Lasting Impacts: The Economic Cost of Child Poverty in NSW

Summary of literature

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NCOSS
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IMPACT ECONOMICS AND POLICY

Prepared for **NCOSS** by **Impact Economics and Policy**

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Acknowledgement of Country

NCOSS and Impact Economics and Policy acknowledge Aboriginal and Torres Strait Islander peoples as the Traditional Owners of Australia and their continuing connection to both their lands and seas. We also pay our respects to Elders—past and present—and generations of Aboriginal and Torres Strait Islander peoples now and into the future. We acknowledge the spirit of the Uluru Statement from the Heart and accept the invitation to walk with First Nations peoples in a movement of the Australian people for a better future.

About this report

This report was commissioned by the NSW Council of Social Service (NCOSS) to improve understanding and awareness of the costs that child poverty is imposing on New South Wales.

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Introduction

This summary brings together key insights from the international literature on the economic costs of child poverty across the following domains:

Mental health

Physical health

Homelessness

Crime

Educational attainment and earnings

Child maltreatment

Domestic violence

Experiences of childhood poverty are strongly associated with negative economic, health and wellbeing outcomes, both when people are children and later in life when they are adults. A significant body of literature has sought to quantify these impacts and their economic costs, as summarised in this note.

However, quantifying the causal impact of child poverty (measured as low family income or socioeconomic status) is difficult for several reasons:

1. **Experiences of childhood poverty differ**, in terms of its extent (mild versus severe deprivation), duration (temporary, recurring or sustained) and when it occurs (in early years versus adolescence). Many children's experiences will be very different to the average.

2. **Impacts can take years to materialise**, such as impacts on adult income and health. This means many studies are based on adults' recollections of their childhood rather than on robust data (although there are exceptions).

3. **There are many confounding factors** that can affect life outcomes, including parents' education, health and behaviour; genetics; the place people grow up in; peer influences; and the educational and health interventions children receive. Some of these factors may play a bigger role than poverty per se, and others can be caused or exacerbated by poverty. Disentangling the effects of these other factors from the effects of poverty is very difficult.

4. **Reverse causality is also possible**, especially when measuring outcomes for children—for example, poor child health could be caused by household poverty, or alternatively poor child health could be linked to poor adult health which affects parents' ability to participate in the labour market (and so is the cause, rather than the consequence, of poverty).

Care also needs to be taken in drawing inferences for Australia from studies conducted in other countries. The economic impacts of child poverty are likely to be lower in Australia than in countries such as the United States due to the moderating influence of Australia's universal healthcare, education and social security systems.

Physical health

Children growing up in poverty tend to have worse physical health, both as children and when they grow up. There is evidence of a strong link in most countries, with the effect growing with a child's age.[1] For example, in the United Kingdom, a doubling in household income is associated with a 0.36 point increase in child health (measured on a scale of 1-5).[2] In Australia, young adults aged 26 to 32 have scores 12 per cent lower for general health and 10 per cent lower for mental health if they were frequently poor as children, compared to people who were never poor as children (measured on a scale of 0-100).[3]

The age when children experience poverty, and its duration, can significantly affect health outcomes. In the United States, the health of children from families with lower incomes has been found to decline faster with age, compared to children from higher-income families, such that poorer children enter adulthood with both lower socioeconomic status and poorer health.[4]

In Australia, children who experienced persistent poverty in the first 2 to 3 years of their life were less likely than other children to have a healthy diet, less likely to participate in regular physical activity, and less likely to have mothers that have a warm parenting style.[5] Persistent poverty negatively affected the health of children aged 4 to 5. It also affected the health of children aged 6 to 9, although health at younger ages was a much stronger predictor of the health of these children. Further, Australian children from vulnerable families (measured using various characteristics) are more likely to use hospital services during the first five years of life, and less likely to use primary and secondary care services, than children from other families.[6]

There are many potential drivers of the relationship between child poverty and physical health. They include:

Lower access to nutritious food, physical activity, and health care.[7]

Exposure to poor quality or overcrowded housing, smoking, environmental pollution, and violence in the neighbourhood and school.[8]

Less effective parenting styles, potentially influenced by the effect of poverty on parents' mental health.[9]

A higher likelihood of being exposed to negative health shocks, and greater impact of chronic health conditions (especially if children spend a prolonged time in poverty).[10]

The health impacts of childhood poverty often extend into adulthood. People experiencing poorer socioeconomic circumstances during childhood carry a higher risk of overall mortality, independently of their socioeconomic position as adults.[11] In the United States, researchers have found that children who experience poor health have significantly lower educational attainment, poorer health, and lower social status as adults, even after controlling for parental income, education and social class.[12] As noted, in Australia, there is evidence that people who were frequently poor as children have lower general and mental health than those who were never poor.[13]

The effects can also be intergenerational. For instance, child poverty can cause poor health outcomes during childhood, which extend to poorer health and economic status in adulthood, which in turn leads to poorer health outcomes for one's own children.[14]

Better childhood health is associated with better adult labour market outcomes, including higher incomes, higher wealth, more weeks worked, and a higher growth rate in income. Controlling for other factors, people who enjoyed excellent or very good health in childhood earn 24 per cent more than people who were not in good health.[15]

The health costs of child poverty are large. The total annual health costs of child poverty in the US have been estimated at US$192 billion in 2015 dollars,[16] comprising:

- Direct health expenditures and increased spending on special education.
- The cost of lost quality-adjusted life years for children born into poverty.

Poor health as a child can also affect education and thus adult earnings. An Australian study found that the impact of an additional year of schooling on hourly wages is 7.4 per cent lower for people in 'poor' or 'fair' health compared to those in better health, which amounts to $19-25 billion in lost productivity each year.[17] The result may be explained by unhealthy workers having poorer productivity while at work and accepting lower-paid jobs given their experience, skills, and education.

Mental health

Children living below the poverty line face higher risks of poor mental health, such as anxiety, depression and conduct disorders. This is a consistent finding from studies in the US, UK, Canada and Australia.[18] It could be because children in families living in poverty are comparatively more exposed to lower quality housing and home environments, parenting under difficult circumstances, family conflicts, poorer physical health, higher residential mobility, lower quality schooling, or lower access to community resources and services—all of which then negatively affect their mental health.[19]

In Australia, children are more likely to display emotional symptoms of mental ill-health if they have lower household income, lower parental education, parental unemployment, or parents who report psychological distress.[20] One Australian study found statistically significant effects of poverty on mental health for male but not female children, with the relationship to income strongest among adolescents compared to younger ages, which may reflect the effect of cumulative exposure to poverty.[21] This is consistent with evidence of a higher prevalence of behavioural/mental disorders in adolescents from low-income households in Australia.[22]

A large part of the relationship between income and child mental health is due to the effects of maternal mental health, maternal education and neighbourhood disadvantage.[23] In Australia, socioeconomically disadvantaged children are estimated to be 11.6 per cent more likely to experience elevated mental health symptoms than their non-disadvantaged peers, after adjusting for confounding variables including family composition, neighbourhood socioeconomic status, parent mental health, and other factors.[24]

Effects can also be persistent. Higher family income and higher maternal education levels are associated with poorer psychosocial functioning for Australian children at age 4, with the gap between children persisting until at least age 14.[25]

The health impacts can last into adulthood. Poor mental health in childhood has been associated with anxiety, depression, poor emotional regulation, and other conditions in adulthood, including reduced physical activity, poor diet, and excessive alcohol abuse.[26] The adult health effects of poor mental health in childhood may even exceed the effects of poor physical health in childhood.[27]

more likely

to display emotional symptoms of mental ill-health if they have lower household income.

11.6%

Socioeconomically disadvantaged children are estimated to be 11.6 per cent more likely to experience elevated mental health symptoms.

Poor mental health as a child is associated with poorer workforce outcomes as an adult. The reduction in adult incomes has been estimated to be as high as 28 per cent in the United Kingdom,[28] and 37 per cent in the United States.[29] The effects are likely to be greatest in early adulthood.[30]

Many studies have found that poor adult mental health in adulthood is associated with lower workforce participation, with the impact being greater for females than males.[31] In Australia, adults with a mental health condition have unemployment rates up to four times higher than healthy Australians and many are reluctant or unable to join the labour force.[32] A one standard deviation decrease in mental health is estimated to reduce the probability of workforce participation by around 17 percentage points.[33]

However, much of the association between mental health and employment is likely to be indirect (i.e. individual-specific factors that contribute to both poor mental health and lower workforce participation) and causality can run both ways (e.g. unemployment can cause or exacerbate poor mental health). Once these factors are controlled for, the causal impact of poor mental health on workforce participation falls to between 10 per cent[34] to 25 per cent of the size.[35]

Further, high levels of psychological distress have been associated with higher absenteeism (1.7 per cent higher) and reduced performance at work (6.1 per cent lower), with a net productivity loss of 6.7 per cent in Australia—estimated at $5.9 billion in 2010 dollars.[36] People who retire from the labour force early due to mental health conditions have significantly lower savings at retirement age compared to those who were able to remain in employment.[37]

4x

Adults with mental health conditions have unemployment rates up to four times higher than health Australians.

6.1%

High levels of psychological distress have been associated with reduced performance at work.

17%

Decrease in mental health is estimated to reduce the probability of workforce participation by around 17 percentage points.

Homelessness

Poverty is the key driver of homelessness for children, with almost 50,000 children and young people experiencing homelessness on any given night in Australia, and over 42,000 children aged 10-24 seeking help from homelessness services each year.[38]

Experiences of homelessness overlap with experiences of child maltreatment, domestic violence, the criminal justice system, and poor mental health. For example, an estimated 63 per cent of homeless Australian youth had been placed in some form of out-of-home care by the time they turned 18, 56 per cent had left home because of violence between parents or guardians, and over half reported that they had been diagnosed with at least one mental health condition.[39] These interconnections can be complex, with the above factors potentially being both causes of and consequences of homelessness.

Homelessness is associated with a range of adverse outcomes for children. Homeless children are more likely than housed children to experience mental health conditions, have a physical disability or behavioural issues, and have poorer academic achievement (due to decreased classroom engagement and frequent school moves).[40] In the United States, school-aged homeless children have been found to be more than twice as likely to have a mental health problem compared to housed children.[41]

Costs to government of youth homelessness are substantial. One study estimated that the cost of providing health services to homeless Australian youth aged 15-24 was $8,505 per person per year, and the cost of justice services was $9,363 per person per year (in 2011-12 dollars).[42] There are also direct costs associated with providing specialist homelessness services, with families with children comprising 32 per cent of clients, young people presenting alone comprising a further 14 per cent.[43] First Nations children are almost eight times more likely to receive assistance through homelessness services than non-First Nations children.[44]

The broader economic costs can also be large. Australian research has found that people who first experienced homelessness as children are less likely to be employed, with lower education attainment and higher welfare receipt explaining most of the effect for women, and lower rates of school completion and higher rates of incarceration explaining some of the effect for men.[45] In the United States, about a quarter of the economic cost of child homelessness (equivalent to about US$7,800 per child per year in 2012 dollars) have been attributed to the costs of not completing high school, including lost wages, incarceration, and net fiscal losses.[46]

Many homeless children continue to be homeless as adults. About half of Australians receiving specialist homelessness services report experiencing homelessness before the age of 18. About half also report that their parents were also homeless at some point in their lives, implying intergenerational persistence of homelessness.[47]

Crime

Child poverty is associated with involvement in the justice system. Children aged 10 to 17 in Australia are about seven times as likely to be under youth justice supervision if they are from the lowest socioeconomic areas compared to those from the highest socioeconomic areas.[48] Poverty has also been associated with significantly higher rates of juvenile crime across areas of New South Wales (mostly via its impact on child neglect), with an increase of 1,000 additional families living in poverty associated with an additional 141 juveniles involved in crime, holding other factors unchanged.[49] In the United Kingdom, the probability of being arrested by age 34 is 3.8 to 9.6 percentage points higher for people who grew up in poverty compared to those who did not.[50]

However, the relationship between child poverty and involvement in the justice system is complex. Involvement in the justice system can also be affected by levels of cognitive stimulation, family context, and peer pressure as a child, although US research has found there is still a clear link between child poverty and delinquency once these other factors are controlled for.[51] Further, isolating the impact of poverty is complicated by a range of factors that are closely linked to both poverty and involvement in the justice system, including experiences of child maltreatment, homelessness, educational experiences, and alcohol and drug problems.[52] One study found that early school leavers in Australia are seven times more likely than Year 12 or equivalent completers to be an offender and eight times more likely to be in prison.[53]

The above factors often compound the forms of disadvantage suffered by children who are involved in crime. Some families also suffer intergenerational effects, with a quarter of Australians entering prison reporting having at least one incarcerated parent or carer when they were a child, and prison entrants aged 18-24 being three times more likely to have a family history of incarceration than those aged older than 45.[54]

Involvement in crime as a child could also make people more likely to be criminals when they are adults. On average, being arrested as a juvenile increases the probability of being arrested as an adult by 14 percentage points, after controlling for other potential determinants of criminality such as years of schooling, parental education and growing up in a single-family household.[55] Further, rates of re-conviction are higher for younger people involved in the criminal justice system: about 81 per cent over a 10-year period for young people in NSW, compared to 54 per cent for adults.[56]

The costs of crime attributable to child poverty are large, with one US study estimating that as much as 20 per cent of the annual costs of crime were attributable to child poverty in 2008—equivalent to 1.3 per cent of US GDP.[57] This includes victimisation costs, costs to government, private spending on crime deterrence, the opportunity cost of time spent planning and executing crimes, and the social costs of incarceration on families and communities (e.g. rates of eviction and divorce). A UK study estimated the cost of crimes committed by people who experienced child poverty at £870 million to £2.2 billion a year (in 2010).[58]

In Australia, the social costs of crime (including costs to police, courts, and prisons) for early school leavers have been estimated at $30.6 million (in 2014 dollars), with males accounting for 95 per cent of this cost.[59] Estimates of economic costs such as these typically adjust for rates of underreporting.

Educational attainment and earnings

The educational gap for children living in poverty is stark and persistent. NAPLAN test scores across all year levels and domains are substantially lower for children from the lowest socio-economic backgrounds compared to those from the highest.[60] Almost a third of children who grow up frequently or regularly poor do not complete high school, compared to less than 10 per cent of children who grew up in a never-poor household.[61] Similarly, less than 45 per cent of children living in poverty attain a university degree, diploma, or certificate 3 or 4, compared to over 60 per cent of never-poor children.[62]

The effects of poverty on education are strongest in the early years of life. Family income is significantly associated with children's cognitive skill development.[63] More than a third of Australian children living in the most disadvantaged areas are developmentally vulnerable when they start school, and are four times as likely to be developmentally vulnerable in their language and cognitive skills compared to children living in the most advantaged areas.[64] Children who were in poverty in their first year of life are about a quarter of a year behind on reading and numeracy scores by Year 3, even after controlling for background characteristics and school readiness at age 4 to 5.[65] There is also evidence that children who were in poverty in the first seven years of life had worse reading and numeracy NAPLAN scores on average, equivalent to just over one year of schooling at the Year 3 level.[66]

Parenting practices may explain some but not all of the differences. There is evidence that differences in parental investment in cognitively stimulating activities and materials for their child explain some of the differences in educational outcomes for children growing up in poverty, but this does not explain the whole effect.[67] Poverty has been associated with parental stress, depression, and poor health, which might adversely impact parents' ability to nurture their children, and the impacts of higher levels of frustration and aggregation that parents have with their children, which may negatively affect their behavioural and verbal development.[68]

Increases in income for families living in poverty can boost educational outcomes for children. Researchers in the United States have found that an exogenous increase in family income in itself is directly associated with an improvement in numeracy and literacy test scores, at least in the short term.[69]In Canada, increased child benefits have lead to improvements in mathematics test scores, especially for boys.[70] In the United Kingdom, a one-third reduction in family income reduces the chances of securing a university degree by about 4 percentage points.[71] These studies use statistical techniques to control for factors such as family background and individual heterogeneity in order to isolate a causal relationship between income and education. However, the findings are not universal, with similar studies failing to find a link between family income and education after controlling for other factors.[72]

45%

Less than 45 per cent of children living in poverty attain a university degree, diploma, or certificate 3 or 4.

1/3

More than a third of Australian children living in the most disadvantaged areas are developmentally vulnerable when they start school.

Reduced education leads to worse labour-market outcomes for many people who grew up in poverty. Researchers around the world have found that childhood poverty is strongly associated with lower earnings and employment in adulthood, with many attributing the effects to reduced education.

In Australia, people who did not experience childhood poverty are 1.8 times more likely to be employed full time, 1.3 times more likely to have a permanent ongoing job, and 3.3 times more likely to be in the labour force than people who experienced several years of poverty as children.[73] Hourly wages are 23 per cent higher for people who did not experience childhood poverty compared to those who did. Even experiencing just a single year of income poverty in childhood is associated with lower earnings in early adulthood.[74]

Internationally, there is evidence that people who experience childhood poverty spend less time in education than other children, enter the labour market at a younger age, and have lower job positions. In Denmark, some of the strongest effects have been found for children who experience poverty in the first years of life or during their last years of compulsory schooling.[75] In the United Kingdom, childhood poverty has been associated with a 28 per cent reduction in adult earnings and a 6.6 percentage point reduction in the probability of being employed at age 34.[76] These effects fall to 15 per cent and 3.2 percentage points respectively after controlling for education and parental characteristics, suggesting that the impacts of childhood poverty on education only explain about 20 percent of the total cost that childhood poverty has on earnings and employment.

Other researchers have sought to isolate the direct causal impact of childhood poverty on adult labour market outcomes in a way that controls for the many confounding factors. For example, a US$3,000 increase in the income of families living in poverty with children aged up to 5 is associated with a 17 per cent increase in the child's earnings, and an additional 152 hours worked per year, when they are an adult.[77] A doubling in a family experiencing poverty's income has been associated with an increase in the child's earnings of as much as 40 per cent.[78]

The economic penalty of childhood poverty can amount to almost 2 per cent of GDP. In the United States, the impact of childhood poverty on lost wages and employment has been quantified at 1.63 per cent of GDP in 2015,[79] and in the United Kingdom at between 0.5 and 1.9 per cent of GDP in 2010.[80]

Children who did not grow up in poverty are to:

more likely

to be employed full time and/or permanently.

more likely

to earn more.

Child maltreatment

There is a strong link between family income and the risk of child maltreatment (child abuse and neglect, including witnessing domestic violence). In Australia, over a third of children aged 12 or younger experiencing substantiated child abuse were in the lowest socioeconomic quintile. Prevalence also interacts with First Nations status, with the substantiation rate for First Nations children aged 12 or younger almost seven times the rate for non-First Nations children.[81]

Studies have found that Australian children who experience poverty are up to 2.9 times more likely to experience child maltreatment compared to those who do not experience poverty,[82] and that non-First Nations children living in the most socioeconomically disadvantaged areas (measured from 1 to 6) are 5.4 times more likely to have experienced substantiated child maltreatment compared to non-First Nations children in the most advantaged areas (the corresponding estimate for First Nations children is 1.2 times).[83] This is after non-economic factors such as parent age, mental health, and substance abuse have been controlled for. An estimated 27 per cent of all child maltreatment in Australia is attributable to economic disadvantage, with the strongest link for physical abuse, sexual abuse, and witnessing domestic violence.[84]

There are similar findings internationally. Various studies in the United States have found that even a modest increase in income for the most disadvantaged families (e.g. through cash transfers or an increase in the minimum wage) can reduce the likelihood of child maltreatment reports by up to 10 per cent.[85] In Denmark, a 30 per cent reduction in welfare payments was associated with a 25 per cent increase in the risk of children being placed in out-of-home care.[86]

The longer children are in poverty, the higher the risk. According to US studies, children aged up to 15 who have been in poverty for up to 10 years are between 2.5 and 3.7 times more likely to be subject to a report of maltreatment.[87] Children aged under 5 are nearly six times as likely to be exposed to violence or victimisation in the home if their family experiences persistent food insecurity.[88]

1/3

Over a third of children aged 12 or younger experiencing substantiated child abuse were in the lowest socioeconomic quintile.

27%

27 per cent of all child maltreatment in Australia is attributable to economic disadvantage.

26%

Child abuse and neglect was directly responsible for an estimated 26 per cent of suicides and self-inflicted injuries.

$500,000

The lifetime costs of child maltreatment in Australia have been estimated at over $500,000 per child.

Children who experience maltreatment have worse health, education, and justice outcomes. In Australia, child abuse and neglect was directly responsible for an estimated 26 per cent of suicides and self-inflicted injuries, 20 per cent of depressive disorders and 27 per cent of anxiety disorders in 2015.[89] Child maltreatment has also been linked with reduced social skills, poorer school performance, impaired language ability, and negative physical health outcomes.[90] Children who have contact with the child protection system are more likely than other children to have contact with the juvenile justice system and homelessness services.[91] In addition, children who have experienced abuse or been exposed to family violence may be more likely to be perpetrators of family or sexual violence when they are older.[92]

The economic costs of child maltreatment are substantial, and include the costs of future drug and alcohol misuse, mental illness, poor physical health, homelessness, criminality and incarceration, lower workforce participation, and premature death.[93] People who have had contact with the child protection system are estimated to cost Australia's public hospital system up to 27 per cent more over their lives than people who have not had contact with child protection.[94] The lifetime costs of child maltreatment in Australia have been estimated at over $500,000 per child in 2014-15 dollars (see Table 1). Internationally, there is clear evidence that experiences of child maltreatment are associated with reduced income, unemployment, lower levels of job skill, and fewer assets, over and above the influence of family socioeconomic status when growing up.[95]

Table 1: Estimated lifetime costs attributable to child maltreatment (per child maltreated for the first time in 2012-13)[96]

Cost	Best estimate (2014-15 dollars)
Financial costs	
Health system costs	$62,519
Special education	$3,719
Criminal justice system costs	$17,124
Housing and homelessness costs	$874
Child protection system	$15,495
Productivity losses	$47,913
Deadweight losses	$28,793
Non-financial costs	
Loss of life and lifespan due to poor mental health, suicide and self-harm	$314,417
Premature mortality	$14,340
Total costs	**$505,194**

Domestic violence

Poverty has been strongly linked to experiences of domestic violence. Women experiencing poverty are more vulnerable to intimate partner abuse.[97] In Australia, about 12 per cent of women remaining in a violent relationship said they were unable to leave because of a lack of money and financial support, and about 15 per cent of women returning to a violent partner did so because they would otherwise have been in poverty and/or homeless.[98] Family violence is the main reason women and children leave their homes in Australia, and is the main reason for single women with children seeking assistance from specialist homelessness services.[99]

Further, a significant proportion of mothers who experience domestic violence in Australia report that their children have seen or heard the violence, with estimates ranging from 35 per cent to 69 per cent of these women.[100] This exposure of children to family violence is considered a form of child maltreatment (discussed above).

A mother's experiences of domestic violence, caused by household poverty, can also directly impact children. There is evidence that experiences of domestic violence by pregnant women can cause sustained stress which adversely affects their child's birth weight and brain growth. Violence can also adversely affect parenting skills and maternal attachment, compromising children's ability to regulate emotions and their academic performance in school.[101]

One study found that experience of family conflict at ages 13 and 15 is a strong predictor of homelessness at age 25, even after controlling for other risk factors such as peer interactions, academic performance, and neighbourhood attachment.[102]

It is also possible that experiencing child poverty makes people more likely to be involved with domestic violence as an adult (either as a victim or a perpetrator), separately and in addition to the effect of poverty on experiencing or witnessing violence as a child. However, isolating this effect would be methodologically difficult.

12%

12 per cent of women stay in a violent relationship because they have a lack of money or financial support.

15%

15 per cent of women return to a violent partner because they would otherwise have been in poverty and/or homeless.

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