

Child Care: Who Benefits?

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EXECUTIVE SUMMARY

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- Arguments for the public funding of child care rest on the claim that it is a public good—that it provides benefits for the individual and for society, and that investment in child care will reap social and economic payoffs. Perhaps the most abiding and persuasive claim, and the focus of this paper, is that good child care is beneficial to all children.
- Numerous reports on child care produced in Australia over the last decade have made strong claims about immediate and ongoing positive effects of formal child care for all children, based on the findings of overseas early intervention projects.
- A more careful reading of the child care literature reveals that the findings of these studies cannot be generalised outside the specific context in which the programmes were conducted. The research base of many claims about child care does not support their weight.
- The most that can be said with any certainty is that children from disadvantaged families can benefit from high-quality child care, probably best delivered on a part-time basis. It is by no means clear that such advantages extend to the broader range of children, or to full-time formal child care for infants. Therefore, a case for increased public funding of universal child care cannot be based on these claims.
- The most common mistake is to confound centre-based care for infants with part-time pre-school programmes for 3 and 4 year olds. They are very different forms of non-parental care and have very different effects.
- American studies regularly cited to support the argument that child care is widely beneficial include the High Scope Perry Preschool Project, the Abecedarian Project, Project CARE, Head Start and Early Head Start. Each of these studies involved children from low-income or disadvantaged families, who were given a combination of centre-based child care and home visits and, in some cases, health and parenting services. The results achieved were significant but they cannot be expected to be replicated with the broader population.
- Studies that have involved a more representative population provide a less conclusive and more cautionary picture of the effects of child care. Some, including the US National Institutes of Child Health and Development (NICHD) study, have found risks associated with early child care. Australian research is relatively scarce but is equally mixed, and the effect sizes have also been relatively small. Much research has focused on the quality of child care and has concluded, unsurprisingly, that high-quality child care is better than low-quality child care, but has not shown that *any* quality of child care is superior to parental care.
- This paper concludes that there is insufficient evidence to believe that, in general, even high-quality formal child care in the early years is either beneficial or harmful to children in the long term. The oft-claimed developmental, social and economic impacts are by no means guaranteed.

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Introduction

In the 1980s, the Australian government began funding child care; and over the last decade the size of the public purse dedicated to child care has played an important electoral role, and the literature on child care has expanded accordingly.

The term ‘child care’ can be used to encompass a wide range of environments, with the only common feature being that it is non-parental care. It can include regulated centre-based child care or home-based ‘family day care’, as well as informal care by relatives or friends. Child care in the context of this paper refers to non-parental care in formal group-care settings for children in the years from birth to school age. A distinction is made in this paper between child care, which can begin full-time as early as 6 weeks of age, and pre-school, which is usually part-time in the year or two prior to school.

Over time, child care has gone from something that families would use sparingly and only if necessary, to being an alleged human right.¹ There is a loud chorus calling for increased public funding so that all children can attend ‘high-quality’ child care. The major parties have largely acquiesced, to the point that it is estimated that the Federal government now provides more than half of the cost of child care for most families.²

Arguments for the public funding of child care rest on the claim that it is a public good—that it provides benefits for the individual and for society, and that investment in child care will reap social and economic payoffs. It is claimed that ‘affordable and accessible’ child care increases female labour-force participation, and thus productivity and economic growth, and that child care is associated with increased fertility. Perhaps the most abiding and persuasive claim, and the focus of this paper, is that good child care is beneficial to all children.

Every so often this claim is challenged. In the mid-1990s, *The Sydney Morning Herald* and *The Age* published a cartoon by Michael Leunig that portrayed a bewildered baby lying in a child care centre. Child care was already a highly-charged issue among middle-class working women, and the Leunig cartoon caused a furore in the media and academia.

At that time, the question was whether the effects of child care were negative or neutral, and the majority of people seemed to settle on the latter, due to the influence of university-based child care academics, female journalists, and the highly-influential Australian Institute of Family Studies (AIFS).

In the last decade this has gradually changed. The importance of the time from birth to age 3 in brain development has become well known, to the point of being a mantra. Increased awareness that what happens to babies can have a lasting impact on their lives has been a positive development, but it has also been used to steer the child care debate to another level.

Child care advocates are no longer happy with community acceptance of the message that children in child care will at least be no worse off than those in parental care, all things being equal. Now there is a determined movement to show that child care is beneficial for all children. It is no longer enough simply to allay the anxiety of parents who decide to put their children in formal child care for their own private reasons. Now there are efforts to show that they are in fact giving their children an advantage, and that all children would benefit from formal child care, if only it was of sufficient quality.

The intention of this paper is to examine the arguments and evidence most often used to justify making child care more ‘accessible and affordable’ for all families, through increased government funding. It does not contain a detailed or comprehensive review of the entire body of literature on child care, but is restricted to the most frequently-cited and most substantial studies, and an analysis of their use and misuse.

The developmental effects of child care

Numerous reports on child care have been produced in Australia over the last decade by almost every government-funded agency undertaking social or applied economic research. They overwhelmingly make strong claims about immediate and ongoing positive effects of formal child care for all children.

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‘The substantial and positive impacts of quality early childhood care and education on children’s social and cognitive development are well established. Quality programs are strong predictors of later social and educational outcomes and also have important social and economic impacts on families. —Alison Elliot, Australian Council for Educational Research (2006)³

‘Children who attend high quality child care centres perform better in cognitive and social skills, and can be more ready to make the transition to pre-school and primary school.’ —House of Representatives Standing Committee on Family and Human Services (2006)⁴

‘Quality childcare services are widely recognized as being of vital importance to families with young children, children themselves and Australian society in general. Child care services assist parents to participate in work or study, offer families an opportunity to be involved in the community, help to create social networks and provide children with opportunities to develop their social and intellectual skills.’ —Australian Institute of Health and Welfare (2006)⁵

‘Quality child care in the ‘early years’ is also considered to be beneficial to a child through providing a stimulating, educational and caring environment that aids a child’s social, educational and physical development. Studies have shown that quality early childhood programs serve as an early intervention device, aiding in reducing future social problems such as crime, unemployment and teenage pregnancies.’ —National Centre for Social and Economic Modelling (2005)⁶

‘Child care plays an important role in improving the educational and developmental outcomes of children. Along with the growing recognition that the early years in the lives of children are critical for their development, a growing body of evidence shows that quality child care can support children’s socio-emotional functioning. —Ian Davidoff, Australian Treasury (2007)⁷

Adding weight to these claims are seemingly absolute endorsements for universal access (that is, public funding) to child care by high-profile, respected academics like Alan Hayes, current director of the Australian Institute of Family Studies, and Don Edgar, a former director of AIFS.

According to Don Edgar, for example,

‘Long-term studies show that for every dollar invested in quality child care, we reap \$7 saved in rates of later school failure, unemployment, crime and family breakdown ... Every hour spent in every form of child care is a learning experience.’⁸

In making these claims, the above reports and others like them draw most often on overseas studies. On the surface, these studies appear to provide evidence that formal child care has significant positive effects for all children or, at the very least, does no harm. It is also repeatedly claimed that there are guaranteed economic payoffs.

A more careful reading of the research, however, reveals that this is not the case. Recent reviews of the longitudinal studies on which these claims are based have concluded that their findings cannot be generalised outside the specific context in which the ‘early intervention’ programmes were conducted.

A report from the Institute of Education at London University warns that

‘There is undoubtedly a trend, reflected in many studies, to indicate that early intervention makes a difference to subsequent outcomes, but the misapplication of the findings from these studies is likely to lead to a diminished, rather than enlarged, understanding of the processes involved, and the contexts in which they can be said to work.’⁹

It is not the intention of this paper to reignite the ‘child care wars’ of the 1990s. This literature review is not comprehensive or in-depth, but it is important to point out that the research base of many claims about child care does not support their weight.

The biggest mistake made in the reporting of research on child care is to confound centre-based care for infants with part-time pre-school programmes for 3 and 4 year olds. They are very different forms of non-parental care and have very different effects.

Summarising the research evidence on early childhood programmes, Edward Melhuish at the Institute for the Study of Children, Families and Social Issues at the University of London, states that

‘While the research on pre-school education (3+ years) is fairly consistent, the research evidence on the effects of childcare (0–3 years) upon development has been equivocal with some studies finding negative effects, some no effects and some positive effects. Discrepant results may relate to age of starting and also probably at least partly to differences in the quality of childcare received by children. In addition, childcare effects are mediated by family background with negative, neutral and positive effects occurring depending on the relative balance of quality of care at home and in childcare. Recent large-scale studies find effects related to both quantity and quality of childcare.’¹⁰

The studies most commonly cited as providing evidence of the efficacy of formal child care are American. Perhaps the best known of these is the High Scope Perry Preschool Project, a longitudinal study that has followed its subjects from early childhood into their forties. The Perry Preschool Project is responsible for the oft-repeated claim of a seven-fold return on investment in early childhood care programmes (read, ‘centre-based child care with highly trained staff’), and dramatically-reduced risk of unemployment, criminality and teenage pregnancy.¹¹

The results as stated are not false but they do not apply as broadly as might be assumed from the way they are generally reported. The Perry Preschool Project was a programme designed for children aged 3 and 4 years, from severely disadvantaged families, and who had been identified as being at risk of developmental delays. The project involved part-day pre-school attendance and home visits by child care professionals.

This means that although the results are striking and significant, they do not necessarily apply to children under 3 years, or to children with a wider range of backgrounds and abilities. They also do not apply to long day-care.

This is a common misrepresentation. Other American studies regularly cited to support the argument that child care is widely beneficial include the Abecedarian Project, Project CARE, Head Start and Early Head Start. Each of these studies involved children from low-income or disadvantaged families. Each of these studies, moreover, involved a combination of centre-based child care and home visits with, in some cases, health and parenting services.¹² Again, the results achieved cannot be expected to be replicated with the general population.

Another study, the Cost, Quality and Outcomes Study, had a broader range of participants in terms of family background, but was again restricted to children aged 3 to 7 years.¹³ Multiple analyses using data from these studies have been published, providing various findings on mother-child attachment, cognitive skills, social-emotional adjustment, school readiness and behaviour. These findings are significant and important, if applied appropriately.

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The findings can be briefly summarised: high-quality child care is better for children than low quality child care, especially for children from impoverished homes.

The findings can be briefly summarised: high-quality child care is better for children than low quality child care, when quality is measured by staff/child ratios, staff qualifications, learning programmes and physical environment. This is true for all children, but especially for children from impoverished homes.

Equally important, however, is what these studies *do not* show. They do not show that centre-based child care is superior to parental care for all children. They do not show that long hours in centre-based child care are beneficial (or even harmless) for all children. They do not show that centre-based child care is beneficial (or even harmless) for babies and infants, except those whose parental care is poor.

There are only a few studies offering strong comparative evidence on infants in child care and infants in parental care. One Swedish study published in 1989 is frequently referred to in the literature. It found that children who had started full-time child care before they were one year old had better school achievement, school adjustment and social competence at age 8 than children who started child care later or not at all. No study has replicated these results, and a follow-up study when the children were 13 years old found the child-care effect lessened substantially and was no longer statistically significant on two of the three measures.¹⁴

The largest US study on child care, by the National Institute for Child Health and Development, is also frequently referred to in the child care literature, but often in more critical terms than the other studies. This is probably because the NICHD study finds fewer positive effects of child care, and even some negatives. A recent report using NICHD data finds that although children may gain some short-term cognitive benefits from centre-based child care in early childhood, early entry and long hours in centre-based child care are associated with later childhood behavioural problems, including aggression.¹⁵

While the findings of the NICHD study are also not directly applicable to the Australian child care context, they do carry more weight than most. The sample size is larger than most other longitudinal studies and its participants are more representative of the population. Numerous researchers have used NICHD data to examine the effects of child care and the findings do convey an element of risk associated with child care. This risk increases with time in care and becomes more salient with age, regardless of quality of care.¹⁶

A finding of risk is not evidence of incontrovertible harm and, like the evidence from other child care studies, it is important neither to play down the risks nor to overstate them. In all observational research, it is not possible to attribute cause and effect. Although one of the most robust findings is that spending more hours in child care is related to more problem behaviours in later childhood, it is plausible that causality works both ways. It may be, for example, that parents with difficult children are likely to have them spend more time in care.¹⁷

Cortisol research gives us a better indication that young children's experience of child care is not benign. Cortisol is known as the stress hormone, and is released by the body when humans experience a threat, feel unsafe, or unsure of themselves. Repeated stressful experiences in early childhood can lead to abnormal production of cortisol and is associated with a range of mental and physical health problems later in life.¹⁸ Cortisol findings are important because they measure children's immediate psychophysiological responses to child care, as opposed to subjective reports by parents and carers.

The normal pattern of cortisol release is a peak in the morning and a decline throughout the day. US researcher Sarah Watamura and colleagues found that seven out of ten children aged one-and-a-half to 3 years increased their cortisol output throughout the day at child care, but most of these same children did not have elevated cortisol levels on their days at home.¹⁹

Australian Research

Australian research has also provided conflicting results on the effects of child care.

The Australian Institute of Family Studies has been an important source of research on child care. In 1994, AIFS published a report by Gay Ochiltree which reviewed forty years

of international research on child care and concluded that '[d]espite endless research to find negative effects of non-parental care, no evidence has been found that good quality child care harms children'.²⁰ This was followed in 1995 by a report by Gay Ochiltree and Don Edgar which rejected the validity of overseas research, including the NICHD study, which found negative effects of child care.²¹ Demonstrating the disputed nature of child care research, Anne Manne later took Ochiltree and Edgar to task over their interpretation of the evidence.²²

Over the last few years, AIFS has been involved in a fairly nuanced assessment of the impact of child care on children. AIFS researchers have been part of a team of researchers investigating the impact of different types of child care, the stability of child care arrangements, and the challenge of creating a cohesive care environment for children from different cultures.²³

Linda Harrison from Charles Sturt University and Judith Ungerer from Macquarie University have published numerous articles on child care, including longitudinal research on the effect of child care on security of maternal attachment—the strength and sensitivity of the relationship between mother and child—and on wellbeing at school age. Secure maternal attachments are believed to reduce the risk of a range of psychological and behavioural problems. Harrison and Ungerer found that infants in full-time formal child care were more likely to have secure maternal attachments than infants in short hours of formal child care or children in informal care settings (such as relatives or friends).²⁴ Harrison and Ungerer also found that the timing of mothers' return to work was related to attachment security at 12 months, with an earlier return to work being associated with more secure attachment. Infants whose mothers had not returned to work at 12 months were least likely to have secure attachment, perhaps counterintuitively.²⁵

Several child care-related factors which were insignificant in the early years in these studies seemed to have an impact over time, however. Results at age 6 showed that children who had received high hours of care had poorer academic ratings, whereas children whose child care had been less extensive were rated as more competent learners. Instability of infant child-care arrangements also became more salient and was associated with social and behavioural problems at age 6. Type and quantity of care exhibited no relationship, positive or negative, with social and behavioural development.²⁶

University of Melbourne academic Kay Margetts has looked at the relationship between duration, timing and type of childcare and adjustment in the first year of formal schooling. She found that 'more extensive non-parental care in the years closest to birth increases the risk of children having difficulty adjusting to the first year of schooling in all domains; social, behavioural and academic.'²⁷ Margetts did not find any significant difference in the risks associated with types of non-parental care: early onset and long hours of all non-parental care increased the risk of later problems, especially behavioural. The exception, again, was pre-school attendance in the year or two prior to school, which was found to be widely beneficial.

Margaret Sims, at Edith Cowan University, has published several studies on child care. Sims found elevated cortisol levels in children in lower-quality childcare, indicating that their experience was stressful, and lower cortisol levels in children in higher-quality child care. While Sims did not compare cortisol in children in child care with children in parental care, she draws the conclusion that 'cortisol research also supports the contention that it is quality that counts, not who delivers the care.'²⁸ This does not concur with cortisol results reached by Sarah Watamura and colleagues, outlined above.

There have been no large-scale randomised trials of child care or early childhood programmes in Australia, and existing studies rarely provide direct evidence on the effects of parental versus non-parental care. Effect sizes in the existing evidence are often small, and the applicability of US research on child care in the Australian context is also contentious. An article co-authored by US and Australian researchers challenges the negative findings of the NICHD study and concludes that 'the generalizability of the NICHD study findings hinges on the specific context in which these results have been

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obtained'. Presumably the same cautions pertain to the studies which report positive findings, but this is not stated.

Nonetheless, AIFS director Alan Hayes told the Commonwealth parliamentary inquiry into Balancing Work and Family in 2005 that

Child care, for example, is no longer, and has not been for a decade at least, seen as a labour force participation issue alone. Child care is a key contributor to the development, health and wellbeing of children, and this perspective is increasingly acknowledged.²⁹

This paper does not conclude that child care is harmful, although there are several Australian authors who have made this case, including Steve Biddulph and Peter S Cook.

Biddulph's book, *Raising Babies: Should Under 3's Go to Nursery?*, has not been published in Australia, but he has written a number of press articles outlining his argument against centre-based child care, particularly for infants. According to Biddulph,

The research is now undeniable that babies and younger toddlers do not thrive in child care. ... Care-raised babies don't all become psychopaths, but they are measurably more anxious, aggressive and disobedient as they move through pre-school and the primary grades.³⁰

Biddulph's book contains his interpretation of the evidence on child care, focusing on the results that indicate harmful effects. Like Biddulph, retired child psychiatrist Peter Cook presents evidence that highlights the adverse effects of formal child care for infants; but there is also a tendency to overstate the case for exclusive maternal care of children.³¹ This results in a debate that swings endlessly, and unhelpfully, back and forth between the two extremes when in reality the evidence falls somewhere in the middle.

In her book, *Motherhood*, Anne Manne gives a detailed account of the NICHD studies and other research findings that time spent in child care and early age of entry into child care are risk factors for later behavioural problems. Even so, Manne acknowledges that there are extenuating factors and what is good for one family may not be right for another:

There is no need to catastrophise the results, but in modern societies, on every health issue, the agreed principle is that every person adopting a recommended course of action should know the risks as well as the suggested benefits.³²

An important new Australian study promises to provide some new information about child care. The Longitudinal Study of Australian Children is a national study which began in 2004 to track development and experiences from birth to young adulthood.³³ It is observational, not a randomised trial, and will therefore not yield the highest possible quality of data, but it will provide a much needed opportunity to study the links between experiences of child care and later educational, social and behavioural outcomes in Australia. This opportunity must be maximised if the results are to be useful. Data collected should allow replication and extension of the most sophisticated studies of cortisol levels, attachment, and short- and long-term cognitive and behavioural effects.

Conclusion

Although research does not confirm the hypothesis that child care is universally good, this does not mean it confirms the antithetical view—that child care is universally bad. Nor can we confidently accept the null hypothesis, that child care does no harm, especially to infants.

This paper concludes that there is insufficient evidence to believe that, in general, formal child care in the early years is either beneficial or harmful to children in the long term. There are a large number of possible intervening factors, including the child's home

environment, their age, the quality and type of care, time spent in care and the stability of care arrangements. There may well be other influential factors, such as temperament of the child, that are yet to be properly investigated.

This paper does not suggest whether families should or should not use child care. It is a personal choice made by families, based on their own circumstances, but this choice must be honest and informed. It does show, however, that the claimed developmental, social and economic impacts are by no means guaranteed.

In terms of policy, therefore, a judgement must be made about the effective use of public funds. The evidence suggests that well-designed, tightly-targeted programmes can be effective for children from socioeconomically disadvantaged families, but it does not justify universal child care.

Nobel Prize-winning economist James Heckman has expressed concern that his highly influential findings on the economic benefits of early intervention for disadvantaged children have been misinterpreted. In an article on the *Wall Street Journal* website, Heckman says that ‘Science doesn’t support universality ... we have to promote [early childhood programmes] more cautiously’.³⁴

ANU economist Andrew Leigh agrees with Heckman and has argued that Australian policy-makers are aware of the research evidence and have ‘read the headline but skipped the story’. As a result, taxpayer dollars are flowing to universal, low-impact early childhood programmes instead of intensive programmes where they are most needed. Leigh contends that ‘Offering more publicly-provided child care to the middle class may have a high electoral impact, but it is not going to transform the life chances of the poorest’.³⁵

The most that can be said with any certainty, based on early-intervention studies, is that children from socially and economically disadvantaged families can benefit from high-quality child care, probably best delivered on a part-time basis. It is by no means clear that such advantages extend to the broader range of children, or to full-time formal child care for infants. A case for increased public funding of universal child care cannot, therefore, be based on these claims.

The arguments that child care increases female labour force participation and hence national productivity and economic growth, and is associated with increased fertility rates, will be examined in later papers.

The evidence suggests that well-designed, tightly-targeted programmes can be effective for children from socioeconomically disadvantaged families, but it does not justify universal child care.

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