

The Case for Investing in Early Childhood

A Snapshot of Research by

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everyone's family

Introduction

A range of factors have contributed to the rise of early childhood education and care (ECEC) on the international policy agenda, including ageing populations, increases in lone-parent households, higher female employment rates and welfare reforms. However, the importance of investing in early childhood has yet to be adequately reflected across the Australian policy agenda, as the Council of Australian Governments (COAG) recently acknowledged:

“The economic and social change of recent decades presents new challenges for policies that seek to boost human capital. It will no longer be enough to help people deal with the effects of change. A more strategic, life-cycle perspective will be needed to prevent the emergence of problems in the first place, as opposed to merely treating them.”¹

A focus on prevention and early intervention, and sustained attention, is required if people's underlying capabilities are to be maintained throughout life. The Prime Minister captured this sentiment recently, when he spoke of a "willingness to redirect the energies of government away from simply picking up the pieces of social dysfunction towards strategies of early intervention".²

Evidence from around the world suggests that strengthening the family as an essential unit of society and promoting the regeneration of communities are the most effective ways to ensure children develop into healthy and responsible adults, thereby contributing to a more caring and cohesive Australian society. A supportive family environment is a critical factor mediating positive early childhood development, as has been shown in research by James Heckman (examining skill development) and Richard Tremblay (looking at the development of aggression).

Heckman - Cognitive and Non-Cognitive Skill Development

A significant body of research shows that a supportive family environment for children, especially in the earliest weeks and months after they are born, greatly increases their chances for optimal cognitive and non-cognitive development as well as for better learning outcomes and more successful transitions from home to school and through other life transitions (Shonkoff & Phillips, 2000; Shonkoff & Meisels, 2000; Keating & Hertzman, 1999). More recent research by the Nobel prize-winning economist James Heckman has introduced a new level of analysis into the importance of family in mediating the cognitive (intellectual) and non-cognitive (socio-emotional) skills development of children in the early years. In particular, Heckman shows how this distinction has become increasingly important in light of interventions exploring how children can successfully overcome disadvantage in a sustainable manner.

Heckman's evidence (Heckman et al, 2006) asserts the complementarity of the two skill types, with particular emphasis on the ability of non-cognitive skills (e.g. motivation, self-confidence) to moderate the impact of genetic disadvantages on socioeconomic success in later life. His research convincingly shows that poor non-cognitive skills are powerfully influential in terms of a child's subsequent involvement in crime, teenage pregnancy and education among other things (Heckman et al, 2006). Other longitudinal research also

¹ Communiqué from the Council of Australian Governments (COAG) meeting on 10 February 2006.

² Ibid.

demonstrably supports this complementarity. For example, the High/Scope Perry Preschool Program, which tracked the impacts of early childhood intervention on disadvantaged African–American children over 40 years conclusively illustrated this when it showed that the children within the program had become considerably more successful adults than similar children outside the program, even though their IQs were no higher (Schweinhart et al, 2004).

Tremblay – Mediating aggression

Heckman’s research is further complemented by a growing body of longitudinal evidence on the socio-emotional benefits of early years investment. Tremblay (2006) has shown that aggression – long conceived to be a learned behaviour peaking in adolescence – actually has genetic origins in early childhood and infancy, with the family environment playing a crucial role in moderating the degree to which this aggression develops later in life. For example, research by Dionne et al (2003) into 600 twins studied since birth showed that initially physical aggression has a strong genetic base. This effect is strong at 18 months, accounting for 82 per cent of aggression. However at 60 months or 5 years, the genetic influence is down to 0 per cent, while environmental influences increase from 18 per cent to 42 per cent over the same period. The issue is not that children learn to aggress, but rather that children learn not to aggress, with factors including separated parents, low income and adolescent motherhood all acting as predictors of high levels of retention of physical aggression (Tremblay, 2006). This confirms similar national and international research into the importance of factors such as parental education and income on children’s wellbeing (Bornstein & Bradley, 2003; GoC, 2003; Rector & Johnson, 2002), and makes it clear that a supportive family environment is absolutely critical to the development of pro-social skills in infants and children.

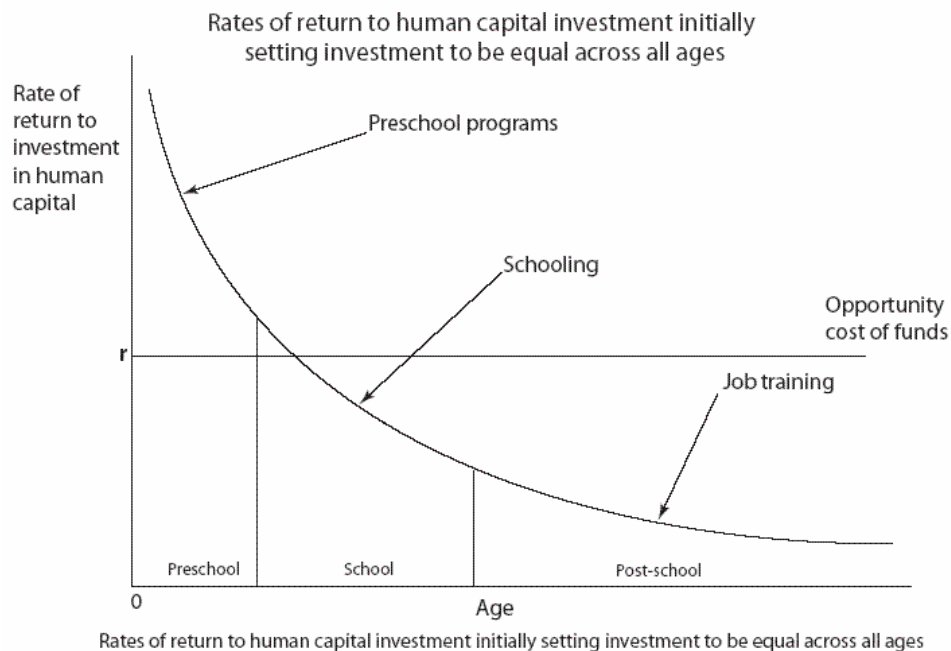
Together, these complementary perspectives promoting early years investment have significant implications for how government, private and non-profit sector organisations respond to disadvantage. For the past 30 years, interventions have been strongly influenced by Piaget’s theory of education, which prioritised the development of cognitive (intellectual) skills as the key to socioeconomic success in adult life (Piaget & Inhelder, 1969). As a result, policies and programs have been predicated largely on the assumption that an educational intervention is ‘successful’ if it improves on test scores (Clement, 2005). This neglects all of the non-cognitive, socio-emotional abilities that usually develop in children from a supportive family environment, and that the evidence shows are powerful determinants of reduced disadvantage as adults.

The benefits of investing in early childhood family environments

Research into the dynamics of skill formation makes clear that non-cognitive (like cognitive) skills are most effectively cultivated in early childhood, as positive attitudes produce a multiplier impact on the successful desire for and acquisition of other skills. In other words, early childhood interventions that nourish a balance of both cognitive and non-cognitive skill development put children in a much better position for the future (Cunha et al, 2006).

However, positive benefits can begin to accumulate long before the child is even born through ensuring appropriate support for ante-natal foetal health and development. Research has highlighted factors such as siblings, a mother from a disturbed background, an adolescent mother, separated parents, being from a low income family, and smoking in pregnancy as being potentially harmful to children’s skills development. Smoking in pregnancy in particular has been shown to affect the baby’s brain development and may lead to inattention and hyperactivity. The quality of food throughout pregnancy also affects brain development, possibly the control mechanism (Tremblay, 2006). Supporting the family unit even before the child is born is therefore of critical importance to healthy cognitive and non-cognitive development in early childhood.

Ensuring that supportive services for pregnant mothers and their babies are accessible, affordable and of accredited quality is likely to involve a sizeable ‘up-front’ investment of government funding. Yet once the public impact of this early investment has been calculated (taking into account crime savings, education savings, welfare savings and increased taxes due to higher earnings), the economic return is between 15-17% for every dollar (Heckman, 2006a). This is exceptionally high for an investment of this nature, and far more of a return than for dollars invested in school or post-school interventions (see chart below).



The ‘Opportunity cost of funds’ line indicates that anything above this line should get priority funding. *Source: Heckman (2006b)*

Conclusion

The Smith Family is ultimately concerned with societal change through children and education. At a program implementation level, The Smith Family aims to increase the personal and collective resources of individuals, families and communities to help them develop skills and capacities they need to respond to challenges and more fully participate in society. Given that developmental success or failure within the first five years of a child's life directly influences the acquisition of basic skills, particularly those required for "optimal functioning in formal education", the further expansion and extension of effective programs in early childhood education is extremely important (Leseman, 2002).

As an evidence-based organisation, The Smith Family has used the research referred to throughout this snapshot to create the Guiding Principles³ that have informed our strategic transformation from a welfare-orientation to a social enterprise model over the last seven years. Today, we are increasingly focusing our efforts on the prevention and early intervention end of the change continuum, and on achieving our long-term outcomes of establishing the strongest possible foundations for the transition from ante-natal through to birth and school. Our decisions to refocus on disadvantaged children within the family context, and to adopt a 'place-management' approach in facilitating child-friendly communities as a response, were not only initially informed and guided by evidence, but continue to be reaffirmed and validated by subsequent waves of research as discussed in this snapshot. In this way, The Smith Family has been able to maintain its leadership role as a social enterprise in developing an effective population based response to maximise the socioeconomic participation of disadvantaged children and their families.

For some time now, universal access to public school education has been a feature of our society. Yet, while the research discussed in this snapshot has revealed the critical role of ECEC in helping children to reach their full potential, universal access to preschool care is still absent in Australia. Although the idea of compulsory preschool education for all four-year olds is now finally being discussed, the research suggests that this in isolation is not enough. The years 0-3 and the internal and external environmental factors for pregnant mothers are also, if not more, influential in determining healthy child development, and should also be addressed.

Heckman and Tremblay's research has shown that families, not schools, are the major source of inequality in the performance of students. Gaps in scholastic ability emerge early in children's lives and widen slightly in the early years of schooling, but they stay constant after the age of eight. In fact, school environments play only a small role in accounting for these gaps, or in widening or narrowing them (Heckman, 2006b; Tremblay, 2006).

In conclusion, the research touched upon in this snapshot is strongly supportive of a shift in policy and programming along the change continuum to the prevention and early intervention end, reflecting The Smith Family's own organisational transition over the last seven years. Investment in early childhood education and care is manifestly the best evidence-based path to maximise the attainment of our mission that together with caring Australians, The Smith Family will unlock opportunities for disadvantaged families to participate more fully in society.

³ The Smith Family's eight Guiding Principles were drawn up in 1999 to shape the evolution of the organisation into the 21st century. They are that we will (1) Be about societal change; (2) refocus on disadvantaged children within the family context; (3) work with and through other organisations; (4) be evidence-based and community focused; (5) move steadily along the change continuum to the prevention and early intervention end; (6) diversify our sources of funding; (7) be national in presence as well as spirit; and (8) enhance our internal capacity particularly using technology.

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