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Low Income (Poverty) During Prenatal and Early Postnatal Periods and Its Impact on Psychosocial Child Development

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Introduction

Many expectant and new mothers have low family incomes. Their children tend to display more behavioural problems and less prosocial behaviour than children born to mothers with higher family incomes.[1-13] To what extent and in what ways income differences may be the cause of children's behavioural problems are therefore crucial research and policy questions.

Subject

Behavioural problems in children are costly for both families and society. Since both tax and income-transfer (eg, child allowance) policies provide effective ways of changing family income, it is important to establish whether low family incomes per se are responsible for children's

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psychosocial problems.

Problems

Key methodological problems in research on this topic include:

1. distinguishing family income from other aspects of a family's socioeconomic status, such as parental education;
2. determining the extent to which the association between family income and children's psychosocial outcomes may be causal in nature; and
3. determining the mechanisms by which income affects psychosocial outcomes.

A key policy question in this area of research is whether steps to redistribute income from richer to poorer families are more cost-effective than intervention programs designed to prevent or treat psychosocial problems.

Research Context

Linkages between family income and children's behavioural outcomes have been investigated with cross-sectional and longitudinal data.[1-13] Because family incomes may vary from one year to the next,[14] *longitudinal* data relating family income during prenatal or early postnatal periods to later psychosocial outcomes in children provide a much stronger basis for establishing causal inference than do *cross-sectional* studies that relate concurrent family income to child psychosocial outcomes. In addition, studies that include statistical controls for confounding family conditions (such as family structure) offer better causal estimates than studies that do not. Lastly, a handful of experimental studies have manipulated family economic conditions through the random assignment of families to various welfare reform conditions.[15]

Key Research Questions

1. Does prenatal or early postnatal family income affect children's psychosocial outcomes?
2. If so, what pathways account for such an effect?

Recent Research Results

An income-based definition of poverty compares a household's total cash income (from work, welfare, relatives, and all other sources) with a threshold level of income that varies according to family size, inflation and, in some definitions, according to general societal living standards. A substantial minority of families moves in and out of poverty each year. Unemployment, divorce or other untoward events decrease incomes and push families into poverty. Reemployment, marriage or other positive events increase family incomes, pushing them up and over the poverty threshold.[16] Income is a distinct component of a household's socioeconomic status by virtue of its volatility, a reality that is not well represented by the occupation- or education-based measures often employed in psychological studies. Unfortunately, there are very few longitudinal studies of children's early development that include high-quality measurement of family incomes.

a) Correlational Studies

Research with young children has found that low family income and poverty are associated with a variety of psychosocial outcomes.[1-13] To date, more studies have concentrated on the effects of income on problem behaviour[1-3,5-13] than on positive behaviour.[2,4-5,8] However, there is some evidence that income is associated with both types of behaviour in young children.[2,4-5]

Low family income during the early childhood has been linked to comparatively less secure attachment,[4] higher levels of negative moods and inattention,[5] as well as lower levels of prosocial behaviour in children.[2] The link between low family income and young children's problem behaviour has been replicated across several datasets with different outcome measures, including parental reports of externalizing and internalizing behaviours,[1-3,7-9,11-12] teacher reports of preschool behavioural problems,[10] and assessments of children based on clinical diagnostic interviews.[7]

Generally speaking, support for an association between low family income and children's problem behaviours is modest. For example, one study found that a child whose family had low incomes between birth and age 5 was 30% more likely to have parent-reported behavioural problems than a child whose family did not experience low incomes.[7] Research has found somewhat stronger links between children's psychosocial outcomes and persistent, as opposed to transitory, poverty.[3,6]

b) Causal Modeling

A handful of child outcome studies have attempted to distinguish the effect of family income from the effects of other aspects of family life, such as parental education, that may differ between poor and non-poor families.[2-3, 8, 11-13] Overall, statistical controls for correlated aspects of family socioeconomic status produce either very small or no significant net associations between family income and children's behavioural problems. Statistical controls for children's prior problem behaviour reduce the effects of low family income on children's behavioural problems by about half.[3-8]

Experimental designs involving the manipulation of family incomes are better suited to establishing causal associations between household income and well-being in children because differences in income are not associated with child or parent characteristics. Random-assignment experiments conducted in the 1990s attributed low-income families with a variety of conditions, some of which boosted maternal employment but not family income, while others boosted both maternal employment and family income.[15] Relative to controls, children in families with mothers assigned to conditions that boosted only employment differed little in terms of externalizing or internalizing behavioural problems. Children in families with mothers assigned to conditions that also boosted family income showed improvements in some psychosocial outcomes relative to controls. Unfortunately, the studies were focused primarily on school-aged children, and therefore the findings from these studies do not address the question of whether increases in income during the first years of life would have a positive effect on children's psychosocial development.

Conclusions

On average, children reared in low-income families have more psychosocial problems than do children reared in high-income families. But research has failed to establish substantial *causal linkages* between low family income and children's psychosocial outcomes; indeed, other characteristics of low-income families appear to be more important. Family structure—single motherhood in particular—has been identified in a number of studies as an important correlate of children's behavioural and social adjustment.[18] Substance abuse,[19] genetic differences,[20] and exposure to early trauma[21] are other possible factors that may account for the link between low family incomes and children's behavioural problems.

Much more research is needed to identify which correlates of low family incomes are the most amenable to intervention efforts. In addition, because past studies have focused primarily on

whether poverty affects young children's problem behaviour, research is also needed to investigate the links between low family income and other psychosocial outcomes in children.

Implications for Policy and Services

Current research does not appear to suggest that improving the economic status of low-income families would, by itself, promote children's psychosocial development or reduce their behavioural problems; indeed, a family's income status appears to have a much more substantial causal effect on children's cognitive development and academic achievement.[2-3, 15, 17] Consequently, while income transfers may be effective in improving children's cognitive development, it is unlikely that they will improve children's social and behavioural adjustment. In the end, direct services and therapeutic interventions may be a comparatively more promising alternative.

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