

Does Money Affect Children's Outcomes? – A systematic review

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Summary

This briefing covers the recently published report from the Joseph Rowntree Foundation titled Does Money Affect Children's Outcomes? On the basis that there is insufficient research into the causal relationship between income and outcomes for children, the report explores at length and in significant detail the impact that money has on the wellbeing of children.

Through their research, the authors endeavour to answer the important question – is money important in itself, or do the general associations between income and outcomes simply reflect 'other differences between richer and poorer households such as levels of parental education or attitudes towards parenting?' The research underpinning the report drew upon what the authors deemed to be 'all relevant papers that use reliable causal methods to investigate the impact of household financial resources on children's outcomes'. Among the conclusions reached are that children from low income families have worse cognitive, social-behavioural and health outcomes than children from wealthier families and that a given sum of money has a greater impact on the life of a poorer child than the same sum invested in the family of a wealthier child.

This report will be of particular interest to local authority members and officers, particularly those responsible for the Child Poverty Act, who have responsibility for developing solutions that improve the outcomes of children growing up in low income householders which are historically and increasingly poor in the UK when compared to our OECD neighbours.

Overview

This report reaches the overall conclusion that 'there is strong evidence that household financial resources are important for children's outcomes and that this relationship is causal'. Therefore, whilst 'protecting households from income poverty may not provide a complete solution' to the poorer outcomes experienced by children from deprived backgrounds, it should comprise a key part of government efforts to improve these. The author's calculations found that 'income increases' had a comparable impact on children to spending on early childhood programmes or education. Further, income influences many other outcomes simultaneously. These include:

- Parenting
- Physical home environment
- Maternal depression
- Smoking during pregnancy

The report also finds that income impacts on direct measures of child well-being and development including their:

- Cognitive ability
- Achievement at school
- Engagement in school
- Anxiety levels

Crucially, the report found that 'even small income effects' are likely to add up to a significantly large cumulative impact. Its authors cite research that 'refers to income support policies as the 'ultimate "multipurpose" policy instrument' with 'few other policies likely to affect so many outcomes at the same time'.

The authors helpfully acknowledge the clear downside of the overall picture their conclusions draw – that 'in the current economic climate, reductions in household income are likely to have wideranging negative effects'. And simultaneously, 'part of the Coalition Government's deficit reduction strategy is to reduce welfare budgets in order to limit spending cuts to essential public services including education, with a view to protecting children's life chances'. The authors conclude that 'however well-intentioned', the government's fiscal strategy is 'likely to be self-defeating, especially in a context of high unemployment [where] reductions in household financial resources will damage the broader home environment in ways that will make it harder for public services to deliver for children'.

The JRF finish by highlighting the need for more research to expand the evidence base underpinning the conclusions arrived at in the report with some key gaps existing in current literature. Indeed, they say that currently there is:

- No evidence using causal methods to look at the impact of income on children's subjective well-being and social inclusion, and less evidence on mediating mechanisms, including maternal mental health and parenting practice, than on cognitive development.
- A dominance of US research in the evidence base only four studies for the UK were included in this research.

Briefing in full

Does money matter?

During their research, the report's authors found that of 34 of the studies that were examined:

- 23 showed a positive and significant relationship between income and all of the outcomes that the research examined.
- Six studies showed an impact of income on some but not all of the outcomes.
- Only five studies found no evidence of an income effect.

In short, the JRF found that there are significant positive effects on all the child outcomes that were looked at with the exception of 'subjective well-being and social inclusion, where no studies were found that met [the researchers] criteria'. The area where the evidence was strongest related

to 'cognitive development and school achievement, followed by social and behavioural development.

Of the 'intermediate outcomes' that the researchers considered, the 'strongest evidence' of impact related to 'maternal mental health'. The relevant studies showed 'a positive income effect'. This was followed by 'parenting and the home learning environment'.

How much does money matter?

The researchers looked at the range of effects of household income and found that, when looking at studies which [made] 'use of experiments or other exogenous income changes' effects 'ranged from 5 per cent to 27 per cent for cognitive outcomes and from 9 per cent to 24 per cent for social and behavioural outcomes, with estimates of 14–15 per cent for maternal depression'. In their concluding comments for this section, the authors explain that these 'are comparable in size to effects calculated for other interventions, including studies of school expenditure and early childhood education programmes'. However, interestingly, 'income appeared to operate across a much wider range of outcomes'.

The effect sizes highlighted by the research 'suggest that increases in household income would not eliminate differences in outcomes between low-income children and others but could be expected to contribute to substantial reductions in these differences'. They give the example of how 'eliminating the income gap between households where children receive free school meals and those where they do not might be expected to eradicate half the gap in outcomes at Key Stage 2 between FSM and non-FSM children'.

Why does money matter?

When asking the question of why money does matter, the researchers are explicit in stating that 'it is beyond the scope of this study to provide a comprehensive exploration of the mechanisms through which income affects particular outcomes'. However, they examine the evidence from the main studies looked at through the research and look at two possible explanatory pathways which are the Investment Model and the Family Stress Model.

The research evidence used in this report provides 'stronger support for the Family Stress Model whereby income affects children's outcomes via intermediate outcomes such as parental mental health and parenting behaviours'. Researchers found 'mixed evidence in support of the Investment Model' which is based on the principle that 'additional income allows families to buy goods and resources which promote their children's development'. Researchers found some indication that 'investment mechanisms may be more important for cognitive development and family stress mechanisms for behavioural outcomes'.

The researchers acknowledge the importance of 'understanding the mechanisms through which income affects outcomes' because many of the existing studies identifying a causal relationship are from outside the UK' and largely coming from the US making generalising their findings and applying them to the UK context difficult. Whilst this is true, the 'central mechanisms that emerge as important – parental stress and mental health, parental relationship quality, parenting behaviours, and to a lesser extent investment in educational resources and the physical environment – are likely to be equally relevant to the UK'. However, they are very clear that the

question of pathways from income to children's wider outcomes deserves much greater consideration than is currently possible due to the paucity of data emanating from the UK context.

Does money matter more for low-income households?

The report finds that there is 'very strong evidence that increases in income have a bigger impact on outcomes for those at the lower end of the income distribution scale'. The main evidence base underpinning the report's conclusions found evidence of a clear 'non-linear income effect for at least some outcomes'. Further, non-direct effects were found 'across a wide range of outcomes, including health, cognitive and schooling outcomes and measures of social and behavioural development'.

Interestingly, a 'marginal £1,000 makes more difference to children in lower-income than in higher-income households'. Further, the researchers hypothesise, 'if additional income is important because it relieves pressure on parents (the Family Stress Model)' they 'anticipate that income changes would have more effect in families close to the breadline than on those that are comfortably off'. And similarly, 'if the Investment Model is relevant, lower-income households are also likely to be most affected, as extra income may enable them to increase spending on essential goods such as healthy food and sufficient heating, as well as books, computers and educational outings'.

However, the authors point out that 'regarding the question of whether or not there is a cut-off point after which increased income ceases to have any impact at all, the evidence is much more limited and any conclusion must be very tentative'.

Does money matter most for the youngest children?

The majority of studies that the researchers drew upon to inform the report 'found that the timing of income is significant'. However, the evidence points to mixed conclusions 'about which stage of childhood is most important'. Interestingly, the evidence reviewed suggested that 'income at particular stages seems to be more important for some types of outcome than others'.

For example, in relation to cognitive outcomes, when the authors looked at a small group of studies that satisfied their causal criteria the evidence they found 'suggested that income in the early years is most important'. However, if the evidence is extended to include longitudinal studies then it becomes much more mixed with 'different studies pointing to each stage of childhood as the more important'.

With regards behavioural outcomes, researchers found a 'rather different' story'. Only four studies drawn upon for this research 'looked at behavioural outcomes using income across childhood but of these, three provided some evidence that income in middle childhood or adolescence is more important than income early on'.

Short-term or permanent income?

Studies drawn upon for this research indicate that 'longer-term duration of poverty has stronger associations with child outcomes than a short-term experience of poverty'. Further, the researchers found that there is some limited evidence that at least part of this association is causal. However, evidence was also found to support the conclusion that 'even short-term

experience of low income may have negative effects, with evidence that unstable income is associated with worse behavioural outcomes'. The researchers also found that their studies echo the point made earlier in the report that timing matters 'so experience of poverty in early childhood may be particularly important for some developmental outcomes, and experience of poverty in adolescence for others'.

Does the source of income matter?

17 out of 19 studies used for this research found 'positive effects of income on children's outcomes, with no obvious systematic differences in the size or significance of findings between the studies that looked at benefits and the studies that look at other income changes. In short, the source of income has limited effect upon the extent of the impact it has upon a child's outcomes.

The authors found 'no studies focusing directly on whether the source of income matters for children's outcomes'. However, those studies that examined increases in income as a result of benefit changes 'found positive effects on a range of children's outcomes'. Research also found that 'there is some evidence that income changes can have less positive effects on certain outcomes if they are linked to mandated increases in employment' (i.e. where a parent is required to work to receive benefits'. However, 'the evidence base for this [was] small'.

Does it matter who receives the money?

One of the studies drawn upon as part of this research undertook a 'natural experiment' in the US 'in which a new casino distributed profits to adult tribal members in rural Carolina' and found that 'extra income has a more positive impact if mothers rather than fathers are the recipients'. Interestingly, the research found that 'when mothers receive the income there is a significant positive effect on children's total years of education and high school graduation rates, but there is no noticeable impact on children's educational outcomes when fathers receive it'. There are a range of reasons for this that the authors explore amongst them being that 'mothers are more likely to spend additional resources on children', due to their role as the 'main carer'.

Conclusion

The report finishes by drawing together the core conclusions that have been arrived at for each of the questions the research endeavoured to answer. Notably, 34 of the studies drawn upon for the research found strong evidence regarding whether or not money affects children's outcomes. In sum, it found that 'children in lower-income families have worse cognitive, social-behavioural and health outcomes in part because they are poorer, not just because low income is correlated with other household and parental characteristics'. The evidence of the impact of family found that it was 'strongest for cognitive development and school achievement, followed by social-behavioural development'. Other indirect outcomes affecting children are also impacted by family outcome, the report concludes 'including maternal mental health, parenting and home environment'.

When income is increased, the evidence found that 'cognitive development appeared roughly comparable with that [achieved through] spending similar amounts on school or early education programmes'. Therefore, authors argue, 'increasing household income could substantially reduce differences in schooling outcomes, while also improving wider aspects of children's well-being'. Further, a set amount of money has a significantly greater impact upon the outcomes of 'children in low-income than better-off households' whilst still helping better off children too.

The report also found that the timing of increases in income during a child's life impacts on outcomes. Indeed, the authors found that increases in income during 'early childhood' make the 'most difference to cognitive outcomes, while in later childhood and adolescence' the make 'more difference to social and behavioural outcomes'. And finally, the length of time during which a child lives in poverty is significant with 'longer-term poverty' having a more damaging effects on a child's outcomes 'than short-term poverty'.

Whilst the researchers write with confidence, they finish off by reiterating the message made plain at the start – that 'although many studies' drawn upon during this report 'were from the US, the mechanisms through which money appears to affect children's outcomes, including parental stress, anxiety and material deprivation, are equally relevant in the UK' and should be taken into serious consideration when developing policy to improve the outcomes of children from poor backgrounds.

Comment

One can be forgiven for feeling that this report, at a glance, is merely treading over old ground. The evidence base supporting the argument that money matters for children's outcomes is hardly lacking. But its authors set out their case in a clear and reasoned way and it contributes to a critical national debate. It is, therefore, welcome.

A deeper exploration of why it seems to matter so much would strengthen it. In particular, an exploration of why it matters more for certain groups of poor children would increase its usefulness. Indeed, not all children growing up in poor families can expect their outcomes to be poor, a fact that is highlighted in June's Ofsted report <u>Unseen Children</u>.

The report draws upon secondary sources of information, the vast majority of which are American. Whilst this in no way makes the report's conclusions meaningless, they should be complimented by British research if they are to wield any clout. Indeed, the drivers and consequences of poverty are contextual and local even within the UK itself. Again, <u>Unseen Children</u> makes this point clearly. This is an obvious gap in the evidence base and one which should be filled if policy makers are to pay real attention to the key messages within the report.

Perhaps the most intriguing and challenging of its recommendations, in terms of government policy, is the conclusion drawn that direct increases in family income have a significant impact upon improving children's outcomes. In a time of austerity and in a policy climate where the thrust is clearly to 'make work pay', the appetite for policies that put money in the pockets of poor parents to supplement wages, or to replace them where parents are not working, is clearly low. The traction that this recommendation will have with government is therefore likely to be weak. But it is an important conclusion and one that should, along with the other conclusions set out in the report, be born in mind by policy makers both now and in the future.

External Links

The Independent Review on Poverty and Life Chances, Frank Field MP (2010)

Early Intervention: Smart Investment, Massive Savings, Graham Allen MP (2011)



Unseen Children, Ofsted (2013)

Poor children's life chances are decided in primary school, report finds, Guardian (2013)

Related briefings

Our children deserve better: Prevention pays, Chief Medical Officer's Annual Report 2012 (2013)

Unseen children: access and achievement 20 years on, Ofsted, Martin Rogers (2013)

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