

Measuring the Economic Environment: What resources are available to children in their first 1000 days?



Strong and consistent associations between the experience of poverty in early life and poor outcomes across the life course have been well documented in recent decades, for many populations living in a range of different socio-economic and political contexts. Because of this much resource and political energy has been invested in attempts to reduce the impact of poverty, especially in early life. In New Zealand there has been a recent focus on finding new solutions to reduce the high rates of poverty that particularly affect children, as well as to address the inequities that are seen in both rates of exposure to poverty and the multiple poor outcomes previously demonstrated as being associated with early exposure to poverty.¹

There are many ways to define child poverty and there is no one standard way to do so, although it is common to use a measure based on household income (absolute or relative). Measures which capture the experience of hardship at a family level are also often used alongside these income measures.^{2,3} Because it is now well recognised that early exposure to poverty limits multiple life course opportunities and imposes costs at the individual, family and societal level the drive to reduce child poverty in particular has also taken a rights-based approach, based on the premise that it is every child's right to "achieve their full potential and participate as equal members in society".¹

There is no simple solution to address either the causes or the consequences of child poverty, and while the mechanisms through which poverty affects life course outcomes are yet to be fully elucidated, it is also recognised that multi-faceted, cross-agency solutions will be required to address this entrenched issue within our society. In the 2012 report on *Solutions to Child Poverty*, the expert advisory group noted that in order to find innovative solutions: firstly the scale and the seriousness of child poverty needed to be better understood; and secondly a better understanding of the causes and consequences of poverty for contemporary New Zealand children was required.

What is the *Growing Up in New Zealand* evidence?

The breadth of information collected directly from the *Growing Up in New Zealand* families provides a rich resource that can contribute to developing both a better understanding of the extent of child poverty and its causes and consequences.

Information is available about a range of capitals that collectively contribute to a family's ability to ensure that their child or children is/are able to achieve their "full capacity and participate equally in society". In addition to repeated measures of economic capital (measures commonly used to define poverty) the longitudinal information collected from the families from before their children's birth also includes repeated measures of physical, social and human capitals available to contemporary NZ children during their earliest years (Figure 01).

Growing Up in New Zealand information collected directly from the families and children provides repeated measures of the components of the four inter-connected capitals listed in Figure 01.

In this briefing we provide some specific examples of the longitudinal information available to measure the components of economic capital (commonly used alone to assess poverty), as well as family focussed physical, social and human capitals, all of which collectively contribute to a family's capacity to support their child's early development and wellbeing.

Knowledge about how these inter-related capitals co-occur, as well as change over time, can inform a much richer understanding of the extent, causes and consequences of child poverty in New Zealand today, to provide population relevant and context specific insights into developing innovative solutions to reduce child poverty.

Economic capital

Income based measures of economic capital are commonly used to define absolute or relative rates of poverty in a population. Measures of family hardship, that is being "constrained by material circumstances" can provide additional information about the resources available at a family level, although these are not always available.² Economic deprivation and experiencing hardship commonly occur together, but do not always co-occur (estimates are that they may co-occur in around 50% of cases).³

The *Growing Up in New Zealand* information has measures of both economic deprivation and family hardship so the extent of this overlap can be determined for the contemporary New Zealand child population during their earliest years.

Given the centrality of measures of economic capitals for assessing the extent of child poverty, information on three components of the Economic capitals from Figure 01 are provided on the following pages.

Firstly information on total family income available to a household during the first 2 years of a child's life is shown. Family or household income is acknowledged to be a useful proxy for the level of material deprivation a child is experiencing.¹

Additionally information about the sources of income (including benefit receipt), and experience of hardship, based on the New Zealand individual deprivation scale, are provided to illustrate the information available to measure economic capital.

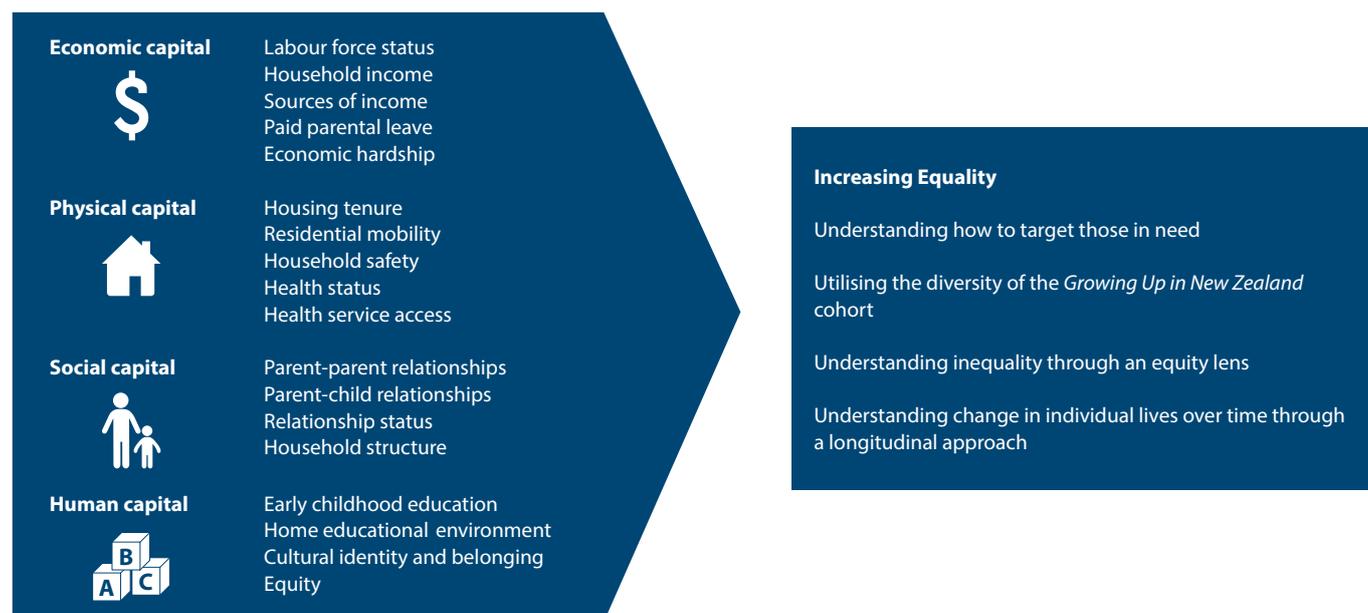


Figure 01: Examples of the economic, physical, social and human capitals available to the *Growing Up in New Zealand* children during their early development. Examples are focussed on the family and home environment (LHS). Understanding how these capitals are distributed and accrue over time can inform how to increase equity (RHS).

Family income

Family incomes generally undergo a great deal of flux around the time of a child's birth.

- It is common for cohort families to experience a drop in income in the immediate period after their child's birth. This is often because at least one parent takes leave from their employment around this time.
- The greatest change in the distribution of household incomes during the first nine months of the children's lives was the reduction in the proportion of households earning between \$100,000 and \$150,000 per annum. In general the distribution was shifted downwards.
- By the time the children were two years of age the distribution of household income had shifted back in the direction of the pre-pregnancy household income distribution, although not completely back to pre-pregnancy levels (Figure 02).

Sources of income

- Most families were reliant on multiple income sources during the first two years of their children's lives. When the children were two years old, 1 in 4 families (26%) had only one source of income. By comparison 40% received income from two sources, 22% from three, 8% from four and over 3% of families received income from five or more sources.
- The overall proportion of households receiving an income tested benefit was similar when the children were nine months and two years old (16%). This similarity hides significant individual family movement in and out of these categories however – approximately one-third of families moved out of benefit receipt and another one-third moved in (Figure 03).

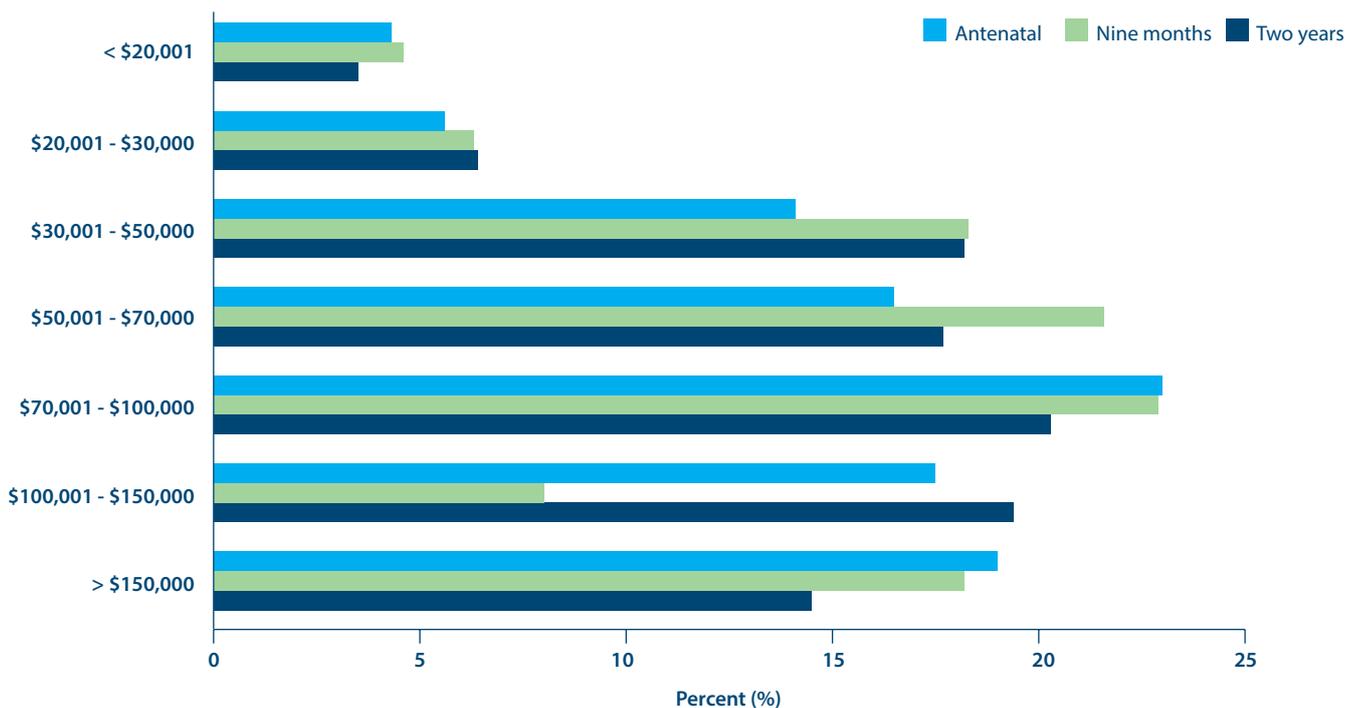


Figure 02: Distribution of Household income for *Growing Up in New Zealand* families and changes during the first 1000 days of their child's life (measured late pregnancy, nine months and two years)

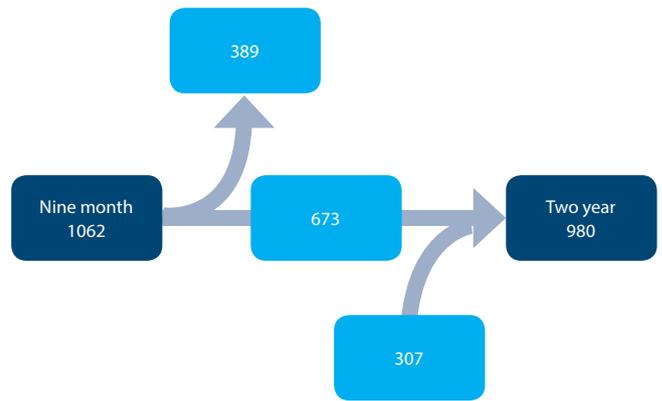


Figure 03: Change in income tested benefit receipt between nine months and two years

*Exit arrows indicate households who stopped receiving an income tested benefit between data collection waves, and entry arrows indicate households who started receiving an income tested benefit between data collection waves.

Economic hardship

Many families experienced some form of hardship during their child's first year of life.

- Half of all families reported they have been forced to buy cheaper food so they could pay for other things they needed; 18% reported putting up with feeling cold to save heating costs; 13% had made use of food grants or food banks because of money shortages and 13% had gone without fresh fruit or vegetables often in order to pay for other things.
- Less than half (44%) of families with infants did not report experiencing any indicators of hardship between late pregnancy and when the children were 9 months of age; compared to almost 1 in 3 (29%) reporting at least one hardship, 13% experiencing two, and 14% reporting three or more.

Other capitals

Examples of the information available from families on components of physical, social and human capitals in Figure 01 are also provided here to illustrate the wealth of longitudinal information available to better understand the reality of experiencing poverty for New Zealand children during their early years when developmental trajectories start to take shape.

Physical capital

Housing tenure and residential mobility

- Just over half of families (55%) were living in family owned accommodation when their children turned two. This was approximately the same proportion as at earlier time points.
- Approximately 38% of families lived in private rental accommodation and 6.5% lived in public rental accommodation when their child was two years of age.
- Nearly **one in two families (45%) had moved house** at least once between late pregnancy and when the cohort child was two years of age (Figure 04).

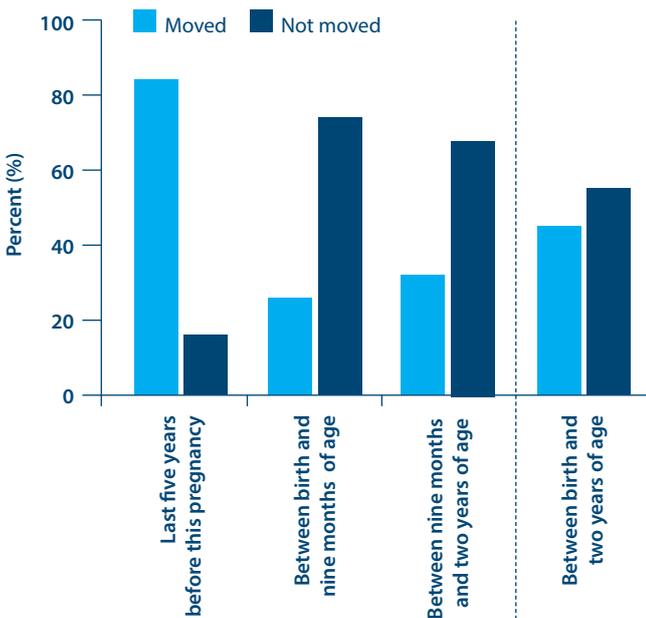


Figure 04: Residential mobility in the first two years of life (percentage who moved)

Service access

A total of 365 families (approximately 6% of the cohort) stated they were in contact with social service agencies or support services in the first 1000 days of their child's life. 10% were in contact with two services and 5% were in contact with three or more. For example:

- **Whānau Ora** – 102 families (approximately 2%) had had contact with a Whānau Ora service, where 48% of these mothers identified as Māori, 27% European and 21% Pacific

or Asian. Initial contact with Whānau Ora services was before birth in 24% of cases, before 6 weeks for 20%, between 6 weeks and six months for 16% and a similar proportion between six months and one year, with 20% of contacts in the second year of the child's life.

- **Family Start** – 77 families (1.2%) reported contact with Family Start in the first two years of their child's life.
- **Child Youth and Family** – 79 families (1.3%) reported contact with CYF services in the first two years of their child's life.

Social capital

Household structure

At two years cohort children were commonly growing up in extended family situations (Figure 06).

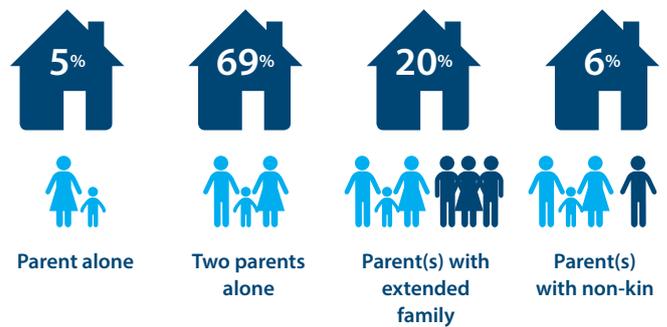


Figure 06: Household structure at two years of age

- Approximately 11% of the children had experienced at least one change in household structure between the age of nine months and two years.
- The proportion of households where children were living with a sole parent or with extended family both decreased between nine months and two years of age.

Human capital

Early childhood education

Enrolment and participation in early childhood education (ECE) has been gathered since birth. The diversity and changes in ECE use by the cohort over their first two years is shown in Figure 07.

Comprehensive information is also available to characterise the home learning environments during the first two years of life so this can be integrated with the information on the formal learning environments to understand how these capitals contribute to child development and wellbeing, and how different patterns of exposure during the first 1000 days of life might either mitigate or exacerbate the exposures to other capitals, including exposure to poverty.

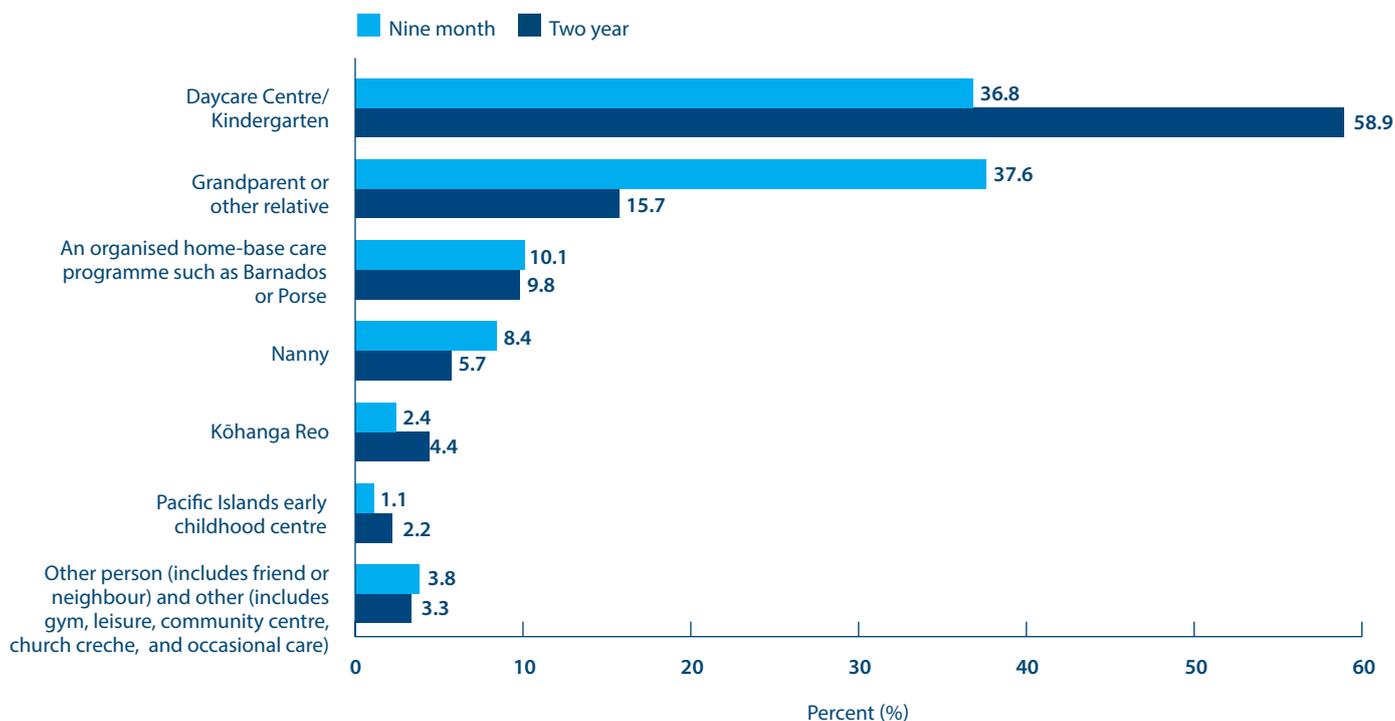


Figure 07: Types of early childhood care and education used at nine months and at two years of age

What does this mean for finding solutions to child poverty?

Growing Up in New Zealand can deliver:

- Population relevant information about the economic, physical, social and human capitals to better understand the scope and seriousness of child poverty across the diversity of our contemporary New Zealand children during their earliest years
- Rich information about families and home environments from before the birth of the cohort children to better understand the causes of poverty in childhood
- Longitudinal information about the cumulative exposure to poverty over time and what familial and environmental factors mitigate movement in and out of poverty
- Longitudinal information about multi-disciplinary child outcomes to understand the consequences of exposure to poverty for children growing up in New Zealand today
- Measurement of economic, social, human and physical capitals for Maori, Pacific and Asian children growing up in New Zealand as well as NZ European to understand the causes and consequences of inequities in exposure to child poverty
- Population relevant information about how these multiple capitals (Figure 01) overlap and accumulate to help identify NZ children who are most vulnerable in early life before they experience poor outcomes, so strategies can be better targeted to support them from before birth to “achieve their full potential and participate as equal members in society”

¹Solutions to Child Poverty: Evidence to Action. Expert Advisory Group on Solutions to Child Poverty. Children’s Commissioner

²Treasury Report (T2012/866): A descriptive analysis of income and deprivation in New Zealand. NZ Treasury, May 2012.

³Perry, B. The mismatch between income measures and direct outcome measures of poverty. 2012. Social Policy Journal of NZ vol 19: pp101-127.

About *Growing Up in New Zealand*

Growing Up in New Zealand is New Zealand's contemporary longitudinal study of child development, tracking the development of nearly 7000 children in the context of their diverse families and environments from before their birth until they are young adults.

Multidisciplinary longitudinal information has been collected from the *Growing Up in New Zealand* children, who were born in 2009 and 2010, and their families.⁸ Each data collection of *Growing Up in New Zealand* seeks age-appropriate information across six inter-connected domains: family and whānau, societal context and neighbourhood, education, health and wellbeing, psychosocial and cognitive development, and culture and identity.⁹ A number of face-to-face data collection waves have been conducted with the mothers, fathers and children of *Growing Up in New Zealand* from before birth and through the first 1000 days of life. It is intended for data collection waves to occur with the cohort every 2-3 years until they reach adulthood.

The *Growing Up in New Zealand* children are broadly generalisable to current New Zealand births,¹⁰ and importantly the study collects evidence from families across the spectrum of socioeconomic status as well as ethnic diversity. The study includes significant numbers of tamariki Māori (1 in 4 of the cohort), Pacific children (1 in 5) and Asian children (1 in 6). Almost half of the cohort children are expected to identify with multiple ethnicities. This diversity of the families involved, as well as their ongoing commitment, helps to future-proof the information that can be provided from *Growing Up in New Zealand*. Retention rates are very high (over 92%) through to the preschool data collection wave which is in the field in 2014.

The unique information collected within *Growing Up in New Zealand* is designed to contribute evidence to inform

- a better understanding of the causal pathways that lead to particular developmental outcomes in contemporary New Zealand, and
- the effective evaluation, development and implementation of programmes and policy to optimise: support for families; health and development of children; and equity of outcomes across and within the New Zealand population.

The study is run by as a multi-disciplinary team of experts at the University of Auckland, who work in partnership with experts at other academic institutions as well as a large number of government agencies including the Social Policy Evaluation and Research Unit (Superu) and the Ministries of Social Development, Education, Health and others to ensure that up-to-date and appropriate evidence is provided for policy translation. A number of key reports and publications have already been produced from *Growing Up in New Zealand* and the resource provided is being increasingly utilised. Data from the *Growing Up in New Zealand* study is available for access. For further information on data access arrangements, copies of existing study publications, and contact details for our team please view www.growingup.co.nz

⁸Morton SMB, et al. (2012). How Do You Recruit and Retain a Pre-Birth Cohort? Lessons Learnt From Growing Up in New Zealand. *Evaluation & the Health Professions*; DOI: 10.1177/0163278712462717.

⁹Morton SM, et al. (2013). Cohort profile: Growing Up in New Zealand. *International Journal of Epidemiology* 42:65-75.

¹⁰Morton SMB, et al. (2014). Growing Up in New Zealand cohort alignment with all New Zealand births. *Australian and New Zealand Journal of Public Health*. In press.

A Growing Up in New Zealand Policy Brief November 2014

Suggested citation: Growing Up in New Zealand (2014). Growing Up in New Zealand Policy Brief. Measuring the Economic Environment: What resources are available to children in their first 1000 days? Auckland: Growing Up in New Zealand.

Prepared from data published in:

Morton, SM, et al. (2014). Growing Up in New Zealand: A longitudinal study of New Zealand children and their families. Report 3: Now we are Two: Describing our first 1000 days. University of Auckland, Auckland. ISSN: 2253-2501

Morton, SM, et al. (2012). Growing Up in New Zealand: A longitudinal study of New Zealand children and their families. Report 2: Now we are born. University of Auckland, Auckland. ISSN: 2253-2501

Morton, SM, et al. (2010). Growing Up in New Zealand: A Longitudinal Study of New Zealand Children and Their Families. Report 1: Before we are born. University of Auckland, Auckland. ISBN:978-0-473-17889-5