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BARNETT PAPERS IN SOCIAL RESEARCH

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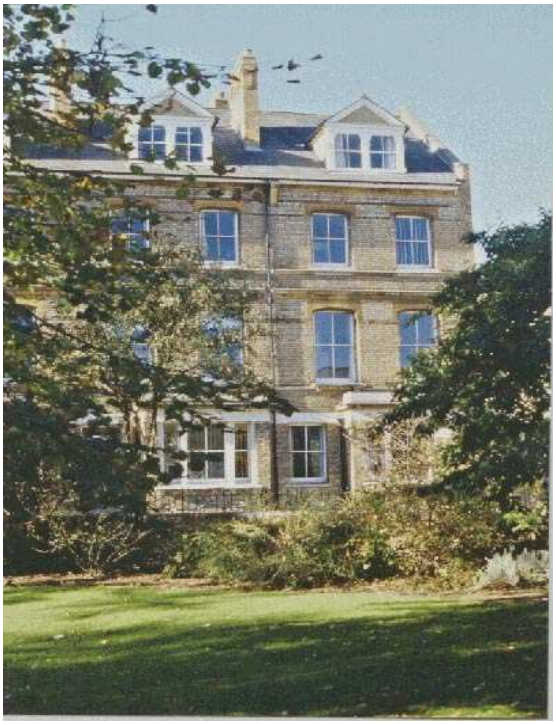
The relationship between poverty and child-hood well-being in Great Britain

3/2008



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Abstract:

Complementing evidence that childhood poverty negatively affects adult outcomes, the impact of poverty on well-being in late childhood is investigated empirically to help inform the targeting of policy. Child well-being and household poverty are conceptualised as multi-dimensional phenomena and structural equation modelling used to ascertain the relative importance of determinants of child well-being. Aspects of child well-being are differentially affected by different dimensions of poverty and mediated by household composition and the education and employment status of the household head. Reducing financial stress and improving housing and environmental degradation might have a significant positive impact on child well-being.

1. Introduction

Anti-poverty policy in Britain, the United States and much of Europe is increasingly focussed on child poverty (EU, 2008; HMT, 2008; CEO, 2006). Among the many reasons for this shift in emphasis is evidence of the scarring effects of child poverty on adult outcomes, undermining the equality of opportunity that is meant to underpin social justice, as proposed by the influential US philosopher John Rawls (1971). However, there is growing concern in some quarters that the future orientated emphasis on children becoming adults neglects the importance of child well-being in the here and now (Sutton, 2007; Ridge, 2002). One consequence may be to misdirect policy, prioritising instrumental measures while failing directly to enhance the quality of childhood. This may curtail the chances of a child in a low income household enjoying a 'good' childhood, an undesirable outcome in itself, but one that could also inhibit the development of personal resilience needed to break the link between child poverty and poor adult outcomes (Aber, 2007).

In Britain, the re-focussing of policy can be precisely dated to 18th March 1999 when the then Prime Minister, Tony Blair, delivered the annual Beveridge Lecture and announced the goal to 'end child poverty' within 'a generation' (Blair, 1999). This important commitment was a late addition to a lecture on social justice in which Blair reasserted his meritocratic, Rawlsian view of justice defined as equality of opportunity rather than equality of outcome (Buckler and Dolowitz, 2000). The lecture was future orientated, borrowing the sound-bite from Gordon Brown, who succeeded Blair as Prime Minister, that, while children comprised 20 per cent of the population, they were '100 per cent of the future'. Consistent with Blair's conception of social justice as 'a community where everyone has the chance to succeed', he committed the government to breaking 'the cycle of deprivation so that children born into poverty are not condemned to social exclusion and deprivation' (Blair, 1999, pps. 8, 16). The speech was followed by a blizzard of anti-child poverty policies and commitments and the publication of an annual document against which performance was to be assessed (Hills and Stewart, 2005; DWP, 2007a). Despite lukewarm public support for the policy, political commitment to the anti child-poverty agenda has proved long-

lived and has also been endorsed by leaders of the political opposition (Cameron, 2008; Park et al., 2007; Letwin, 2006).

Much of the academic literature relating to child poverty in the UK has focussed on two issues: first the identification of households where risk is greatest and second, the so-called 'scarring' of children and the transmission of disadvantage into adulthood. With respect to the former, the risk factors are now well established (Lloyd, 2006; Bradshaw, 2006a; Platt, 2007; Iavacou and Berthoud, 2006). Not surprisingly, poor children are more likely to be found in low income households, despite the well documented efforts of parents to protect their children from the consequences of financial hardship (Middleton et al., 1997). They are also at increased risk of poverty when living in:

- Workless households
- Households receiving benefits
- Those in rented accommodation
- Lone parent families
- Families with younger children are more likely to be poor
- Large families
- Ethnic minority households

Poverty is also increasingly being conceptualised as multi-dimensional with income poverty differentiated from, for example, material deprivation, degraded neighbourhood environments, psycho-social strain and social isolation (Baulch, Calandrino, 2003; Whelan and Maitre, 2007; Tomlinson et al., 2008) . However, from both a research and policy perspective, the crucial issue is no longer that of identifying which children are most at risk, but rather mapping the pathways through which household poverty in all its manifestations affects children and their well-being.

With respect to the second set of literature on scarring and transmission, the impact of poverty on a child's future life-chances has been extensively researched and summarised (HMT, 2008; LCPC, 2008, CDF, 2007; Such and Walker, 2003). Moreover, early analyses caught the attention of Gordon Brown in late 1998 and may have influenced the content of Blair's Beveridge Lecture (Lee and Hills, 1998). Hobcraft (2004) has exploited two birth cohort studies, the British Cohort Study and National

Child Development Study, to demonstrate that childhood poverty was closely associated with 33 of 37 negative adult outcomes, while Stewart (2005) has documented evidence that child poverty leads in later life to low self-esteem, low expectations, reduced educational attainment, benefit dependency and poor labour market outcomes. Using similar cohort data, Blanden and Gibbons (2006), Blanden and Gregg (2004) and Gregg and Machin (2000) have isolated the negative effects of low income on educational attainment, while problems associated with longstanding illnesses, obesity and higher risk of accidents associated with childhood poverty also persist into adulthood (DCSF, 2007; Dowling et al., 2004). Focusing on youth poverty (youth being defined as being aged 16-25), Fahmy (2006) has documented 'hazardous transitions' into adulthood linked to poverty including a high propensity not to be not in employment, education or training (NEET), a reduced level of citizenship and civic participation and a higher risk of homelessness

While this work is convincing there is comparatively much less literature relating child poverty in the here and now and its immediate impact on the life of the child (HMT, 2008). Studies suggest a complex relationship between economic hardship and child well-being and that the latter may mediate the effect of poverty on adult outcomes. Some British evidence points to children feeling embarrassed and socially excluded, seeing inequality as inevitable and education futile (Attree, 2006; O'Neill, 2006) although other work shows children being variously oblivious to their poverty, accepting of it or pestering hard for extra resources and opportunities (Fortier, 2006; Middleton et al., 1997). At one extreme, children find themselves protected by parents and other family relationships whereas, at the other, poverty may lie at the root of abusive or ineffectual parenting (Bartlett, 2007; Barth et al., 2006; Katz et al., 2007). Similarly, school may provide a refuge and a potential means of economic escape or serve to trap low income children in a state of under-performance (Horgan, 2007; Ansalone, 2001).

There is, though, a growing interest in the current well-being of children and its measurement (Pollard and Lee, 2002), with two special issues of *Social Indicators Research* (SIR, 2007a, 2007b) recently having been devoted to the topic. However, there is some confusion about the relationship between child well-being and poverty

and deprivation. While Bradshaw et al. (2007) suggest that 'child well-being and deprivation represent different sides of the same coin', there is evidence that, though conceptually well-being is related to childhood poverty, empirically it differs (Land et al., 2006; Bradshaw and Mayhew, 2005) for reasons that are not well-understood, but which probably include protective behaviour by parents (e.g., Flouri, 2004) and individual resilience (Masten, 2001).

Given this confusion and the importance of focussing on children's current well-being, this article employs structural equation modelling to create a multidimensional picture of child well-being and to test hypotheses about the ways in which this might be affected by household poverty. Using data from the British Household Panel Study – a study that collects data directly annually from older children and their parents living in the same households - models are estimated that measure different dimensions of child well-being and relate these to different aspects of household poverty. The models are then used to estimate the impact on child well-being of alleviating various dimensions of poverty so as to identify the relative effectiveness of potential anti-poverty targeting strategies.

2. The measurement of poverty and child well-being

Both household poverty and child well-being are measured as multidimensional concepts using structural equation models (SEMs). Like the more traditional method of factor analysis, a SEM reduces a large number of observed variables to a smaller number of factors. However, in a SEM the variables are conceptualised as observed manifestations of an underlying or 'latent' dimension. Each observed variable in a SEM also has an error term associated with it, allowing measurement error to be isolated and controlled for in a way that is impossible with factor analysis. But, most importantly, a SEM requires a strong theoretical justification before the model is specified. That is the researcher decides which variables are to be associated with which latent unobserved factors in advance.

A variant of SEM, somewhat confusingly called Confirmatory Factor Analysis (CFAs), is used to measure household poverty. A first order CFA merely attempts to measure predefined underlying concepts. The left side of Figure 1 shows a simple CFA which has two latent unobserved variables: L1, material deprivation; and L2, financial strain. L1 is measured by the observed variables V1 to V4 and L2 is measured by variables V5 to V7. The single headed arrows represent coefficients or loadings in the model and are usually shown in a comparable standardised form. The covariance between material deprivation (L1) and financial strain (L2) is represented by the double headed arrow. The associated error terms are shown as the circles labelled e1 to e7. Using statistical techniques such as maximum likelihood estimation and making assumptions about the distributions of the variables and error terms in the model, the coefficients and covariances can be estimated. In all SEMs a variety of fit statistics is available to assess the validity of the models constructed (see Klein, 2005, Byrne, 2001). While it is usually assumed that the observed variables in the model are continuous and that the distribution of the variables is multivariate normal, recent developments mean that it is possible explicitly to model categorical and binary variables as is done in the analysis below. Covariates can also be applied to the overall measurement models to assess differences between groups or to assess the impact of a particular variable on the latent concepts under consideration. Furthermore, scores can be generated for the unobserved latent variables. These scores are analogous to the factor scores obtained using conventional factor analysis.

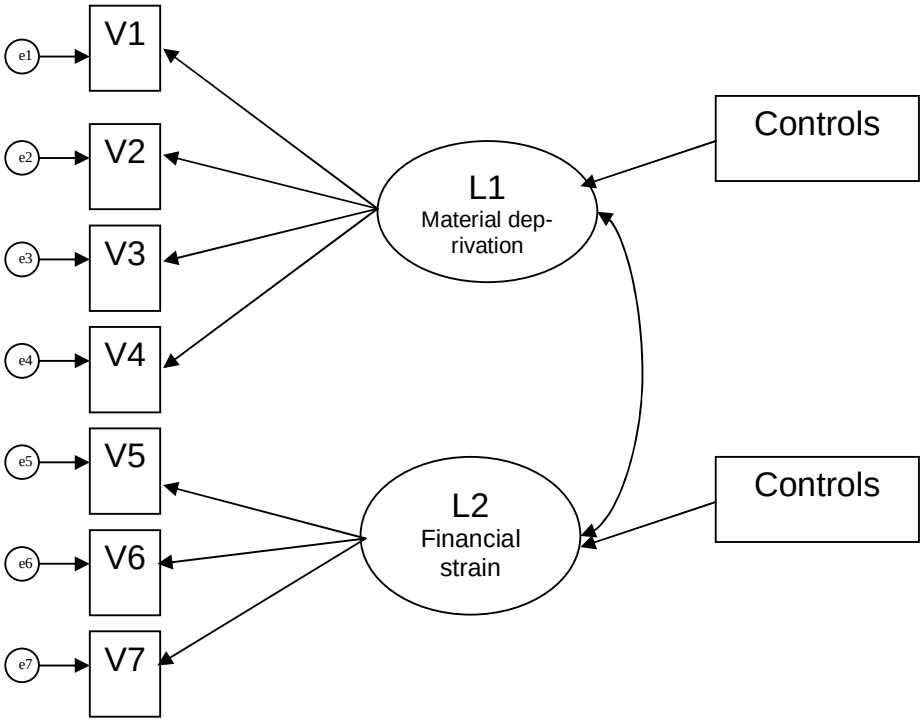

Figure 1 A simple 1st order confirmatory factor analysis (CFA) model with controls

It is possible to extend the first order CFA, and Figure 2 illustrates a second order model in which a further latent unobserved variable, poverty, is added that is theorised to relate simultaneously to both L1 and L2. It will be noted that L1 and L2 now have residuals associated with them (res1 and res2). Models of this kind can be made as complex as necessary to describe real-world situations and, for reasons explained in detail in Tomlinson et al. (2008), the model of household poverty employed below comprises six dimensions: financial strain, material deprivation, the environment, psycho-social strain, civic participation and social isolation. These are combined into an overall index referred to as the Poverty Index (PI).

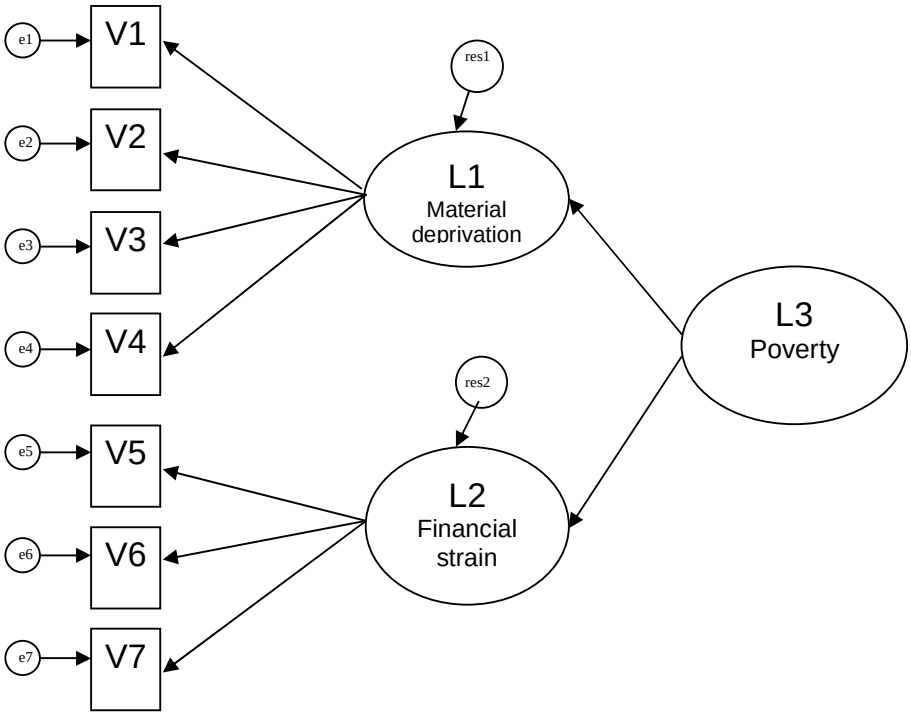

Figure 2 A 2nd order confirmatory factor analysis (CFA) model

Table 1 Dimensions included in the Poverty Index

Financial strain • Based on three items relating to subjective assessment of financial circumstances including missed housing payments Material deprivation • Based on 13 variables relating to possession of material items such as a dishwasher and central heating and whether the household could afford to do certain things Environment • Based on five housing and six neighbourhood characteristics Social isolation • Based on eight social contact and social support variables Civic participation • Based on two indices relating to involvement in and membership of organisations Psycho-social strain • Based on the 12 item General Health Questionnaire entered as a three-part model combining anxiety/depression, social dysfunction, and loss of confidence.
For details see: Tomlinson et al., (2008)

The data used were drawn from the 2001 wave of the British Household Panel Survey for all households with children after excluding the small number headed by a person aged less than 18 or over 64. The BHPS commenced in 1991 with an initial sample of around 10,000 individuals resident in some 5,000 households. These individuals have subsequently been re-interviewed each year and the sample has also been extended to include more households. Information to create the poverty index was based on responses provided by household heads and by the application of statistical weights it is possible to calculate nationally representative estimates of poverty rates (Tomlinson et al., 2008).

Table 2 Measuring child well-being: component variables

1. **Home life** is a measure of the child's relations to their parents:
   - How much children talk to their parents
   - How much control parents exercise over TV
   - How much the family share meals together

2. **Educational orientation** is a measure of how well the child is doing at school:
   - How much the child likes his/her teachers
   - Whether the teachers 'get at me'
   - General feelings about school
   - Whether the child is doing well at school

3. **Low self-worth** is a measure of the child's psychological health:
   - Whether the child feels unhappy
   - Whether the child has lost sleep
   - How useless the child feels
   - How much of a failure the child feels
   - Whether the child feels no good
   - The extent to which the child feels lonely
   - The extent to which the child is left out of activities

4. **Risky behaviour** is an attempt to measure aspects of risk-taking or anti-social behaviour:
   - Whether the child has ever been suspended from school
   - How often the child plays truant
   - How much experience the child has with smoking cigarettes
   - Whether the child vandalises property
   - Whether the child has friends that use illegal drugs (there is no direct question about the respondent's own drug use)

The BHPS collects information on children in the sample households and, importantly, all older children, those aged between 11 and 15, complete a separate ques-

tionnaire (known as the British Youth Panel – BYP) which forms the basis for the measurement models of child well-being. Bradshaw et al. (2007) developed an eight-fold classification of child well-being comprising subjective well-being, education, relationships, civic participation, risk and safety, health, material well-being and housing. Data limitations prevent adoption of all Bradshaw's dimensions but, more importantly, material well-being and housing are taken as aspects of household level poverty rather than direct measures of childhood well-being; and it is the associations between multidimensional poverty and child well-being that is the ultimate focus of this article.

Four dimensions of child well-being were included in the analysis. **Home life** is a measure of a child's relations to their parents and is similar to Bradshaw's 'relationships' dimension. **Educational orientation** is a measure of how well the child is doing at school and again is similar to Bradshaw's education indicator. **Low self-worth** is a measure of the child's psychological health and based in part on Bradshaw's subjective well-being indicator while r**isky behaviour** is an attempt to measure aspects of risk-taking or anti-social behaviour and is analogous to Bradshaw's concept of 'risk and safety'. Table 1 lists the component variables.

Adopting the same approach as to the multi-dimensional measure of poverty, a first order CFA of child well-being was constructed using the variables listed in Table 2 (see Figure 3). All the variables were measured as ordinal scales except the variable relating to suspension from school which was binary. Some of the scales were re-coded to reduce the number of categories where very small cell sizes were a problem for the analysis. Apart from the basic CFA model with four dimensions, further models were developed with covariates included (so called MIMIC models) for gender, age of the child and the overall Poverty Index of the head of household. The model estimation was undertaken using MPlus 4 software with the observed variables being treated as ordinal rather than continuous where appropriate.

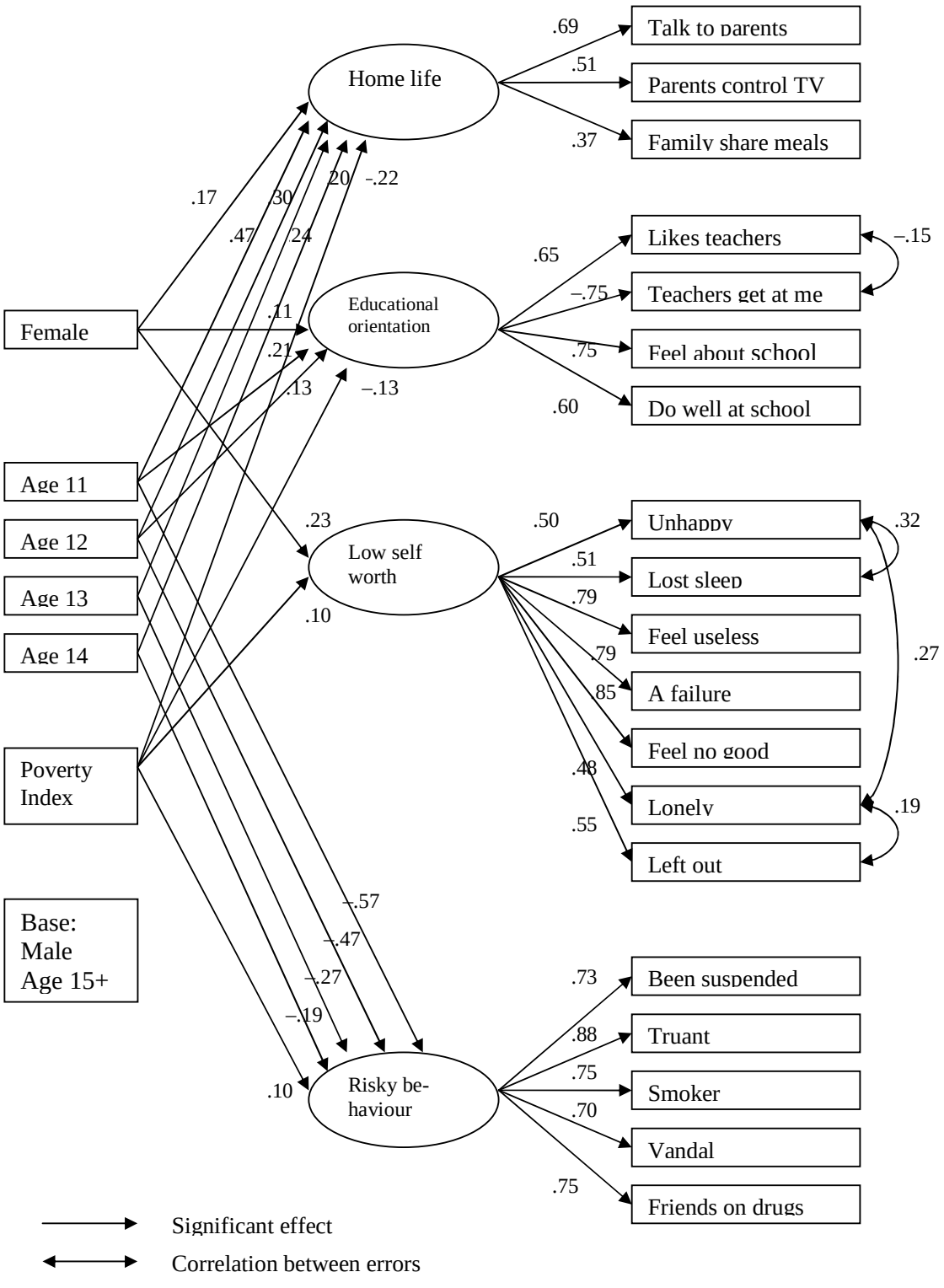

Figure 3 A basic MIMIC model of child well-being (wave 11) with covarates

Arrows show standardised significant coefficients (at 1% level)

3. Results and discussion

The CFA models produce a good fit to the data (see Table 3) and the coefficients on the observed variables are all in the expected direction and all statistically significant at the one per cent level. Some error terms were allowed to co-vary as illustrated in the figure based on very high modification indices observed in the initial modelling. Examining the latent constructs themselves and the correlations between them reveals the relationships between the various dimensions of well-being. That is educational orientation is strongly associated with home life and negatively associated with low self-worth and risky behaviour. Risky behaviour is also positively associated with low self-worth. (Table 2).

Table 3 Fit statistics and correlations for the basic model

Fit statistics:
(N=1201)

	Without controls	With controls
Chi-square	426.959 (79 d.f.)	639.104 (130 d.f.)
CFI	0.937	0.902
TLI	0.955	0.921
RMSEA	0.057	0.057

Correlations between latent variables in controlled model (all significant at 1%):

	Home life	Educational orientation	Low self-worth
Educational orientation	+.54		
Low self-worth	-.18	-.36	
Risky be-haviour	–.63	-.54	+.22

The covariates associated with well-being are also salient (Figure 3). Consistent with previous literature, girls have lower self-worth than boys, but have a better educa-

tional orientation and involvement in home life (Emler, 2001; DES, 2007). Similarly reflecting other studies, there is no significant difference between girls and boys with respect to risky behaviour (Beinart et al., 2002; though McAra [2005, p.2] reports that 'girls offend less as they perceive themselves to be under greater constraint from conventional regulatory mechanisms'). The age controls show that attachment to home life diminishes with age while risky behaviour increases. As expected (Marks et al., 2004), children of 11 and 12 also have stronger educational orientation than their older peers. However, the most striking result is that poverty has a highly significant and detrimental effect on all four dimensions of child well-being contributing to low self-worth and risky behaviour while detracting from educational orientation and engagement in home life. Poverty is therefore shown to have a serious debilitating effect on child well-being in the here and now. The relative impact of poverty on each dimension of well-being is also evident. The strongest negative effect appears to be on home life (–0.22) followed by that on educational orientation (–0.13). The impact on low self-worth and risky behaviour is less marked (both at 0.10), but still highly significant.

As already explained, poverty is most appropriately modelled as a multi-dimensional concept and, since the Poverty Index is a weighted summation of six sub-indices, it is possible to establish which particular dimensions have the largest impact on child well-being. The model summarised in Figure 3 can be further elaborated by adding in individual pathways for each dimension of household poverty. It is also possible to estimate separate models by substituting each sub-dimension of poverty for the overall Poverty Index. . The sizes and significance of the coefficients relating to the various sub-dimensions of poverty allow assessment of their relative impact on children's well-being.

The results are summarised in Table 4 in which only statistically significant effects are reported. Model A shows the effect of including all the sub-indices of poverty simultaneously. This provides an indication of the impact of each sub-dimension of poverty holding all other sub-dimensions constant. It can be seen that there are few significant effects if this approach is taken. However, if this restriction of strict independence is relaxed and each sub-dimension is separately entered (Models B-G), it

becomes possible to identify which dimensions of household poverty have the most significant impact on which aspects of child well-being.

Table 4 Standardised coefficients for various models predicting child well-being after controlling for age and gender (only significant coefficients shown)

	Model						
Home life	A	B	C	D	E	F	G
Financial strain	ns	-0.159	-	-	-	-	-
Material deprivation	-0.099	-	-0.193	-	-	-	-
Environment	ns	-	-	-0.122	-	-	-
Psychosocial strain	ns	-	-	-	-0.114	-	-
Civic participation	0.124	-	-	-	-	0.176	-
Social isolation	ns	-	-	-	-	-	ns
Educational orientation							
Financial strain	-0.090	-0.121	-	-	-	-	-
Material deprivation	ns	-	ns	-	-	-	-
Environment	ns	-	-	ns	-	-	-
Psychosocial strain	ns	-	-	-	ns	-	-
Civic participation	0.147	-	-	-	-	0.162	-
Social isolation	ns	-	-	-	-	-	ns
Low self-worth							
Financial strain	ns	0.090	-	-	-	-	-
Material deprivation	ns	-	ns	-	-	-	-
Environment	0.075	-	-	0.082	-	-	-
Psychosocial strain	ns	-	-	-	0.082	-	-
Civic participation	ns	-	-	-	-	ns	-
Social isolation	ns	-	-	-	-	-	ns
Risky behaviour							
Financial strain	ns	0.081	-	-	-	-	-
Material deprivation	ns	-	0.091	-	-	-	-
Environment	ns	-	-	0.065	-	-	-
Psychosocial strain	ns	-	-	-	0.067	-	-
Civic participation	ns	-	-	-	-	-0.091	-
Social isolation	ns	-	-	-	-	-	ns

ns not significant
- variable not in model

Models B-G reveal that different components of household poverty have different effects on the various aspects of child well-being raising the possibility – further discussed below - that different policy instruments might be required to fulfil different policy priorities. For example, while financial strain affects all the four dimensions of child well-being, material deprivation is associated with just two, increasing risky behaviour and negatively affecting home life. A poor environment, relating both to bad housing conditions and a deprived neighbourhood, is, in turn, associated with reduced quality of home life, low self-worth and risky behaviour. However, the social isolation of the head of household, sometimes interpreted as a measure of social capital, has no bearing on any of the four indicators of child well-being.

The associations reported in Table 4 are best viewed as average effects and there is, of course, considerable evidence that the worst effects of poverty on children can, on occasion, be avoided, not least through the actions of parents. Aber and his colleagues, working in the United States, have convincingly demonstrated that the long-term impact of poverty and material hardship on children's cognitive and emotional outcomes are mediated by parental characteristics (e.g., Gershoff et al, 2007). Likewise, McCulloch and Joshi (2001) found, using the British National Child Development Survey, that family environment and family support can offset the negative effects of poverty and living in disadvantaged neighbourhoods on children's test scores at school, while Blanden (2006) has shown that parental interest has a positive impact on adult educational outcomes.

Several alternative models were estimated to take account of such mediating influences insofar as the available data allowed by including appropriate variables as additional controls (Table 5). The effect of household composition was tested by including a variable indicating whether the household was headed by a single adult (compared to other types of household) and variables representing the number of children in different age categories. The results show that the children in single adult households are less likely than others to eat or talk with their parent or to have their access to television monitored, variables that index the home life latent variable, and they are more likely to engage in risky behaviour, but not to differ in terms of educational ori-

entation or sense of self-worth. In certain respects, therefore, the well-being of children in one parent households may be compromised possibly because the total volume of care available is less. Certainly, the same mediating influence was apparent even when a control for income was included in this model in an attempt to separate out the impact of low income from lone parenthood on child well-being. The presence of other children or siblings appears to have no effect on children's well-being.

Table 5 Effects of various controls on the basic well-being model with various controls in addition to age and gender of the child (wave 11). Significance level is 1%. Standardised coefficients shown.

	Household composition	Education of head	Employment status head	Household Income
Significant impact on:				
Home life	–0.11 (Single adult household)	+0.23 (Higher education)	–0.11 (Unemployed) –0.11 (Non-employed)	+0.16
Educational orientation	n.s.	+0.15 (Higher education)	–0.10 (Non-employed)	+0.11
Low self worth	n.s.	n.s.	+0.07* (Non-employed)	n.s.
Risky behaviour	+0.09 (Single adult household)	n.s.	+0.08 (Unemployed) +0.09 (Non-employed)	–0.09*
Fit:				
CFI	.913	.904	.912	.908
TLI	.929	.923	.930	.927
RMSEA	.049	.052	.051	.055

n.s.: Not significant *=significant at 5%

The influence of differences in the employment status of the household head was modelled using variables for self-employment, unemployment and non-employed status (i.e. not working and not actively looking for a job). Self-employment has no effect but whereas children living with an unemployed head of household are prone to engage in risky behaviour and to suffer a poor home life, those in households headed by someone who is not economically active (which would include non-employed disabled people) are disadvantaged on all four dimensions of well being. This difference

may reflect the impact of long-term poverty on children since this is more likely to occur among households headed by a person who is economically inactive since unemployment is more typically intermittent and interspersed with periods of relatively greater prosperity. Consistent with the literature, children of more educated parents have a competitive advantage over other children in terms of educational orientation and quality of home life, but this effect is only apparent among households where the head has received higher education.

When income is included in the models (as the logarithm of equivalised household income) it behaves in a similar way to the Poverty Index, but the negative relationship with children's sense of self worth is not statistically significant. This suggests that the impact of poverty on a child's mental state is greater than the effect of income alone. Combined with the findings that the various sub-dimensions of poverty have different consequences for the four dimensions of child well-being considered, this confirms the importance of not relying on cash benefits alone to tackle the problem of child poverty. Moreover, the analysis raises the possibility that anti-poverty policies might be targeted to maximise their effect on child well-being.

4. Potential policy implications of the model

In Britain, the government's determined assault on poverty has employed a wide range of policy instruments. These have included a strong emphasis on help for families, and single parents in particular (DWP 2007b), through the tax credit and benefit system and a range of measures to break the intergenerational inheritance of poverty ranging from investment in health and schools, to the provision of early years education, investment in deprived communities and parenting support (HMT, 2008). However, the central thrust of policy has been to encourage workless parents into employment while paying somewhat less attention to other aspects of a child's environment. But, while child poverty has fallen, improvements have stubbornly been below target and specific policies, such as the New Deal for Lone Parents designed to encourage lone parents to take up employment, have sometimes failed to provide the secure, well-paid employment necessary to lift families out of poverty (Yeo, 2007).

Moreover, the indicators the government has chosen to use (income and deprivation) to target policy and to measure its effectiveness have proved problematic. Income measures show wide fluctuations over time within households while low income does not always correlate very well with deprivation (which can also be defined in a number of different ways). While the multifaceted nature of poverty has been acknowledged, its cumulative character has hardly registered because of the use of a multiplicity of separate indicators.

In a context in which governments seek new policy instruments in order to renew their commitment to reduce or eradicate child poverty, the forgoing analysis points to the possibility that policies could in principle be targeted on different aspects of household poverty to the benefit of the current generation of children. For example, the modelling suggests that improving the environment of children – both within and outside the household – may well have a greater overall impact on well-being than improving material deprivation. Equally, if the goal is to enhance educational performance then alleviating financial strain and encouraging civic participation of parents may be important strategies since these appear to mediate the effects of poverty on child well-being. One the other hand, the social isolation of the head of household, often taken as a measure of social capital, seems to have little bearing on any of the four indicators of child well-being.

The SEM methodology presented above can be exploited to explore the likely impact on child well-being of policy options that succeed in tackling the various dimensions of household poverty. However, it is difficult to disentangle the different impacts simply by observing the coefficients and correlations shown in Figure 3 and Table 4. Nevertheless, by using scores on the well-being dimensions generated for the child sample and models estimated using continuous variables, it is possible to assess the impact of changing various dimensions on the outcomes. Tables 6 and 7 report the predicted consequences for child well-being of changing household scores on the different components of the dimensions in the following manner:

- Moving from a completely materially deprived to a fully equipped household

- Moving from a relatively frequent level of deprivation to no deprivation (frequent deprivation refers to a household that does not have the following: a PC, dish-washer, dryer, car, cable/satellite TV; plus cannot afford holidays once a year, to replace worn furniture or to feed visitors once per month)
- Moving from the most intense financial hardship to none
- Moving from the worst housing to no housing problems
- Moving from the worst kind of neighbourhood to one which has no problems
- Finally a combined effect of improved housing and neighbourhood change (that is our total environmental dimension).

Table 6 Impact of various household changes on child well-being Numbers refer to changes in the % of a standard deviation

Dimension of well-being	Full deprivation to no deprivation	Common deprivation to no deprivation	Intense financial pressure to no financial pressure	Bad housing to best housing	Bad neighbourhood to best neighbourhood	Total environmental effect
Home life	+26%	+3%	+62%	+23%	+18%	+41%
Educational orientation	+15%	+8%	+39%	+15%	+11%	+26%
Low self-worth	–9%	–1%	–24%	–9%	–6%	–15%
Risky behaviour	–8%	–1%	–25%	–8%	–8%	–17%

Table 7 Impact of household income changes on child well-being after controlling for gender and age. Numbers refer to changes in the % of a standard deviation

Dimension	50% median to median income	60% median to median income	70% median to median income	80% median to median income	90% median to median income
Home life	+21%	+16%	+11%	+8%	+3%
Educational orientation	+15%	+11%	+9%	+4%	+2%
Low self-worth	–9%	–3%	–3%	0%	0%
Risky behaviour	–8%	–8%	–4%	–4%	0%

Changes in each dimension of child well-being are expressed in terms of percentages of a standard deviation in order to ensure comparability with a shift of one standard deviation arbitrarily defined to mark a significant improvement. As the original scores are not standardised and the means are not comparable (and moreover can be positive or negative), the standard deviation is the simplest way to facilitate easy comparison.

Table 6 reveals that that the quality of a child's home life is the aspect of well-being that is most sensitive to changes in poverty with the percentage improvements in home life all being quite high irrespective of which dimension of poverty is altered. Nevertheless, as Table 6 shows, small changes in material deprivation bring about only small improvements in home life although they have a larger impact on educational orientation.

Combining the effects of improved housing and neighbourhood has a marked impact on all four dimensions of well-being, increasing the quality of home life by 41 per cent of a standard deviation and educational attachment by 26 per cent, while reducing risky behaviour and low self esteem by 17 per cent and 15 per cent of a standard deviation respectively. However, these effects are exceeded by the mechanism of alleviating financial pressure with, for example, the quality of home life improving by 62 per cent of a standard deviation and risky behaviour falling by 25 per cent of a standard deviation if financial pressure is abolished. However, it is important to recognise that alleviating financial pressure is not simply a matter of increasing income. When income changes alone are factored into the comparison, other changes being ignored (Table 7), the impact is much reduced; even lifting households with half median incomes up to the median is only associated with a 21 per cent standard deviation increase in the quality of a child's home life and an 8 per cent standard deviation reduction in risky behaviour. The logic, therefore, is that tackling poverty in the round is necessary to maximise the benefits for children and that addressing income poverty alone is an inadequate response to the social problem represented by poverty.

Finally, we can use a similar methodology to investigate the impact of changing employment status and household composition on child well-being: two matters of par-

ticular relevance to the current debates on child poverty (Table 8) The modelling indicates that changing the status of a household head from [full or part-time] employment to unemployment has substantial negative effects on a child's home life, risky behaviour and educational orientation, effects which, in the symmetrical world of cross-sectional modelling, could be reversed by policies that successfully help unemployed people enter work. The implication, therefore, is that successful work activation programmes targeted on unemployed persons could also have beneficial effects for the children of those who successfully secure employment.

However, the differential effects of changing status from employment to unemployment or to non employment, also reported in Table 8, suggest that the current UK policy of extending the coverage of such schemes to the economically inactive, including lone parents and disabled people, could have a noticeably more limited positive effect. Certainly the impact of the difference between employment and non-employment on home life and engagement in risky behaviour is much less than that associated with the difference between employment and unemployment. On the other hand, policies targeted on the economically inactive might, if successful, additionally contribute to a child's sense of worth, something that the modelling predicts is unlikely to happen when an unemployed person gets a job. This, in turn, could suggest that young people see job-search as a manifestation of an adult's positive work ethic (and not just employment) and gain emotional sustenance from it..

Table 8 Impact of moving from various household states on child well-being after controlling for gender and age

	Loss of an adult from the household	Becoming a single parent household	Household head moves from employed to unemployed	Household head moves from employed to non-employed
Home life	-1%	-35%	-62%	-34%
Educational orientation	+6%	-11%	-38%	-31%
Low self-worth	-2%	+12%	-1%	+19%
Risky behaviour	+3%	+23%	+38%	+23%

The modelling indicates that a reduction in the number of adults in a household has little effect on child well-being, but that the difference between a multiple adult and a single parent household is marked. The largest detrimental effect associated with a child living with a lone parent is on home life (reducing it by 35% of a standard deviation) but there are also associated increases in risky behaviour and, to a lesser extent, increases in low self worth and decreases in educational orientation in single parent households. This finding reflects the earlier observation that household structure is important in mediating the impact of the various dimensions of poverty on child well-being. It is also chimes well the policy attention being given by the British Conservative opposition to ways of supporting the traditional two parent nuclear family. Whether it would prove possible to reverse the demographic momentum towards co-habitation and lone parenthood is a moot point although there is little evidence that the sustained attempts to do so in the United States have proved very effective (Birch et al., 2004; Trenholm et al., 2007). Thought may need to be given to policies that could counteract the apparent negative consequences of growing up in a one-parent family but our analysis suggests that the answer is unlikely to lie in increased income alone.

5. Conclusions

While not wishing to ignore the importance of research which demonstrates that poverty can scar children for life, attention has been drawn to the complementary need to focus on the effects of poverty on children in the here and now. The analysis shows that, other things being equal, children who are poor are more likely than others to report having a difficult home life, to have negative attitudes towards school, to feel isolated and anxious and to engage in anti-social and risky behaviour. Perhaps even more importantly, the research demonstrates that household poverty comprises different dimensions and that each has different effects on the four aspects of child well-being that have been captured with the data available.

For example, it seems clear that where adults are not succeeding well in making ends meet, this has significant effects on all aspects of a child's well-being. Moreover, the associated psycho-social problems that many adults experience when poor independently impact on a child's mental well-being, their chance of engaging in risky behaviour and, perhaps not surprisingly, on their reports of the quality of their home life. Likewise, poor housing and unsatisfactory local environments exert their toll. It is clearly important, therefore, to recognise that poverty adds significantly to pressures in children's lives and directly diminishes the experience of childhood.

The policy logic that follows from the analysis is the requirement for a well-rounded policy strategy that would attempt to counteract the processes by which poverty affects child well-being. There is support in the analysis for certain of the current policy emphases. It suggests, for example, that children may suffer less from poverty if their parents are in work. Equally, though, it is clear that children in households where financial stress is apparent suffer badly and other evidence demonstrates that employment does not always lift families clear of financial poverty. Extra help for lone parents should also be prioritised irrespective of whether the parent is in employment or not.

However, the implication of the analysis is that existing policies to raise incomes and promote employment need to be accompanied by a range of new policies. While it is true that children benefit directly from parents being employed, the improvement is more marked between unemployment and employment than between non-employment, indexing among other circumstances lone parenthood and disability. Moreover, the analysis suggests that implementing a more comprehensive and coherent neighbourhood regeneration policy could improve the lot of children across the board enhancing home life, improving educational orientation and reducing feelings of low self-worth and engaging in risky behaviour. Furthermore, if such a policy were able to incorporate significant elements of local participation this might be doubly effective since the analysis found that, other things held constant, civic participation by parents had a surprisingly high impact on child well-being. The analysis also points to the need to explore ways in which the psycho-social strain of adults in poor

households can be alleviated – as this impacts negatively on the mental well-being of the children as well as undermining home life.

Of course, no research is definitive and we plan more fully to exploit the longitudinal potential of the BHPS by observing the consequences of actual changes in family circumstances and transitions on the well-being of children expressed within a multi-dimensional framework. Nevertheless, it is to be hoped that research such as that presented which focuses on the immediate effects of poverty will further enthuse governments to continue to pursue the goal of eradicating child poverty. The clear message is that the social gains from this strategy do not all lie in the future; rather the immediate benefit is that, in Britain, 3.8 million children could potentially enjoy a childhood freed from the familial stress, academic failure, anxiety and social isolation that so often accompanies poverty.

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