

Poverty and Social Exclusion in the UK: **The 2011 Survey** 

Working paper series: No 7

**PSE Measures Review Paper:** Children's Deprivation Items

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### Poverty and Social Exclusion in the UK: The 2011 survey

### **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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### Introduction

This paper aims to provide a critical review of the children's items used in PSE99 and provide suggestions for improvements in PSE11. A rationale for the inclusion of child-related deprivation items will be presented, followed by an analysis of the items used in PSE99. Questions used in other established surveys will then be considered, particularly where comparable items are used. Next, a description of the process of developing a new set of items for inclusion in the Understanding Children's Wellbeing 2010 survey is presented. Two lists of deprivation items (short and long) are presented for consideration, along with analysis of items according to the age of children and recommendations about which age groups items are relevant for.

The paper is written for an internal audience, or at least people who are assumed to be familiar with the socially perceived necessities methods.



### Rationale for including children's items

The PSE method for measuring deprivation may be particularly important for measuring child poverty. Income poverty may be a particularly unreliable indicator of poverty of children. It is collected at the individual adult and household level and without detailed expenditure data we do not know whether it is spent on or for children. Deprivation items geared to measuring children's wants and needs may offer a better measure. We may be able to identify:

- deprived children in income poor homes,
- non deprived children in income poor homes,
- deprived children in non income poor homes and
- non deprived child in non income poor homes.

In PSE99 the socially perceived necessities questions did not work very well. Criticisms fall into 3 types – how and by who necessities were determined; the items used; and the use of the 'don't have and don't want' response code. The first two are now examined, and the issue of 'don't have and don't want' is examined below under the heading 'Parents as proxies'.

Regarding the determination of which items were necessary, McKay and Collard (2003) identified differences in perceived necessities across income groups, with richer respondents less likely to identify items as necessary than poorer respondents. Table 1 shows the items where significant differences between income groups were found, including three items – a bike, 50p per week for sweets, and a computer suitable for school work – which would be considered necessities according to poorer respondents but not according to richer respondents (highlighted). One potential reason suggested is cultural differences between richer and poorer families – using the example of sweets, these are an easier and cheaper treat to provide than fresh fruit, and so more accessible to poorer families than the healthier alternatives that are likely to be favoured by richer families. The methodological and ethical issue of richer people deciding on what items are necessary for poorer people who are less likely to be able to afford them is also highlighted. This links to a possible reason for the differences – if richer families are less likely to be going without these items, it may be that they are unable to appreciate the impact on children of lacking them. It is therefore suggested that where these items would be excluded based on the overall proportion viewing them as a necessity but would be included by those on lower incomes, these items are considered for inclusion in conceptions of necessities.



ltem	% parents viewing as necessity	% low income	% high income
Bedroom for every child of different sex over 10 years	76	83.3%	72%
School trip at least once a term	73	80.7%	65.9%
Swimming at least once a month	71	85.3%	68.1%
Garden to play in	68	77.5%	55.1%
Bike: new/second hand	<mark>60</mark>	<mark>60.6%</mark>	<mark>49.9%</mark>
At least 50p a week for sweets	<mark>45</mark>	<mark>59.8%</mark>	<mark>33.8%</mark>
Computer suitable for schoolwork	<mark>38</mark>	<mark>50.7%</mark>	<mark>32.4%</mark>
Computer games	13	25.5%	8.1%

#### Table 1: Impact of income on child items

An additional issue here is that parents, rather than children, determined the items to be included. Therefore, the measure could be argued to be only a proxy of child poverty, being itself a measurement of how poor parents think children are. This is discussed further below, with regard to the response codes offered and the development of child-centric deprivation items for the UCW.

In terms of the items included in PSE99, McKay and Collard provide an extensive analysis of these in their development of child items for inclusion in the FRS. Whilst stressing the importance of child items to the measurement of child poverty, rather than family poverty, several issues are raised; responses were found to be more uniformly distributed across income groups than adult items, to have lower reliability, and to potentially focus too much on school-age, rather than pre-school children. Child poverty was found to be "predominantly a sub-set of adult deprivation, not a whole new group" (2003: 9). However, this is possibly unsurprising since the items used are agreed by parents, rather than children, to be necessities - qualitative research suggests that parents protect their children from parental conceptions of poverty, whilst children have also been found to protect parents from knowledge of their experiences of poverty (for example Ridge, 2002, 2005, and 2009). This would suggest that when items are identified as necessities by parents, most parents may be likely to supply these items to their children at the expense of providing for themselves. This does not guarantee that the children concerned are not by their own judgement poor, and indeed they may be protecting their parents from knowing their social needs. An index based on necessities as established through research with children may be a means to address some of these difficulties, and more information on the process of developing such an index for the UCW is provided below. This may also link with the issue that lacking one or more items, rather than a higher number,



was agreed as the threshold for poverty in PSE99. This makes discrimination between rich and poor children, and between children who are poor to different degrees, difficult. It appears that, wherever possible, parents do provide all the items they perceive to be necessary for their children. Two possible ways to address this would be to use a more child-centric list of items, and/or, in line with the previous paragraph, to examine differences between social groups in terms of the items deemed necessary and including more that may be deemed necessities by poorer families but not by richer families (or along other lines of distinction).

We need to try to do better this time.

#### Parents as proxies

The PSE11 is not going to interview children. Adults are going to be the respondents to the survey which decides which items are socially perceived necessities. Parents are going to be the respondents to the survey that decides if they have, don't have and can't afford and don't have and don't want. This has implications for how data is collected and analysed, discussed below.

Deprivation items traditionally include three answer options – have the item, don't have the item because respondent cannot afford the item, and don't have or want the item. This enables a distinction between those who may appear poor due to personal preferences without in fact experiencing poverty from their own perspective, and those who are poor through necessity (see Hallerod, 1994). In the measurement of child poverty using parents as proxies, this raises an interesting question. Many authors suggest that parents may only imperfectly report on their children's situation (for example Ben-Arieh, 2005 and 2008), and the risk of this is presumably increased when parents are being asked to report subjective facets of child poverty, such as whether their child wants a particular item. This is explored in more detail below regarding the development of items for the UCW survey, but is also an important consideration in terms of how and whether the 'don't have and don't want' response is used when asking parents to report on their children.

Alcock (1993) also presents an interesting challenge to the 'don't have and don't want' response, suggesting that people may indicate a lack of desire for an item (or may not view the item as a necessity) as a result of reducing or adapting their expectations based on their circumstances (see also Hallerod, 2006). This could result in richer participants appearing to be more deprived than poorer counterparts because of different cultural expectations about what is needed. This may indicate that the inclusion of 'don't have and don't want' moves deprivation items closer to a measure of subjective poverty rather than objective deprivation. However, as Alcock also states, it would be difficult to argue that not wanting an item is irrelevant, as the definition of deprivation would be compromised by claims that people can be deprived of things that they have no interest in having. It is possible that the 'don't have and don't



want' code, therefore, is more interesting in its contribution to our understanding of social exclusion than of poverty directly, and of how individuals vulnerable to being excluded through material deprivation may contribute to their own (or their children's) exclusion from wider social norms.

These points raise complex issues about what response codes to offer parents, and how to interpret data for analysis. Whilst including the 'don't have and don't want' category provides an interesting insight into parents' perceptions of children's wants and needs, it may not provide an accurate measure of child poverty as experienced by the child, rather than as experienced by the parent. Treating parental reports that children don't have and don't want items as if the child is not lacking the item risks excluding children who are in poverty but hiding this from their parents from results. Whilst the 'don't have and don't want' code certainly provides interesting information, it is unclear what issue is being measured, three options being: poverty, social exclusion, or parental exclusion of children from social norms. Since parents will almost certainly vary in how accurately they describe their children's desires, the data is likely to provide a measure of a mixture of these three. It is suggested here that the code is retained, but that careful consideration of how to interpret responses is required in analysis. One possible solution could be to use multiple response codes such as those used for pensioner items in the 2008 wave of the FRS (including don't have the money, not a priority for me, health/disability, too much trouble, no-one to do this with, not something I want, not relevant to me, and other). However, this still fails to address the issue of children hiding their desires from parents.



### **Review of PSE99 questions**

Table 2 provides a summary of the child deprivation items included in PSE99. Items which are lacked by 3% or more of the population because parents report an inability to afford them are highlighted. The 3% cut-off is arbitrary but is an effort to ensure that the items provide more of a distinction between poor participants and non-poor participants; items that are owned by all or almost all children offer little insight into poverty. However, a different cut-off point or no cut-off could be equally valid, as evidence from McKay (forthcoming) suggests that more families lack items now than was the case in 1999. A cut-off may therefore result in the loss of data that can now provide insight into child poverty.

Item	% parents	% children lacking
	viewing as	because parents
	necessity	cannot afford
New, properly fitted, shoes	96	2.3
A bed and bedding for self	96	0.6
Warm, waterproof coat	95	1.9
Fresh fruit or vegetables at least once	93	1.8
a day		
Celebrations on special occasions	<mark>92</mark>	<mark>3.6</mark>
Three meals a day	91	0.9
Books of own	90	0.1
Play group at least once a week	89	1.3
All required school uniform	88	2
Hobby or leisure activity	<mark>88</mark>	<mark>3.2</mark>
Toys (eg. dolls, teddies)	85	0.5
At least 7 pairs of new underpants	84	1.9
Educational games	<mark>84</mark>	<mark>4.2</mark>
Meat, fish or vegetarian equivalent at	<mark>76</mark>	<mark>3.7</mark>
least twice a day		
Bedroom for every child of different	<mark>76</mark>	<mark>3.3</mark>
sex over 10 years		
Carpet in bedroom	75	1.4
At least 4 pairs of trousers	<mark>74</mark>	<mark>3.1</mark>
School trip at least once a term	73	1.8
At least 4	71	2.8
jumpers/cardigans/sweatshirts		
Swimming at least once a month	<mark>71</mark>	<mark>7.1</mark>
Garden to play in	<mark>68</mark>	<mark>3.5</mark>
Some new, not second hand, clothes	<mark>67</mark>	<mark>3.1</mark>
Construction toys	<mark>66</mark>	<mark>3.3</mark>
Holiday away from home at least one	<mark>63</mark>	<mark>21.8</mark>

#### Table 2: Children's items from PSE99



week a year		
Bike: new/second hand	<mark>60</mark>	<mark>3.4</mark>
Leisure equipment	<mark>57</mark>	<mark>3.1</mark>
Friends round for tea/snack fortnightly	<mark>53</mark>	<mark>3.7</mark>
At least 50p a week for sweets	45	1.6
Computer suitable for schoolwork	<mark>38</mark>	<mark>35.7</mark>
Computer games	<mark>13</mark>	<mark>13.2</mark>



# Review of questions from other surveys

#### (primarily FRS, ALSPAC, Breadline Britain and SILC)

#### Breadline Britain 1990

Bradshaw et al (2000) provide a comparison between responses from parents gathered in PSE99 and responses from a cross-section of the population gathered in the Breadline Britain survey. Details of the proportions from each survey viewing items as necessities are shown in table 3. The authors highlight differences between parents and non-parents in terms of which items are considered necessary, and that younger people (aged 16-24) and professional people tend to make harsher judgements that others. A "remarkable similarity of judgement" is evident between different ethnic groups (2000: 14), but people from Wales and Scotland were generally less likely to consider items necessary, were again evident. This emphasises the above point regarding who determines what is necessary, but also offers some encouragement in terms of the ability to arrive at deprivation items since different ethnic groups were found to be largely in agreement.

Item	PSE % necessity	Breadline Britain % necessity
New, properly fitted, shoes	96	94
A bed and bedding for self	96	93
Warm, waterproof coat	95	95
Fresh fruit or vegetables at least once a day	93	93
Celebrations on special occasions	92	92
Three meals a day	91	90
Books of own	90	89
Play group at least once a week	89	88
All required school uniform	88	87
Hobby or leisure activity	88	89
Toys (eg. dolls, teddies)	85	83
At least 7 pairs of new underpants	84	83
Educational games	84	83
Meat, fish or vegetarian equivalent at least	76	77
twice a day		
Bedroom for every child of different sex over	76	78
10 years		
Carpet in bedroom	75	67

#### Table 3: Comparison between PSE99 and Breadline Britain



At least 4 pairs of trousers	74	69
School trip at least once a term	73	74
At least 4 jumpers/cardigans/sweatshirts	71	73
Swimming at least once a month	71	75
Garden to play in	68	68
Some new, not second hand, clothes	67	70
Construction toys	66	62
Holiday away from home at least one week a	63	70
year		
Bike: new/second hand	60	54
Leisure equipment	57	60
Friends round for tea/snack fortnightly	53	59
At least 50p a week for sweets	45	49
Computer suitable for schoolwork	38	41
Computer games	13	18

#### FRS/HBAI

McKay and Collard (2003) developed questions for inclusion in the FRS based on PSE99 questions, resulting in high levels of similarity. The FRS included only 10 items due to space constraints. Unfortunately the wording of some items in the FRS differs from that used in PSE99 – this is noted in table 4 where relevant. It should also be noted that the FRS survey is differently administered, which may impact on findings. In all areas other than celebrations on special occasions, the proportion of families with children who are unable to afford items has increased, in some cases substantially (for example 16% of families unable to afford separate bedrooms for children over 10 of different sexes, compared to 3.3% in PSE99).

Item	FRS 2008-9 % lacking due to inability to afford	% PSE99 lacking due to inability to afford
Celebrations on special occasions	3	3.6
Play group at least once a week	6	1.3
Hobby or leisure activity	7	3.2
Bedroom for every child of different	16	3.3
sex over 10 years		
School trip at least once a term	5	1.8
Swimming at least once a month	11	7.1
Garden to play in (PSE); outdoor space/facilities to play safely (FRS)	13	3.5
Holiday away from home at least one week a year (PSE); At least one week's holiday away from home with	35	21.8

#### Table 4: FRS 2008-9 compared to PSE99



family		
Leisure equipment (PSE); Leisure	7	3.1
equipment such as sports		
equipment or a bicycle		
Friends round for tea/snack	8	3.7
fortnightly		

#### SILC and ALSPAC

Additional questions from SILC (box 1) and ALSPAC (box 2) are listed below. Many of the questions relating to poverty overlap with those in PSE99 and FRS. Within SILC, questions are also asked about access to medical (including dental) services. These may be of less relevance to the measurement of poverty as narrowly defined in the UK due to universal NHS provision, but may offer significant insight into social exclusion. In terms of the SILC deprivation items, one question – regarding children having a suitable place for study and homework – does not have a directly comparable counterpart in PSE99 (highlighted in box 1). Whilst other items may differ slightly between the surveys in terms of wording, there are similar items in both surveys. Unfortunately SILC questions were included only as a one-off special module in the 2009 wave of the survey, and data are not yet available for analysis.

ALSPAC questions are slightly different as these were not designed exclusively to measure poverty or material deprivation. Whilst some of the items (for example possession of a bike, own bedroom, computer) are evidently related to material deprivation, others, such as ownership of a pet, may be more related to personal or familial preferences. More testing of these questions would therefore be necessary were they to be considered for inclusion in a survey aimed at the measurement of poverty.



#### Box 1: SILC material deprivation questions

Do ALL the children in your household...

- Have some new (not second-hand) clothes?
- Have at least two pairs of properly fitting shoes?
- Eat fresh fruit or vegetables at least once a day?
- Eat three meals a day?
- Eat one meal with meat, chicken or fish (or vegetarian equivalent) at least once a day?
- Have books at home suitable for their ages?
- Have outdoor leisure equipment suitable for their ages (bicycle, roller skates, etc.)?
- Have indoor games suitable for their ages (building blocks, board games, computer games, etc.)?
- Have regular leisure activities (swimming, playing an instrument, youth organisations, sports etc.)?
- Have celebrations on special occasions (birthdays, religious events, etc.)?
- Invite friends round to play and eat from time to time?
- Go on holiday at least 1 week per year?
- (who attend school) participate in school trips and school events that cost money?
- (who attend school) have a suitable place to study or do homework?
- Have an outdoor space in the neighbourhood where they can play safely?

Was there any time in the last 12 months when at least one of the children in your household needed to consult a GP or specialist but did not? (yes/no) What was the main reason for not consulting a GP or specialist on this (these) occasion(s)? (could not afford to; waiting list; could not take the time because of work, care of other children or care of other persons; too far to travel/no means of transport; other reason)

Was there any time in the last 12 months when at least one of the children in your household needed a dental examination or treatment but did not receive it? (yes/no)

What was the main reason for not consulting a dentist on this (these) occasion(s)? (could not afford to; waiting list; could not take the time because of work, care of other children or care of other persons; too far to travel/no means of transport; other reason)



#### Box 2: ALSPAC questions relating to material possessions

- Ownership of computer games (Some More About Me, question B1.j)
- Access to the internet or email at home (Some More About Me, question B4.a)
- Having pets (Some More About me, questions C9 and 10)
- Having own bedroom (My World, question A1)
- Sharing bed (My World, question A4)
- Items owned in bedroom (My World, question A7, including cuddly toys, other toys, TV, computer, books, comics, radio, clock, games e.g.
   Snakes and Ladders, table, desk, furry pets (e.g. hamster), posters/drawings, certificates e.g. for, swimming, music, hanging mobiles e.g. windchimes, Dreamcatchers, fish, other pet)
- Owning a mobile phone (Rings and Things, question A1 (indirect))
- Owning a watch/watches (Watches and Funny Feelings, question A4)
- Use of a computer at home (Watches and Funny Feelings, question C1)
- Household ownership of car (Travelling, Leisure and School, question D5; Life of a 16+ Teenager, question M12)
- Owning a bike and bike helmet (Travelling, Leisure and School, questions D8 and 9; Life of a 16+ Teenager M19 and 20)
- Part-time work alongside education (Life of a 16+ Teenager, question N2 and 3)
- Details of past jobs (Life of a 16+ Teenager, questions N5 and 6)
- Details of education-related possessions including computer, internet, books, quiet space to work, private tuition. (Year 11 Questionnaire, question A14)



### **Children's Society UCW Survey**

The Understanding Children's Wellbeing survey 2008 included a range of questions on poverty which were answered by children aged 10-15. Several issues were identified in analysis, which led to the development of an index of deprivation items for use in the 2010 wave of the survey. Details of the process of developing this index are presented here.

#### Qualitative work

Following identification of the need to include more suitable child-centric questions, it was found that no existing surveys included deprivation items agreed by children rather than by parents/adults. Qualitative focus groups were conducted with 8-15 year olds to establish a long list of items to pilot. These groups were facilitated by researchers from the Children's Society and the University of York. Children were asked various questions relating to possessions, and were encouraged to consider socially perceived necessities through exercises asking them to think about the kinds of things they felt someone of their age needed to have a normal kind of life. A list of 20 items was agreed for piloting following analysis of qualitative data.

#### Pilot survey

The pilot sample included 300 parent-child pairs, and asked comparable questions of parents and their children to allow for validation between the two answers. Children were all aged 11-15, so in the secondary age range. Initially descriptive statistics and comparisons between the answers given by parents and children are presented. Following this, a deprivation scale including all 20 deprivation items piloted is presented. Thirdly, the creation of a shorter, 10-item scale is described and its robustness tested.

#### - Questions designed to measure poverty

Four questions were asked to measure poverty. These were:

- What is your (weekly/monthly/annual) household income? (only asked of parents)
- How many adults in your household (including you) have a paid job? OR How many of the adults that you live with have a paid job?
- Does your participating child usually receive free school meals? OR Do you usually receive free school meals?
- How well off/rich do you think your family is, compared to other similar families (with children of a similar age to your participating child)? OR How well off/rich do you think your family is, compared to other families you know with children your age?

Details of the difference between parental and children's reports are



presented below. Equivalising income had unexpected results in that relationships between income and deprivation were not strengthened through the application of equivalence scales, but details of equivalised income are presented for information. The OECD modified equivalence scale is used throughout.

Annual income was not found to be normally distributed, as shown in charts 1 and 2. Because respondents were asked to choose an income range rather than provide an exact number, figures have been calculated by taking the bottom point of the bottom group (0), and the mean average of all groups in between the top and the bottom. The top group presented some difficulties as there was not a specified highest amount, resulting in all households with an income over £52,000 being grouped together. The large number of scores at the top of the income distribution indicates that the scale used to measure income did not go high enough to reflect variation in higher incomes.

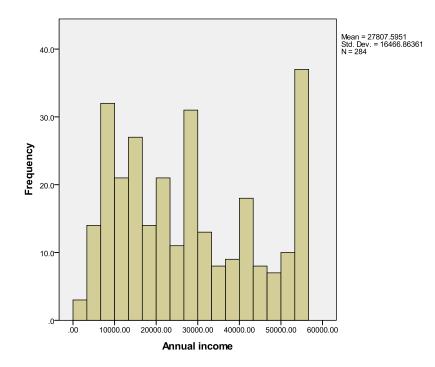


Chart 1: Distribution of annual household income



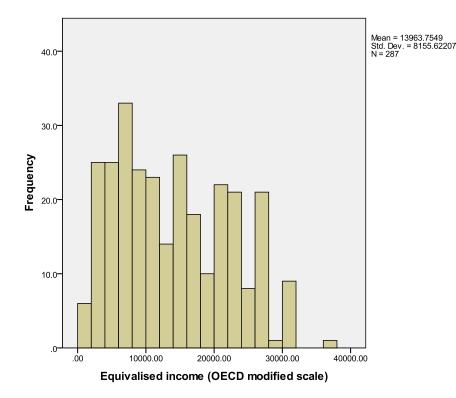


Chart 2: Distribution of equivalised annual household income

Although there was a statistically significant difference between the samples, table 5 shows that there was a fairly high level of similarity between children's and parent's reports of adults in paid work (percentages given are of the whole sample). Shaded cells show where parents and children were in agreement. 93.6% of parents and children provided the same answer as each other.

	Children			
Parents	0	1	2	3+
0	42	2	-	-
1	1	89	6	-
2	1	7	143	-
2+	-	2	1	8

r=0.9\*\* No missing data for adults, 2 children did not know.

As above, a large level of agreement can be seen between parents and children regarding free school meal receipt, although again a statistically significant difference was found. 98.6% of parents and children provided the same answer as each other.



#### Table 6: Free school meals

	Children	
Parents	Yes	No
Yes	58	2
No	2	241

r=0.94\*\* No missing data for adults, 2 children did not know.

Slightly more of a difference was evident between adults and children in their subjective perceptions of familial wealth. 50.7% of parents and children agreed with each others' assessment. However, it is evident from table 7 that responses were along similar trends – children and parents were never at opposite extremes of the responses, and more children and parents gave the same answer than gave any single different answer.

Table 7: Self-rated wealth	Table	7:	Self-rated	wealth
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			Children		
Parents	Very well off	Quite well off	About average	Not very well off	Not very well off at all
Very well off	3	2	2	-	-
Quite well off	2	21	19	-	-
About average	1	39	82	27	1
Not very well off	-	3	29	33	15
Not very well off at all	-	-	2	10	12

r=0.64\*\*

#### Relationships with annual income

Table 8 shows differences in annual income between children with no adults in paid work and those with one or more adults in paid work. Predictably, there is a significant difference between the groups. However, the size of the difference is greater for non-equivalised annual income than when an equivalent income is used.



		t	Mean
Annual income	No adults in work	-14**	£11,409
	1+ adults in work		£31,779
Equivalised	No adults in work	-11.6**	£6,126
annual income	1+ adults in work		£15,307

#### Table 8: Annual income and adults in paid employment

Significant differences in annual income were also found between participants based on free school meal status. Again, surprisingly, the difference was slightly smaller when income was equivalised. These are shown in table 9.

Table 9: Annua	l income	and free	school	meal status
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		t	Mean
Annual income	Free school	-9.6**	£14,687
	meals		
	Not free school		£32,311
	meals		
Equivalised	Free school	-8.9**	£7,387
annual income	meals		
	Not free school		£15,557
	meals		

Medium to strong correlations were found between parents' and children's self-reported wealth and annual income as reported by parents. For parents, the correlation was  $r=0.6^{**}$ , and for children  $r=0.5^{**}$ .

#### **Deprivation items**

#### **Descriptive statistics**

Respondents were given a list of 20 items and ask to indicate whether they (or their participating child) had the item, did not have but wanted the item, or did not want or need the item. Table 10 shows responses to these questions, broken down according to whether the answer was supplied by parent or child. Again, high levels of similarity can be seen in responses to these questions. Where there are differences, these tend to be very small. In the table, contrasts between parents and children are highlighted in yellow where there are fewer children than adults within the response category, and in blue where there are more children than adults.

Items were also tested for similarity between parent-child pairs. For brevity, results for this are shown in appendix A. For all items there was a statistically significant difference between parents and children, but differences were all very small.



Item	Parent: child has	Child: has	Parent: child wants	Child: wants	Parent: child does not want	Child: does not want
Some pocket money each week to spend on themselves	73.9% (210)	<mark>72.4%</mark> (205)	22.5% (64)	23.7% (67)	3.5% (10)	3.9% (11)
Some money that they can save each month, either in a bank or at home	65.5% (186)	65.5% (182)	27.8% (79)	30.2% (84)	6.4% (18)	<mark>4.3%</mark> (12)
A pair of designer or brand name trainers (like Nike or Vans)	52.5% (149)	56.2% (158)	22.9% (65)	23.8% (67)	24.6% (70)	<mark>19.9%</mark> (56)
Treats and snacks like sweets, chocolate, chips or pizza once a week	89.4% (254)	90.1% (254)	6.3% (18)	<mark>6%</mark> (17)	4.2% (12)	<mark>3.9%</mark> (11)
Being part of a club where they play sports or do a hobby like drama, art or music	60.2% (171)	62.4% (174)	18.3% (51)	<mark>19%</mark> (53)	20.4% (57)	18.6% (52)
An iPod or other	75.4%	77.5%	16.5%	16%	8.1%	<mark>6%</mark>
personal music player Their own mobile	(214) 88.4%	(220) 89%	(47) 8.1%	<mark>(45)</mark> 9.2%	(23) 3.5%	<mark>(17)</mark> 1.8%
phone	(251)	(252)	(23)	(26)	(10)	(5)
A computer at home that is connected to the internet that they can use for school work and in their free time	97.5% (277)	97.9% (276)	2.5% (7)	2.1% (6)	-	-
A games console, like an Xbox, PS3 or Wii, and at least one game for it	88.4% (251)	90.1% (255)	5.3% (15)	5.7% (16)	6.3% (18)	<mark>4.2%</mark> (12)
Cable or satellite TV	75.6%	77.6%	15.9%	16%	8.5%	<mark>6.4%</mark>
at home	(214)	(218)	(45)	(45)	(24)	(18)
A pet at home	64.8% (184)	66.5% (189)	19.9% (56)	19.9% (56)	14.9% (42)	<mark>13.1%</mark> (37)
A garden at home, or somewhere nearby like a park where they	94% (267)	93% (264)	4.6% (13)	4.6% (13)	1.4% (4)	1.8% (5)

Table 10:	descriptive	statistics for	deprivation	items
-----------	-------------	----------------	-------------	-------



can safely spend time with their friends						
A bedroom of their own (not shared)	81.7% (232)	83.1% (236)	15.5% (44)	<mark>15.2%</mark> (43)	2.8% (8)	<mark>1.4%</mark> (4)
Presents on special occasions like birthdays and Christmas	96.8% (275)	<mark>98.2%</mark> (278)	1.8% (5)	<mark>1.1%</mark> (3)	1.4% (4)	<mark>0.7%</mark> (2)
A family car for transport when they need it	83.8% (238)	85.1% (239)	12.3% (35)	<mark>11.4%</mark> (32)	3.9% (11)	<mark>3.6%</mark> (10)
Access to public transport like the train or the bus when they need it	85.9% (244)	<mark>85%</mark> (238)	6.7% (19)	<mark>6.4%</mark> (18)	6.7% (19)	<mark>8.6%</mark> (24)
The right kind of clothes to fit in with other people their age	86.3% (245)	<mark>82.9%</mark> (233)	11.3% (32)	13.9% (39)	2.5% (7)	3.2% (9)
Books of their own (suitable to their age) at home	93.3% (265)	<mark>92.3%</mark> (262)	2.1% (6)	<mark>1.4%</mark> (4)	4.2% (12)	<mark>5.7%</mark> (16)
At least one family holiday away from home each year	66.5% (189)	69.9% (197)	29.2% (83)	<mark>27.3%</mark> (77)	3.5% (10)	<mark>2.8%</mark> (8)
Family trips or days out at least once a month	53.2% (149)	56% (154)	37.5% (105)	<mark>35.3%</mark> (97)	9.3% (26)	<mark>8.7%</mark> (24)

#### Deprivation scale

A 20 point deprivation scale was created based on the total number of items owned by children. For the purposes of this scale items that were not wanted were treated as missing data. The complexity around how to treat such items is acknowledged (a more thorough discussion can be found in Alcock, 2003; Gordon, 2000), as the response may reflect a genuine lack of desire for the item or may be related to adjusted expectations based on circumstances. Treating this response as missing was therefore felt to be the best way to avoid this kind of answer overly influencing results.

Chart 3 shows the number of items children are lacking based on the 20-item scale. Lacking no or one items appears to be fairly common, whilst lacking two or more is less so.



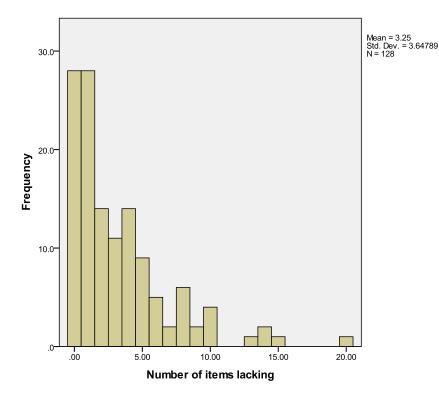
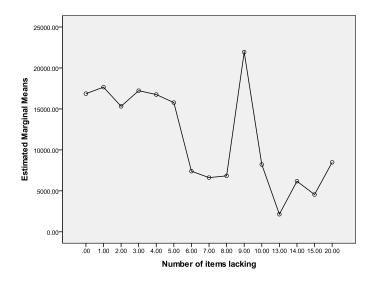


Chart 3: Number of items children lack (20-item scale)

Although a significant relationship was found between equivalised income and the number of items lacked, graph 4 presents a picture that is somewhat difficult to interpret. There is a clear drop in income at 6 items lacking, but a spike in income at nine items lacking, and although the general trend is that more items lacking is associated with lower income, this is not as strong as it ideally would be. It should be noted that some possible scores on the numbers of items lacked were not reported by any respondents, resulting in (for example) no point on the graph representing the income of households lacking 11 or 12 items.



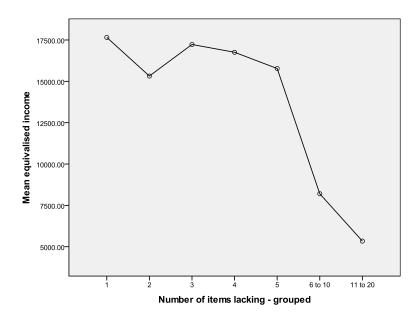
# Chart 4: Relationship between number of items lacked and annual equivalised income



F=2.1\*

To compensate for the small number of cases, particularly lacking higher numbers of items, households lacking 6-10 items and those lacking 11 or more items were combined. This provides a picture closer to what would have been expected, shown in chart 5.

#### Chart 5: Income and items lacking (grouped)



F=3.8\*\*



Table 11 shows the percentage of children lacking each number of items. The percentage of children lacking five or more items, identified as a point where lack of items is most strongly associated with lower income, is 18.7%.

Number of items lacking	% children	Cumulative %
0	21.9% (28)	21.9%
1	21.9% (28)	43.8%
2	10.9% (14)	54.7%
3	8.6% (11)	63.3%
4	10.9% (14)	74.2%
5	7% (9)	81.3%
6	3.9% (5)	85.2%
7	1.6% (2)	86.7%
8	4.7% (6)	91.4%
9	1.6% (2)	93%
10	3.1% (4)	96.1%
11	-	-
12	-	-
13	0.8% (1)	96.9%
14	1.6% (2)	98.4%
15	0.8% (1)	99.2%
16	-	-
17	-	-
18	-	-
19	-	-
20	0.8% (1)	100%

 Table 11: Proportion of children lacking items

A low to moderate correlation was found between child-reported deprivation scores and household income (r=0.4\*\*). Probably as a result of missing data, there was not a significant relationship between deprivation score and adults in paid employment - only 6 cases of children with no adults in paid employment could be analysed. This may suggest that there is a correlation between poverty and inability to answer the questions about deprivation items, as more missing data was evident in cases where children had no adults in paid work. However, the small number of respondents as a result of the nature of the data as a pilot study may also have an effect here, since the aim was to test questions rather than use a representative sample. A difference was found in average deprivation scores according to whether children received free school meals, presented in table 12.

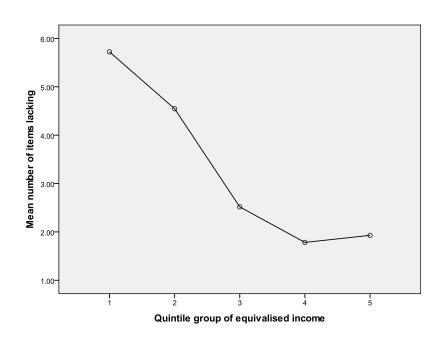


# Table 12: Relationship between deprivation score and child's free schoolmeal receipt

	t	Mean deprivation score
Receive free school meals	2.7**	6
Do not receive free school meals		2.7

A significant relationship was found between deprivation scores and equivalised income quintile group ( $F=5.6^{**}$ ). As illustrated in chart 6, the relationship between deprivation score and income quintile was largely as expected, other than that those in the highest income quintile owned on average slightly fewer items than those in the fourth quintile.

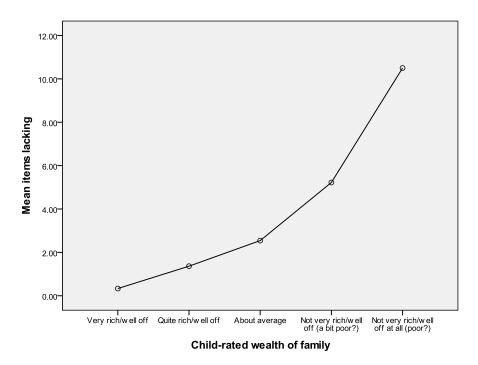
#### Chart 6: deprivation scores according to income quintile



A similar pattern can be seen for deprivation scores according to children's perceived familial wealth, shown in chart 7 (F=21.6\*\*). Here, however, children consistently own more items as their family's rating improves.



# Chart 7: Deprivation scores according to child's perception of family wealth



#### Links to poverty measures

Statistically significant associations between each item of the list and the poverty measures are illustrated in table 13 below. To avoid a great deal of repetition, details of these associations are presented in appendix B rather than here. Only one item – having a pet at home – did not link to any of the measures of income poverty. Items were then ranked in two ways. Firstly, they are ranked according to how much insight they offer into breadth of poverty, which was calculated by ranking items in order of the proportion of children lacking the item (number 1 is lacked by most children). Secondly, they are ranked according to how much insight they provide into the gap between respondents in the bottom and top income quintiles ('Largest gap between top and bottom'). This was calculated by working out the difference between the proportion of children in the lowest income quintile owning the item and the proportion of children in the highest income quintile owning the item. A full table showing the proportion of children owning each item broken down by income quintile is given in appendix C.



Item	Annual house-	Adults in paid	Free school	Subjective family	Most children	Largest gap
	hold	employ-	meals	wealth	lacking	between
	income	ment	receipt	Wealth	laoning	top and
	moomo	mont	roooipt			bottom
Pocket	Y	Y	Y	Y	4	5
money						
Money to	Y	Υ	Υ	Υ	2	4
save						
Designer/	Υ	N	Υ	Y	5	2
brand						
name trainers						
Treats/	Y	Y	Y	Y	15	10*
snacks						
Being	Y	Y	Y	Y	7	6
part of a						
club						
iPod/	Y	N	N	Υ	8	7
similar						
Mobile	Ν	N	Υ	Ν	13	NA
phone					10	4.45
Computer and	Υ	Ν	Υ	Y	18	14*
internet						
Games	N	N	Y	N	16	18
console	1.4				10	10
Cable/sat	Y	N	Y	Ν	9	13
ellite TV						
Pet	Ν	Ν	Ν	Ν	6	NA
Garden/	Y	Y	Y	Ν	17	12*
similar						
Bedroom	Y	N	N	N	11	11
Presents	Y Y	N Y	N	N	20	17*
Car	Y N	Y N	Y Y	Y Y	12 14	8 15
Access to public	IN	IN	ř	ř	14	15
transport						
Clothes	Y	N	N	Y	10	9
to fit in				-		
Books	Y	Ν	Ν	Y	19	16*
Holiday	Y	Y	Y	Y	3	3
once a						
year						
Day trips	Υ	Υ	Y	Y	1	1
with family						
танніў						

# Table 13: associations between deprivation items and income poverty measures

\*Interpretation of these figures is complicated by the fact that no children in the top income quintile lacked the item.



Cronbach's Alpha was used to test the scalability of the 20 items (as reported by children). The whole list scored a very acceptable 0.86 – results are shown in table 14. Removal of one item – having a pet at home – improves the Alpha score, and the score would stay roughly the same with mobile phone and being part of a club removed. In the subsequent analysis items were removed one at a time (depending on which item had least impact on the Alpha score). However, for brevity results are only shown where changes to the Alpha impacted when rounded to two decimal points. It should also be noted that the small drops in the Alpha score noted here would be expected as a result of reducing the number of items in the scale, so the fact that decreases are only small is promising.

Item	Item-total correlation	Cronbach's Alpha if deleted
Pocket money	0.53	0.85
Money to save	0.54	0.85
Designer/brand name trainers	0.48	0.85
Treats/snacks	0.43	0.85
Being part of a club	0.32	0.86
iPod/similar	0.58	0.84
Mobile phone	0.32	0.86
Computer and internet	0.6	0.85
Games console	0.41	0.85
Cable/satellite TV	0.49	0.85
Pet	0.23	0.86
Garden/similar	0.57	0.85
Bedroom	0.32	0.85
Presents	0.48	0.85
Car	0.53	0.85
Access to public transport	0.35	0.85
Clothes to fit in	0.59	0.84
Books	0.54	0.85
Holiday once a year	0.54	0.85
Day trips with family	0.54	0.85

#### Table 14: Item-total statistics (20 items)

A score of 0.85 can be retained with the inclusion of a minimum of 15 items – results are shown in table 15.

Item	Item-total correlation	Cronbach's Alpha if deleted
Pocket money	0.58	0.83
Money to save	0.57	0.83
Designer/brand name trainers	0.57	0.83
Treats/snacks	0.41	0.84
iPod/similar	0.4	0.84

#### Table 15: Item-total statistics (15 items)



Computer and internet	0.57	0.83
Games console	0.52	0.84
Cable/satellite TV	0.41	0.84
Garden/similar	0.46	0.84
Presents	0.5	0.84
Car	0.46	0.84
Clothes to fit in	0.5	0.84
Books	0.45	0.84
Holiday once a year	0.55	0.83
Day trips with family	0.53	0.84

To retain an Alpha of 0.84, presents and books can be dropped from this list, leaving a total of 13 items. Scores are shown in table 16.

Item	Item-total correlation	Cronbach's Alpha if deleted
Pocket money	0.58	0.82
Money to save	0.57	0.82
Designer/brand name trainers	0.48	0.83
Treats/snacks	0.4	0.83
iPod/similar	0.55	0.82
Computer and internet	0.49	0.83
Games console	0.39	0.83
Cable/satellite TV	0.46	0.83
Garden/similar	0.48	0.83
Car	0.49	0.83
Clothes to fit in	0.49	0.83
Holiday once a year	0.55	0.82
Day trips with family	0.54	0.82

#### Table 16: Item-total statistics (13 items)

Dropping either or both of the next two items which contribute least - having a computer and internet connection at home and having a games console – reduces the Alpha score to 0.83 (11 items). Results are shown in table 17.

Table 17:	: Item-total	statistics	(11	items)	)
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Item	Item-total correlation	Cronbach's Alpha if deleted
Pocket money	0.59	0.81
Money to save	0.59	0.8
Designer/brand name trainers	0.47	0.82
Treats/snacks	0.4	0.82
iPod/similar	0.55	0.81
Cable/satellite TV	0.47	0.82
Garden/similar	0.42	0.82
Car	0.47	0.82
Clothes to fit in	0.47	0.82
Holiday once a year	0.55	0.81
Day trips with family	0.55	0.81



To reduce the list to 10, treats/snacks can also be removed from the list. Cronbach's Alpha for these 10 items remains well within acceptable levels, at 0.82. Results are shown in table 18.

Item	Item-total correlation	Cronbach's Alpha if deleted
Pocket money	0.59	0.8
Money to save	0.6	0.8
Designer/brand name trainers	0.47	0.81
iPod/similar	0.55	0.8
Cable/satellite TV	0.47	0.81
Garden/similar	0.41	0.82
Car	0.47	0.81
Clothes to fit in	0.47	0.81
Holiday once a year	0.55	0.8
Day trips with family	0.55	0.8

Table 18: Item-total statistics (10 items)

Chart 8 shows the number of items children lack based on the 10-item scale. Here, a sharper difference in numbers is evident between those lacking no items and those lacking one or more items than was evident on the 20 item scale.

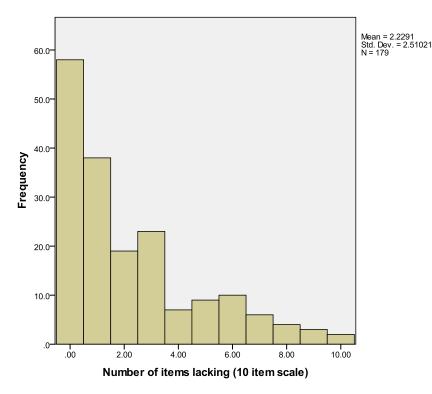


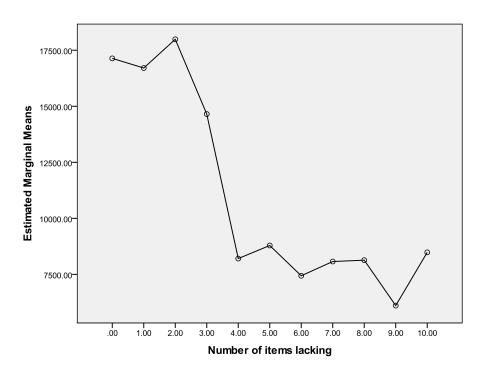
Chart 8: Number of items children lack (10-item scale)

The relationship between the 10 item scale and equivalised income is clearer than that for 20 items. There is a fairly clear threshold at either 2 or 3 items



lacking, after which equivalised income plummets sharply. The relationship between lacking increasing numbers of item and income is both stronger and more significant than for the 20-item scale. This is shown in chart 9.





#### F=4.3\*\*

Table 19 shows the percentage of children lacking each number of items. With regard to the potential cut-off points in terms of household income levels (detailed above), 22.9% of children are lacking 3 or more items, and 19% are lacking 4 or more.

Number of items lacking	% children	Cumulative %
0	32.4% (58)	32.4%
1	21.2% (38)	53.6%
2	10.6% (19)	64.2%
3	12.8% (23)	77.1%
4	3.9% (7)	81%
5	5% (9)	86%
6	5.6% (10)	91.6%
7	3.4% (6)	95%
8	2.2% (4)	97.2%
9	1.7% (3)	98.9%
10	1.1% (2)	100%

	<i>.</i>		1 1 A 1 A
Table 19: Proportio	n of children	lacking items	on the 10-item scale



#### Testing the new deprivation scale

The new reduced scales were calculated in the same way as the 20-point scale, using the items listed above. Correlations for the reduced scales with the 20-point scale are shown in table 20. The strength of these correlations suggests that relatively little information is being lost in the use of the reduced scale, also demonstrated by the Cronbach's Alphas of the reduced scales.

Scale	r
15 point	0.97**
13 point	0.97**
11 point	0.96**
10 point	0.95**

The 10 and 11 point scales were found to have very slightly stronger correlations with annual income than the longer scales, and all reduced scales were more strongly correlated with income than the 20-point scale. Results are shown in table 21.

#### Table 21: Correlations between reduced scales and annual income

Scale	r (non-equlivalised)	r (equivalised)
15 point	0.42**	0.41**
13 point	0.42**	0.41**
11 point	0.44**	0.43**
10 point	0.44**	0.42**

A significant relationship was also found between the reduced scales and adults in paid employment – results are presented in table 22. More cases were available for analysis with the reduced scale, as a result of less missing data linked to these items. The 10 and 11 point scales have a slightly stronger relationship to adults in paid employment than the 13 and 15 point scales.

# Table 22: Relationship between deprivation score and adults in paidwork

	Scale	t	Mean items lacking
15	No working adults	2.9**	4.4
point	1+ working adults		2.3
13	No working adults	3**	4.4
point	1+ working adults		2.2
11 point	No working adults	3.4**	4.3
	1+ working adults		2.1
10	No working adults	3.4**	4.2
point	1+ working adults		2

Significant relationships were also found between the scales and receipt of



free school meals, presented in table 23. Again, the 10 and 11 point scales have a slightly stronger relationship than the 13 and 15 point scales to receipt of free school meals.

Table 23: Relationship between	deprivation score and free school m	neal
	receipt	

Scale		t	Mean items lacking	
15	FSM	3.2**	4.4	
point	Not FSM		2	
13	FSM	3.2**	4.2	
point	Not FSM		2	
11 point	FSM	3.4**	4.1	
-	Not FSM		1.9	
10	FSM	3.4**	3.9	
point	Not FSM		1.9	

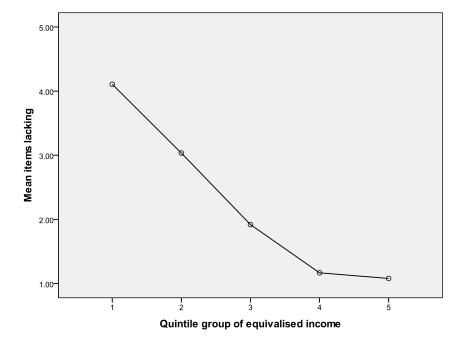
A significant relationship was found between reduced deprivation scores and income quintile group using ANOVA, shown in table 24. As with the relationships detailed above, the shorter scales related more strongly to income quintile than the longer scales. In this case, the 10 point scale also related slightly more strongly than the 11 point scale to income quintile.

#### Table 24: Relationship between reduced scales and income quintile

Scale	F
15 point	9.6**
13 point	9.7**
11 point	10.9**
10 point	10.8**

Chart 10 illustrates the relationship between the 10-point scale and income quintile. The relationship is similar to that using the 20-point scale, but two clear cut-off points can be seen – at the second and fourth quintiles – which may suggest that the lower point is where a wider range of spending is possible, and the higher point is where the increased goods that can be obtained has become exhausted (a similar argument is made by Alcock, 1993). The lack of a dip in scores between the fourth and fifth quintile may also be promising, in that it may indicate that the items included have more of a claim to be necessities – cultural differences between classes may impact on the desirability and possession of some items, but for the items included here it appears that the children at the top of the income distribution have or want the same items as the children lower down on the distribution.





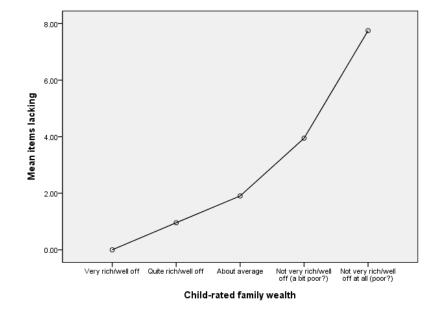
#### Chart 10: 10-point deprivation score according to income quintile

The pattern of the relationship between deprivation score on the reduced scale and child-rated family wealth ( $F=26.6^{**}$ ) is illustrated in graph 5, and is very similar to the pattern for the full scale. A slightly different pattern is evident here in that the 11 point scale is more strongly related to perceived wealth than the 10-point scale, although the difference is very slight. Results are shown in table 25 and chart 11.

Scale	F
15 point	26.2**
13 point	26**
11 point	28**
10 point	26.1**

Table 25: Relationship	between	reduced s	scales ar	nd self-rated	wealth
			004100 41		<b>HOGHLIN</b>





#### Chart 11: 10-point deprivation score according to child-rated wealth

#### Discrimination between rich and poor

To test not only the scalability of the measure but also its ability to discriminate between richer and poorer children, several steps were taken. Firstly, new scales were made based on the six criteria detailed in table 10, whereby the first four scales included all items significantly associated with the variables (these being household income, number of adults in paid employment, free school meal receipt, and self-rated family wealth); and the last two included the ten items most strongly fitting the specified criteria (items which most children were lacking, and items which there was the greatest disparity in ownership between children in the bottom and top income guintiles). To test the capacity of these scales to discriminate between poor and non-poor children, ANOVAs were run for each scale looking at the average income of those lacking from no to all items. Results are presented in table 26, and charts 12-17 showing the relationships are presented below. Although one scale - based on items relating to the number of adults in paid employment has a stronger relationship to income, the graph for the 10-point scale shows a much sharper cut-off in income between those lacking none, one or two items and those lacking three or more items. These items are therefore felt to be more useful in discriminating between poor and rich children.

#### Table 26: ANOVA results for different types of scale

Scale	F
10-point scale (as above)	4.3**
Annual income scale	2.3*
Adults in paid employment scale	5.2**
Free school meals scale	2.6**



Self-rated wealth scale	3.2**
Most children lacking items scale	3**
Largest gap between richest and poorest scale	3.2**

#### Chart 12: Relationship between annual income scale and annual income

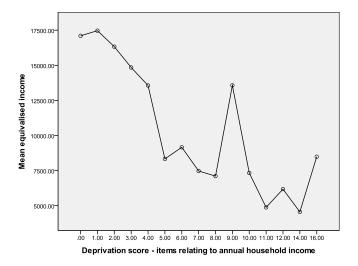
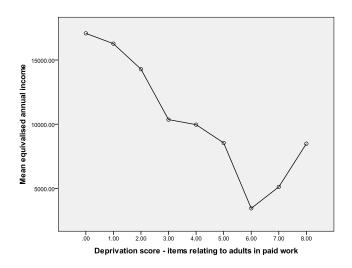


Chart 13: Relationship between adults in paid employment scale and annual income





# Chart 14: Relationship between free school meal scale and annual income

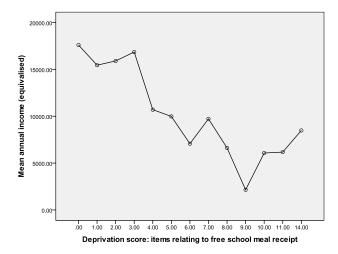
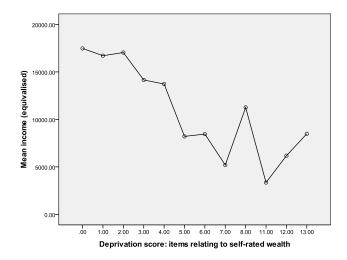


Chart 15: Relationship between self-rated wealth scale and annual income





## Chart 16: Relationship between most lacked items scale and annual income

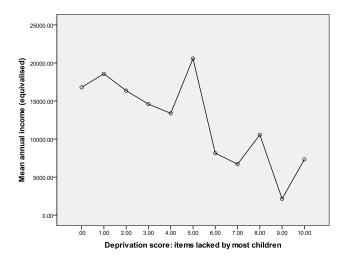
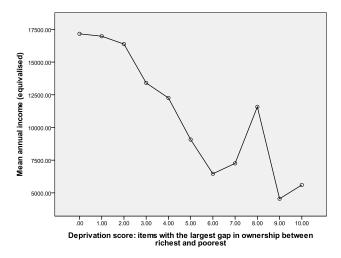


Chart 17: Relationship between rich-poor gap scale and annual income



#### Summary

Children were, on the whole, found to be able to accurately report on parental employment and receipt of free school meals. More disagreement was evident between parents and children in terms of subjective assessment of their family's wealth, and most disagreement tended to be in the middle of the scale with children perceiving higher familial wealth than adults on average. Children's subjective perceptions of familial wealth were closely linked to possession of deprivation items, suggesting that such items are a promising way of measuring subjective poverty amongst children. Since children's reporting of objective facets of poverty was also similar to that of adults, and deprivation items correlated with annual income, the deprivation scale also appears to be an adequate proxy (amongst other forms of measurement) of



objective deprivation.

Cronbach's Alpha was used to explore the scalability of the 20 items and of reduced versions of the scale. Having a pet at home was the only item that through its removal improved the Alpha score. Reductions in Alpha can be seen for each reduced version of the scale (15-, 13-, 11- and 11-point scales). However, the 10 and 11 point scales showed stronger links to other poverty variables than the longer scales. This may suggest that the shorter scales are better at picking up poverty, rather than inequality. There is little to choose between the 10- and 11-item scales, although the 11 item scale does reflect children's subjective wealth slightly better than the shorter scale. The ability of scales to discriminate between rich and poor children was tested using ANOVA, and the 10-point scale was found to discriminate between these two groups most successfully, with a cut-off at 3 or 4 items lacking.

A notable finding from the pilot is that whilst parents and children consistently report very similar assessments of poverty and of whether they own items, where there are differences these tend to be around adults saying that children do not want or have items, whilst children say that they do. This contrasts with McKay and Collard's (2003) finding that child poverty is merely a sub-set of adult poverty, since children may (theoretically at least) be poor without living in a poor family, and lends support to Ridge's (2002, 2005 and 2008) qualitative findings that poor children may hide their experiences of poverty from their parents.



## **Proposal for the Omnibus**

#### - Long list

This list contains 39 items, from PSE99, FRS, EU SILC, and UCW. This is the preferred list for inclusion if space allows.

From PSE99 (items considered necessities and lacked by 3%+).

- Celebrations on special occasions
- Hobby or leisure activity
- Educational games
- Meat, fish or vegetarian equivalent at least twice a day
- Bedroom for every child of different sex over 10 years
- At least 4 pairs of trousers
- Swimming at least once a month
- Garden to play in
- Some new, not second hand, clothes
- Construction toys
- Holiday away from home at least one week a year
- Bike (new/second hand)
- Leisure equipment
- Friends round for tea/snack fortnightly

For consideration from PSE99:

- At least 50p a week for sweets (considered necessary by poorer parents)
- Computer suitable for schoolwork (considered necessary by poorer parents, more universal now)
- Computer games (more universal now)

From FRS 2008-9 (higher proportion lacking than in 1999):

- Play group at least once a week
- School trip at least once a term

#### From EU SILC:

- A suitable place to study or do homework
- Access to all the GP/specialist treatment needed
- Access to all the dental examinations/treatment needed

From UCW:

- Pocket money



- Money to save
- Designer/brand name trainers
- Treats/snacks once a week
- Being part of a club
- iPod/similar
- Mobile phone
- Computer and internet
- Games console
- Cable/satellite TV
- Their own bedroom
- Presents on special occasions
- A family car
- Access to public transport
- Clothes to fit in with their peers
- Books of their own
- Day trips with their family once a month
- -

#### Short list

This list contains 25 items – these are those from PSE99 which were lacked by 3%+ of respondents, those from the FRS 2008-9 which were lacked by 3%+ of respondents, and those from the shortened UCW scale.

#### PSE99:

- Celebrations on special occasions
- Hobby or leisure activity
- Educational games
- Meat, fish or vegetarian equivalent at least twice a day
- Bedroom for every child of different sex over 10 years
- At least 4 pairs of trousers
- Swimming at least once a month
- Garden to play in
- Some new, not second hand, clothes
- Construction toys
- Holiday away from home at least one week a year
- Bike (new/second hand)
- Leisure equipment
- Friends round for tea/snack fortnightly

#### FRS:

- Play group at least once a week
- School trip at least once a term

UCW:



- Pocket money
- Money to save
- Designer/brand name trainers
- iPod/similar
- Cable/satellite TV
- Garden/similar
- Family car
- Clothes to fit in with peers
- Day trips with family once a month



# Age-related analysis and recommendations

Table 27 shows the decisions used in PSE99 about which items were relevant to different age groups. Items not on the list were asked of parents with children of any age.

	Babies	Pre- school	Primary school	Secondary school
Toys	+	+	+	-
Leisure equipment	-	-	+	+
Bedrooms for children of different	-	-	+	+
sex				
Bike	-	+	+	+
School uniform	-	-	+	+
Hobby/leisure activity	-	-	+	+
Play group	+	+	-	-
School trip	-	-	+	+
Friends round	-	-	+	+

#### Table 27: Age adjusted items in PSE99

Hirsch and Smith (2010) conducted focus groups with parents of pre-school and school-aged children to inform items for inclusion in the FRS and any age-specific differences in children's needs for these items. Overall support was found for the decisions made in PSE99, for example in terms of the need for pre-school children to have toys related to development. However within other items there was some evidence that children were needing items at younger ages – this was highlighted for separate bedrooms (whilst most agreed with the cut off of 10, some felt that younger children now need this kind of space) and ownership of a bike or tricycle. Technological changes and the ages at which children now need technological items were noted. Debate around mobile phones was inconclusive but it is suggested that children may need these at secondary age, and computers with an internet connection at home were seen as necessary at least for children of secondary age, and possibly for children in primary school. For younger children, an additional item of adequate family space to eat meals together was suggested, and for older children it was felt that some branded clothes are necessary. A shift was noted from informal contact with friends towards more organised social activities for school-aged children such as membership of (potentially feecharging) clubs, and participation in activities involving a cost such as swimming.

#### UCW research

The focus groups used to develop items for the UCW produced some notable findings. Children tended to agree with the adults detailed in Hirsch and Smith's (2010) study that mobile phones were appropriate for children of secondary school age and were not a need for younger children. It was also felt by some participants that a room of their own was unnecessary for



children in primary school and that there were benefits to sharing such as avoiding fears associated with being alone in the dark. However, children generally agreed that a room of their own (rather than one shared with a sibling of either sex) was necessary for children of secondary school age. Age differences were explored in the pilot data. Items were categorised into those who had or wanted the item (children having the item were assumed to also want it), and those who did not have and did not want the item. The shortcomings and potential inaccuracies of this approach are acknowledged, and caution is advised in the use of results. The findings are further limited as only children of secondary age took part in the pilot. However, for some items a significant difference was found in the mean ages of children wanting and not wanting the items, which may provide useful information in the allocation of age adjustments to PSE11 items.

Significant differences in age between those wanting and not wanting items were found for 6 out of the 20 items. Of these, club membership, games consoles, presents on special occasions, a family car, and family day trips were more desirable to younger children, whilst iPods were more desirable to older children. One very tentative interpretation of this may be that younger children have more need for formal and family-based activities whilst older children prioritise items that facilitate independent activities. However, there is insufficient evidence here to support this as a conclusion and the retention of the items for all appropriate age ranges is suggested in order that further comparisons can be made using a larger, representative sample. Results are shown in table 28.

Item	Want/not	t	Mean
Club membership	Want	-5**	13.2
	Don't want		14.6
iPod	Want	<mark>2.2*</mark>	<mark>13.6</mark>
	Don't want		<mark>12.5</mark>
Games console	Want	-2.3*	13.5
	Don't want		14.6
Presents on special	Want	-20.8**	13.5
occasions	Don't want		16
Family car	Want	-2.5*	13.5
	Don't want		14.7
Family day trips	Want	-4.4**	13.4
	Don't want		14.8

Table 28: Age differences in which items were desired

#### Age-related recommendations

Table 29 details recommendations for age adjustments in PSE11, based on these findings.



	Babie	Pre-school		Secondar
	S		Thinkiry	
At least 4 pairs of trousers	-	+	+	У +
Designer/brand name trainers		-	+	+
Some new, not second hand, clothes	+	+	+	+
Clothes to fit in with their peers	т -	т -	т -	+
Toys	+	+	+	т -
Bike (new/second hand)	т -	+	+	+
Leisure equipment		-	+	+
Educational games	+	+	+	+
Books of their own	+	+	+	+
Treats/snacks once a week	Ŧ	т	+	+
Computer suitable for school work, with internet	-	-	+	+
connection	-	-	Ŧ	Ŧ
Computer games	_		+	+
iPod/similar	-	-	+	+
Mobile phone	-	-	Ŧ	+
Games console	-	-	-	+ +
Cable/satellite TV	-	-	+	+ +
	-	+	+	-
Pocket money	-	-	+	+
Money to save	-	-	-	+
At least 50p a week for sweets	-	+	+	+
Swimming at least once a month	+	+	+	+
Holiday away from home at least one week a year	+	+	+	+
Day trips with family once a month	+	+	+	+
Friends round for tea/snack fortnightly	-	-	+	+
Play group at least once a week	+	+	-	-
School trip at least once a term	-	-	+	+
Being part of a club	-	-	+	+
Presents on special occasions	+	+	+	+
Celebrations on special occasions	+	+	+	+
Hobby or leisure activity	-	-	+	+
Meat, fish or vegetarian equivalent at least twice a	+	+	+	+
day				
Garden to play in	+	+	+	+
A suitable place to study or do homework	-	-	+	+
Access to all the GP/specialist treatment needed	+	+	+	+
Access to all the dental examinations/treatment	+	+	+	+
needed	_			
Their own bedroom	-	-	-	+
Bedroom for every child of different sex over 10 years	-	-	+	+
A family car	+	+	+	+
Access to public transport	+	+	+	+
Total items		20	33	36

#### Table 29: Recommendations for appropriate ages for each item



## References

Alcock, P. (1993) Understanding poverty. London: MacMillan.

Ben-Arieh, A (2005) 'Where are the children? Children's role in measuring and monitoring their wellbeing'. In *Social Indicators Research* vol.74 no.3 pp573-596.

Ben-Arieh, A. (2008) 'The child indicators movement: Past, present and future'. In *Child Indicators Research* vol.1 no.1 pp3-16.

Berthoud, R., Bryan, M and Bardasi, E. (2004a) *The Dynamics of Deprivation*. Accessed online from http://sticerd.lse.ac.uk/presentations/case/Berthoud\_17\_11\_04.pdf on 21/10/10.

Berthoud, R., Bryan, M and Bardasi, E. (2004b) *The dynamics of deprivation: the relationship between income and material deprivation over time.* Accessed online from http://campaigns.dwp.gov.uk/asd/asd5/rports2003-2004/rrep219.pdf on 21/10/10.

Bradshaw, J., Williams, J. and Middletom, S. (2000) *Working Paper 2: The necessities of life for children*. Accessed online from http://www.bris.ac.uk/poverty/pse/99PSE-WP2.pdf on 8/11/10.

Gordon, D. (2000) 'The scientific measurement of poverty: recent theoretical advances' in Bradshaw, J. and Sainsbury, R. (Eds.) *Researching poverty*. Aldershot: Ashgate Publishing Ltd.

Hallerod, B. (1994) A new approach to the direct consensual measurement of *poverty*. Accessed online from http://www.sprc.unsw.edu.au/media/File/dp050.pdf on 8/11/10.

Hallerod, B. (2006) 'Sour Grapes: Relative Deprivation, Adaptive Preferences and the Measurement of Poverty'. *Journal of Social Policy* vol. 35 pp371-390

Hirsch, D. and Smith, N. (2010) *Family values: Parents' views on necessities for families with children*. DWP: London.

McKay, S. (forthcoming) report for the Department of Work and Pensions on child and family deprivation items.

McKay, S. and Collard, S. (2003) *Developing deprivation questions for the Family Resources Survey*. Accessed online from http://campaigns.dwp.gov.uk/asd/asd5/WP13.pdf on 8/11/10.

McLaughlin, E. and Monteith, M. (2006) Child and family poverty in Northern



Ireland. Accessed online from http://www.qub.ac.uk/sites/EqualitySocialInclusionInIreland-HomePage/Events/LaunchofChildandFamilyPoverty/Filetoupload,27770,en.pd f on 4/11/10.

Ridge, T. (2002) Childhood poverty and social exclusion. Bristol: Policy Press.

Ridge, T. (2005) 'The challenge of child poverty: developing a child-centred approach' in Hendrick, H. *Child welfare and social policy.* Bristol: Policy Press.

Ridge, T. (2009) Living with poverty. London: DWP.

