DOES MONEY IN ADULTHOOD AFFECT ADULT OUTCOMES?

There is ample evidence that adults with lower incomes tend to have worse outcomes including worse health, lower life expectancy and lower subjective wellbeing than individuals with more. But is money in adulthood *itself* important? Or are these relationships driven by other factors such as higher levels of education, underlying personality traits or the long-term impact of childhood circumstances? This study reviews the evidence, focusing on research that tested whether the relationship between money and outcomes in adulthood is causal.

Key points

- The review identified 54 studies that were able to test the effect of money on adult outcomes. This evidence suggests that money in adulthood does itself matter for wider adult outcomes, but this is clearer for some outcomes than for others.
- There is strong evidence that additional financial resources make people happier and reduce mental health problems such as depression and anxiety.
- Money also gives people more choices in a range of areas of life, including decisions about relationships, employment and education.
- Increases in women's income appears to reduce domestic violence, though only two studies looked at this.
- The evidence on physical health is unclear. There is strong evidence that increases in resources improve the health behaviour of parents, but more income can lead to less healthy behaviours, such as drinking and smoking more, for the rest of the population. Evidence on the impact on health outcomes, such as obesity and life expectancy, is also very mixed.
- Researchers' focus on causal methods, and on resources in adulthood, inevitably narrowed the focus of this review. Included studies largely examine fairly small and short-term changes in resources or large windfalls in unusual circumstances. The impact of permanent or life-course differences in resources is nearly impossible to capture using these methods.
- The mixed findings for physical health suggest that changing health outcomes late in life is hard, and underline the importance of investing early in childhood to affect long-term drivers of health and well-being. But the positive effects for other outcomes, especially mental health, show us that money in adulthood also matters, with implications for social security benefits and wage policies.

The research

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BACKGROUND

This report examines the evidence on whether money in adulthood has a causal impact on wider adult outcomes. Individuals with less income tend to do worse on a range of indicators than those with more, including measures of physical health and subjective well-being. But would more money in itself make a difference? Or are these differences driven by other, associated factors, such as higher levels of education or more satisfying work, or by long-term factors too well-established to be shifted by a boost to income during adulthood?

In this review we examine what empirical evidence tells us about whether adults' individual or household financial resources *in themselves* contribute to other outcomes in adulthood. Strict criteria were applied to the type of evidence that could be included in the review, in order to be confident that the effects identified were the result of money itself rather than other correlated factors. Systematic searches were used to minimise bias. Fifty four high-quality studies were identified from OECD and European Union countries, examining the relationship between money (income, assets, debt) and adults' wider outcomes. The larger part of the literature was on happiness and mental health, and on physical health and health behaviour. There was also some evidence on relationship quality and stability, educational participation and outcomes, and employment behaviour, and a very few studies on social and political participation.

Does money in adulthood matter?

The evidence suggests that money in adulthood does itself make a difference, although this is clearer for some outcomes than for others. There is strong evidence that additional financial resources in adulthood make people happier and reduce mental health problems, such as depression and anxiety. There is also some evidence to support the idea that these effects are larger in households on a lower income to start with. Several included studies capture the role increased resources can play in low-income households in reducing stress, anxiety and depression.

On health behaviours and physical health outcomes, the evidence is far more mixed. There is good evidence from studies looking at social security reforms that an increase in resources improves the health behaviour of parents, especially in relation to smoking. However, evidence from studies of lottery wins and inheritance receipts finds the opposite in relation to the general population: more money can lead to less healthy behaviours such as drinking and smoking more. For health outcomes, including obesity, mortality and morbidity, the evidence is also mixed.

The rest of the evidence in the report suggests broadly that money gives people more choices in a range of areas of life. Several studies find that a boost in unearned income (e.g. through a lottery win or inheritance) leads people to reduce working hours. There was limited causal evidence on educational outcomes, but of the four studies included, two found that increases in housing wealth increase the likelihood of staying in education at 18 and of attending a more prestigious institution, while one found that higher college debt reduces the likelihood of attending graduate school or of choosing a doctoral or MBA programme.

Money also appears to affect relationship transitions, with a boost in income linked both to more relationships ending and to the start of new relationships. This suggests that an increase in income results in an increase in choice over relationship status. There were no studies meeting our criteria that looked at money and relationship satisfaction, but two looked at women's income and domestic abuse, with both finding that increases in women's income reduced the likelihood of abuse. This is in line with theories that predict that women are more likely to leave abusive relationships when they have more economic independence, and that men are therefore likely to reduce abusive behaviour to avoid this.

What makes these studies ‘causal’?

Researchers only included studies using methods that allowed the effect of money to be separated clearly from that of other associated factors. In the final 54 studies, nearly half make use of either a randomised controlled trial (four) or a natural experiment (22), including seven lottery studies and six looking at inheritance, as well as other studies making use of variation in social security benefit entitlement. These are all studies in which, either by design or natural variation, some households receive more money than others, but differences are not driven by underlying household characteristics that might also affect wider outcomes. This allows us to attribute changes in the outcomes measured to the changes in money itself.

Fifteen studies use an ‘instrumental variable’ technique, identifying a variable (the instrument) that is associated with a person’s financial resources but not with individual or household characteristics that could themselves affect the outcomes being measured. An example is variation in earnings due to union membership. Thirteen use fixed-effect or similar approaches on longitudinal data; these measure changes in resources and outcomes for particular individuals or households over time. This approach effectively controls for differences between individuals that we expect to be constant over time, such as personality traits or social class. Factors that do change over time such as losing a job, becoming ill or the breakdown of a marriage, can usually be controlled for.

Because of the focus on studies that use these methods, the evidence base is effectively restricted to studies that look at marginal changes in income and wealth; often these are short term, sometimes relatively small and sometimes large one-off windfalls but in unusual circumstances (such as lottery wins).

What about the long-term impact of money?

The decision to restrict our review to studies using causal methods, as well as the study’s focus on money during adulthood, mean that the review does not pick up the effect of long-term and persistent differences in resources, which are likely to explain so much of the variation between households. This inability to capture the long-term impact of financial resources may account for some of the mixed results, particularly in relation to health. The mechanisms and pathways that link financial resources to health appear to be complex, multi-faceted and cumulative across the life course (Benzeval *et al*, 2014). Many aspects of health inequality start in childhood and widen over the life course (Ben-Shlomo and Kuh, 2002). The methods included in the review only capture fairly short-term changes in resources, and it might be implausible to expect these to undo the effects of differences in health that have accumulated over a long period of time.

Conclusion

The mixed results identified for health behaviours and physical health outcomes suggest that changing health outcomes late in life is hard, and underlines the importance of investing early in childhood to affect the long-term drivers of health and well-being. This conclusion is supported by the stronger and more consistent findings from our companion review on money and children's outcomes, particularly in relation to cognitive and social-behavioural outcomes (Cooper and Stewart, 2013). Of course, children tend to live with adults, and raising income for parents is the most effective way to reach children, so policies for adults and children do not stand in opposition to each other. Furthermore, the evidence on income and *parental* health behaviour stands out as different to that on adults in general, with increases in income leading to reductions in parental smoking.

At the same time, the findings for other outcomes indicate that resources during adulthood also matter in other crucial ways. Increases in money appear to increase the choices available to adults, in terms of relationships, employment and education. More resources also mean improvements in happiness and mental well-being, including reductions in stress and depression. These findings have important implications for policy relating to low wages and social security benefits, for parents and non-parents alike.

Finally, we note that there is currently very little research that meets our criteria from the UK or other European countries, with most of our included studies coming from the US. As well as more evidence for the UK, it would be valuable to have more studies that include longer follow-up after income increases, more studies that measure *decreases* in income, and more evidence looking separately at the effects of men's and women's resources.

About the project

This research was by Kerris Cooper and Kitty Stewart, Centre for Analysis of Social Exclusion, London School of Economics and Political Science.

The study used systematic review techniques to identify relevant research studies from 1988 to 2013. Studies were only included if they used randomised controlled trials, natural experiments, instrumental variable techniques or fixed effect approaches on longitudinal data. A representative sample of studies were taken from each search and relevant references were followed up to maximise the number of relevant studies reviewed. In total 28,787 studies were screened, with 54 studies meeting the full inclusion criteria. The majority of the studies came from the US, with some from the UK, Germany, Denmark, Sweden, Canada, Australia and Mexico.

FOR FURTHER INFORMATION

This summary is part of JRF's research and development programme. The views are those of the authors and not necessarily those of JRF. The main report, **Does money in adulthood affect adult outcomes?** by Kerris Cooper and Kitty Stewart, is available as a free download at www.jrf.org.uk

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