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Poverty transitions among families supporting a child with intellectual disability*

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Abstract

Background Little is known about child disability and dynamic aspects of poverty.

Method Analysis of data collected over a 12-month period for families (a) supporting a child with intellectual disability ($n = 370$), (b) supporting a child with other disability ($n = 1,418$), and (c) supporting a child with no disability ($n = 7,215$).

Results When compared to families not supporting a child with disability, families supporting a child with intellectual disability were (a) more likely to be poor, (b) more likely to become poor, (c) less likely to escape from being poor. Half of poverty transitions were associated with identifiable potential trigger events.

Conclusions There were few differences between families supporting or not supporting a child with disability with regard to either levels of exposure to potential trigger events or to the strength of the association between exposure and poverty transitions.

Keywords: *poverty, hardship, children, families*

Introduction

Exposure during childhood to poverty, and associated social and material hardship, has detrimental effects on multiple aspects of children's development and on the life opportunities, health and well-being, and life expectancy of these children in their adult years (Bradshaw, 2001; Brooks-Gunn & Duncan, 1997; Clark, Caldwell, Power, & Stansfield, 2010; Duncan & Brooks-Gunn, 2000; Galobardes, Lynch, & Davey Smith, 2008; Grantham-McGregor et al., 2007; Hertzman & Boyce, 2010; McLaughlin et al., 2010; Shonkoff, Boyce, & McEwen, 2009; The Marmot Review, 2010; World Health Organization, 2008). Increased risk of exposure to childhood poverty in Anglophone high income countries is associated with a number of factors, including indigenous status in countries more recently colonised (e.g., Australia, New Zealand, United States), membership of some specific minority ethnic groups (e.g., African Americans and Hispanic groups in the United States; Pakistani and Bangladeshi groups in the UK), single parent headed households, households in which no adult is in paid employment, households with more and younger children, and

households containing either an adult or child with disability (Flaherty, Veit-Wilson, & Dornan, 2004; Graham, 2007; Lister, 2004; Seccombe, 2007).

Of particular relevance to the present paper is the extensive evidence that children with disability, including children with intellectual disability, are significantly more likely to grow up in poverty than their typically developing peers (Elwan, 1999; Emerson, 2007, in press; Emerson & Hatton, 2007, 2009; Fujiura & Yamaki, 2000; Gordon, Parker, Loughran, & Heslop, 2000; Groce, 2003; Ingstad & Eide, in press; Parish, Rose, Grinstein-Weiss, Richman, & Andrews, 2008). The association between poverty and child disability is of particular concern as it indicates that children with disability are significantly more likely to live under conditions that have been shown to impede development, educational attainment and adjustment, and increase the risk of poor health, additional impairment, and social exclusion (see above). Consequently, the association between poverty and child disability represents a major challenge to social policies that seek to improve the life chances of, and address the disadvantage and discrimination faced by, people with disability (Cabinet Office, 2005; Department

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for Education and Skills, 2003; Her Majesty's Treasury, 2007; United Nations, 2006; U.S. Department of Health and Human Services, 2005).

While socioeconomic gradients in the prevalence of child disability have been repeatedly documented, less is known about the causal processes that underlie these gradients. Existing evidence points to the operation of three potential pathways (Emerson & Hatton, 2009). First, the presence of a child with disability in a family may increase the chances of the family descending into poverty and reduce the chances of them escaping from poverty. This hypothesis is indirectly supported by the results of research that has documented the additional direct and indirect costs associated with raising a child with disability (Dobson, Middleton, & Beardsworth, 2001; Leonard, Brust, & Sapienza, 1992; Tibble, 2005). Indirect costs include the financial impact of reduced rates of maternal employment among families with a child with disability (Loprest & Davidoff, 2004; Parish, Seltzer, Greenburg, & Floyd, 2004; Porterfield, 2002). If these additional costs are not compensated by receipt of welfare benefits, other forms of support (e.g., informal support from the extended family, support from charitable organisations), or reduced costs in other areas of child care, it is plausible to assume that they will have an impact on the incidence and duration of episodes of poverty (Carers UK, 2007; Council for Disabled Children, 2006; Disability Rights Commission, 2006, 2007; Inclusion Europe, 2006; Inclusion International, 2006). However, recent longitudinal research has indicated that any such effects are negligible once the comparisons are made between families supporting a child with disability and families with similar levels of personal and social capital (Shahtahmasebi, Emerson, Berridge, & Lancaster, in press).

In contrast, a parallel body of social epidemiological research has suggested that growing up in poverty is associated with increased exposure to a range of material and psychosocial hazards (e.g., premature birth, low birth weight, exposure to a range of toxins and teratogens, poorer nutrition, poor housing conditions, exposure to less than optimal parenting, poorer educational opportunities, injury and accidents) that may increase the risk for health conditions or impairments associated with disability (Bolte, Tamburlini, & Kohlhuber, 2010; Bradshaw, 2001; Braubach & Fairburn, 2010; Duncan & Brooks-Gunn, 2000; Hertzman & Boyce, 2010; Irwin, Siddiqi, & Hertzman, 2007; Laursen & Nielsen, 2008; McLoyd, 1998; Shonkoff et al., 2009).

Finally, there is the possibility that the association between family poverty and child disability may reflect a process of selection, with unmeasured

“third factors” (e.g., poor parental health, parental intellectual disability) leading independently to an increased risk of both family poverty and child disability (IASSID Special Interest Research Group on Parents and Parenting with Intellectual Disabilities, 2008).

Research relating to the link between child disability and family poverty suffers from major limitations relating to the use of cross-sectional measures of poverty taken at a single point in time. There are good reasons for taking a more dynamic or longitudinal approach to the analysis of poverty (Aber & Ellwood, 2001; Berthoud, Bryan, & Bardasi, 2004; Bradbury, Jenkins, & Micklewright, 2001a; Smith & Middleton, 2007; Walker & Ashworth, 1994). First, evidence suggests that for most people poverty is a relatively transient experience (Bradbury, Jenkins, & Micklewright, 2001c; Jenkins, Rigg, & Devicienti, 2001; Smith & Middleton, 2007), and that the negative outcomes associated with poverty are related more strongly to the persistence of poverty over time rather than the experience of poverty per se (Ackerman, Brown, & Izard, 2004; Adelman, Middleton, & Ashworth, 2003; Benzeval, Dilnot, Judge, & Taylor, 2000; Berthoud et al., 2004; Duncan & Brooks-Gunn, 2000; Duncan, Brooks-Gunn, & Klebanov, 1994; Linver, Brooks-Gunn, & Kohen, 2002; Lynch, Kaplan, & Shema, 1997; McLeod & Shanahan, 1996; McLoyd, 1998; Petterson & Albers, 2001; Smith, Brooks-Gunn, & Klebanov, 1997; Smith & Middleton, 2007). Second, and of particular relevance to the present paper, identifying factors associated with the entry into and/or exit from poverty can significantly add to our understanding of why people are poor and identify key pathways out of poverty. This information is critical to the development of social policies that seek to reduce child poverty, since any such policy must have an impact on either reducing the chances of children entering poverty or improving the chances of children escaping from poverty. The existing evidence suggests that entries to and exits from poverty are, in general, primarily influenced by changes in labour-related income and employment status, and secondarily by changes in household composition (e.g., birth into a poor household, separation and repartnering; Bane & Ellwood, 1986; Bradbury, Jenkins, & Micklewright, 2001b; Duncan et al., 1993; Jenkins et al., 2001; Smith & Middleton, 2007). However, to date, no studies have investigated factors associated with entries to and exits from poverty among families supporting a child with disability.

The aim of the present paper is to identify events that are associated with transitions into and out of

poverty and material hardship among three groups of families: (a) families supporting a child with intellectual disability, (b) families supporting a child with other types of disability, and (c) families supporting a child with no disability. Given the possibility that type of impairment associated with disability may have an impact on family dynamics, we separated out the group of children with intellectual disability (the largest “single impairment” group and the specific focus of the present journal). No other impairment group was of sufficient size to allow for impairment-specific effects to be investigated.

Specifically, we sought to answer four questions:

- (1) What proportion of short-term transitions into and out of poverty is associated with potential trigger events (e.g., entry into or exit from employment)?
- (2) Does this proportion vary across the three types of families investigated?
- (3) What is the strength of the association between the occurrence of specific potential trigger events and short-term poverty transitions?
- (4) Does the strength of the association vary across the three types of families investigated?

Methods

Sample

We undertook secondary analysis of data collected in Waves 3–7 (2001–2005) of the Families and Children Study (FACS; <http://statistics.dwp.gov.uk/asd/asd5/facs/>) (Hoxhallari, Conolly, & Lyon, 2007; Lyon, Mangla, Tait, & Scholes, 2007). Relevant data files and supporting documentation for Waves 3–7 of FACS were obtained from the UK Data Archive (<http://www.data-archive.ac.uk/>). FACS employs an annual refreshed panel of a nationally representative sample of approximately 7,000 British families supporting approximately 12–13,000 dependent children. The initial sample was drawn from Child Benefit records (a universal nonmeans-tested welfare benefit with approximately 98% uptake rate). Sampling procedures for subsequent years were based on the follow-up of existing panel members supplemented by a booster sample of new families to replace families who drop out of the study and in order to ensure sample representativeness. Therefore the sample at each annual wave of data collection contains a combination of families who participated in the previous annual wave of data collection and a minority of families newly recruited into the study.

FACS involves a face-to-face computer assisted personal interview (CAPI) with a primary informant (typically the child’s mother), a 15-minute CAPI with their partner (where available), and in recent years a self-completion questionnaire for children aged 11–15. The data contain a wide array of variables relating to income poverty and other indicators of socioeconomic deprivation (Emerson & Hatton, 2007).

Identifying children with disability

We identified a child as having a disability if the informant replied in the affirmative to either of the following two questions: (a) “Does [name of child] have any long-standing illness or disability? By longstanding I mean anything that has troubled [name of child] over a period of time or that is likely to affect [child’s name] over a period of time?”; (b) “Has [name of child] been identified at school as having a Special Educational Need (SEN)?”. In addition, the informant had to reply in the affirmative to either of the following two questions related to impact: (a) “Do/Does/Will this problem/any of these problems affect [name of child]’s ability to attend school or college regularly?” or (b) “Do/Does/Will this problem/any of these problems cause you to spend more time caring for [name of child] compared with a fully-fit child of similar age?”

This approach identified 10–13% of dependent children as being at risk of disability at any given wave, and 17–23% of families with dependent children as caring for a child with disability. These prevalence estimates are toward the middle of the range of prevalence rates (3–16%) reported in previous UK studies of child disability (Gordon & Heslop, 1998; Gordon et al., 2000).

Within the group of children with disability, we identified a subgroup of children with intellectual disability on the basis that informants indicated that their child’s long-standing illness or disability or Special Educational Need was due to them having “learning disabilities”—the term currently used in the UK to describe intellectual disability—from a predetermined list of possible impairments or health conditions. This approach identified 2–5% of dependent children as having intellectual disability at any given wave, and 4–7% of families with dependent children as caring for a child with intellectual disability. These prevalence estimates are consistent with the results of existing epidemiological research that has included children with mild intellectual disability (Emerson, in press; Leonard & Wen, 2002; Roeleveld, Zielhuis, & Gabreels, 1997).

Indicators of poverty and hardship

We use two indicators related to poverty: income poverty (based on equivalised household income), and hardship (based on access to assets and resources). The two indicators of poverty were moderately intercorrelated ($\tau\text{-}B = 0.30, p < .001$); the strength of this association being very similar for families who were and were not supporting a child with disability.

Income poverty. FACS contains information from which annual equivalised household income (calculated both before and after the deduction of housing costs) can be calculated. Following common practice, we used a relative definition of income poverty: equivalised annual household income before the deduction of housing costs for the year in which the data were collected falling below 60% of the national median for the year in which the data were collected (Shaw et al., 2007).

Hardship. FACS contains information on the number of items/activities that the family currently “would like but cannot afford” out of a list of 34 items that are deemed necessary or customary components of British family life (Pantazis, Gordon, & Levitas, 2006). The 34 items include items related to social activities (e.g., a celebration with presents for friends and family at special occasions like birthdays; a night out once a month), material goods (e.g., toys and sports gear for the children; a car/van; a weatherproof coat for each child), and food (e.g., a cooked main meal every day). We created a hardship score based on the number of items the family reported that “we would like to have this, but cannot afford it at the moment,” with each item being weighted by the proportion of the sample that did have this item. This procedure gave greater weight to being unable to afford items of activities that were more commonly possessed by British families with dependent children.

Approach to analysis

The analyses reported in this paper are a descriptive analysis of short-term longitudinal data. Specifically, we aimed to explore the association between *changes* in household circumstances between two points in time separated by 12 months and changes in poverty status between the same two points in time separated by 12 months. For each wave of data, each family was classified as being in/out of poverty, with poverty transitions being determined from two successive waves (with a one-year interval) when data were

available. In addition, changes in household circumstances (e.g., occupational status) were determined for the same period.

In the first series of analyses we determined the base rates of poverty for each group of families and the probability of experiencing poverty one year later. Simple descriptive bivariate analyses were undertaken to determine (for each group of families) the extent to which transitions into and out of income poverty and hardship were associated with potentially positive and negative changes in family circumstances (potential “trigger events”). These events included (a) changes in household composition (number of dependent children living in the household, separation and partnering), (b) changes in parental health and disability status, (c) changes in employment and occupational status. Finally, we examined the strength of the association between these potential “trigger events” and transitions into and out of poverty and hardship.

Transitions were examined for families for whom two successive years of data were available. In order to control for error due to the effects of differential attrition and to maximise the sample size, data were restricted to one transition per household. For households participating in three or more consecutive waves, the transition between the first two waves of participation was selected (given this was automatically the case for families participating in just two successive waves). Relevant data were available for 9,003 families. Of these, 370 (4.1%) were supporting a child with intellectual disability and 1,418 (15.8%) were supporting a child with other disability. The remaining families ($n = 7,215, 80.1\%$) were supporting a child or children, none of whom were identified as having a disability. The analysis reported in this paper assumes that observations in the first year are independent of those in the second year.

Results

Base rates and transitional probabilities

Initial analyses indicated significant between-group differences in the probability of experiencing income poverty and hardship at Year 1, and (given poverty status at Year 1) experiencing income poverty and hardship at Year 2 (Table 1). Specific subgroup analyses (not presented in Table 1) are discussed in the following section.

When compared to families not supporting a child with disability, families supporting a child with intellectual disability were significantly more likely in Year 1 to be living in income poverty ($OR = 1.87$,

Table 1. Probability of experiencing income poverty and hardship at Year 1 and of transitioning into and out of income poverty and hardship by Year 2

<i>Probability of living in income poverty in Year 1</i>			
Families with child with intellectual disability	<i>n</i> = 334	0.302	$\chi^2 = 65.9(2)$ <i>p</i> < .001
Families with child with other disability	<i>n</i> = 1,250	0.274	
Families with child with no disability	<i>n</i> = 6,342	0.188	
<i>Probability of living in hardship in Year 1</i>			
Families with child with intellectual disability	<i>n</i> = 370	0.524	$\chi^2 = 196.5(2)$ <i>p</i> < .001
Families with child with other disability	<i>n</i> = 1,418	0.479	
Families with child with no disability	<i>n</i> = 7,215	0.313	
<i>Probability of transition into income poverty at Year 2</i>			
Families with child with intellectual disability	<i>n</i> = 229	0.118	$\chi^2 = 23.4(2)$ <i>p</i> < .001
Families with child with other disability	<i>n</i> = 885	0.166	
Families with child with no disability	<i>n</i> = 4,998	0.109	
<i>Probability of transition out of income poverty at Year 2</i>			
Families with child with intellectual disability	<i>n</i> = 99	0.495	$\chi^2 = 8.9(2)$ <i>p</i> < .05
Families with child with other disability	<i>n</i> = 333	0.375	
Families with child with no disability	<i>n</i> = 1,157	0.461	
<i>Probability of transition into hardship at Year 2</i>			
Families with child with intellectual disability	<i>n</i> = 176	0.125	$\chi^2 = 23.8(2)$ <i>p</i> < .001
Families with child with other disability	<i>n</i> = 739	0.134	
Families with child with no disability	<i>n</i> = 4,956	0.082	
<i>Probability of transition out of hardship at Year 2</i>			
Families with child with intellectual disability	<i>n</i> = 194	0.232	$\chi^2 = 6.7(2)$ <i>p</i> < .05
Families with child with other disability	<i>n</i> = 679	0.267	
Families with child with no disability	<i>n</i> = 2,259	0.302	

1.47–2.38, *p* < .001) and hardship (*OR* = 2.42, 1.96–2.98, *p* < .001). When analyses were restricted to the subsample of families not experiencing hardship in Year 1, families supporting a child with intellectual disability were significantly more likely to experience (transition into) hardship (*OR* = 1.60, 1.01–2.52, *p* < .05) at Year 2. When analyses were restricted to the subsample of families experiencing hardship in Year 1, families supporting a child with intellectual disability were significantly less likely to not experience (transition out of) hardship (*OR* = 0.70, 0.49–0.98, *p* < .05) at Year 2. There were no significant differences in the probability of experiencing income poverty at Year 2 between these two groups of families when analyses were stratified on income poverty status in Year 1.

When compared to families not supporting a child with disability, families supporting a child with other disability were significantly more likely in Year 1 to be living in income poverty (*OR* = 1.62, 1.41–1.87, *p* < .001) and hardship (*OR* = 2.02, 1.80–2.26, *p* < .001). When analyses were restricted to the subsample of non-poor families in Year 1, families supporting a child with other disability were significantly more likely to experience income poverty (*OR* = 1.62, 1.33–1.98, *p* < .001) and hardship (*OR* = 1.73, 1.37–2.19, *p* < .001) at Year 2. When analyses were restricted to the subsample of poor families in Year 1, families supporting a child

with other disability were significantly less likely to not experience (transition out of) income poverty (*OR* = 0.70, 0.55–0.90, *p* < .01) by Year 2. The difference in the probability of transition out of hardship between these two groups was not statistically significant.

The association between poverty transitions and potential trigger events

The results of our analyses of the association between potential trigger events and poverty transitions are presented in Tables 2 and 3. Given the marked differences in sample sizes between the three groups of families, it is important when interpreting the data presented in Tables 2 and 3 to consider the magnitude of effect sizes (odds ratios), rather than just *p* values. In the following section we summarise factors that increase the odds of entry/exit by 50% or more for families supporting a child with intellectual disability.

Entry into poverty. Three specific potential trigger events were associated with a marked increase in the odds of a family supporting a child with intellectual disability in entering income poverty: an increase in the number of dependent children in the household (*OR* = 6.19, 1.31–29.32), the main informant developing a disability (*OR* = 3.30, 1.08–10.15), and an increase in the number of adults in the household

Table 2. Rate (% occurrence per annum) of potential negative trigger events among people not experiencing poverty and hardship; strength of association (odds ratio with 95% confidence intervals) between potential trigger events and transition into poverty and hardship

	Families with child (intellectual disability)	Families with child (other disability)	Families with child (no disability)
<i>Income poverty (Number of potential transitions)</i>	<i>n</i> = 233	<i>n</i> = 908	<i>n</i> = 5,148
Any event	43%; 1.83 (0.81–4.11)	49%; 1.97 (1.37–2.83)***	45%; 1.69 (1.41–2.02)***
More dependent children	3%; 6.19 (1.31–29.32)*	5%; 2.43 (1.28–4.60)**	7%; 1.29 (0.94–1.76)
Main informant developing LLSI/D	8%; 3.30 (1.08–10.15)*	8%; 1.55 (0.86–2.79)	6%; 1.24 (0.87–1.77)
Partner developing LLSI/D ^a	10%; n/a	17%; 3.09 (0.80–11.96)	14%; 1.29 (0.55–3.03)
Main informant poorer self-rated health	14%; 1.47 (0.51–4.22)	19%; 1.50 (0.99–2.28)	13%; 1.47 (1.16–1.87)**
Partner poorer self-rated health ^a	10%; 1.48 (0.16–14.10)	17%; 4.94 (1.87–13.02)***	14%; 1.86 (1.12–3.08)*
Decrease in occupational status	12%; 0.93 (0.26–3.31)	15%; 1.36 (0.85–2.16)	17%; 1.81 (1.47–2.23)***
Decrease in number of adults working 16 + hours per week	8%; 1.56 (0.42–5.78)	9%; 2.04 (1.18–3.52)*	10%; 2.32 (1.80–2.97)***
Separation (to lone parent status) ^a	3%; 1.29 (0.15–11.19)	4%; 1.17 (0.47–2.89)	3%; 2.98 (2.02–4.41)***
<i>Hardship (Number of potential transitions)</i>	<i>n</i> = 176	<i>n</i> = 739	<i>n</i> = 4,956
Any event	47%; 1.78 (0.72–4.41)	45%; 2.19 (1.42–3.38)***	44%; 1.73 (1.41–2.13)***
More dependent children	3%; 3.75 (0.65–21.80)	6%; 3.30 (1.65–6.62)***	7%; 1.55 (1.10–1.19)*
Main informant developing LLSI/D	6%; 0.77 (0.09–6.37)	7%; 2.61 (1.36–5.02)**	5%; 1.58 (1.08–2.32)*
Partner developing LLSI/D ^a	3%; n/a	7%; 1.68 (0.35–8.05)	5%; 1.10 (0.47–2.57)
Main informant poorer self-rated health	18%; 1.38 (0.47–4.08)	16%; 2.07 (1.25–3.42)**	12%; 1.49 (1.12–1.98)**
Partner poorer self-rated health ^a	11%; n/a	16%; 2.48 (0.88–6.93)	13%; 1.80 (1.10–2.95)*
Decrease in occupational status	15%; 1.77 (0.59–5.27)	14%; 1.30 (0.74–2.30)	17%; 1.54 (1.20–1.96)**
Decrease in number of adults working 16 + hours per week	11%; 1.27 (0.34–4.75)	8%; 1.11 (0.53–2.32)	9%; 1.66 (1.22–2.24)**
Separation (to lone parent status) ^a	3%; 3.92 (0.67–22.89)	3%; 3.06 (1.14–8.26)*	3%; 5.54 (3.71–8.27)***

Note. LLSI/D = limiting long-standing illness or disability; n/a = OR not calculated as > 1 cells with *n* < 5.

^abase = couple families.

p* < .05. *p* < .01. ****p* < .001.

working for 16 + hours per week (*OR* = 1.56, 0.42–5.78). Only the first two of these were statistically significant associations. Exposure to any of these potential trigger events was relatively rare (< 10%) among families not living in income poverty. When compared to families not supporting a child with disability, families supporting a child with intellectual disability not living in income poverty were less likely to be exposed to an increase in the number of dependent children, 3% versus 7% (*OR* = 0.39, 0.18–0.83, *p* < .01); and having a decrease in occupational status, 12% versus 17% (*OR* = 0.64, 0.43–0.96, *p* < .05). There were no statistically significant between-group differences in the probability of exposure to any other potential negative trigger events.

Entry into hardship. Three specific potential trigger events were associated with a marked increase in the odds of a family supporting a child with intellectual disability in entering hardship: separation (*OR* = 3.92, 0.67–22.89), an increase in the number of dependent children in the household (*OR* = 3.75, 0.65–21.80), and a decrease in the family's occupational status (*OR* = 1.77, 0.59–5.27). None of these associations were statistically significant. Exposure to

the first two of these potential trigger events was rare among families not living in hardship (< 3%). However, 15% of families supporting a child with intellectual disability and not living in hardship experienced a decrease in occupational status within a 12-month period. When compared to families not supporting a child with disability, families supporting a child with intellectual disability not living in hardship were more likely to be exposed to the main informant having reduced self-rated health, 18% versus 12% (*OR* = 1.71, 1.15–2.53, *p* < .01). There were no statistically significant between-group differences in the probability of exposure to any other potential negative trigger events.

Exits from poverty. Three specific potential trigger events were associated with a marked increase in the odds of a family supporting a child with intellectual disability in exiting from income poverty: increase in occupational status (*OR* = 5.40, 1.10–26.44), the informant (almost always the child's mother) having improved health (*OR* = 4.26, 1.93–11.95), and an increase in the number of adults in the household working more than 16 hours per week (*OR* = 2.13, 0.37–12.22). Only the first two of these associations were statistically significant. Of these potential

Table 3. Rate (% occurrence per annum) of potential positive trigger events among people experiencing poverty and hardship; strength of association (odds ratio with 95% confidence intervals) between potential positive trigger events and transition out of poverty and hardship

	Families with child (intellectual disability)	Families with child (other disability)	Families with child (no disability)
<i>Income poverty (Number of potential transitions)</i>	<i>n</i> = 101	<i>n</i> = 342	<i>n</i> = 1,194
Any event	56%; 4.52 (1.93–10.61)***	53%; 2.12 (1.34–3.34)**	50%; 1.65 (1.31–2.09)***
Fewer dependent children	21%; 1.16 (0.44–3.03)	20%; 1.70 (0.99–2.92)	9%; 1.46 (0.98–2.16)
Main informant recovering from LLSI/D	12%; 3.53 (0.89–13.91)	9%; 1.30 (0.61–2.79)	7%; 0.90 (0.57–1.40)
Partner recovering from LLSI/D ^a	13%; 1.22 (0.07–22.40)	8%; 1.67 (0.26–10.81)	4%; 0.59 (0.11–3.28)
Main informant better self-rated health	24%; 4.26 (1.51–11.95)**	20%; 1.19 (0.69–2.07)	17%; 0.77 (0.56–1.05)
Partner better self-rated health ^a	9%; 1.22 (0.07–22.40)	12%; 0.78 (0.16–3.82)	21%; 1.71 (0.85–3.45)
Increase in occupational status	13%; 5.40 (1.10–26.44)*	15%; 2.70 (1.45–5.04)**	18%; 2.01 (1.46–2.75)***
Increase in number of adults working 16 + hours per week	7%; 2.13 (0.37–12.22)	11%; 3.62 (1.68–7.79)**	13%; 3.89 (2.62–5.78)***
Partnering ^b	7%; 1.46 (0.31–6.91)	5%; 7.37 (2.04–26.69)***	5%; 2.43 (1.37–4.28)**
<i>Hardship (Number of potential transitions)</i>	<i>n</i> = 194	<i>n</i> = 679	<i>n</i> = 2,259
Any event	53%; 1.04 (0.53–2.03)	53%; 1.43 (1.02–2.02)*	48%; 1.38 (1.16–1.66)***
Fewer dependent children	14%; 0.94 (0.35–2.49)	15%; 1.08 (0.67–1.74)	7%; 0.90 (0.35–1.30)
Main informant recovering from LLSI/D	9%; 1.02 (0.34–3.30)	10%; 0.69 (0.37–1.27)	7%; 0.77 (0.53–1.12)
Partner recovering from LLSI/D ^a	13%; 1.32 (0.21–8.25)	10%; 5.59 (1.62–19.35)**	7%; 1.22 (0.59–2.54)
Main informant better self-rated health	22%; 0.60 (0.25–1.46)	19%; 0.87 (0.56–1.35)	19%; 1.18 (0.94–1.48)
Partner better self-rated health ^a	17%; 0.31 (0.03–2.81)	15%; 1.14 (0.42–3.08)	14%; 0.74 (0.43–1.28)
Increase in occupational status	14%; 1.40 (0.57–3.42)	15%; 1.41 (0.90–2.22)	18%; 1.48 (1.18–1.85)**
Increase in number of adults working 16 + hours per week	6%; 1.11 (0.29–4.29)	8%; 1.01 (0.54–1.87)	10%; 1.49 (1.12–1.99)**
Partnering ^b	5%; 0.82 (0.17–3.99)	3%; 2.69 (1.12–6.46)*	5%; 1.75 (1.16–2.65)**

Note. LLSI/D = limiting long-standing illness or disability.

^abase = couple families; ^bbase = single parent families.

p* < .05. *p* < .01. ****p* < .001.

trigger events, families living in income poverty were most likely to be exposed to improvements in informant health (24%) and positive changes in the family's occupational status (13%). When compared to families not supporting a child with disability, families supporting a child with intellectual disability living in income poverty were more likely to be exposed to a decrease in the number of dependent children, 21% versus 9% (*OR* = 2.54, 1.51–4.26, *p* < .001). There were no statistically significant between-group differences in the probability of exposure to any other potential positive trigger events.

Exits from hardship. No specific potential trigger events were associated with a marked increase in the odds of a family supporting a child with intellectual disability in exiting from hardship. When compared to families not supporting a child with disability, families supporting a child with intellectual disability living in hardship were more likely to be exposed to a decrease in the number of dependent children, 14% versus 7% (*OR* = 2.34, 1.51–3.63, *p* < .001). There were no statistically significant between-group differences in the probability of exposure to any other potential positive trigger events.

Discussion

Principal findings

When compared to families not supporting a child with disability, families supporting a child with intellectual disability or other disability were significantly more likely to be living in income poverty and hardship. When initial poverty status was taken into account, families supporting a child with intellectual disability were significantly more likely to have transitioned into hardship and significantly less likely to have transitioned out of hardship 12 months later. Similarly, families supporting a child with other disability were significantly more likely to have transitioned into income poverty and hardship, and significantly less likely to have transitioned out of income poverty.

Approximately 50% of entries into or escapes from poverty were associated with one or more of the potential trigger events investigated. Among families supporting a child with intellectual disability, changes in occupational status or employment were associated with escape from income poverty (but not hardship) and entry into income poverty and hardship. Exposure to changes in occupational status or employment was not uncommon, with 12–15% of

families supporting a child with intellectual disability experiencing a change in occupational status in a 12-month period. There were few systematic marked differences between families supporting a child with intellectual disability and other families with regard to either levels of exposure to potential trigger events or the strength of association between exposure and poverty transitions.

Strengths and limitations of the study

The main strengths of the study are (a) the use of a relatively large longitudinal sample of British families, and (b) the use of two measures of poverty. The main limitations of the study were (a) the operational definition of child disability employed, and (b) the essentially cross-sectional nature of the analyses. Current approaches to defining disability stress the role of social and environmental conditions in determining whether particular bodily or psychological variations (“health conditions” or “impairments”) result in disability (Emerson et al., 2009; World Health Organization, 2007). As such, disability is not a characteristic of people, but of the interaction between health conditions or impairments and prevailing social norms, expectations, and accommodations. While this poses difficulties for survey research that seeks to identify and count the number of people with disability (Fujiura & Rutkowski-Kmitta, 2001; Tossebro & Kittelsaa, 2004), one can attempt to identify people (in this case, children) whose characteristics are likely (given the nature of the society in which they are living) to result in them being identified with disability. There are, however, two limitations that arise from our approach to identification. First, identification was solely dependent on informant (nearly always maternal) report of longstanding illness/disability or school-based identification of the child’s Special Educational Needs. There is, of course, room for error in either question. While informant report of disability is likely to capture significant physical health conditions and sensory impairments, informants may not consider their child’s emotional, behavioural, or learning difficulties to be an “illness” or “disability.” Similarly, while informant report of SEN is likely to identify children with a formal Statement of SEN, informants may not be aware of SEN identified at earlier stages in the school-based assessment of SEN (Department for Education and Skills, 2001). Second, it was not possible within the available data to derive an index of the severity of the child’s disability. Clearly, the group of children identified will have been a very heterogeneous group of children with different impairments of differing

severity. It is plausible to assume that the overall pattern of results may not necessarily hold up across all salient subgroups (e.g., children with very severe disability).

It should also be kept in mind that, while the data are longitudinal, the analyses are essentially cross-sectional, with their focus on the association between change in family circumstances and change in poverty status over the same one-year period. As such, the results cannot suggest any direction in causal relationships between potential trigger events and poverty transitions. Thus, for example, the strong association between parental separation on entry into hardship could reflect a range of causal processes, including (a) separation increases the risk of entry into hardship, (b) entry into hardship increases the risk of separation, and (c) other factors (e.g., the onset of severe mental illness) could independently increase the risk of both hardship and separation.

It should also be noted that the two measures of poverty were collected at two points in time, 12 months apart. The hardship measure was based on family circumstances at the time of interview. No retrospective information was collected on hardship. As such, it is possible that unrecorded transitions in and out of hardship may have occurred in the intervening period. The reported data are simply a record of hardship status at two separate points in time. The income poverty measure was based on estimated annual income. Again, it is possible that this method may have disguised shorter-term fluctuations in income poverty status.

Implications

While keeping the above caveat in mind, the results are consistent with those of previous research, which has suggested that (when both rate of exposure and effect size are taken into account) entries to and exits from poverty are, in general, primarily influenced by changes in labour-related income and employment status, and secondarily by changes in household composition (e.g., birth into a poor household, separation and repartnering; [Bane & Ellwood, 1986](#); [Bradbury et al., 2001b](#); [Duncan et al., 1993](#); [Jenkins et al., 2001](#); [Smith & Middleton, 2007](#)). What is notable is that, with one exception, there were no statistically significant differences between families supporting a child with intellectual disability and families not supporting a child with disability in either the risk of exposure to these types of trigger events or the strength of association between exposure and transitions into and out of poverty. The one exception was that families supporting a

child with intellectual disability who were not living in income poverty were less likely to be exposed to a decrease in household occupational status. While at first sight perhaps surprising, these results are fully consistent with the growing body of research that suggests that differences between families who are or are not supporting a child with intellectual disability appear to be related to aspects of the socioeconomic position of families, rather than the presence in the family of a child with disability per se (Emerson & Hatton, 2009; Emerson et al., 2010; Hatton, Emerson, Graham, Blacher, & Llewellyn, 2010; Shahtahmasebi et al., in press). For example, recent research has indicated that differences in the rates of separation, partnering or repartnering between families who are or are not supporting a child with intellectual disability disappear once the comparisons are made between families in similar socioeconomic circumstances (Hatton et al., 2010). It should be kept in mind that the comparisons we present in this paper are between families who either were or were not exposed to poverty.

Our results also throw further doubt on the suggestion that the observed socioeconomic gradients in the prevalence of intellectual disability in childhood are the result of the indirect costs (e.g., maternal employment) of supporting a child with intellectual disability. Specifically, we found little evidence of any marked differences in exposure to potential trigger events associated with indirect costs (e.g., reduced probability of entering or increased probability of exiting from labour market activities).

Our results suggest that increasing the chances of families escaping from poverty (and reducing their chances of becoming poor) will be improved by strengthening the human and social capital available to families. This may require, for example, a strengthened commitment to such issues as ensuring that sustainable high quality child care is available for all children with disability, and that benefit regulation ensures that the availability of child care actively supports opportunities for the parents of children with disability to enter employment and the introduction of health checks for family carers (Department of Health, 2008; Emerson et al., 2009; Every Disabled Child Matters, 2008; McQuaid, Fuertes, & Richard, 2010).

Unanswered questions and future research

Our analyses included a heterogeneous group of children with intellectual or other disability over a relatively short time span (12 months). Priorities for future research in this area would be (a) the identification of specific subgroups of children and

families with different poverty trajectories, (b) the replication of these methods using data over longer periods of time and with larger samples, (c) further investigation of child and family characteristics associated with variations in poverty transitions (Shahtahmasebi et al., in press), and (d) the identification and investigation of the correlates and impact of shorter-term fluctuations in poverty status.

Author note

The authors have no conflicts of interest to declare.

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