between child poverty and adults in children's households providing unpaid care.

#### *Cultural participation*

Child poverty was significantly associated with living in a household in which adults did not participate in common cultural activities.

*Political and civic participation*

Children living in poverty were more likely to live with adults who were not members of any social organisations, and who took no local or national action. Associations with living with adults with a low sense of political efficacy were less clear: there was no significant association between being in poverty and living with at least one adult with a low sense of political efficacy, but there was a significant association with living with adults who all had a low sense of political efficacy.

*Social participation*

Significant associations existed between child poverty and children or the adults they live with lacking one or more common social activities. However, the indicators in this sub-domain are not independent from those used to assess child poverty.

Results are shown in table 19.

**Table 19: Child (PSE) poverty and social exclusion: participation domain (%)**

	% children	% poor children	Odds if child is poor
<b>Economic participation</b>			
No adults in paid work	18	40	5.9*
At least one adult not in paid work	41	68	4.7*
At least one adult unemployed >12 months in past 5 years	20	43	6.2*
All adults unemployed >12 months in past 5 years	10	24	6.3*
At least one adult gives unpaid care (not child care)	27	27	1.0 NS
All adults give unpaid care (not child care)	13	15	1.2 NS
At least one adult gives unpaid care (child care)	82	81	0.9 NS
All adults give unpaid care (child care)	73	70	0.8 NS
At least one adult gives unpaid care (all)	85	84	0.9 NS
All adults give unpaid care (all)	76	73	0.8 NS
At least one adult not satisfied with job	7	13	2.3*
All adults not satisfied with job	3	6	4.2*
<b>Cultural participation</b>			
No participation in common cultural activities	10	16	2.0*
<b>Political and civic participation</b>			
At least one adult not a member of any social organisations	57	81	4.5*
All adults not members of any social organisations	38	62	4.1*
At least one adult taking no local or national action	42	63	3.2*
All adults taking no local or national action	28	47	3.2*
At least one adult has low sense of political efficacy	24	30	1.5 NS
All adults have low sense of political efficacy	13	20	2.3*
<b>Social participation</b>			
Child lacks one or more common social activities	32	81	27.1*
At least one adult lacks one or more common social activities	31	62	7.0*
All adults lack one or more common social activities	15	38	8.7*

### **Quality of life**

#### *Health and well-being*

Poor children were more likely to live with adults with fair or bad health, and to live with adults with a limiting illness.

#### *Living environment*

Problems with accommodation and neighbourhood were all significantly more likely to affect children in poverty.

#### *Crime, harm and criminalisation*

Children in poverty were more likely to live with adults with a criminal record; evidence on adult experiences of harassment and discrimination was less clear: poor children were more likely to live with all adults who had experienced harassment or discrimination, but no more likely to live with only one adult with such experiences.

**Table 20: Child (PSE) poverty and social exclusion: quality of life domain (%)**

	% children	% poor children	Odds if child is poor
<b>Health and well-being</b>			
At least one adult has fair, bad or very bad health	27	42	2.6*
All adults have fair, bad or very bad health	12	23	3.5*
At least one adult has a limiting illness	18	29	2.6*
All adults have a limiting illness	0	0	N/A
<b>Living environment</b>			
Multiple problems with accommodation	41	63	3.3*
Home not in 'good' state of repair	38	60	3.6*
Adults dissatisfied with accommodation	9	18	3.8*
Adults dissatisfied with neighbourhood	9	17	3.1*
Experiencing 3+ neighbourhood problems	35	50	2.4*
<b>Crime and social harm</b>			
At least one adult experienced harassment or discrimination	22	26	1.4 NS
All adults experienced harassment or discrimination	10	16	2.4*
At least one adult has a criminal record	9	15	2.5*
All adults have a criminal record	3	7	3.7*

Overall, it is evident that poor children were more likely to experience themselves and live in households where adults experienced a range of social exclusions.

### **Conclusions**

We were responsible for the child poverty in the PSE 2012 survey. This paper is the final summative analysis of child poverty in the PSE 2012 survey. There will be other outputs by us and others in the team related to child poverty in the UK and by the project members in Northern Ireland and Scotland.

It is already well established that child poverty is a serious problem in the UK. It had been getting better slowly. But after 2010 it has begun to get worse again as austerity has had the biggest impact on families with children – real reductions in income and living standards, less than real terms uprating in cash benefits and tax credits, unemployment and cuts in local

services – all recently analysed in the Equality and Human Rights Report (Reed and Portes 2014).

The PSE survey was carried out early in the life of this Parliament and being cross-sectional cannot contribute to discovering what has happened to child poverty since 2008 or 2010. So what does it show?

It advances the measurement of child poverty by using a child deprivation measure based on socially perceived necessities, the conventional income poverty measure (but with a more realistic equivalence scale) and the PSE measure which combines deprivation and low income. In the appendix it also responds to the criticism of the socially perceived necessities method as applied to children by an analysis of children lacking necessities whether or not the parents say they lack them because they cannot afford them.

Then there is clear evidence that all these objective poverty measures are strongly related to parent's own assessment of their subjective poverty.

The analysis of the characteristics of poor children is familiar, including the fact that now a majority of poor children are living in households with someone in employment.

The analysis of intra-household sharing is new and confirms using quantitative data the findings from qualitative studies that child deprivation would be much higher if parents were not sacrificing their own living standards for the sake of their children.

Finally the paper explores the associations between poverty and deprivation and a large number of indicators of social exclusion. Child and social exclusion are strongly associated in almost all domains. The most interesting exception is that there does not appear to be an association with social relationships. This was found in the previous PSE survey in 1999 and we suspect it has to do with employment – people who are less likely to work are more likely to have time to sustain social relationships. In almost all other respects the association between poverty, deprivation and social exclusion is strong and dire.

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### Appendix A: Enforced lack sensitivity testing

The enforced lack approach – i.e. that lacking a socially perceived necessity is only considered a deprivation if the reason for lacking is inability to afford the item/activity – was instigated by Mack and Lansley (1985) in response to criticisms of Townsend’s (1979) approach from Piachaud (1981) that counting all items lacking irrespective of the reason for the lack may miscount those who lack items/activities through personal preference as poor. However, complications arise with this approach when child, rather than adult, poverty is the issue of concern. Such complications (not all of which are relevant to the PSE survey, but which are relevant to deciding on an approach) comprise:

- Where adults are respondents, how suitable and accurate is it to rely on them as proxies for reporting children’s preferences?
- Where children are respondents, can an adequate knowledge of household finances be assumed to enable trust in ‘can’t afford’ responses’?
- Further to the above, if child reports are used and indicate the child lacks and wants an item/activity, is the ability of adults to afford this item a relevant factor in whether the child is deprived or not, given that the child’s preferences are not being met whether or not adults can afford it?
- Where children’s preferences (or adults’ reports of children’s preferences) indicate that a child does not want items/activities widely believed to be instrumental in development towards successful adulthood (e.g. educational and developmental resources), what does a non-enforced lack indicate?

UNICEF<sup>10</sup> have taken the view that if a child lacks a socially perceived necessity regardless of whether an adult says they lack it because they cannot afford it then it is an abrogation of child rights and should be treated as a deprivation. These issues require careful theoretical consideration, but practical implications of analytical decisions are also important. These can be tested through comparing the kinds of children determined to be in poverty when alternative deprivation criteria are used – i.e. when all lacks, rather than just enforced lacks, are counted as deprivations.

Table A1 shows the proportions of children experiencing enforced lack and any lack of socially perceived necessities, and the difference in these proportions. For most items, differences are very small (<5%), indicating that few adults report children as lacking these for any reason other than being unable to afford them. Exceptions include outdoor leisure equipment (difference of 10%), construction toys (23%), pocket money (14%) and money to save (6%). For activities, all but celebrations on special occasions have comparatively high rates of non-enforced lack – hobby (7%), school trip (13%), toddler group (23%), clubs (19%), day trips (13%) and holidays (9%).

**Table A1: Enforced vs. any lack (%)**

Items			
	Does not have, can't afford	Does not have, any reason	Difference
A warm winter coat	1	2	1
Books at home suitable for their ages	2	3	1

<sup>10</sup> <http://www.unicef-irc.org/publications/710> <http://www.unicef-irc.org/publications/744>

Three meals a day	1	3	2
Indoor games suitable for their ages	2	4	2
Fresh fruit or vegetables at least once a day	3	5	2
Some new, not second hand, clothes	4	5	1
Meat, fish or vegetarian equivalent at least once a day	3	4	1
New, properly fitting shoes	4	5	2
At least four pairs of trousers	5	6	1
A garden or outdoor space nearby	5	7	2
A suitable place at home to study or do homework	5	7	2
Computer and internet for homework	6	8	2
Enough bedrooms for every child of 10 or over of a different sex	12	15	4
Outdoor leisure equipment	6	16	10
Construction toys	5	27	23
Pocket money	16	30	14
Money to save	33	39	6
<b>Activities</b>			
	<b>Does not do, can't afford</b>	<b>Does not do, any reason</b>	<b>Difference</b>
Celebrations on special occasions	1	3	1
A hobby or leisure activity	6	14	7
Going on a school trip at least once a term	8	20	13
Toddler group, nursery or play group once a week	4	27	23
Children's clubs or activities	9	28	19
Day trips with family once a month	21	33	13
A holiday away from home at least one week a year	26	35	9

A potential reason for the differences noted above may be misspecification of age adjustments – i.e. where items and activities have been assumed to be relevant to one age group, in reality their relevance may be to a smaller or different age range. To test this, the ages of children experiencing an enforced lack of the items and activities was compared to that of children lacking them for other reasons. Results are shown in table A2. Only for construction toys – where the mean age of children experiencing an enforced lack was 7, while the mean age of children experiencing a lack for other reasons was 12 – was there a statistically significant difference in age.

**Table A2: Differences in age for enforced vs. other lacks**

	<b>Mean age (enforced lack)</b>	<b>Mean age (other lack)</b>	<b>Sig</b>
Leisure	8	9	NS
Construction toys	7	12	*
Pocket money	11	10	NS
Saving money	11	11	NS
Hobby	10	11	NS
School trips	11	12	NS
Nursery	1	1	NS
Clubs	8	9	NS

Day trips	9	10	NS
Holiday	8	7	NS

To further explore differences, indices of child deprivation were calculated based on enforced and any lack, and thresholds set where similar numbers of children would be classed as deprived. The resulting classifications were then tested to see if they identified the same children as deprived, and whether similar kinds of children were identified as deprived.

Table A3 shows the numbers of deprivations experienced by children based on enforced and all lacks. Thresholds with similar numbers of children are identified for the purposes of comparison – 30% of children experience an enforced lack of two or more necessities, compared to 31% of children experiencing any lack of four or more necessities; and 21% of children experience an enforced lack of three or more necessities, compared to 22% of children experiencing any lack. These thresholds were therefore selected for further examination.

**Table A3: Number of enforced and any lacks (%)**

Number of deprivations	Don't have, can't afford	Don't have, all
None	54	22
1	15	21
2	9	15
3	7	10
4	4	9
5	3	6
Six or more	7	16

Table A4 shows the proportions of children whose deprivation status is similar or different based on enforced versus all lacks, using the thresholds detailed in table A3. For both thresholds, most children are in the same groups (i.e. they are not deprived according to both thresholds – 63% or 74%; or they are deprived by both thresholds - 21% and 15%). That is, a total of 84% or 89% of children are classified in the same manner based on enforced lack or any lack approaches. Neither is the direction of difference predictable based on which approach is used – similar proportions are classified as deprived by the enforced lack threshold and not by the any lack threshold, as are vice versa.

**Table A4: Classifications of children by enforced lacks and all lacks thresholds (%)**

		All lacks (4+ threshold)	
		Not deprived	Deprived
Enforced lack (2+ threshold)	Not deprived	63	8
	Deprived	7	21
		All lacks (5+ threshold)	
		Not deprived	Deprived
Enforced lack (3+ threshold)	Not deprived	74	6
	Deprived	5	15

As a further check whether the different approaches result in fundamentally different kinds of children being categorised as deprived, logistic regressions examining associations between demographic characteristics and deprivation were run on each of the four classifications. Overall, associations were few and were in similar directions.

- Household employment status and the child's age retained significant links to deprivation when enforced lack definitions were used, but not when all kinds of lack were counted.
- Differences based on family type were few and were not consistent across the different types of measure, perhaps suggesting noise in the data rather than genuine differences based on how deprivation is counted.
- Differences based on ethnicity were not always consistent – for example black children were more likely to be deprived based on all lacks at the 4+ threshold, and enforced lacks at the 3+ threshold, but not based on the other thresholds. However, Pakistani/Bangladeshi children were more likely to be deprived when all lacks were counted, an association which was not statistically significant when only enforced lacks were included.
- Children in socially or privately rented accommodation were more likely to be deprived than children in owner-occupied accommodation irrespective of the method for calculating deprivation.

Results are shown in table A5.

**Table A5: Logistic regressions examining risk factors for deprivation based on enforced and any lacks**

		Enforced lack, 2+ threshold	All lacks, 4+ threshold	Enforced lack, 3+ threshold	All lacks, 5+ threshold
		Odds	Odds	Odds	Odds
<b>Household employment status</b>	At least one adult works full time	1.0	1.0	1.0	1.0
	At least one adult works part time (no FT)	1.1 NS	0.9 NS	1.4 NS	1.2 NS
	All adults workless or inactive	2.0*	1.5 NS	2.1*	1.4 NS
<b>Family type</b>	One adult, 1-2 children	1.0	1.0	1.0	1.0
	One adult, 3+ children	3.0*	1.4 NS	1.5 NS	1.3 NS
	Two adults, 1-2 children	0.8 NS	0.8 NS	0.8 NS	0.7 NS
	Two adults, 3+ children	1.4 NS	1.3 NS	1.3 NS	1.1 NS
	Other	0.5 NS	0.5 NS	0.3*	0.5 NS
<b>Age of child</b>	0-1	1.0	1.0	1.0	1.0
	2-4	1.3 NS	0.7 NS	1.4 NS	0.7 NS
	5-10	2.6*	0.9 NS	2.6*	1.0 NS
	11-15	2.8*	1.5 NS	3.3*	1.6 NS
	16-17	2.4 NS	1.6 NS	2.6 NS	2.3 NS
<b>Ethnicity</b>	White	1.0	1.0	1.0	1.0
	Black	1.7 NS	2.1*	2.3*	1.8 NS
	Asian Indian	0.5 NS	1.7 NS	0.2*	1.7 NS
	Pakistani/Bangladeshi	1.5 NS	2.7*	2.0 NS	2.5*
	Other	0.9 NS	1.2 NS	0.9 NS	1.2 NS
<b>Tenure</b>	Owner	1.0	1.0	1.0	1.0
	Social renter	5.2*	2.9*	5.2*	3.9*
	Private renter	2.9*	2.1*	3.2*	2.7*
	Other	0.8 NS	0.7 NS	1.6 NS	N/A

On the whole, the different methods for calculating deprivation require careful consideration, and must be informed by conceptual decisions and by the purposes of the research. However, no major differences appear to arise in analysis of the PSE data based on whether an enforced lack or any lack approach is used.