Department for Work and Pensions

Working Paper No 54

Measuring material deprivation among older people:

Methodological study to revise the Family Resources Survey questions

Stephen McKay

A report of research carried out by The National Centre for Social Research on behalf of the Department for Work and Pensions

© Crown Copyright 2008. Published for the Department for Work and Pensions under licence from the Controller of Her Majesty's Stationery Office.

Application for reproduction should be made in writing to The Copyright Unit, Her Majesty's Stationery Office, St Clements House, 2-16 Colegate, Norwich NR3 1BQ.

First Published 2008.

ISBN 978 1 84712 443 2

Views expressed in this report are not necessarily those of the Department for Work and Pensions or any other Government Department.

Contents

Ac	knowle	edgemen	tsvi
Th	e Auth	or	vii
Su	mmary	<i>'</i>	1
1	Introd	duction	3
	1.1	Backgro	ound – measuring progress against child poverty
	1.2	Materia	l deprivation among older people
		1.2.1	A programme of research4
2	Proble	ems in m	easuring deprivation among older people
	2.1	Introdu	tion
	2.2	Income	based measures of poverty
	2.3		l deprivation measures and the use of 'deprivation ers'
		2.3.1	Separate material deprivation measures for older people9
	2.4	Contex 2.4.1 2.4.2 2.4.3	tual problems measuring deprivation among older people10 Health
	2.5		al analysis of the existing Family Resources Survey tion indicators13 Validity of the items in Family Resources Survey13
		2.5.2	Reliability of the items in Family Resources Survey13
		253	Cannot afford and do not want

3	Metho	Methods used in new material deprivation measurement work					
	progra	amr	ne		.15		
	3.1	Ov	erviev	v of the methods used	.15		
	3.2	Со	gnitiv	e testing of survey questions: an explanation	.16		
4	Asking	g ab	out a	ppropriate goods and services	.19		
	4.1	The	e over	all structure of the questions – cognitive issues	.19		
	4.2	On	nnibus	s analysis of what is a 'necessity'	.20		
		4.2	2.1	Comparisons for older people versus all people	.25		
		4.2	2.2	Reliability analysis	.28		
5		4.2	2.3	Factor analysis	.28		
	4.3	Со	gnitiv	e interviews: appropriate necessities	.28		
		4.3	3.1	Qualitative evidence	.28		
		4.3	3.2	Results from cognitive testing	.29		
5	Asking	g ab	out w	hy any items are lacking	.31		
	5.1	On	nnibus	s analysis of having necessities	.31		
	5.2		_	e interviews: appropriate follow-up questions for necessities	.36		
	5.3	Fin	al step	os in constructing the questions	.38		
6	Using	the	quest	tions to measure material deprivation	.43		
	6.1	We	eights	or a simple count	.43		
		6.1	1.1	New follow-up questions	.44		
	6.2	Up	dating	g the weights (over time) or a fixed system	.45		
	6.3	Sel	ecting	a threshold for deprivation	.45		
	6.4	Fin	al refl	ections	.46		
Ар	pendix	Α		y Resources Survey material deprivation questions 5-06 onwards)	.47		
Ар	pendix	В	2008	NatCen Omnibus questions on necessities	.49		
Ар	pendix	C		ed Family Resources Survey material deprivation questions der people	.55		
Ref	erence	S			.59		

List of tables

Table 2.1	Reliability of the ten Family Resources Survey deprivation	
	questions, by age	14
Table 4.1	Items rated as necessary for older people (those aged 65+), by	
	age group	22
Table 4.2	Number of goods regarded as necessities, by respondent's	
	sex and age	25
Table 4.3	Necessities for older people in 2008, and for all individuals in	2.0
	1999	
Table 4.4	Necessities for people in 1983, 1990, 1999, 2002 and 2008	27
Table 5.1	Ownership levels of the deprivation indicators, by age	
	(ordered by levels of 'cannot afford')	32
Table 5.2	How having particular items correlates with measures	
	of affluence (by rough order of income sensitivity)	34
Table 5.3	How being unable to afford particular items correlates with	
	measures of affluence (by rough order of income sensitivity) –	
	only significant items shown	36
Table 5.4	Decision grid with information about making question	
	selections	40
List of figu	ures	
Figure 2.1	Unable to afford particular items, by level of savings	11
Figure 2.2	Help provided by children for those aged 65 or older	
	(base: those with living children)	12
Figure 4.1	Whether selected items are necessary for older people,	
	by age group	24

Acknowledgements

This report provides some new results but mostly summarises the deliberations and research of a large group of analysts. As such, it depends on the contributions made by numerous staff within the Department for Work and Pensions (DWP), and the National Centre for Social Research. Any errors or misunderstanding are the author's responsibility.

The Author

Stephen McKay is Professor of Social Research within the School of Social Policy at the University of Birmingham.

Summary

We report on a series of projects and discussions that were designed to improve the measurement of material deprivation for older people, by substituting new questions in the Family Resources Survey (FRS) for those aged 65 or older.

The existing FRS questions have the following main form¹.

Do you have:

- a holiday away from home for at least one week a year, whilst not staying with relatives at their home?
- friends or family around for a drink or meal at least once a month?
- two pairs of all weather shoes for adults?
- enough money to keep your home in a decent state of decoration?
- household contents insurance?

Answer codes for all questions:

- (1) We do this.
- (2) We would like to do this but cannot afford this at the moment.
- (3) We do not want/need this at the moment.
- (4) [Does not apply].

This set of questions seems to work well for families with children, who have been the key subjects of research on measuring deprivation. However, they appear to work less well for older people – as was demonstrated in a series of recent Department for Work and Pensions (DWP) projects. Some of the things ('items') being asked about appear to be less relevant for the older age group, or prone to misunderstanding. The approach of forcing an answer into three categories (broadly: have, cannot afford, don't need) also seems to prompt a surprisingly large number of replies of 'do not need/want', on the face of it at odds with low levels of income among some older people.

See Appendix A for the full list of questions.

In the light of such evidence, a new research programme was conducted to improve the measurement of material deprivation for older people. This comprised:

- a analysis of the deprivation indicators within the FRS;
- b new cognitive question testing work, conducted by the National Centre for Social Research, to better understand how to ask older people about material deprivation; and
- c new quantitative work using omnibus questions, from the 2008 NatCen Omnibus survey, on what is regarded as necessary, and which items older people have.

Analysis from each of these stages is presented in this report. This evidence was used to make judgements about how to revise the questions concerning material deprivation. This project culminated in recommendations for new FRS questions aimed at the older group. The proposed new questions take the following form²:

Q1. 'I am going to read out a list of questions about items related to people's standards of living. For each one, please answer yes or no.'

Do you eat at least one filling meal a day?

Do you go out socially, either alone or with other people, at least once a month?

Do you see your friends or family at least once a month?

Do you take a holiday away from home for a week or more at least once a year?

Would you be able to replace your cooker if it broke down?

YES/NO responses

[all asked before arriving at Q2]

- Q2. INTERVIEW READ OUT... 'I am now going to ask you about each of the things you said you do not do or have. Selecting your answers from this card, please tell me why this is.'
- 1. I do not have the money for this.
- 2. This is not a priority for me on my current income.
- 3. My health/disability prevents me.
- 4. It is too much trouble/too tiring.
- 5. There is no one to do this with or help me.
- 6. This is not something I want.
- 7. It is not relevant to me.
- 8. Other (not on showcard).
- 9. DK (not on showcard).

See Appendix C for the full list of questions and their new structure.

1 Introduction

1.1 Background – measuring progress against child poverty

Most measures of poverty rely on data about people's incomes. A person is regarded as poor, or on a low income, if their income is below a set level. This level may be determined by reference to other people's incomes (such as 50 per cent of the mean, or 60 per cent of the median), or some account of what is needed to live a particular lifestyle (determined by, for instance, 'budget standards'³). In some analyses spending may be used instead of income. A series of surveys has provided considerable information about household and family incomes: statistics from the Family Resources Survey (FRS) go back to the mid-1990s, and from the Family Expenditure Survey (FES) at least back to the 1960s. One-off surveys of income and living standards have provided further detail in selected years.

However, as we describe later, income may not tell us the whole story about living standards, material well-being or deprivation.

In 1999, the then Prime Minister Tony Blair announced a pledge 'for ours to be the first generation to end child poverty forever, and it will take a generation. It is a twenty year mission'. This prompted the question of how progress against poverty – and specifically child poverty – might be measured. The Department for Work and Pensions (DWP) therefore undertook a wide-ranging consultation exercise in 2002-03 to arrive at appropriate measures (DWP 2002). Part of this process led to the introduction of a measure of poverty based on material deprivation – lacking items generally considered to be essential – in conjunction with being on a relatively low income (DWP 2003). Academic research identified a relatively small set of questions that could be included in the FRS and yet capture most of the information that would be gleaned from a longer list of questions that would only appear in specialised surveys (McKay and Collard 2004). The FRS was changed from 2004-05 to incorporate these questions on material deprivation, and thus contribute to measuring progress towards reducing and ultimately eliminating child poverty.

Budget standards may be based either on expert opinion, or on wider public opinion, or some combination of the two – see Bradshaw *et al.* (2008) for recent evidence.

1.2 Material deprivation among older people

The questions selected to measure material deprivation using the FRS were identified through a long and careful process of analysis and consultation. The research and consultation looked at past studies and ensured that the new FRS questions could broadly replicate the kinds of results produced in more specialised studies (e.g. Gordon *et al.* 2000a). The list of questions, for adults, is shown in Appendix A to this report.

Despite the progress made in measuring material deprivation, it has become increasingly recognised – or at least suspected – that these measures might be working less well for the older age group (i.e. people aged over State Pension Age). The income position of the older age group tells a rather different, and less positive story about pensioner well-being than figures for material deprivation. Even when on low incomes, many pensioners said they either owned particular goods or, if they did not have them, said this was through choice rather than financial constraint.

It has been found that, 'Older groups, in particular, were less likely to say they could not afford an item they lacked, and more likely to say they did not want it ... among those lacking the item, the oldest group (aged 65+) had the lowest incomes but were the least likely to mention inability to afford as a reason.' McKay (2004: 218). The potential consequence is that if some groups are reluctant to describe themselves as poor, or answer questions in a way that might lead them to be perceived as poor, then such groups may be omitted from statistics on deprivation. It is possible that a prolonged period of time spent on a low income could well depress aspirations, and lead some groups to say they do not want items that, in other circumstances, they might well desire. Some older studies of how people manage their money may also be prescient in looking at their apparent levels of deprivation, and their willingness to answer questions about getting by. Finch and Elam (1995: 80) finding that, 'The ability to get by without debt and without financial support from the family, thus upholding self-esteem, was particularly important. The ability to manage was linked to independence. Nevertheless, the involvement of family is often important, and the importance of independence is that it may enable choices of activities within a social network.

1.2.1 A programme of research

Academic discussions, debate and evidence about older people and their measured living standards prompted DWP to commission three studies directly looking at older people and deprivation (published as Berthoud *et al.* 2006; Dominy and Kempson 2006; Finch and Kemp 2006).

We may summarise their broad conclusions as follows. These are long and detailed reports, so these are necessarily brief summaries.

Berthoud et al. (2006) found a steady reduction in levels of deprivation for those aged 50 and over, after controlling for income. They suggested, 'One interpretation is that variations in people's willingness to acknowledge that they can't afford items is the main driver of the age-sensitivity in the main index' (p.4). Detailed analysis of cross-section data led them to hypothesise that older people were less deprived than younger people with the same incomes, but not to the extent portrayed in some measures of material deprivation. Analysis of changes over time, among the same individuals, however also led them to find that ageing was itself associated with increasing material deprivation.

Finch and Kemp (2006) examined pensioners who did not spend all of their income. Many older people save money, arguably inconsistent with a simple life-cycle perspective on assets, and spending fell more rapidly with age than did income. Whilst describing the results as 'far from conclusive' (p.6) they suggest that low spending relative to income is associated with increasing frailty, itself associated with important factors around declining social relations. Pensioners would be more likely to spend their incomes, and maintain their living standards, by continuing to be independent and part of a social network.

Dominy and Kempson (2006) took a qualitative approach (the other studies were based on secondary data analysis) to directly investigate why older people appear well-off using standard deprivation indicator approaches. They conducted six focus groups and 42 in-depth interviews. As well as providing detailed feedback on the existing (FRS) indicators, the research indicated that age, ill-health; family support and lifetime incomes were important determinants of how the questions were answered. They found that 'lack of engagement in social activities did ... lead to a reduction in discretionary spending' (p.7), a result that we will repeat in several aspects of this summary report. They also highlighted problems with reasons why items were absent, and that people had items without considering if it was themselves or others paying for them or providing them. Respondents also tended to say they did not need items when they really could not afford them. The existing FRS items performing best were:

- Home contents insurance.
- Home decoration.
- Saving for a rainy day.
- Holiday.
- Replacing electrical goods.
- Hobbies/leisure.
- Two pairs of shoes.

These three studies helped us to understand how the new deprivation questions were functioning for older people. These studies, in turn, prompted a new research effort to better understand how to measure pensioner deprivation in surveys, and in

particular through the FRS. This new programme of work principally comprised:

- 1. DWP internal work and discussions, encompassing data analysis of the deprivation indicators within the FRS.
- 2. New cognitive question testing work, conducted by the National Centre for Social Research, to better understand how to ask older people about material deprivation. The final report by Legard, Gray and Blake (2008) provides a detailed exposition of the research methods used and a nuanced account of the process of analysis and the recommendations made. This report contains an overview of their key findings.
- 3. New quantitative work using omnibus questions, from the 2008 NatCen Omnibus survey, on what is regarded as necessary, and which items older people have.

These initial three studies, published in 2006, and the subsequent programme of work were co-ordinated through a series of meetings between DWP and researchers. This enabled each aspect of the research to inform each other aspect. The cognitive question testing helped produce improved wording and a more reliable structuring of the questions. Analysis of the new omnibus questions helped to identify appropriate items to ask about, based on what is regarded by people as essential and which items are most commonly lacked by lower income respondents.

2 Problems in measuring deprivation among older people

2.1 Introduction

In this section, we look at some of the general methodological problems involved in measuring deprivation. We look first at income-based approaches, then at deprivation indicators (Section 2.3), and then at some of the general issues involved in looking at the living standards of older people (Section 2.4). The final Section (2.5) conducts some statistical analysis of the reliability and validity of the 2004-05 Family Resources Survey (FRS) questions on material deprivation.

2.2 Income-based measures of poverty

Data based on incomes remains the main method to measure poverty, because it offers significant advantages. It is a reasonably good measure of command over resources and, despite technical questions about what precisely to include, it seems to be a concept with some face validity. A further advantage, and one of important practical relevance, is that incomes are directly responsive to the policy levers of increasing benefits and tax credits. Changing people's incomes is more directly within the remit of government – though taxes and benefits – than are certain other poverty concepts such as total spending or the use of particular services.

There have, of course, also been many criticisms of income-based measures of poverty. We summarise some of the key issues ahead. However, income data is likely to remain the mainstay of poverty measurement. Using incomes to measure poverty (and hence identify those who are poor) must necessarily involve a number of probably intractable problems:

- 1)Those with incomes a penny apart may be classified as poor and non-poor, despite having very similar circumstances. In other words the dividing line between poor and non-poor is likely to be somewhat (or completely) arbitrary. This may be particularly important where the 'poverty line' is located in a dense part of the income distribution, as now.
- 2) Only an expensive dedicated survey (like the FRS) is able to capture income data of sufficient quality and comprehensiveness.
- 3) Even with such surveys, using high quality approaches, a great deal of income data needs to be imputed and not all elements may be reliable. The effect of non-response on measured incomes may also be significant.
- 4) Decisions need to be made about how to take account of the needs of households of different sizes, and perhaps with different needs the role of equivalisation. At present adjustments are made for numbers of adults and children, but not for health problems or disability. Income needs to be adjusted to take account of differences in needs, which may well change the classifications of households into richer and poorer depending on how those adjustments are made.
- 5) Incomes are generally measured at a single point in time, often directly relevant only to a few weeks. It may be an unreliable guide to incomes and living standards conceptualised over a longer period.

The lists of advantages and disadvantages could be extended. Income remains the mainstay of poverty measurement but is far from perfect for the reasons outlined above.

2.3 Material deprivation measures and the use of 'deprivation indicators'

One response to the limitations of income-based measures has been to include measures based on material standard of living, or material deprivation. Deprivation indicators may capture an important dimension of wellbeing different from that of low income.

One means of implementing such measures is the consensual approach to poverty measurement, looking at the enforced lack of necessities (Pantazis *et al.* 2006). This has been promoted as a rigorous scientific approach to the measurement of poverty. The use of such indicators features strongly in academic analysis of deprivation (e.g. Hillyard *et al.* 2003, Whelan and Maître 2007) including research on older groups (Barnes *et al.* 2006) and in policy documents (Social Exclusion Unit 2006). The concept of using indicators of necessities has been influential in measuring progress towards reducing child poverty, with a target based in part on a measure of deprivation. Anti-poverty strategy in Ireland has also made use of information on necessities to measure progress. The FRS has been amended to include questions relating to material deprivation (McKay and Collard 2004), starting with data collected during 2004-05.

Recently researchers have critically evaluated the role that deprivation indicators may play in measuring hardship (McKay 2004, and the DWP projects). Questions about preference, or how families choose to spend their limited resources remain an important critique of the overall approach – including most recently Brewer at al (2008: 64).

Some of these criticisms relate to their use in general, others are more focused on their use for the older age group. Few (if any) of these critiques address their use in conjunction with measures of low income, except by implication. In practice, the Government has shown interest in measures that comprise material deprivation and low income combined.

2.3.1 Separate material deprivation measures for older people

Whilst most research on deprivation indicators has covered the whole population, there has often been a specific focus on families with children, and most interest in child poverty. The series of Department for Work and Pensions (DWP) reports mentioned above (Berthoud *et al.* 2006; Dominy and Kempson 2006; Finch and Kemp 2006) are an important exception providing a valuable foundation for this new programme looking at older people.

It would be highly convenient if the same set of deprivation questions were applicable to all groups in the population, irrespective of age, life stage or the presence of children (or other factors). This would make for the most consistent comparisons of material deprivation across different groups. However, there is little point in being able to make comparisons across groups if the measures are misleading for some of those groups, and particularly in the light of clear evidence of problems for older people. Any comparison between older and younger people, using the existing measures, is more likely to mislead than to provide useful information. We therefore propose questions that provide a more reliable and helpful indication of the level of material deprivation among older people.

For related reasons these kinds of indicators are changed over time which, whilst it might reduce the scope for analysis of trends, provides the best picture of the current situation. Before returning to these issues in detail, in the next section we first turn to consider some generic problems that arise in looking at the material deprivation of older people, which apply across a range of different measures of well-being.

2.4 Contextual problems measuring deprivation among older people

2.4.1 Health

A given level of ill health or disability may depress living standards, and is a key component in deprivation. The role of health (mobility) was also considered in the qualitative work (Dominy and Kempson 2006). Hill *et al.* (2007) assign a central role to health, analysing qualitative interviews to determine that it was *'the most valued resource'* (p. 10), and declining health had many negative consequences for general well-being – and they identified maintaining mobility as being particularly significant. The link with the health of the partner was also significant, and could affect the living standards of couples.

Berthoud et al. (2006) produced quantitative analysis to suggest that 'all indicators of health get worse as people become older. The strongest deteriorations occur for 'heart/circulation' followed by ADL limitations and self-rated health' (p.78). However, they also concluded that only some health indicators affect different measures of poverty, and this varies across the different measures. They did not look at the health of partners, in the context of analysis focusing (to some extent, necessarily) on individuals. Moreover, ageing itself continued to have an effect even after controlling for health. However, it is worth noting that in the British Household Panel Survey (BHPS), and no doubt in other longitudinal datasets, there are large-scale changes in the health reports given by individuals from year to year.

The evidence suggests that health issues are often mentioned in qualitative research among older people, both as an actual and potentially important factor in affecting living standards for a given level of income. The qualitative research also suggests that the effects of health on living standards – for a given level of income – may differ across people (e.g. single people affected to a greater extent that couples). The quantitative research finds some effects for some kinds of health measures, but not others, and not for different kinds of deprivation measure.

2.4.2 Savings

Despite having relatively low incomes, many pensioners still save (Finch and Kemp, 2006). This is a common feature of research on the finances of older people, though initially counter-intuitive to those schooled in a 'life-cycle' view of saving. It would be surprising if those with sizeable savings were to be regarded as deprived – or, at least, that a lack of items would be evidence of choice rather than financial constraint. Setting aside the significant problems with recording level of savings in surveys, level of savings appears to be a good predictor of being unable to afford particular items (see Figure 2.1). Levels of deprivation (lacking an item, through inability to afford), are by far the highest for those with under £1,500 in savings, and roughly halve when savings reach £1,500-£3,000. Even so, there are also some groups who say they cannot afford particular activities despite having quite high levels of saving.

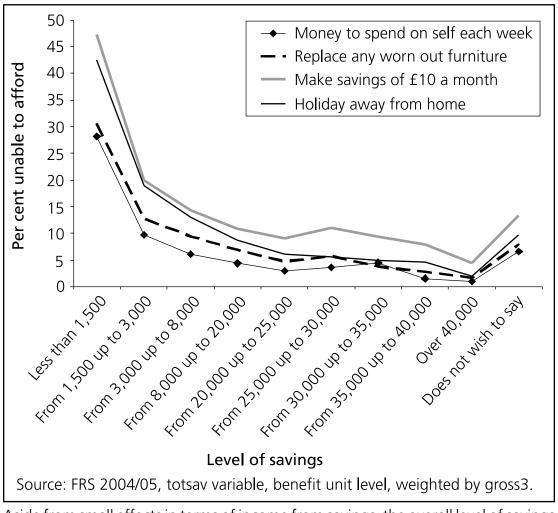


Figure 2.1 Unable to afford particular items, by level of savings

Aside from small effects in terms of income from savings, the overall level of savings or assets is rarely included in direct measures of poverty or deprivation. These may be rather more important for older people (and, of course, the life-cycle view of saving would suggest that savings reach a maximum for any individual around retirement, declining in value thereafter).

2.4.3 Receiving help from others

Dominy and Kempson (2006) argued that many older people only had items because they received support from elsewhere, particularly from family members, who provided for them: 'electrical items (most common), clothes, holidays, car, furniture, bills and food. In addition, many received practical help, such as decorating (most common), transport, shopping, food, gardening and cleaning (this support is listed in order of prevalence)' (ibid: p 5).

So, what may appear to be apparently high living standards (or low deprivation) for those on a low level of income, may actually be attributed to help from others – rather than, say, skill in managing on a budget.

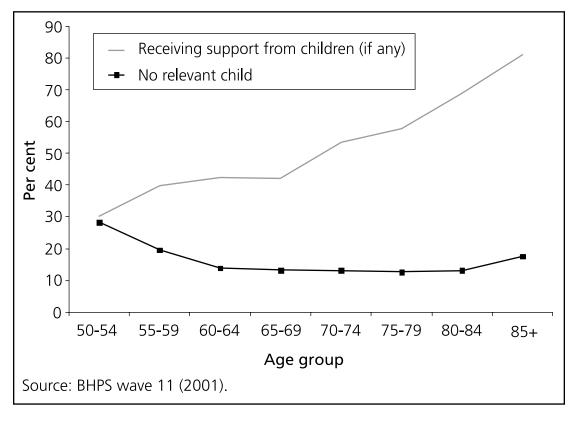
This is a point that does, of course, apply to other types of family. A lone mother may receive help (in cash or in kind) from her own parents; a single person living

alone may receive assistance from friends. Under such circumstances, measures of material deprivation may provide a better measure of actual living standards than does income. It is an open question what kind of concept would provide the most appropriate measure of command over resources in such circumstances.

An important policy issue is whether such help and support counts as a family responding to poverty, or just represents a level of reciprocity one might expect and not deserving of further analysis. In many places, and at different times, helping older relatives would be a strong expectation on families, its absence more worthy of comment than its taking place. It is not readily possible to discern if family support for older people is signalling a problem of poverty (being addressed by families in informal ways) or merely the kind of exchanges that one would expect between families.

In 2001, the BHPS explored links across households, asking about help given and received, from parents and children. The question about help from children asked respondents, 'And do you regularly or frequently receive any of the things listed on this card from your children not living here?' The kinds of support provided were both financial and non-financial. In Figure 2.2 we show how often various kinds of help were received, by the age group of the recipient. Over half of those in their 70s, and three-quarters of those in their 80s, seemed to be receiving regular or frequent assistance (among those with children – and the overwhelming majority, 80 plus per cent, had living children).

Figure 2.2 Help provided by children for those aged 65 or older (base: those with living children)



We also analysed the kinds of help received by those aged 65 or older, split by different housing tenures. Generally speaking, deprivation rates are much lower among owner-occupiers. Among the key results are:

- Direct provision of financial help was rare (six per cent).
- It was quite common for those aged 65 or older to be receiving lifts from their children (40 per cent), or have their shopping done (29 per cent).
- Home-owners, generally the better-off group, were somewhat less likely to be receiving any of these kinds of assistance.

2.5 Statistical analysis of the existing Family Resources Survey deprivation indicators

This section presents analysis of how well the existing material deprivation questions (within the FRS) work for older people. Various statistical approaches are used to examine the validity and relevance of the questions, and how reliable they are for older people. We also consider the distinction between being unable to afford particular items, and not wanting them, as this is a key part of the existing approach to measuring material deprivation.

2.5.1 Validity of the items in Family Resources Survey

A set of questions on material deprivation has been included in the Family Resources Survey for the last two published set of results.

In the UK, questions about necessities have rarely been asked – the set informing the Pantazis *et al.* (2006) research dates from summer 1999. It would also not be unfair to say that most researchers in this field have been primarily concerned with issues of child poverty and deprivation among families. There are separate child questions in the 1999 study, but not for (say) disabled people, single adults, or older people – all groups with significant poverty risks.

The FRS questions emerged from a research programme where academics were concerned with the most appropriate means of measuring deprivation among families with children, following on from the strong policy aspiration (that became a pledge) for its long-term abolition. Much less of the testing was directed towards other groups in the population, such as single people, disabled people or older people. Of course, these groups were always included in the research, and the results analysed by a number of subgroups in which they were included. However, as we see later, a more specific focus on the older age group might have affected the ultimate development of these questions.

2.5.2 Reliability of the items in Family Resources Survey

Dominy and Kempson (2006) pointed to cognitive issues with certain questions on the existing FRS material deprivation questions for older people – issues to which we return when discussing the more formal cognitive testing conducted.

However, quantitative analysis is still able to shed some light on the reliability of the set of questions, by looking at values for statistics like Cronbach's alpha (a direct measure of reliability). Initial analysis of the main ten adult questions (see Table 2.1) seemed to suggest that:

- a measure based on cannot afford items is more 'reliable' than one based on simply not having the items;
- in both cases, the scales are broadly reliable (with 'respectable' values of alpha) for those aged 70 or older, but may have lower reliability for those aged 60-69.4

Table 2.1 Reliability of the ten Family Resources Survey deprivation questions, by age

		Values of Cronbach's alpha
Age group	Cannot afford items	Don't have items (cannot afford or don't want)
16 – 39	.865	.827
40 – 59	.870	.824
60 – 69	.837	.762
70+	.808	.711
All	.861	.805

Analysis of FRS 2004/05, at individual level.

2.5.3 Cannot afford and do not want

Older groups are less likely to say they do not have particular items because they cannot afford them. Instead, their absence is said to be because they do not want them. This leaves open the question of whether they could afford them, if they did want them. Internal DWP analysis has indicated that 'can't afford' answers show no real difference between poor and non-poor for singles; but was much higher among poorer than non-poor couples. This is part of a long-running debate, and is one of the main issues considered in this report, and in particular via thinking about the cognitive processes involved for respondents in answering questions about material deprivation. Part of the way forward proposed is to break down the simple dichotomy between inability to afford and not wanting something, to reflect a wider range of motivations behind people's decisions about the goods they own and the activities they do.

⁴ 'Reliability' is used in a technical sense here, and its advantages can be over-stated. It simply means that the questions tend to correlate well with each other.

3 Methods used in new material deprivation measurement work programme

3.1 Overview of the methods used

A range of different methods have been used in the course of the research programme, adding up to a mixed-methods design drawing on a diverse range of methods and skills. This is in addition to the three studies published in 2006 that used leading experts to analyse deprivation and low income among older people.

First, the programme of research commenced with internal Department for Work and Pensions (DWP) exploration of the background issues about measuring deprivation and the problems with the current approach. Secondary analysis of the Family Resources Survey (FRS) 2004-05, also undertaken within DWP, showed the effectiveness of current measures and some of their limitations.

Second, new quantitative data analysis based on two waves of the omnibus survey was conducted by the National Centre for Social Research. This was to examine those items that are regarded as necessary, or not, for those aged 65 or older. It also examined which items older people had, and the reasons why they lacked other items. This quantitative data was used to obtain timely information on those goods that are regarded as essential, and to consider which were the most likely to indicate deprivation.

Third, new research was conducted with applied cognitive question testing to the standard set of questions on material deprivation. Full details appear in Legard, Gray and Blake (2008), but we summarise the overall approach, ahead. Interested readers may wish to consult the main report, but in this paper we attempt to summarise the key conclusions and recommendations from this part of the research programme.

3.2 Cognitive testing of survey questions: an explanation

'Cognitive question testing' may be used to explore how people understand and answer survey questions, with a view to improving the usefulness of such questions. Are such questions working as intended, or are respondents forming unintended meanings of the questions? The use of cognitive question testing may help to improve questions, such as through changes to question wording to clarify what is being sought. Such testing is generally implemented in one-on-one, face-to-face interviews. Interviewers are instructed to ask the survey questions as worded and as they would do in a standard survey interview. Respondents are then probed to gain an understanding of how the questions were answered and to identify any problems respondents experienced. In addition to verbal probing (which can either be interviewer driven or spontaneous, based on something which the respondent says or does) the 'think aloud' technique can be used, where respondents are asked to 'think aloud' and verbalise their thought processes as they interpret and answer the questions and go about providing their answers.

Cognitive interviewing to test questions is based on a model of how respondents answer questions. This involves four iterative stages (Tourangeau 1984), namely comprehension; retrieving information; judgement; and response. The respondent must understand what the question is asking for, bring to mind the relevant information after some reflection about what is needed and respond to the interviewer in the desired format. One of the main approaches to carrying out cognitive question testing work is to ask respondents to work through the process of deciphering the questions about providing an answer – Thinking Aloud.

The cognitive testing was conducted by the National Centre for Social Research and proceeded in two stages. A first stage (interviewing 20 respondents aged 60 plus in December 2007) looked in detail at some of the existing FRS questions (in the modified form used in the Omnibus testing), particularly with a view to proposing alternative ways about asking the follow-up questions⁵. A second stage (15 respondents aged 60 plus, January 2008) looked at the effectiveness of taking forward those recommendations, and commented in detail on the most credible questions about material deprivation.

The research used a number of criteria to select the respondents, ensuring appropriate inclusion of respondents by gender, age group and income level. Samples were drawn from those who had previously taken part in the FRS, and who agreed to be re-contacted for further research.

The original FRS questions are listed in Appendix A. The set tested for the Omnibus is in Appendix B, and the new recommended set in Appendix C.

Stage one

This stage started from the existing FRS questionnaire structure (though with the question about having the item separated from the reason for not having it, as was used in the Omnibus testing). This took four questions on material deprivation that were regarded as relatively unproblematic, in order to focus on the process of deciding whether respondents did not have them through choice, or an inability to afford them. These four questions were: eating two filling meals a day; buying a newspaper or magazine once a week; having a warm waterproof coat, being able to pay an unexpected expense of £200 (a follow-up set of five questions were asked if respondents had all four of these items).

This was then followed by a series of questions which examined an alternative approach focussing on which items people said they would like and also including questions which allowed people to give a variety of reasons for not having an item (beyond the issues of affordability and not wanting or needing it which are offered in the FRS question).

Stage two

The research at stage two tested new questions developed as a result of stage one which allowed respondents to give a variety of reasons for not having particular items (including health and social reasons). The sample for stage two was designed to include more lower income respondents than at stage one, to increase numbers where affordability would be a prominent issue. In addition, more women were included since they had been under-represented in the first stage. A large part of this second stage was devoted to looking in detail at some of the best candidates for inclusion in the final question set, namely:

- Do you eat at least one filling meal a day?
- Do you eat fresh fruit and vegetables every day?
- Do you eat at least one balanced meal a day?
- Do you see friends or family regularly?
- Do you go out socially on a regular basis?
- Do you have a smart outfit for social occasions?
- Would you be able to pay an unexpected expense of £200?
- Do you belong to a club or society which requires a regular paid subscription?
- Do you take a holiday away from home one week a year?
- Do you keep your home in a good state of repair?
- Can you pay regular bills like Council Tax or electricity without cutting back on essentials?
- Do you buy over the counter medicines?

- Do you keep things like central heating, electric's, plumbing and drains in good working order?
- Do you have adaptations to your home like grab rails, a walk-in shower, a wheelchair ramp or a stair lift?
- Could you replace your cooker if it broke down?

For each of the items a respondent did not have they were asked why they did not have or do the item (using specific wording for each item and allowing respondents to choose from a variety of options outlined in Appendices B and C).

Following this round of research, and at a key meeting with DWP, recommendations were made regarding which questions had worked best, and how the wording of such questions might be improved. We discuss these issues in the succeeding chapters.

4 Asking about appropriate goods and services

In this section, we examine different ways of identifying appropriate questions for measuring material deprivation. The main methods used are cognitive testing and analysis of the omnibus data. However, we also bring to the analysis past research in this area, such as that conducted by Dominy and Kempson (2006).

But first we begin at a 'higher' level of discussion, taking an overview to consider the best way to structure the series of questions about deprivation (Section 4.1). This concerns the flow (or filtering) of questions and the order in which they are asked. We then turn to the evidence about what is necessary and appropriate for measuring material deprivation, using analysis of the omnibus data (Section 4.2) and further results from the cognitive testing (Section 4.3).

4.1 The overall structure of the questions – cognitive issues

The cognitive testing and associated development work led to some important recommendations about the structuring of the questions about deprivation. The Family Resources Survey (FRS) approach (and also that of Families and Children Study (FACS) and the PSE study before) is essentially to take one item at a time and then to ask if the good is possessed (or the activity conducted), missing through choice, or missing through an inability to afford it. This is asked as a single question with three possible answers – have/cannot afford/don't want.

A particular concern we have identified is the reluctance that some people have to admitting to any element of poverty. Older people, to a greater extent than other people, may not admit that items are missing through any inability to afford them, but instead suggest they do not want those things. This kind of 'poverty of expectations' may mean that pensioners who are clearly deprived end up being measured as not being deprived on this method of capturing material deprivation.

One of the clearest changes made (in advance of cognitive testing), to help get around this problem, is to split the questions into two elements. First, to ask whether the item is actually possessed, and then to follow up – for the entire set of question – the reasons why they are missing. This modifies and improves on the existing approach in two ways.

First, the separation of whether they have the item from the reason why it is missing. This seems to work better for most respondents. This approach has been used before (and continues to be used within the British Household Panel Survey (BHPS)), but seems to have largely been replaced in order to reduce respondent burden. It is also possible that the existing approach is satisfactory for other groups in the population, including families with children who have often been the principal subjects of study.

A further significant observation is that the existing questions tend to gloss over important distinctions between have and do. So, the questions begin 'Do you have ...' and this is used to ask about a range of items, including:

- ... a holiday away from home for at least one week a year, whilst not staying with relatives at their home?
- ... make regular savings of £10 a month or more for rainy days or retirement?
- ... replace any worn out furniture?

Clearly, the initial wording works better for some of the list of items than for others. In the light of this, the suggestion was therefore made of separating the have/do/able-to concepts. This was then the approach taken within the cognitive questions testing to better explore the wording of the questions being tested. It is also clear that some of the questions ask about more than one thing – including consumption of fruit and vegetables (what if they are different) or visiting friends and family, which again might elicit different responses depending on whether either group is perceived to be the main focus.

A second major change is that the follow-up questions occur only after all of the items have been asked, rather than after each one. This stops a potential reluctance to admit that items are missing, in order to shorten later questions by learning from the process of the interview (avoiding 'shortcuts' that some respondents may choose to make). Legard et al. (2008) explain that 'The desire to take a shortcut can form an important part of the cognitive process people go through when making decisions about how to answer a survey question. In the context of a survey interview we know that people search for shortcuts to help them quickly get through what might already be a lengthy interview.'

4.2 Omnibus analysis of what is a 'necessity'

Only on rare occasions have analysts sought to measure those goods and services that are regarded as necessities – those that no-one should have to be without. This is the first part of establishing a measure of material deprivation, developing suitable indicators of material well-being. The last set of such questions, prior to

the current study, was asked in 1999 for the Millennium Survey of Poverty and Social Exclusion (Pantazis *et al.* 2006). These questions were also aimed at all individuals, with a separate set asking about necessities for children – see the box below for the question format.

1999 Omnibus questions

On these cards are a number of different items which relate to our standard of living. I would like you to indicate the living standards you feel all adults should have in Britain today by placing the cards in the appropriate box.

Box A is for items which you think are necessary; which all adults should be able to afford and which they should not have to do without.

Box B is for items which may be desirable but are not necessary.⁶

[set of 54 cards divided into two groups]

Now I would like you to do the same thing for the children's activities on this set of cards.

[set of 30 cards divided into two groups]

It is unclear how attitudes will have changed in the decade since then. For this reason the Department for Work and Pensions (DWP) commissioned a new analysis of those items that are regarded as necessities – but with an emphasis on what are seen as necessities for those aged 65 or older. It was decided, as in 1999, that the most convenient vehicle for doing this was an omnibus – in this case that was run by the National Centre for Social Research (which incorporate a random rather than a quota sample). The interviews for the NatCen omnibus took place between 17th January and 10th March 2008⁷. These took place in Great Britain, with adults aged 16 or older. Information was also collected, for those aged 60 plus, on which items they had and the reason why they were missing (for those without these items). It is worth noting that NatCen were asking the same people what they think is a necessity for those aged 65 plus and whether they had that particular item (if aged 60 plus).

In Table 4.1 we show the proportion of all respondents regarding particular goods/ services as necessities for those aged 65 plus. This ranges from close to 100 per cent for 'keeping their home damp free', to a low of 21 per cent for belonging to a club requiring a paid subscription. Traditionally, a level of support of 50 per cent or more has been used to indicate that an item is a necessity, although some analysts have occasionally used higher thresholds (such as 70 per cent) to indicate a stricter necessity. In practice, and in this survey, most items tend to achieve rates of support that make it fairly clear whether they are essential, or not, with only a few items attracting levels of support of between 40 and 60 per cent.

An identical approach was used in the 1983 original 'Breadline Britain' survey. This older questionnaire is available at: http://www.data-archive.ac.uk/doc/1865/mrdoc/pdf/1865userguide.pdf accessed 20 June 2008.

⁷ This represents NatCen omnibus Waves 4 and 5 combined.

Table 4.1 Items rated as necessary for older people (those aged 65+), by age group

Items being rated necessities for older people	All	Respondent aged 16-64	Respondent aged 65+
Keeping their home damp-free	99	99	99
Having adaptations to their home where needed	99	99	98
Maintaining central heating, gas, electrics, plumbing and drains	99	98	99
Having mobility aids such as a walking stick or mobility scooter, if needed	98	98	98
Going to the opticians, as needed	98	98	99
Being able to replace their cooker if it breaks down	97	97	98
Having help in the home with personal care, where needed	97	97	96
For those that care for others, that they occasionally have a break for a few days from their caring responsibilities	97	97	97
Being able to pay regular bills, like Council Tax, without cutting back on essentials	97	97	97
Keeping their home in a good state of repair	96	95	98
Being able to get to and from local shops	94	94	96
Having a telephone to use regularly	94	93	96
Having a warm waterproof coat	93	93	96
Being able to afford good quality window and door locks	93	92	97
Seeing friends or family regularly	93	93	93
Going to the dentist regularly	91	92	88
Eating fresh fruit and vegetables every day	89	89	90
Having a home that is regularly cleaned	89	88	94
Eating two filling meals a day	89	91	79
Being able to pay an unexpected expense of £200	80	78	87
Eating the food that they would like to eat or that is culturally important to them on most days	80	79	84
Having access to a car or taxi, whenever needed	78	77	83
Being able to pay for their funeral	72	69	84
Buying over the counter medicines	71	74	59
Being able to attend funerals	71	72	67
Having a warm dressing gown	70	68	81
Being able to go out socially on a regular basis	67	67	66
Having a good pair of slippers	64	61	80
Visiting the hairdresser or barbers regularly	62	58	78
			Continued

Table 4.1 Continued

Items being rated necessities for older people	All	Respondent aged 16-64	Respondent aged 65+
Buying presents for grandchildren/other close family members	57	53	71
Having a smart outfit for social occasions	56	51	74
Buying a newspaper or magazine at least once a week	54	51	69
Having good fitted carpets	53	51	58
Rated necessary by older only, not younger			
Having a home with clean windows	47	42	68
Having a holiday once a year	46	43	56
Having a well-kept garden, if they have one	44	41	61
Having items dry cleaned occasionally	35	32	51
Not regarded as necessities			
Buying vitamin/dietary supplements	44	46	35
Having a mobile phone	34	33	37
Attending a gym or going swimming regularly	23	24	18
Belonging to a club or society which requires a paid subscription	21	20	26
Weighted baset	2,134	1,728	406
Unweighted baset	2,134	1,297	837

[†] These are typical figures, as different numbers of respondents declined to answer particular questions.

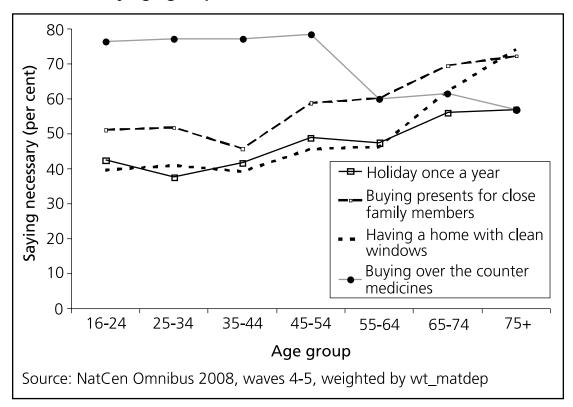
Whilst older people were more likely than younger age groups to identify particular goods and services as necessary, this was not universally true. For instance, whilst 74 per cent of those aged 16-64 thought that being able to buy over the counter medicines was a necessity for those aged 65 and over, among the older group this was much lower, at 59 per cent. However, the main result is really the overall similarity in the answers given by those aged 16-64 and those aged 65 and over. Only four items were rated as necessary by the older age group, and not the younger, with levels of support often very close.

Of course there were exceptions, and some important possible questions were rated as necessary by older people (for older people) but not across the population as a whole. Having an annual holiday is perhaps the standout case.

By and large the age differences that were found were true across the broader range of ages, and we show some examples in Figure 4.1. Looking at those aged 65 and over being able to take an annual holiday, this was more likely to be regarded as necessary the older the respondent. This was also the case for having a home with clean windows, being able to buy presents for family members, and most of the range of other questions that we cannot show here. There were a few instances where older people were less likely to regard something as necessary, including the ability to buy non-prescription medicines. For this item, those aged 55 or older were much less likely to believe this was necessary for older people,

than those aged up to 54. It is possible that this may reflect awareness that some medicines – those requiring a prescription – may be freely available to those above a certain age.

Figure 4.1 Whether selected items are necessary for older people, by age group



Overall, the number of items regarded as necessities tends to increase with age and, in this survey, was slightly higher for women than for men. About three quarters of the items listed were regarded as necessary, women typically identifying 31 such items, compared with 30 among men – which is statistically significant despite being a relatively small difference. Generally speaking older ages were also associated with regarding more things as being necessary: those aged 16-24 selected about 29 necessities, compared with 32 for those aged 65 or older.

Table 4.2	Number of goods regarded as necessities, by
	respondent's sex and age

		Average number of nec	essities (from a total of 41)
	All	Unweighted base	Weighted base
Men	29.8	932	1,044
Women	30.6	1,211	1,099
16-24	28.9	133	317
25-34	29.3	233	348
35-44	29.9	296	409
45-54	30.9	237	346
55-64	29.8	404	316
65-74	31.7	409	220
75+	32.0	431	188
All	30.2	2,143	2,143

Note: differences by gender and by age group are statistically significant at the one per cent level.

There were few differences between the regions of Britain, except that those in London identified more necessities than average (32), and those in the South East rather fewer (29).

4.2.1 Comparisons for older people versus all people

When questions about necessities have been asked before, they have generally related either to all adults (in almost all studies) or to families with children (especially the PSE Millennium Study, Gordon et al. 2000). It is sometimes suggested that separate questions might be appropriate for disabled people, or perhaps other groups. We are not aware of systematic attempts to look at what is seen as necessary for different age groups, excepting children.

The last main study took place in 1999, so clearly there may have been change over time in the general direction of opinions about what is necessary. However, it is still interesting to compare those questions that are similar, to consider if there are differences because of the specific focus in our new survey on those aged 65 plus, rather than on all adults. Results for such a comparison are shown in Table 4.3.

A fairly clear difference is the sizeable number of items where over 90 per cent of people thought this was a necessity for older people. There were 16 such items (out of 41) in the 2008 research, compared to just six, from a longer list (of 54), in 1999. Whilst the surveys used different questions, it does appear that there is greater unanimity about what might be regarded about a necessity for the older group.

Looking at the individual questions, in most cases when the items were being adjudged for the older group – rather than all individuals – then they were more likely to be regarded as necessary. So, having a telephone to use regularly was

regarded as necessary for those aged 65 and over by 94 per cent of people (in 2008); conversely only 71 per cent thought that having a telephone was a necessity across the population (in 1999).

An interesting counter-example is having a holiday. In 2008, only 46 per cent of people believed this to be a necessity for the over-65s. As we have seen, this is certainly not the opinion of those aged 65 and over, who thought it was essential. In 1999 over half (55 per cent) thought that a holiday was a necessity.

Table 4.3 Necessities for older people in 2008, and for all individuals in 1999

2008 Item	This is a n	ecessity for:	1999 Item
	older people (2008)	all people (1999)	
Keeping their home damp-free	99	94	Damp-free home
Keeping their home in a good state of repair	96	82	Money to keep home in a decent state of decoration
Having a telephone to use regularly	94	71	Telephone
Having a warm waterproof coat	93	85	Warm, waterproof coat
Seeing friends or family regularly	93	84	Visits to friends or family
Eating fresh fruit and vegetables every day	89	87	Fresh fruit and vegetables daily
Eating two filling meals a day	89	91	Two meals a day
Eating the food that they would like to eat or that is culturally important to them on most days	80	56	Roast joint/vegetarian equivalent once a week
Having access to a car or taxi, whenever needed	78	38	Car
Being able to attend funerals	71	80	Attending weddings, funerals
Having a warm dressing gown	70	34	Dressing gown
Being able to go out socially on a regular basis	67	37	An evening out once a fortnight
Buying presents for grandchildren/ other close family members	57	56	Presents for friends/family once a year
Having a smart outfit for social occasions	56	51	An outfit for social occasions
Buying a newspaper or magazine at least once a week	54	30	Having a daily newspaper
Having good fitted carpets	53	67	Carpets in living rooms and bedrooms
Having a holiday once a year	46	55	Holiday away from home once a year not with relatives
Having a mobile phone	34	7	Mobile phone
Weighted base	2,134	1,855	Weighted base
Unweighted base	2,134	1,855	Unweighted base

Note: The shaded side of the table indicates the survey, either 1999 or 2008, with more people regarding the item as necessary.

In Table 4.4 we extend the time horizon to consider changes in items regarded as necessities from 1983 onwards. The 2002 figures relate only to Northern Ireland (Hillyard *et al.* 2003); figures for 1983 and 2000 are taken from Gordon *et al.* (2000b). Naturally the last column, as well as being the most up to date, is specifically about the older group (those aged 65 and over). Overall, and bearing in mind that the question wording does sometimes differ, we may note:

- That many goods/services seem to increase in their significance over time, becoming more likely to be seen as essentials. A possible exception to this is goods that are overtaken by technology analysts have stopped asking about VCRs, for instance⁸.
- Generally speaking, goods are more likely to be regarded as necessities for older people than more widely. However, an important exception is taking a holiday, which is not regarded as a necessity for older people specifically, despite being seen as a necessity for everyone. However, more than half of older people themselves did regard a holiday as a necessity.

Table 4.4 Necessities for people in 1983, 1990, 1999, 2002 and 2008

-				Cell	percentages
Item (2008 wording)	All people (1983)	All people (1990)	All people (1999)	Northern Ireland (2002)	Older people (2008)
Keeping their home damp-free	96	98	94	98	99
Keeping their home in a good state of repair	-	92	82	92	96
Having a telephone to use regularly	43	56	71	81	94
Having a warm waterproof coat	87	91	85	93	93
Eating fresh fruit and vegetables every day	-	88	87	92	89
Eating two filling meals a day	64	90	91	-	89
Having access to a car or taxi, whenever needed	22	26	38	53	78
Having a warm dressing gown	38	42	34	-	70
Being able to go out socially on a regular basis	36	42	37	40	67
Buying presents for grandchildren/ other close family members	63	69	56	72	57
Having a smart outfit for social occasions	48	53	51	75	56
Having good fitted carpets	70	78	67	-	53
Having a holiday once a year	63	54	55	60	46

We may also note that in 1983 and in 1990, some of the questions asked about an inside toilet not shared with another household; a bath not shared with another household; and, a pack of cigarettes every other day. The first two are amenities that very few people now lack, and in the case of cigarettes it seems unlikely that a majority would regard them as an essential.

4.2.2 Reliability analysis

Taken as a group of 41 separate items, the questions on what is a necessity may be taken to form a scale. Classical reliability testing produced an alpha value of 0.86, which is respectable and implies that the individual questions are measuring the same underlying concept. This figure for overall reliability (alpha) could be improved only very marginally (i.e. at the third decimal place) by dropping particular items. We do not think that much additional value would be gained by dropping these particular items from the study, but, for completeness, the overall reliability would be marginally enhanced by dropping any of: buying over the counter medicines; having help in the home with personal care, where needed; being able to pay regular bills, like council tax, without cutting back; maintaining central heating, gas, electrics, plumbing and drains; eating two filling meals a day; having adaptations to their home where needed; having mobility aids such as a walking stick or mobility scooter, if needed⁹.

4.2.3 Factor analysis

Factor analysis is used to explore structure within data, to see if an underlying factor may explain observed differences in a set of variables. It helps to reveal whether a set of questions is measuring the same thing, or a set of different concepts. A factor analysis of the questions about necessities showed that there was one main factor (explaining one-sixth of the total variation) which was much more important than other factors. This also supports the reliability-testing evidence, above, that the questions are generally measuring the same concept.

4.3 Cognitive interviews: appropriate necessities

4.3.1 **Oualitative evidence**

Analysis by Dominy and Kempson (2006) provided the most direct analysis of those questions that were seen to be working well, and those that seemed ill-suited to measuring pensioner deprivation.

The accounts of pensioners themselves – a small number, in this qualitative study – enabled the researchers to identify four particular questions as being the highest priorities for older people. These were:

- having two pairs of all weather shoes;
- keeping their home adequately warm;
- being able to replace broken electrical goods such as a refrigerator or washing machine; and
- a hobby or leisure activity.

In practice, once one or more of the worst-performing questions had been dropped, some of the items lower on the list might be better retained to improve reliability.

The other items that were considered by older people to be less important to have, were (in order of importance):

- having home contents insurance;
- keeping their home in a decent state of decoration;
- a holiday away from home for one week a year, not with relatives;
- replacing any worn-out furniture;
- having a small amount of money to spend each week on themselves, not on their family;
- having friends or family for a drink or meal at least once a month;
- regular savings (of £10 a month) for rainy days.

These provide one perspective on the relevant items about which to ask. We now consider the contribution made by cognitive testing some of the possible FRS deprivation questions.

4.3.2 Results from cognitive testing

The cognitive testing revealed a number of limitations with the wording of some of the questions. These may be summarised as follows (Legard *et al.* 2008). First, having non-specific time frames attached to some of the questions made it different to provide a sensible answer, or one that was consistent across respondents. Such questions related to going out socially on a regular basis and seeing friends and family regularly.¹⁰ Legard *et al.* (2008) note that the notion of regular will depend on what a person is used to, more than any judgement about the frequency that other people might regard as 'regularly'.

A second set of issues is around who is responsible for keeping certain aspects of the housing fabric in good order. Questions about gardens or keeping a house in a good state of decoration will be difficult to answer for tenants (and older people are more likely to be tenants than those in middle age). They will also present difficulties for those living with other family members who may be taking responsibility for such upkeep, or for providing consumer durable items. This general point about responsibility applies strongly to questions about making adaptations to homes, for those with changed mobility needs, where the responsibility may not be clear.

A third set of issues identified in the cognitive testing of questions was the relevance of particular questions to older people. Legard *et al.* (2008) divide this set of responses into three groups: (a) no need; (b) no desire; and (c) no choice. A person may have no need for, say, adaptations to their home to address reduced

¹⁰ It is possible that the question, not directly tested, on having a phone to use regularly might not have been so strongly affected, but the underlying point remains.

mobility or issues relating to frailty. They might have no desire to participate in more social activities or to pay for membership of a club. Someone with no living relatives might have no choice about issues of visiting family or buying presents for them on special occasions.

Legard *et al.* (2008) make a number of recommendations about the wording of specific questions. They also noted the importance of a question on:

- being able to meet an unexpected expense;
- having a holiday; paying regular bills without cutting back on essentials;
- being able to replace cooker if it broke down.

These appeared to be good measures of material deprivation.

The overall conclusions about particular questions, and proposed changes to wording, are shown in detail in Section 5.3.

5 Asking about why any items are lacking

In this section, we detail the processes of analysing the NatCen Omnibus data (Section 5.1), and the cognitive question testing (Section 5.2). This is used to make the final selection of questions, which is described in Section 5.3.

5.1 Omnibus analysis of having necessities

Where goods and services are already universally owned, or nearly so, it is difficult to detect any progress in terms of overall material deprivation. However, four measures stand out as being particularly important with more than five per cent of those aged 60 and over being unable to afford them. These were:

- being able to pay an unexpected expense of £200 (11 per cent unable to afford);
- being able to pay for their funeral (11 per cent);
- being able to pay regular bills, like Council Tax, without cutting back on essentials (eight per cent);
- having a holiday once a year (seven per cent).

In fact, some 23 per cent of those aged 60 were unable to afford one or more from this list and nine per cent lacked two or more of them. If we take out the most sensitive question – being able to pay for their funeral¹¹ – then overall 19 per cent of those aged 60 and over lacked at least one of the three remaining items, and five per cent lacked two or more of them. Two per cent were lacking all three. There was, however, no sign of any worsening of material deprivation, just looking at these three measures, with increasing age.

This question appears to capture well the concept of deprivation, but for some people may well cause offence. It is a very sensitive kind of question to include in a large-scale study, and ultimately the level of risk attached to its inclusion was thought to outweigh its usefulness as a deprivation indicator.

As is clear from Table 5.1, between zero and three per cent were unable to afford each of the other items on the list. In almost all cases, those who did not want the item far outnumbered those who were unable to afford it. It is worth noting that the omnibus questions could not incorporate the changes recommended through the cognitive testing for trying to better disentangle concepts of affordability and desirability.

Table 5.1 Ownership levels of the deprivation indicators, by age (ordered by levels of 'cannot afford')

			Row perd	entages
Question/item	Has	Cannot afford	Don't want	Other
Being able to pay an unexpected expense of £200†	89	11	0	0
Being able to pay for their funeral†	89	11	0	0
Able to pay regular bills, like Council Tax, without cutting back on essentials†	92	8	0	0
Having a holiday once a year	67	7	20	6
Being able to replace their cooker if it breaks down	94	3	3	0
Going to the dentist regularly	72	3	26	0
Being able to go out socially on a regular basis	64	2	29	5
Having items dry cleaned occasionally	57	2	41	0
Eating the food that they would like to eat or that is culturally important to them on most days	81	2	17	0
Belonging to a club which requires a paid subscription	43	2	55	0
Attending a gym or going swimming regularly	14	2	73	12
Having a well-kept garden, if they have one	81	2	9	8
Having help in the home with personal care	11	2	60	28
Keeping their home damp-free	95	1	2	2
Buying vitamin/dietary supplements	40	1	59	0
Having access to a car or taxi, whenever needed	91	1	8	0
Eating fresh fruit and vegetables every day	87	1	12	0
Having a mobile phone	69	1	30	0
Going to the opticians, as needed	94	1	5	0
Having adaptations to their home where needed	20	1	54	25
Visiting the hairdresser or barbers regularly	91	1	8	0
Keeping their home in a good state of repair	96	1	2	1
Having a smart outfit for social occasions	92	1	7	0
Being able to attend funerals	91	1	8	0
Having good fitted carpets	89	1	8	2
Able to afford good quality window and door locks	94	1	4	1
Having a telephone to use regularly	97	1	2	0
Having a warm waterproof coat	96	1	3	0
Buying presents for grandchildren/close family	91	1	8	0
			Co	ontinued

Table 5.1 Continued

			Row perd	entages
Question/item	Has	Cannot afford	Don't want	Other
For carers, that they occasionally have a break for a few days from their caring responsibilities	18	1	42	40
Maintaining central heating, gas, electrics, plumbing	95	1	3	2
Having a home that is regularly cleaned	95	1	4	0
Having a home with clean windows	89	1	7	3
Buying over the counter medicines	61	*	39	0
Having mobility aids, if needed	31	*	47	22
Buying a newspaper or magazine at least once a week	85	*	15	0
Having a warm dressing gown	90	*	10	0
Being able to get to and from local shops	93	*	4	3
Having a good pair of slippers	89	*	10	0
Eating two filling meals a day	82	*	18	0
Seeing friends or family regularly	95	-	2	3

Base: those aged 60 and over. † For these questions no follow-up reason about reasons was asked, since inability to afford is part of the question.

A measure of deprivation ought to vary with income; those on higher incomes should be less likely to be deprived; giving a person more income should lead to less deprivation. It is therefore important to consider how the ownership of the items, or being unable to afford them, varies with income. The NatCen omnibus does collect income data, but in a fairly unrefined manner, at least compared to Family Resources Survey (FRS), fitting its more general purpose. We therefore looked additionally at two other variables which are associated with higher incomes but which had fewer problems of measurement – being a home owner, and having non-state pension income. Correlations between these measures of financial status and the range of deprivation indicators are shown in Table 5.2, shown by rough order of the strength of the relationship.

Two items that show especially strong correlations with income are directly concerned with affordability, namely being able to meet an unexpected expense (of £200) and having an annual holiday. In many cases there was little or no relationship with income, whilst for two interesting examples (having adaptations to their home where needed, and having mobility aids where required) there was a negative association with income. This shows that those with these items tended to be on lower income that those who did not. It is certainly possible that this link occurs because these questions are showing an effect of lower income, in the form of poor health. Those on higher incomes do not have such items, because they are generally younger, richer, healthier.

Table 5.2 How having particular items correlates with measures of affluence (by rough order of income sensitivity)

			n coefficien
	Equivalised income	Home owner	Has non- state pension
Being able to pay an unexpected expense of £200	0.17	0.37	income 0.17
Having a holiday once a year	0.17	0.26	0.17
Keeping their home in a good state of repair	0.24 n.s.	0.20	n.s.
Belonging to club or society requiring subscription	0.21	0.15	0.19
Being able to replace their cooker if it breaks down	0.13	0.13	0.13
Having a telephone to use regularly	n.s.	0.27	n.s.
Going to the dentist regularly	0.20	0.18	0.12
Having a well-kept garden, if they have one	0.20	0.13	0.12
Having items dry cleaned occasionally	0.11	0.28	0.11
Having access to a car or taxi, whenever needed	0.19	0.18	0.13
Being able to pay for their funeral	0.16	0.21	0.12
			0.17
Visiting the hairdresser or barber regularly	n.s.	n.s. 0.15	0.16
Being able to pay regular bills, like council tax	n.s.		
Maintaining central heating, gas, electrics, plumbing	n.s.	0.19	0.10
Being able to go out socially on a regular basis	0.16	0.15	0.11
Having a mobile phone	0.18	0.12	0.11
Able to afford good quality window and door locks	n.s.	0.18	0.10
Attending a gym or going swimming regularly	0.14	0.13	n.s.
Being able to attend funerals	n.s.	0.14	0.11
Buying over the counter medicines	n.s.	0.14	0.12
Having a home that is regularly cleaned	n.s.	n.s.	0.13
Having good fitted carpets	n.s.	0.13	0.10
Buying vitamin/dietary supplements	n.s.	0.12	0.12
Eating fresh fruit and vegetables every day	n.s.	0.12	0.12
Having a smart outfit for social occasions	n.s.	0.13	0.10
Being able to get to and from local shops	0.11	0.10	0.12
Keeping their home damp-free	n.s.	0.11	0.10
Having a warm waterproof coat	n.s.	n.s.	0.10
Having a home with clean windows	n.s.	n.s.	0.09
Eating the food that they would like to eat	n.s.	n.s.	0.09
Eating two filling meals a day	n.s.	n.s.	0.09
Going to the opticians, as needed	n.s.	n.s.	0.07
For carers, that they occasionally have a break	n.s.	n.s.	n.s.
Buying presents for close family members	n.s.	n.s.	n.s.
Seeing friends or family regularly	n.s.	n.s.	n.s.
Having a good pair of slippers	n.s.	n.s.	n.s.
			Continue

Table 5.2 Continued

	Pearso	n correlatio	n coefficients
	Equivalised income	Home owner	Has non- state pension income
Buying a newspaper or magazine at least once a week	n.s.	n.s.	n.s.
Having help in the home with personal care	n.s.	n.s.	n.s.
Having a warm dressing gown	n.s.	n.s.	n.s.
Having adaptations to their home where needed	-0.14	-0.17	n.s.
Having mobility aids such as a walking stick	-0.18	-0.13	n.s.

Note: n.s. means not statistically significant. For this analysis, results above 0.1 are quite strong correlations, with those above 0.2 being particularly strong.

Source: NatCen Omnibus 2008, waves 4-5, weighted by wt_matdep.

People may lack items for various reasons unrelated to deprivation. Those without mobility aids may not need them, rather than lacking the money to pay for them. We would therefore not expect a clear link with income or, as turned out to be the case, might expect those on lower incomes to be more likely to have such adaptations or aids.

In measuring material deprivation the focus has generally been on those saying they cannot afford items, rather than on whether they just actually lack such items. Arguments have been made that just looking at ownership may offer an approach that is superior in some ways (e.g. McKay 2003), but the balance of opinion and evidence continues to favour only looking at those who cannot afford items. Improvements to how the information about an inability to afford is collected may offer some positive progress in this regard.

In Table 5.3 we show correlations between income (measured using different concepts) and a selection of the deprivation indicators. For clarity (and brevity) the table only includes those items for which one or more statistically significant correlation were found, and since we are looking at those unable to afford various items, the correlations are generally all in the 'right' direction indicating that higher income (or other measure of affluence) was associated with being less likely to say the item could not be afforded. The strongest links with low income and being unable to afford different items were for having a holiday, being able to replace a broken cooker, having access to a car or taxi, and access to a telephone. These all therefore represent strong candidates for inclusion in a measure of material deprivation for older people, in particular when considered in conjunction with all the other evidence presented by the range of studies discussed here.

Table 5.3 How being unable to afford particular items correlates with measures of affluence (by rough order of income sensitivity) – only significant items shown

		Pearson c	orrelation coefficients
	Equivalised income	Home owner	Has non-state pension income
Having a holiday once a year	-0.14	-0.20	-0.10
Being able to replace their cooker if it breaks down	-0.11	-0.16	-0.09
Having access to a car or taxi, whenever needed	n.s.	-0.12	-0.10
Having a telephone to use regularly	n.s.	-0.15	n.s.
Having items dry cleaned occasionally	-0.10	n.s.	n.s.
Attending a gym or going swimming regularly	n.s.	-0.11	n.s.
Being able to go out socially on a regular basis	n.s.	-0.11	n.s.
Buying presents for grandchildren/other close family members	n.s.	-0.09	n.s.
Keeping their home in a good state of repair	n.s.	-0.12	n.s.
Having a home that is regularly cleaned	n.s.	n.s.	-0.09
Buying vitamin/dietary supplements	n.s.	-0.14	n.s.
Eating fresh fruit and vegetables every day	n.s.	-0.13	n.s.

Source: NatCen Omnibus 2008, waves 4-5, weighted by wt_matdep. n.s. means not statistically significant.

Note: questions that did not ask about reasons why missing (able to pay for their funeral; able to pay an unexpected expense of £200; being able to pay regular bills, like council tax, without cutting back) are excluded from this analysis by definition.

5.2 Cognitive interviews: appropriate follow-up questions for lacking necessities

A series of possible reasons were outlined for why people did not have the items (if they were missing and people would have liked to have them). As we mentioned in Section 4.1, these were separated from the issue of whether people had particular items. The follow-up answer codes that were used (in the first round of testing) comprised:

- It is not relevant to my circumstances.
- I don't want or need this.
- I don't have enough money for this.
- I don't have the money right now.

- It is too expensive.
- My health prevents me from doing/having this.
- Other.
- None of these.

Legard *et al.* (2008) examined the often blurred division between not wanting some of the key items, and being unable to afford them, and the budgeting approaches of older people. They quote one respondent saying 'they could afford to do routine living but not 'extra' things like going away on holiday.' Even so, other factors could also play a part in this, either separately or in combination with lack of money. This included such issues as a declining social circle and issues relating to health/mobility. Holidays with family may become more frequent, reducing the attractiveness of holidays without family irrespective of people's ability to afford them. They also noted the effect of lower incomes on people's aspirations and expectations as people got older, 'It became easy to rationalise inability to afford as lack of need'.

Respondents saw some overlap between the answer codes listed on the showcard, perhaps particularly the first two which were often difficult to separate. Both could be seen to be relevant to the same circumstances. The third and fifth replies (don't have enough money for this; it is too expensive) were also insufficiently differentiated.

Following this analysis, a revised follow-up question on why items were missing was derived for the second round of testing. This was based on the following set of answer codes:

- I do not regard it as good value for money.
- This is not a priority for me on my current income.
- I do not have the money.
- My health/disability prevents me.
- I would need help with this which I do not have.
- It is not relevant to me at this stage in my life.
- It is too much trouble/too tiring.
- There is no-one to do this with.
- I have never wanted this.
- Other.

Again, there some issues of overlap between codes, including the first few codes listed on issues of affordability. And there are also issues on the links between health and needing help with things.

However, despite these important reservations, overall lower income groups did list affordability as a key reason. For higher income groups the lack of particular items may have been related to questions of social isolation, and not wanting to do some of the things on the list. Or, problems of ill health affecting mobility (such as for taking a holiday) were more significant than any lack of financial resources.

The set of codes did reveal a more rounded understanding of why particular items were missing, and it was recommended that this longer set of responses was retained for the new FRS material deprivation question block for older people – as we set out in Section 5.3, though with potential collapsing of some categories to allow inclusion in the FRS (see Appendix C for recommended question).

5.3 Final steps in constructing the questions

A range of research evidence has been presented, but judgement is still needed to weigh up the sometimes conflicting evidence about the utility of different questions for measuring deprivation. It was generally accepted (following cognitive testing and desk research) that:

- a two-stage approach was needed, asking first if the older person had the item, and only then the reason why it was missing;
- the questions about why it was lacking needed to go beyond the simple binary choice of could not afford or did not want;
- the follow-up questions should be asked in a separate block after all the initial questions about whether people had the items. Doing this after each item might lead to the loss of information through respondents taking 'shortcuts'.

Even taking on board all of these points which improve the information collected, it still leaves open the question of what items (goods/services) the FRS should ask about. To assist in the process of choice, a grid was produced towards the end of the research process containing a number of pieces of relevant information – starting with data from the cognitive testing, but also with quantitative results from the omnibus surveys. It served as a useful guide to making decisions about the inclusion of items.

This grid is shown on the next few pages. It is based on the cognitive testing of 15 key questions and on the omnibus data analysed on those 15 questions and four other potentially strong candidates for inclusion.¹²

The decisions had to be made at a time when only the first round of the omnibus data was available. The results in this grid have now been updated based on two rather than one wave of interviews, but the main substantive findings are unchanged and would not materially affect the decisions made.

On the basis of this information and the expertise formed during the research process, a selection of questions was made and these form Appendix C to this report. This set of questions can be seen as representing considerable progress in identifying material deprivation among older people.

In the final selection of questions proposed for inclusion in the FRS, the following set of considerations were particularly important:

- A 50 per cent dividing line is the standard methodological practice in developing a consensual item set. All chosen items were said to be necessities for older people by at least 50 per cent or more of those aged 65 and over (note all items except that relating to taking a holiday were also said to be necessities for older people by the adult population).
- The suite of questions includes the range of subjects/issues which we know from existing research literature are important indicators of pensioner's living standards (except in cases such as disability/health items where further research is required to identify a satisfactory set).
- All items correlate with indicators of older people's well-being, except in the case of 'eating at least one filling meal a day'. However, this has been included as its important a food item is included in the question suite, and the other food questions tested did not work effectively.
- Items where the omnibus survey found a relatively high percentage of older people who could not afford the item have all been included (except for 'being able to pay for their funeral' for reasons of sensitivity). A range of items have also been included where people say they do not have them for reasons other than financial (as they meet the other inclusion criteria and also to ensure a range of topics/issues are included in the question suite).
- Items have been chosen to be robust over time and less affected by technological advances.
- Some items have been omitted because the cognitive testing study found that methodologically they do not work effectively in other words, there is also a rationale for why some items have been excluded, e.g. buying over counter medicines (as many get a prescription for general over the counter medicines), and adaptations to the home (as difficult for the majority of people who do not need these items to respond, and also some people have adaptations in their home which they do not need themselves).

Table 5.4 Decision grid with information about making question selections

Tested item wording		0	Omnibus findings			=	Irrelevance	e)	Recommend	mend	Recommended item wording
	% regarding as necessary (all)	% regarding as necessary (65+)	Has item (aged 65+)	Cannot afford item (aged 65+)	Link with income*	Need	Desire	Choice	Retain	Drop	
1. Do you eat at least one filling meal a day?	* *68	79	82	<.5%	0+				>		Do you eat at least one filling meal a day?
2. Do you eat fresh fruit and vegetables every day?	89	06	87	-	++		>			>	
3. Do you eat at least one balanced meal a day?	n/a	n/a	n/a	n/a	n/a					>	
4. Do you see friends or family regularly?	93	93	95	<.5%	Ö			>	>		Do you see your friends or family at least once a month?
5. Do you go out socially on a regular basis?	67	99	64	2	‡		>		>		Do you go out socially with other people at least once a month?
6. Do you have a smart outfit for social occasions?	56	74	92	_	‡					>	
7. Would you be able to pay an unexpected expense of £200?	80	87	68		÷				>		Would you be able to pay an unexpected expense of £200?
*For this colum	n, '++' is a good	*For this column, '++' is a good result (expected correlations),		'' is the worst result (correlations in wrong direction); '0' indicates no reliable link with income'.'	orrelations in	wrong d	irection);	'0' indicat	es no reli	able link	with income '.'

"For this Column, ++ is a good result (expected correlation). Means the affordability follow-up question wasn't asked.

^{**}The omnibus asked about two filling meals a day.

Table 5.4 Continued

	ı					
Recommended item wording		Do you attend a club or society which requires a regular paid subscription?	Do you take a holiday away from home for a week or more at least once a year?	Are you able to keep your home Is your home kept in a good state of repair?	Without cutting back on essentials, are you able to pay regular bills like electricity [or Council tax]?	Apart from prescription medicines (that you do not have to pay for) do you buy over the counter medicines?
mend	Drop	ć				ز
Recommend	Retain	>	>	>	>	`
9	Choice					
Irrelevance	Desire					
_	Need					>
	Link with income*	0+	‡	‡	+	0+
	Cannot afford item (aged 65+)	2	7	1	∞	<:5%
Omnibus findings	Has item (aged 65+)	43	29	96	92	61
O	% regarding as necessary (65+)	26	56	86	26	59
	% regarding as necessary (all)	21	46	96	97	71
Tested item wording		8. Do you belong to a club or society which requires a regular paid subscription?	9. Do you take a holiday away from home one week a year?	10. Do you keep your home in a good state of repair?	11. Can you pay regular bills like Council Tax or electricity without cutting back on essentials?	12. Do you buy over the counter medicines?

	ā	ĺ
	•	•
	-	7
	-	•
	=	
,	٠	ı
	2	_
	2	
	7	5
	L	_
ı	ī	ī
•	•	•
•	•	•
•	`	•
•		•
•	_	t
•	_	t
•	_	t
•		t
•	_	†
•	_	†

Tested item			Omnibus findings	9		-	Irrelevance	e e	Recommend	mend	Recommended
	% regarding as necessary (all)	% regarding as necessary (65+)	Has item (aged 65+)	Cannot afford item (aged 65+)	Link with income*	Need	Desire	Choice	Retain	Drop	
13. Do you keep things like central heating, electrics, plumbing and drains in good working order?	66	66	95	—	‡				>		Are you able to keep things like/ Are your central heating, electrics, plumbing and drains kept in good working order?
14. Do you have adaptations to your home like grab rails, a walkin shower, a wheelchair ramp or a stair lift?	66	86	20	_	†	>			>	<i>د</i>	(If needed) would you be able to make adaptations to your home like grab rails, a walk-in shower, a wheelchair ramp or a stair lift?
15. Could you replace your cooker if it broke down?	97	86	94	м	‡				>		Would you be able to replace your cooker if it broke down?
16. Having access to a car or taxi when needed	78	83	91	-	+						
17. Having a well-kept garden, if they have one	44	61	81	2	0+						
18. Visiting the hairdresser or barber regularly	62	78	91	-	+						(might need a time-frame specified).
19. Having a telephone to use regularly	94	96	97	-	+						

6 Using the questions to measure material deprivation

This chapter discusses various possible next steps in using the data from the new Family Resources Survey (FRS) questions to develop a measure of material deprivation. Selecting the appropriate set of questions is the key first step, but there are other steps to be taken to arrive at an overall measure of deprivation. The new set of questions may be summarised in different ways, and this section analyses the decisions that need to be made and some of their implications.

A set of variables measuring material deprivation may be used in a variety of ways to produce a measure (or sub-measure) of poverty or deprivation. The approach taken with data on child poverty is to look at those with incomes below 70 per cent of the median and experiencing material deprivation.

The questions that need to be addressed are then:

- Whether to simply sum the number of missing items, or to use a weighted approach. And, on what basis to calculate the most appropriate weights?
 - Does the more sophisticated follow-up question, avoiding the cannot afford/ don't want dichotomy, make any difference?
- How to change those weights over time (if at all).
- How to select a threshold indicating deprivation, by dividing the population into those counted as deprived and not deprived.

6.1 Weights or a simple count

There are potential presentational difficulties to using unweighted counts (a simple count approach), which may be overcome by various approaches to weighting questions on material deprivation (Willitts 2006).

One well-tested approach to weighting, sometimes known as prevalence weighting, takes the proportion who do not have each item and uses that to score its absence (e.g. Halleröd 1994). Missing something that most people have is therefore indicative of worse deprivation than missing a rarer item – if someone is unable to afford it.

The measure of material deprivation is usually created by including a weight for each item that is missing, and not owned through an inability to afford it. The simplest approach is to add up the number of missing items, treating each as having the same importance. Alternatively, a weight may be created, giving a different emphasis to the items. In the current measure the size of this weight depends on the level of overall ownership. Lacking something that is possessed by most people counts as a high value, whilst lacking something owned by fewer people is accorded less weight. Other approaches are possible. Weights could depend on the number regarding an item as essential, rather than the number who have the item. Or weights could be adjusted to become more or less sensitive to the proportion who have the item. However, the prevalence weighting employed at present gives a good balance of being sensitive to the particular good being analysed, without becoming too complex to understand.

The greater sophistication of the weighted approach delivers a final variable with many different values, rather than simple units, which may allow for finer distinctions between those facing, or not, different levels of material deprivation. The evidence to date, however, finds that the apparent sophistication of a weighted approach adds something, but not much, to measures based on simple sums, at least in terms of correlations with income and so on.

6.1.1 New follow-up questions

Debates of this kind have been based on survey questions that provide simple classifications of responses into cannot afford and do not want. The new set of FRS questions for older people bring with them a degree of additional flexibility, since the follow-up question is not dichotomous. Instead, it is possible to look at the following more extensive set of responses, and to focus on the first three:

- 1. I do not have the money for this.
- 2. This is not a priority for me on my current income.
- 3. My health/disability prevents me.

The unknown empirical question is how far those who might previously have said cannot afford will split between the first two codes, in particular, and whether the third code is also measuring some form of social exclusion. Will respondents say they do not have the money for something they lack, or instead that it is not a priority? In terms of creating an overall measure a number of choices are possible, depending on how much we want to look at just the first code (do not have the money) or assume that those saying (not a priority) are also experiencing material

deprivation. This presents the options of:

- Only including code (1) as indicating deprivation, and ignoring (2).
- Look at those saying either of (1) or (2) and treat them both as inability to afford.
- Assign a lower weight to code (2) than to code (1), perhaps half as great or similar.

An important early step in data analysis will be to analyse this division and to consider how far it reflects differences in deprivation. Or, to examine whether only the first code is a true measure of material deprivation. If both responses are important, then the different methods suggested above of including both codes may be needed. There will also be analysis of how to treat the answer relating to disability.

6.2 Updating the weights (over time) or a fixed system

The set of weights chosen may be adjusted in line with changing circumstances or, as with the current child poverty measure, be fixed at a level determined in the baseline year. There are significant advantages to fixing the initial weights, which still allows a relative assessment to be made by looking at change across the population. If the weights are changed, then someone in the same circumstances might count as deprived in one year, and not deprived in another. Although this is also the case with income measures, it seems less intuitively plausible when looking at a smaller set of items that are possessed or not.

6.3 Selecting a threshold for deprivation

A further task is setting a threshold that constitutes material deprivation. Having a measure of material deprivation gives us an index, showing people on a scale from the worst-off to the best-off. Further work is needed to determine the point where we divide people into those experiencing material deprivation, and those not. If possible we would like a point (or line) where there is some tangible difference in the living standards experienced.

However, as with income lines, in practice we may be selecting a line where experiences of those just on either side of that line are actually quite similar. It is rarely the case we may make a clear-cut separation of the type envisaged in Gordon *et al.* (2000: Figure 2). Even so, the statistical approaches adopted do try to make such a division, and attempt to select points where there are groups on either side of the line, which are similar within themselves and different from the other group in terms of their deprivation.

6.4 Final reflections

The programme of research has been diverse, covering various forms of primary and secondary data analysis, statistical analysis of various kinds, desk research, qualitative interviews and cognitive testing. In both the three studies published in 2006, and the recent round of research, the researchers and commissioners involved have been in regular contact and held frequent meetings. This has provided opportunities for projects to learn from each other, and to reflect on the similar messages coming across from rather different kinds of research.

The recent round of research took place within a relatively short timescale, from its inception and desk research to clarify the issues, to the final selection of questions to appear on the FRS. This was helped by a clear focus on the end result and meetings/liaison to ensure that progress was being made at the required pace. From my perspective, this joint or collaborative form of working contributed to the success of each of the projects, ensured the relevance and timeliness of research findings, and was positively received by the external researchers/contractors.

Appendix A Family Resources Survey material deprivation questions (2005-06 onwards)

Questions on material deprivation

This next section is about the sorts of things that some families have, but which many people have difficulty finding the money for.

For each of the following things please tell me the number from the showcard which best explains whether you have it or not.

Do you have:

- a holiday away from home for at least one week a year, whilst not staying with relatives at their home?
- friends or family around for a drink or meal at least once a month?
- two pairs of all weather shoes for adults?
- enough money to keep your home in a decent state of decoration?
- household contents insurance?
- make regular savings of £10 a month or more for rainy days or retirement?
- replace any worn out furniture?
- replace or repair major electrical goods such as a refrigerator or a washing machine, when broken?

(On a slightly different note) do you have a small amount of money to spend each week on yourself (not on your family)?

And do you have a hobby or leisure activity?

Answer codes for all questions

- (1) We do this
- (2) We would like to do this but cannot afford this at the moment
- (3) We do not want/need this at the moment
- (4) [Does not apply]

In winter, are you able to keep this accommodation warm enough?

Yes/No

[questions about 9 items for children then follow, in the same format.]

I am now going to ask you about paying bills for things like electricity and gas.

SHOWCARD

Sometimes people are not able to pay every bill when it falls due. May I ask, are you up-to-date with the bills on this card, or are you behind with any of them?

INTERVIEWER: 'Which others' UNTIL 'No others'

- (1) Behind with the electricity bill
- (2) Behind with the gas bill
- (3) Behind with other fuel bills like coal or oil
- (4) Behind CT
- (5) Behind with insurance policies
- (6) Behind with telephone bill
- (7) Behind with television/video rental or HP
- (8) Behind with other HP payments
- (9) Behind with water rates
- (10) Not behind with any of these

Appendix B 2008 NatCen Omnibus questions on necessities

What counts as a necessity?

I am now going to ask you some questions about standards of living.

I am going to read out a number of different items which all relate to standard of living. Thinking about people aged 65 and over, who are retired and living independently, for each item I read out, I would like you to tell me whether you think it is a necessity or whether it is something they could do without?

So firstly,...

RANDOMISE ORDER OF QUESTIONS.

...eating two filling meals a day?

(Do you think this is a necessity for people aged 65 or more or is it something they could do without...)

Yes – a necessity.

No – not a necessity (These codes and clarification repeated for each question, as needed):

- eating the food that they would like to eat or that is culturally important to them on most days?
- eating fresh fruit and vegetables every day?
- buying vitamin/dietary supplements?
- being able to go out socially on a regular basis?
- buying a newspaper or magazine at least once a week?

- belonging to a club or society which requires a paid subscription?
- attending a gym or going swimming regularly?
- seeing friends or family regularly?
- buying presents for grandchildren/other close family members on important occasions like birthdays or festivals?
- for those that care for others, that they occasionally have a break for a few days from their caring responsibilities?
- having a holiday once a year?
- having a warm dressing gown?
- having a smart outfit for social occasions?
- having a warm waterproof coat?
- having a good pair of slippers?
- having items dry cleaned occasionally?
- having a telephone (landline) to use regularly?
- having a mobile phone?
- having mobility aids such as a walking stick or mobility scooter, if needed?
- having access to a car or taxi, whenever needed?
- having help in the home with personal care, where needed?
- having adaptations to their home such as wheelchair ramps, walk-in showers,
- keeping their home in a good state of repair?
- being able to afford good quality window and door locks?
- keeping their home damp-free?
- having a home that is regularly cleaned?
- having a home with clean windows?
- having a well-kept garden, if they have one?
- maintaining central heating, gas, electrics, plumbing and drains?
- having good fitted carpets?
- having their hair done or cut regularly?
- going to the dentist regularly?
- going to the opticians, as needed?
- buying over the counter medicines?

- being able to pay regular bills, like Council Tax, without cutting back on essentials?
- being able to replace their cooker if it breaks down?
- being able to pay for their funeral?
- being able to pay an unexpected expense of £200?
- being able to attend funerals?
- being able to get to and from local shops?

Which items do people have?

ASKED IF AGED 60 OR OLDER (grouped in areas of life)

MEALS

SHOWCARD

Looking at each of the items on this card, can you tell me which ones you do?

PROBE: Which others?

CODE ALL THAT APPLY

eat two filling meals a day

eat the food that you would like to eat or that is culturally important to you on most days

eat fresh fruit and vegetables every day

buy vitamin/dietary supplements

None of these

CLUBS

SHOWCARD

And which of these do you do?

PROBE: WHICH OTHERS?

CODE ALL THAT APPLY

INTERVIEWER NOTE: IF ASKED, 'GOING OUT SOCIALLY' INCLUDES THINGS LIKE GOING TO PUBS, RESTAURANTS, THE CINEMA ETC. I.E. THINGS THAT INVOLVE PAYING FOR SOMETHING.

buy a newspaper or magazine at least once a week

belong to a club or society which requires a paid subscription

attend a gym or go for a swim regularly

go out socially on a regular basis

None of these

FAMILY

SHOWCARD

Looking at each of the items on this card, can you tell me which ones you do?

PROBE: Which Others?

CODE ALL THAT APPLY

see friends or family regularly

buy presents for grandchildren/other close family members on important occasions like birthdays or festivals

occasionally have a few days' break from any caring responsibilities you may have

have a holiday once a year

None of these

CLOTHES

SHOWCARD

And can you tell me which of these things you have?

PROBE: Which Others?

CODE ALL THAT APPLY

a warm dressing gown

a smart outfit for social occasions

a warm waterproof coat

a good pair of slippers

items dry cleaned occasionally

None of these

MOBIL

SHOWCARD

And can you tell me which of these things you have?

PROBE: Which Others?

CODE ALL THAT APPLY

a telephone (landline) that you use regularly

a mobile phone

mobility aids such as a walking stick or mobility scooter

access to a car or taxi, whenever you need it

help in the home with personal care

adaptations to your home such as wheelchair ramps, walk-in showers, grab rails, stair lifts

None of these

HOME

SHOWCARD

Now for each of these things, can you tell me which ones you do or have?

PROBE: Which Others?

CODE ALL THAT APPLY

keep your home in a good state of repair

have good quality window and door locks

have a damp-free home

have a home that is regularly cleaned

regularly clean your windows or have someone else to clean them

have a well-kept garden

maintain your central heating, gas, electrics, plumbing and drains

have good fitted carpets

None of these

PERSNL

SHOWCARD

And looking at this card, can you tell me which ones you do?

PROBE: Which Others?

CODE ALL THAT APPLY

have your hair done or cut regularly

go to the dentist regularly

go to the opticians as needed

buy over the counter medicines

pay regular bills, like Council Tax, without cutting back on essentials

None of these

EXTRA

SHOWCARD

And for each of these items, please tell me which ones you could do

PROBE: Which Others?

CODE ALL THAT APPLY

replace your cooker if it breaks down

pay for your own funeral

pay for an unexpected expense of £200

attend someone else's funeral

get to and from local shops

None of these

Why people don't have these items (where the person doesn't have them)

IF NOT MENTIONED TWO MEALS A DAY AT MEALS

MEALWHY

SHOWCARD

You mentioned that you do not eat two filling meals a day.

Can you tell me why that is?

We/I would like to have this but cannot afford this at the moment

We/I do not want/need this at the moment

[... and the same format for other questions, if not mentioned ...]

Appendix C Revised Family Resources Survey material deprivation questions for older people

Q1a) INTERVIEWER READ OUT.... 'I am going to read out a list of questions about items related to people's standards of living. For each one, please answer yes or no.'

ITEM A: Do you eat at least one filling meal a day?

ITEM B: Do you go out socially, either alone or with other people, at least once a month?

ITEM C: Do you see your friends or family at least once a month?

ITEM D: Do you take a holiday away from home for a week or more at least once a year?

ITEM E: Would you be able to replace your cooker if it broke down?

ITEM F: Is your home kept in a good state of repair?

ITEM G: Are your heating, electrics, plumbing and drains kept in good working order?

ITEM H: Do you have a damp-free home?

ITEM I: Is your home kept adequately warm?

ITEM J: Without cutting back on essentials, are you able to pay regular bills

like electricity, gas or Council tax?

ITEM K: Do you have a telephone to use, whenever you need it?

ITEM L: Do you have access to a car or taxi, whenever you need it?

ITEM M: Do you have your hair done or cut regularly?

ITEM N: Do you have a warm waterproof coat?

ITEM O: Would you be able to pay an unexpected expense of £200?

YES/NO responses

Follow up question for unexpected expense item:

If answer yes at Q1a item O, ask follow up question:

Q1b. 'How would you pay for this [unexpected expense of £200]?'

SHOW CARD

INTERVIEWER CODE ALL THAT APPLY

I would use my own income but would need to cut back on essentials

I would use my own income but would not need to cut back on essentials

I would use my savings

I would use a form of credit (e.g. credit card or take out a loan)

I would get the money from friends or family as a gift or loan.

Other (not on showcard)

DK (not on showcard)

Q2. INTERVIEW READ OUT... 'I am now going to ask you about each of the things you said you do not do or have. Selecting your answers from this card, please tell me why this is.'

Why do you not/would you not be able to ['item where no stated at question1a'?]

Note: for item F and item I the question wording is slightly different to the rest. These items need to be asked as follows: Why is your home not kept in a good state of repair? Why is your home not kept adequately warm?

SHOW CARD

INTERVIEWER CODE ALL THAT APPLY

- 1. I do not have the money for this
- 2. This is not a priority for me on my current income
- 3. My health/disability prevents me
- 4. It is too much trouble/too tiring
- 5. There is no one to do this with or help me
- 6. This is not something I want
- 7. It is not relevant to me
- 8. Other (not on showcard)
- 9. DK (not on showcard)

References

Barnes, M., Blom, A., Cox, K., Lessof, C. and Walker, A. (2006), *The Social Exclusion of Older People: Evidence from the first wave of the English Longitudinal Study of Ageing (ELSA) (Final Report),* London: ODPM.

Berthoud, R., Blekesaune, M. and Hancock, R. (2006), *Are 'poor' pensioners 'deprived'?* Department for Work and Pensions Research Report No 364, Corporate Document Services.

Bradshaw, J., Middleton, S., Davis, A., Oldfield, N., Smith, N., Cusworth, L. and Williams, J. (2008), *A minimum income standard for Britain: What people think,* York: Joseph Rowntree Foundation.

Brewer, M., Muriel, A., Phillips, D. and Sibieta, L. (2008), *Poverty and inequality in the UK: 2008*, London: IFS Commentary 105.

Brewer, M., Goodman, A. and Leicester, A. (2006), *Household spending in Britain:* What can it teach us about poverty? Bristol: The Policy Press.

Department for Work and Pensions (2002), *Measuring Child Poverty: A Consultation Document*, London: DWP.

Department for Work and Pensions (2003), *Measuring Child Poverty Consultation:* Final Conclusions, London: DWP.

Dominy, N. and Kempson, E. (2006), *Understanding older people's experiences of poverty and material deprivation,* Department for Work and Pensions Research Report No 363, Corporate Document Services.

Finch, H. and Elam, G. (1995), *Managing Money In Later Life: Qualitative Research among Retirement Pensioners*, London: DSS Research Report 38.

Finch, N. and Kemp, P. (2006), Which pensioners don't spend their income and why? Department for Work and Pensions Research Report No 334, Corporate Document Services.

Halleröd, B. (1994), *A new approach to the direct consensual measurement of poverty,* Social Policy Research Centre Discussion Paper No. 50.

Gordon, D., Adelman, L., Ashworth, K., Bradshaw, J., Levitas, R., Middleton, S., Pantazis, C., Patsios, D., Payne, S., Townsend, P. and Williams, J. (2000a), *Poverty and Social Exclusion in Britain*, Joseph Rowntree Foundation.

Gordon, D., Pantazis, C. and Townsend, P. (2000b), *Changing Necessities of Life* 1983-1999, Bristol PSE Working Paper No 3.

Hillyard, P., Kelly, G., McLaughlin, E., Patsios, D. and Tomlinson, M. (2003), *Bare necessities: Poverty and Social Exclusion in Northern Ireland: key findings,* Belfast: Democratic Dialogue.

Legard, R., Gray, M. and Blake, M. (2008), Cognitive testing: older people and the FRS material deprivation questions, DWP Research Report.

Mack, J. and Lansley, S. (1985), Poor Britain, London: Allen and Unwin.

Mayer, S. and Jencks, C. (1989), *Poverty and the distribution of material hardship*. The Journal of Human Resources, 24(1), 88-113.

McKay, S. (2004), 'Poverty or preference: What do 'consensual deprivation indicators' really measure?' Fiscal Studies, June, vol. 25 (2) pp. 201-223, London: Institute for Fiscal Studies.

McKay, S. and Collard, S. (2004), *Developing deprivation questions for the Family Resources Survey*, London: DWP Working Paper 13.

Pantazis, C., Gordon, D. and Levitas, R. (editors) (2006), Poverty and Social Exclusion in Britain: the millennium survey Bristol: The Policy Press.

Social Exclusion Unit (2006), A Sure Start to Later Life: Ending Inequalities for Older People, London: ODPM (Final Report).

Tourangeau, R. (1984), 'Cognitive sciences and survey methods', pp. 73-100 in Jabine, T., Straf, M., Tanur, J. and Tourangeau, R. (eds), Cognitive Aspects of Survey Methodology: Building a Bridge Between Disciplines Washington, DC: National Academy Press.

Whelan, C. and Maître (2007), 'Levels and patterns of material deprivation in Ireland: After the 'Celtic Tiger", European Sociological Review Vol 23 no 2 pp 139-154.

Willis, G. (2005), Cognitive Interviewing, Thousand Oaks, CA: Sage Publications;.

Willitts, M. (2006), Measuring child poverty using material deprivation: possible approaches, London: DWP Working Paper No. 28.