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Child Poverty Insights disseminates emerging research, practice and thinking on child poverty to a global audience of UNICEF and other UN staff, practitioners and academics.

This edition discusses a review of evidence on the relationship between household financial resources and children's outcomes in richer countries. The review, initiated by The Joseph Rowntree Foundation, more specifically seeks to answer if raising household income itself makes a difference to children's outcomes, or if it would be better to focus on investing in schools or improving parenting skills.

Does Money affect children's outcomes? A review of evidence on casual links

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There is a lot of evidence to show that, within rich countries, children from lower income households do less well than their better-off peers on a wide range of different outcomes. For example, they tend to have poorer health, to do less well in school, are more likely to report low self-esteem and more likely to get involved in risky or delinquent behaviour. However, it is not entirely clear how far low income itself is the cause of worse outcomes, or whether it is other factors associated with low income, such as lower levels of parental education or different approaches to parenting, that make the difference. The uncertainty leads to differing opinions among politicians about how to best create policy solutions.

The Joseph Rowntree Foundation asked us to carry out a systematic review of evidence in order to explore whether raising household income itself makes a difference to children's outcomes, or whether it would be better to focus on investing in schools or improving parenting skills. Our review considered all the relevant studies that have been conducted in OECD and EU countries that used methodologies that consider relationships between monetary and other outcomes that are not just based on 'association' but assess 'causal relationships'. We had very strict criteria for what counts as causal evidence, and identified a total of 34 studies which passed the test.

What's the answer? Does money really matter for children's outcomes?

Yes. In short, we found very strong evidence that money matters: children from lower-income households have worse outcomes in part *because they are poorer*, not just because poverty is correlated with other household and parental characteristics.

Low income affects direct measures of children's well-being and development, including their cognitive ability, achievement and engagement in school, anxiety levels and behaviour. The evidence on cognitive development and school achievement was the clearest and most common, followed by that on social and behavioural development.

Of the 34 studies, only five found no evidence of a money effect on any of the outcomes examined, and we believe that in four of the cases there are methodological reasons that may have affected the conclusion. The studies also found effects of low income on outcomes that indirectly affect children, including parenting, the home environment, maternal depression, and smoking during pregnancy.

How can you be sure that it is money making the difference, rather than other related factors like parental interest in children's education?

Many studies which find an association between household financial resources and children's outcomes cannot be certain that there isn't another, hidden, factor driving the apparent link. For example, parents with a lot of ambition and determination may be more likely to end up in higher earning jobs. If they are also more strict about school work (or simply if their children have inherited their approach to life), we might wrongly conclude that income is itself the cause of better school attainment.

To avoid reaching false conclusions of this kind, we set very strict limits on the type of study that could be included in our review. We had to be confident that households were similar to each other in every way other than the difference in income. This is why we only included 34 studies in our final list. There were a number of different research approaches which made the grade. A very few studies were set up deliberately as randomised controlled experiments, where individuals are allocated at random to receive different benefit levels. In several other cases an experimental situation occurred naturally. In one such example, a casino opened on a Cherokee reservation in the United States and distributed profits only to households with an adult tribal member. Researchers tracked outcomes over time among families in the area, and found that in households that received the additional money there were increases in educational attainment and reductions in crime, and mother-child relations also improved. In another example, researchers examined the impact of an oil boom in Norway, comparing outcomes for children born near the oil fields just before the boom with outcomes for children born at the same time in other areas, as well as for children born in the oil region a decade later, when the economic effects had faded. They find the boom had significant positive effects on higher education attainment, especially for children from lower-income households.

Other studies exploited differences in benefit levels over time, between states or provinces and for different family types. For example, researchers calculated the levels of child benefit for a random sample of families in Canadian provinces for each year between 1994 and 2004, and looked to see whether the differences could predict educational and health outcomes for children. They found significant positive effects on educational attainment for boys from lower educated backgrounds and significant improvements in aggression for girls from similar backgrounds. There were also strong positive effects on maternal depression. Because the benefit differences are 'exogenous' – not driven by anything the household itself is doing economically – we can be confident that these effects result from the income differences, not from other factors.

Does money matter most in the poorest households?

We found strong evidence that an additional dollar or pound makes more difference to children in households on lower incomes than for those in richer households. All 13 of the 34 studies that asked this question reached the same conclusion. We also asked whether, beyond a certain point, income ceases to have any effect at all. The evidence on this was mixed. Some of the studies found no impact of additional income on families that are above the poverty line (mostly understood as the official US poverty line), but others found that income continues to have an effect on some health and schooling outcomes much higher up the distribution, albeit a smaller effect than in less well-off households.

So how does money on cash transfers compare to money spent on education or early years' programmes? Is one more effective than the other?

Comparisons of this kind are inevitably rough, but the estimates for cognitive development and schooling outcomes appear broadly similar in size to the effects of spending similar amounts on school or early education interventions. An increased household income has the advantage that it is operating on many outcomes at the same time, e.g. influencing maternal depression and social and behavioural outcomes as well as cognitive scores. Clearly income is not the only thing that matters, and protecting households from low income is unlikely to provide a complete solution to poorer children's worse outcomes. However, it is a sufficiently important factor to form a central part of government efforts to promote children's opportunities. Cutting benefit packages in order to invest in services for young children, for example, is likely to be counterproductive as a way of improving life chances. The two policies need to work alongside each other.

Most of the evidence is from the US. Can we be confident that it would apply to other countries?

Nearly two-thirds of the evidence in our review comes from the US, probably because the US has a long history of investment in large scale datasets of the kind that are helpful for this kind of research. However, the mechanisms through which income appears to affect children's outcomes are likely to be equally applicable in other countries. The studies found support for two central theories about *how* money has an impact. One relates to the stress and anxiety caused by low income, which makes it more difficult for parents to give children time, attention and positive support. The evidence that income affects rates of maternal depression is an illustration of this mechanism at work. The second theory relates to parents' ability to invest in goods and services that further child development, such as healthy food, books and educational outings.

If anything, we found stronger support for the stress mechanism than the investment mechanism. On the other hand, our review focused on quantitative evidence, which is not always good at answering 'why?' questions. Qualitative research would offer further insight.

What about countries with lower levels of income? Are these results relevant there too?

We only included studies from OECD and European Union countries in the review, in part to keep the project manageable and in part because we wanted to find evidence most relevant to the UK context. We might expect money effects to be stronger in lower income countries, just as they appear to be stronger in lower income households within richer countries. Nevertheless, a similar review of studies from other parts of the world would be a useful exercise, and there is certainly a growing evidence base to draw on.

References/Further Reading:

Kerris Cooper and Kitty Stewart (2013) *Does money affect children's outcomes: A systematic review.* York: Joseph Rowntree Foundation. October 2013. http://www.jrf.org.uk/publications/does-money-affect-childrens-outcomes