

# Foundations to thrive: Policy briefs for child and family wellbeing

Dr Felicia Low and Dr Seungyeon Kim

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Koi Tū Centre for Informed Futures is an independent, non-partisan, future-focused boundary organisation dedicated to tackling the complex, long-term challenges shaping Aotearoa New Zealand's future.

We provide high-quality, evidence-based insights to address critical national and global issues arising from rapid social, economic, technological, and environmental change.

Our name, Koi Tū, was gifted by Ngāti Whātua Ōrākei. Koi means "the sharp end of an arrow" and "to be bright and clever," while Tū means "to stand" and conveys resilience. Like our namesake, Koi Tū aims to get to the heart of the most pressing long-term issues.

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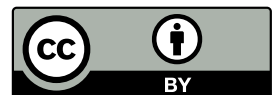


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## Acknowledgements

We acknowledge the late Chloe Wright, whose vision and generosity continue to inspire our work at Koi Tū Centre for Informed Futures, and the Wright Family Foundation for its continued support through the Chloe Wright Policy Unit.

We would also like to thank our co-authors on the evidence briefs on which this policy brief is based: the late Prof Richie Poulton, the late Dr Johan Morreau, and Chloe Wilkinson.

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# Foreword

Understanding how events in early life shape an individual's destiny, in terms of their physical and mental health and their cognitive and emotional development, is at the heart of informing us about our future society.

Human flourishing has therefore been a distinct theme of Koi Tū Centre for Informed Futures since it was founded over five years ago. Over that time, we have produced many evidence briefs that were initially aimed at health professionals but increasingly at the policy and philanthropic communities.

Our work was given impetus by the late Chloe Wright, who recognised the importance of linking the science of parental and infant health to policymaking, and encouraged us to focus on the science-policy interface. After her untimely death in 2023, the Wright Family Foundation supported us to expand our work, particularly within the policy domain; that work is now encompassed within the Chloe Wright Policy Unit of Koi Tū.

The Chloe Wright Policy Unit focuses on the life course between conception and young adulthood. It analyses and summarises the evidence from biomedical, social, educational and psychological sciences to suggest integrated approaches to improving the outcome for the next generation. This is central to the concept of informing our society's future.

Beyond Koi Tū staff, we have an international network of contributors in the Netherlands, United Kingdom, France and Singapore, and partners across several New Zealand universities.

While Chloe's focus had very much been on the perinatal period, we have – with additional support from other donors – broadened our effort to include adolescence. This is based on the compelling evidence for a close relationship between the early-life development of brain regions controlling executive functions and young people's capacity to cope with the stresses of adolescence and the digital milieu.

Having been incubated in the University of Auckland for its first five years, Koi Tū is now in its next stage of development – as an independent charitable trust – so it can better focus on the boundary between evidence and policy without academic drivers.

Koi Tū has numerous connections with the policy community, especially the Social Investment Agency and related ministries. The Social Investment Agency was established to help address the interface between the different elements of departmental decision-making that affect young people.

Beyond the domain-specific work, we have also considered in a separate report how best to develop policies to address some of the 'wicked' problems that bedevil the sector. We also provide advice to NGOs that are developing intervention or prevention programmes for mothers, infants, children and adolescents. While we do not undertake such programmes ourselves, we are especially focused on how to ensure these programmes are robustly proven to be effective so that they merit continuation and scaling.

We will consolidate our work in an annual Chloe Wright Symposium for policy makers. This briefing pack summarises much of our prior work and is released as a memorial document dedicated to Chloe.

I want to particularly acknowledge Dr Felicia Low, a Senior Fellow in Koi Tū who has taken the lead on much of the evidence synthesis and compiled this volume.

**Sir Peter Gluckman**

**Director and Trustee, Koi Tū Centre for Informed Futures**

# A tribute to Chloe Wright



## Chloe Wright ONZM 1947–2023

*Foundations to Thrive: Policy Briefs for Child and Family Wellbeing* is the first publication of the Chloe Wright Policy Unit at Koi Tū Centre for Informed Futures.

Established to translate evidence across health, education, welfare and justice into practical policy and systems change, the Chloe Wright Policy Unit supports policies and services that help all tamariki and whānau in Aotearoa New Zealand to thrive.

Koi Tū honours the memory of Chloe Wright. As co-founder and CEO of the Wright Family Foundation, Chloe's vision and generosity has left a lasting impact on our work, and reflects her unwavering commitment to mothers, children and whānau.

With support from Chloe and the Wright Family Foundation, Koi Tū established the Knowledge Hub for Maternal and Child Health. That support was transformational, enabling research, career development and policy impact.

The Chloe Wright Policy Unit now builds on this foundation: materials first developed under the Knowledge Hub have been reviewed, updated and reissued in this publication to provide clear, end-user-focused guidance for decision-makers.

Koi Tū remains deeply grateful to Chloe Wright and the Wright Family Foundation. The Chloe Wright Policy Unit stands as a living tribute to her vision – ensuring trusted evidence becomes action for the families of Aotearoa.



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# Intergenerational disadvantage: Why maternal mental health matters

## Introduction

Poor maternal mental health during pregnancy may directly affect fetal brain development, leading to long-term health and educational disadvantages that traverse generations. Breaking intergenerational cycles of poverty and disadvantage therefore requires a coordinated, proactive approach to improving maternal wellbeing as early as before pregnancy as a key strategy to improve child outcomes across generations.

This policy brief is based on the Kōi Tū evidence brief *Intergenerational disadvantage: Why maternal mental health matters*, published in May 2021. The full evidence brief is available at: <https://informedfutures.org/intergenerational-disadvantage-why-maternal-mental-health-matters/>

## Key points

- Maternal mental health is a critical but under-recognised driver of child development, school readiness, and lifelong wellbeing.
- Stress during pregnancy – even at mild to moderate levels – can affect development of the child's executive functions that are critical for their cognitive and socioemotional skills.
- Having impaired executive functions places the child at increased risk of poor educational achievement, behavioural difficulties, and poorer adult life outcomes, perpetuating cycles of disadvantage.
- This suggests that there is a biological contribution to how intergenerational disadvantage arises and becomes embedded, requiring a major rethink in how the cycle can be broken and how maternal healthcare should be approached.
- Early interventions need to focus on the mother and infant, with parental needs being supported even before the child is born through to after birth.

## Context

In New Zealand, about 12–18% of pregnant women experience clinical depression, with a considerably larger proportion, estimated at about 30%, experiencing mild to moderate symptoms. This suggests that nearly half of all pregnant women are affected by mental distress, yet this often goes undiagnosed and untreated.

In addition to the psychological burden on the woman and her whānau, maternal distress influences the prenatal environment, directly affecting fetal brain development through altered stress hormone levels. Neuroimaging studies have shown changes in infant brain structure that are linked to poorer measures of executive functions and school readiness when the child is older.

Left unaddressed, these children over time are more likely to experience educational failure, mental health challenges, unemployment and criminal involvement, imposing a disproportionate economic cost on society. However the repercussions continue to echo across generations for two major reasons: first, parental adversity and reduced opportunities tend to impose similar constraints on the child; and second, women who have grown up with executive function challenges are more likely to experience mental distress during their own pregnancies, increasing the risk of their children having impaired executive functions (Figure 1).

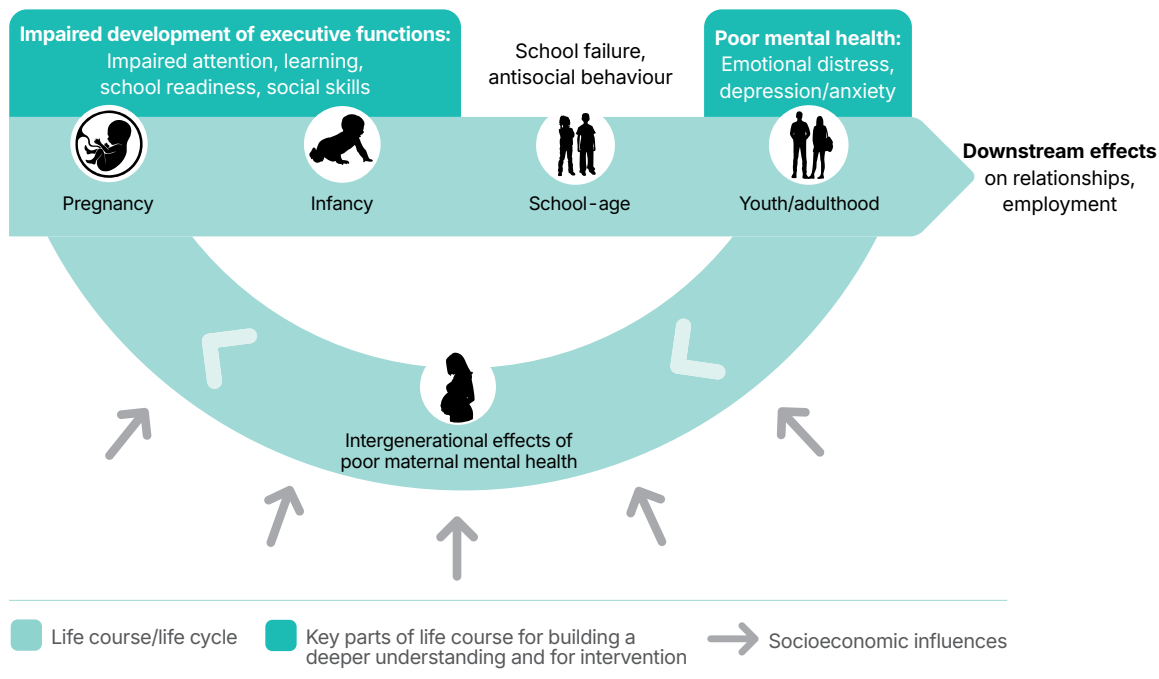


Figure 1. Intergenerational disadvantage, maternal mental health, and executive functions are cyclically linked.

In New Zealand, the burden of maternal mental distress is compounded by material hardship, suggesting that Māori and Pacific women and young mothers are likely to bear greater emotional burden during pregnancy. Furthermore, female high school students in particular are increasingly reporting poorer emotional wellbeing and significant depressive symptoms, raising the prospect of new generations of women who are at great risk of poor mood during pregnancy, further worsening the pervasiveness of intergenerational disadvantage.

Clearly, investing in maternal mental wellbeing is not only a matter of equity and compassion; it is also a practical strategy for breaking the cycle of disadvantage and promoting thriving futures for families and communities.

## Actions for consideration

- Position maternal mental health as a policy priority within child wellbeing and intergenerational investment frameworks.
- Implement routine, culturally appropriate screening for mental distress from early pregnancy through to after birth.
- Ensure women with milder or moderate symptoms of distress receive mental health support
- Adopt scalable, population-level approaches including social, educational and material transfer support to address key drivers of maternal distress. These may include fiscal assistance, mentorship, whānau support and extended leave.

## See also

- [Early investment: A key to reversing intergenerational disadvantage and inequity in Aotearoa New Zealand](#)
- [Executive functions: A crucial but overlooked factor for lifelong wellbeing](#)
- [Perinatal mental distress: An under-recognised concern](#)
- [Bonding: The importance of supporting parents to bond with their child from the earliest years](#)
- [Promoting resilience in children and young people](#)

# Early investment: A key to reversing intergenerational disadvantage and inequity in Aotearoa New Zealand

## Introduction

Intergenerational disadvantage is arguably one of the most important social issues facing Aotearoa New Zealand. Yet, decades of policy effort to reduce its prevalence or effects through social and fiscal policy have had limited results. The high numbers of children born into deprivation since the late 1980s are themselves now becoming parents raising their children under the same constraints.

This policy brief is based on the Kōi Tū evidence brief *Early investment: A key to reversing intergenerational disadvantage and inequity in Aotearoa New Zealand*, published in December 2023. The full evidence brief is available at: <https://informedfutures.org/early-investment/>

## Key points

- Intergenerational disadvantage begins before birth, with exposure during fetal and infant development increasing the risk of poorer outcomes across the life course.
- Maternal mental distress during pregnancy and infancy can disrupt fetal brain development, with lasting implications for a child's ability to thrive.
- Addressing maternal wellbeing is therefore critical to breaking entrenched cycles of disadvantage and requires a shift in how early intervention is prioritised.
- The quality of caregiver–infant interactions in the first three years is central to cognitive and socioemotional development, yet strategies to support these interactions are not widely or effectively implemented.
- Targeting the earliest stages of life offers the greatest return on investment, with strong economic evidence supporting the cost-effectiveness of intervention during the prenatal and early childhood period, particularly for children in disadvantaged environments.
- A coordinated response across health, social development, and education sectors is essential to address the complex drivers of intergenerational disadvantage and deliver lasting impact.

## Context

Persistent child poverty continues to undermine New Zealand's social and economic fabric. Nearly 30 percent of tamariki still lack their basic needs despite continual policy efforts to lift incomes and living standards, and Māori and Pasifika families bear a disproportionate share of this burden.

Disadvantage often begins as early as in utero. Prenatal exposures such as poor maternal nutrition, smoking, alcohol, and other drugs heighten lifelong risks of behavioural, physical and mental-health effects. Emerging evidence also shows that fathers' health and substance use at conception also pass risk to the next generation.

It is estimated that nearly half of all women experience moderate or clinical (severe) levels of perinatal mental distress. This may disrupt fetal brain development both during pregnancy through maternal stress hormones, and after birth if impaired mother-child bonding leads to fewer warm, active interactions.

With weakened executive functions that underpin learning, selfregulation and social competence, the child is more likely to face cascades of poorer educational, health, and behavioural outcomes that are perpetuated in the next generation. The Dunedin Longitudinal Study confirms that having poor childhood executive functions is a risk factor for later belonging to a small, highcost group driving the lion's share of later welfare, healthcare, and justice expenditure.

Much of that burden could have been prevented by early investment. Economic analyses are unequivocal that spending in the early years of life, from conception to school entry, yields the highest returns in human capital (Figure 2).

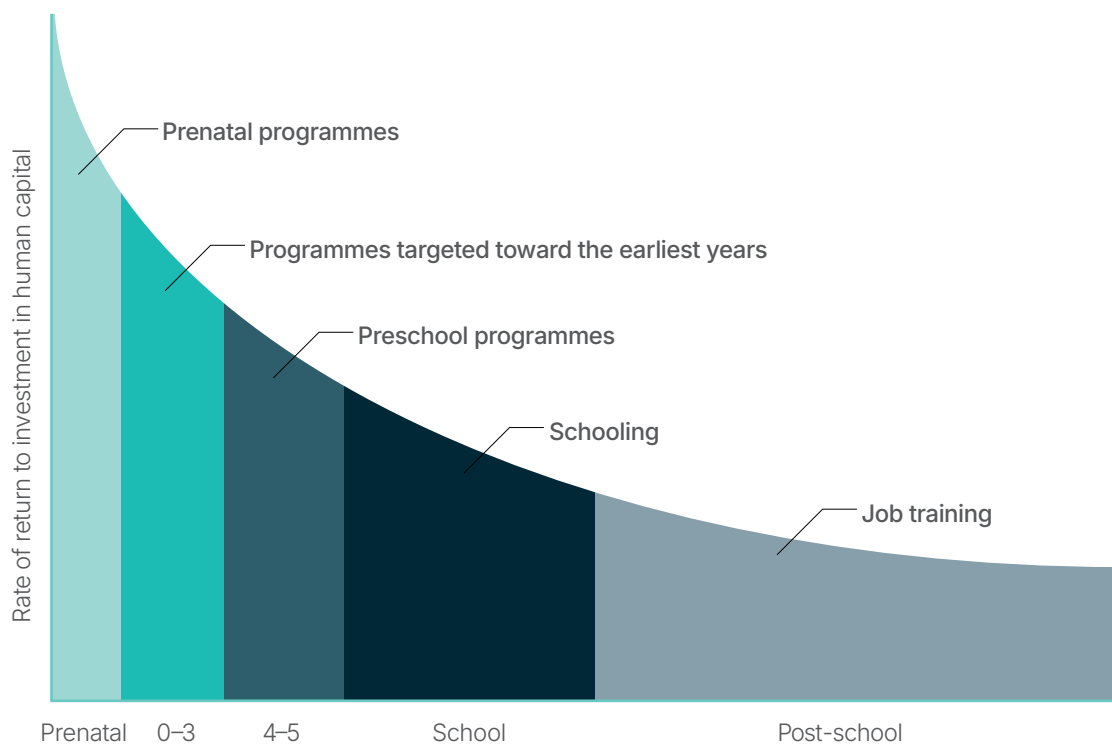


Figure 2. Investment in the earlier stages of life promotes child success, greater productivity and reduced social spending, yielding greater overall economic benefits.

There is extensive evidence from rigorous international studies supporting the immense economic value of high-quality early childhood interventions for disadvantaged children. Programmes have shown returns of \$7 to \$12 per dollar invested, with the wide-ranging positive impacts benefiting not only the children themselves, but also their own children later in life.

Within the New Zealand context, early investment should involve a systemslevel, crosssector strategy anchored in health, social development, and education to invest in young people (before they become parents), in pregnant women and their families, and in babies and children. Successful delivery hinges on longterm, coordinated commitment to shift public spending from costly latestage remedies to preventive earlylife interventions.

## Actions for consideration

- Embed early investment principles across all policy frameworks, recognising their long-term economic and social benefits.
- Better integrate policymaking across the health, social development and education sectors to enable more holistic wraparound care for families requiring support.
- Health
  - Link parents to maternity care as early as possible;
  - Implement universal screening for maternal mental distress from early pregnancy, ensuring women with mild or moderate depression are also well supported;
  - Implement screening for mental distress and parent-infant bonding after birth.
- Social development
  - Build up a well-resourced, culturally grounded local workforce of kaitiaki (carers and educators) to provide tailored, accessible and continual guidance to parents and whānau until school age.
- Education
  - Support caregiver education on positive parenting behaviours, serve and return play and interactive reading;
  - Boost child and whānau engagement with the early childhood sector and primary school system;
  - Support ECE providers to foster executive function development through active, engaged play or reading;
  - Screen preschoolers for executive function needs;
  - Build preconception health literacy into the high school curriculum;
  - Explore piloting high-quality, evidence-based early childhood programmes for disadvantaged children with provision for independent monitoring and evaluation.
  - Emphasise social, education and fiscal interventions that reduce stresses on women and whānau, especially those living in deprivation.

## See also

- [\*Intergenerational disadvantage: Why maternal mental health matters\*](#)
- [\*Executive functions: A crucial but overlooked factor for lifelong wellbeing\*](#)
- [\*Bonding: The importance of supporting parents to bond with their child from the earliest years\*](#)
- [\*Perinatal mental distress: An under-recognised concern\*](#)

# Executive functions: A crucial but overlooked factor for lifelong wellbeing

## Introduction

Executive functions are the foundational skills that enable us to learn, solve problems, regulate our behaviour, and build positive relationships. Having compromised executive functions early in life can have lifelong negative consequences, not only for the child but also for future generations and wider society.

This policy brief is based on the Kōi Tū evidence brief *Executive functions: A crucial but overlooked factor for lifelong wellbeing*, published in November 2021. The full evidence brief is available at: <https://informedfutures.org/executive-functions/>

## Key points

- The skills of executive functions rely on the development of specific brain circuits that begin forming in utero and continue through infancy and childhood.
- Deficits in executive functions increase the risk of negative outcomes from childhood to adulthood and across all domains of life.
- Widespread executive function difficulties contribute significantly to societal challenges and can have lasting effects across generations.
- Factors that heighten the risk of impaired executive function include low socioeconomic conditions, maternal depression during pregnancy and lack of responsive caregiving.
- Supporting children's executive function development early in life, such as through serve-and-return interactions between caregiver and child, is critical for promoting lifelong wellbeing.
- Addressing challenges related to compromised executive function requires coordinated, cross-sector action across the whole of government.

## Context

Executive function capacities are foundational to individual success and societal wellbeing, yet they remain largely invisible in current public discourse and policy settings.

Executive functions begin developing before birth and are shaped significantly in the early years of life, particularly through nurturing, responsive relationships that include an abundance of serve-and-return interactions, and stable environments. When well-developed, these skills support a child's readiness for school, resilience in the face of adversity, and long-term outcomes in education, employment, health, and behaviour. Conversely, as starkly demonstrated by the Dunedin Multidisciplinary Study, compromised childhood executive function is associated with a higher risk of school failure, mental health difficulties, job instability, antisocial behaviour, and poor life satisfaction, all of which impose disproportionately high flow-on costs to society (Figure 3).

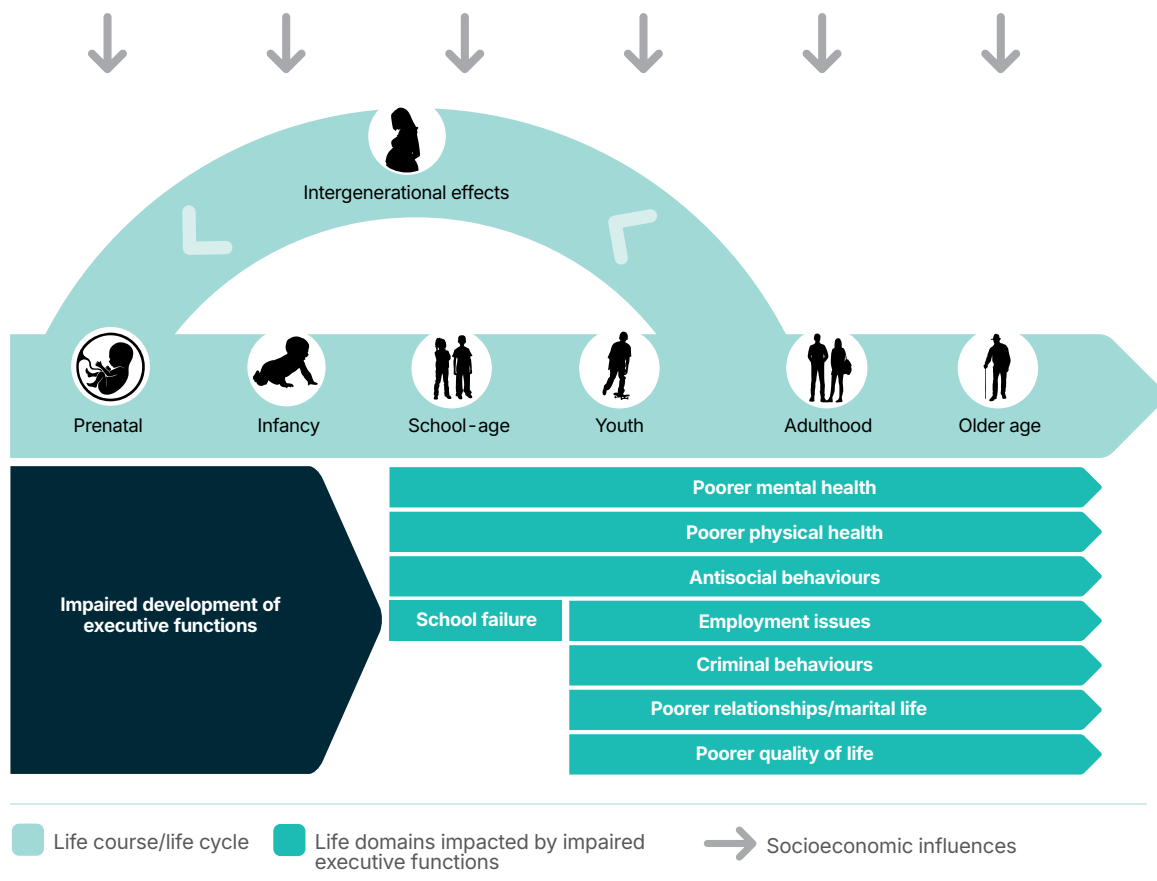


Figure 3. The lifelong consequences of impaired executive function development in early life.

A range of adverse early experiences can potentially disrupt executive functions development, including poor maternal mental health, low socioeconomic conditions, lack of warm, nurturing caregiving, chronic stress, excessive screen time, and unbalanced nutrition. These risk factors cluster disproportionately in disadvantaged communities, reinforcing cycles of intergenerational inequity.

Despite their significance, executive functions are rarely acknowledged explicitly in education, health, or social policy. Yet they offer an opportunity to rethink new ways of addressing complex entrenched intergenerational disadvantage. This requires a shift in how early development is understood and supported, where executive functions are regarded as a central, modifiable target for public investment.

## Actions for consideration

- Integrate the promotion of executive functions into early childhood policy, recognising the importance of the prenatal period through to early schooling in shaping these skills.
- Support parenting and caregiving environments that foster emotional security, self-regulation, and attention skills, through initiatives that promote serve-and-return interactions and responsive care.
- Reduce preventable risk factors such as toxic stress, poor maternal mental health, and excessive non-interactive screen use through coordinated cross-sector initiatives and public health guidance.
- Embed development of executive functions into early learning settings and curricula, with a focus on self-regulation, problem-solving, and social-emotional learning through play-based and relationship-centred approaches.

- Invest in early intervention, prevention and remediation, recognising that strengthening executive functions from an early age offers high long-term returns and can help reduce intergenerational disadvantage.

## See also

- *Intergenerational disadvantage: Why maternal mental health matters*
- *Bonding: The importance of supporting parents to bond with their child from the earliest years*
- *Early investment: A key to reversing intergenerational disadvantage and inequity in Aotearoa New Zealand*

# Bonding: The importance of supporting parents to bond with their child from the earliest years

## Introduction

The early bond between a child and their parent or caregiver is a powerful driver of brain development and lifelong wellbeing. New evidence is highlighting specific ways parents and caregivers can interact with their child to help strengthen bonding, thus improving brain development and building skills necessary for lifelong wellbeing. The profound impact of strong parent-child bonds calls for policy and service delivery to better support parents in caring for children.

This policy brief is based on the Kōi Tū evidence brief *Bonding: A brilliant brain builder*, published in May 2022. The full evidence brief is available at: <https://informedfutures.org/bonding/>

## Key points

- The brain undergoes rapid development during pregnancy and infancy, laying the foundation for children's lifelong learning, behaviour, and wellbeing.
- Warm, responsive (serve-and-return) interactions between parents or caregivers and child, especially in the first few years of life, help establish a secure, nurturing relationship and support healthy brain development, particularly in building early executive function skills.
- A lack of strong bonding in early life can disrupt brain development and lead to long-term negative outcomes.
- The quality of the parent-child bond is shaped not only by individual interactions but also by the broader family/whānau environment and surrounding social conditions.
- While bonding should include all key figures in a child's life, many fathers face barriers to early engagement due to limited structural supports, despite wanting to be involved.
- Key factors such as access to paid parental leave, screen use by both parents and children, caregiver mental health, and opportunities for fathers to participate more fully in caregiving deserve focused policy attention.

## Context

While it has long been recognised that children benefit from strong bonds with their parents, growing evidence shows that positive parenting directly supports brain development and lifelong wellbeing, with wider societal benefits.

Foundational brain functions, including executive skills like attention, planning, and impulse control, are underpinned by secure parent-child relationships. Without strong bonds, children face higher risks of poor health, mental illness, and reduced cognitive functioning later in life. Indeed, brain imaging shows differences in brain structure and function in children exposed to emotional neglect or less sensitive parenting.

Strong bonds are fostered through parenting that is responsive and consistent. Meaningful interactions, such as skin-to-skin contact at birth and serve-and-return exchanges during infancy and early childhood, support bonding and benefit literacy and emotional development.

However, bonding is influenced by the broader context in which caregiving takes place (Figure 4). Factors such as poverty, housing stress, family violence, and a lack of social support can undermine a caregiver's capacity to provide consistent and nurturing care. Maternal mental distress during the perinatal period is a significant barrier to bonding and has been shown to affect brain development and behavioural outcomes in children.

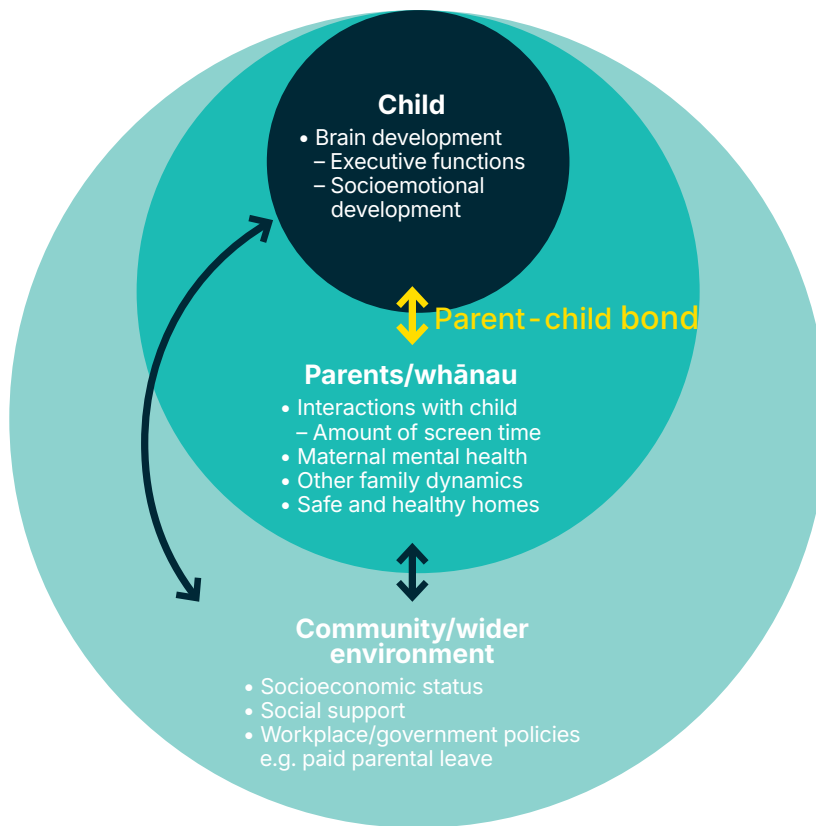


Figure 4. A child's emotional security and brain development occur within the wider context of their family/whānau, the broader environment and the interplay between each setting (arrows).

The intergenerational nature of bonding is also important. Mothers who experienced neglect or poor emotional connection in their own childhoods are more likely to face difficulties bonding with their children, perpetuating patterns of emotional disconnection and disadvantage. Conversely, secure early bonding strengthens a child's capacity to bond with their own children later in life – creating a powerful positive cycle.

Fathers and other caregivers play an essential role in the bonding process, yet face structural barriers such as inadequate parental leave policies, cultural expectations, and limited access to parenting support. Prolonged use of devices by both children and adults can displace valuable parent-child interaction. Addressing these barriers is key to ensuring all caregivers can contribute meaningfully to their child's early development.

While bonding occurs naturally for many families, it is not automatic, and some will need extra support in their vital role as a child's nurturer.

## Actions for consideration

- Support caregivers through the early years, particularly in the first 2,000 days, with services that promote responsive caregiving and emotional connection.
- Raise parental awareness around the benefits of bonding to children's brain development, the importance of engaging in serve-and-return activities, and monitoring children's screen time as well as their own.
- Support parental mental wellbeing so parents feel well placed to actively engage in warm, sensitive caregiving
- Strengthen paid parental leave by extending both the duration and the payment rate to ease financial strain and support parental mental health.
- Address broader social and economic determinants such as poverty, housing insecurity, and family violence that undermine caregivers' ability to bond.

## See also

- *Executive functions: A crucial but overlooked factor for lifelong wellbeing*
- *Perinatal mental distress: An under-recognised concern*
- *Intergenerational disadvantage: Why maternal mental health matters*
- *Screen time: The effects on children's emotional, social, and cognitive development*

# Perinatal mental distress: An under-recognised concern

## Introduction

Perinatal mental distress is a common but often under-identified and under-treated condition, significantly affecting the wellbeing of mothers, babies, and families. Left unaddressed, perinatal distress can disrupt maternal functioning, strain parent-child bonding, and contribute to long-term developmental risks for children that perpetuate cycles of intergenerational disadvantage.

This policy brief is based on the Kōi Tū evidence brief *Perinatal mental distress: An under-recognised concern*, published in September 2022. The full evidence brief is available at: <https://informedfutures.org/perinatal-mental-distress/>

## Key points

- The symptoms of perinatal mental distress encompass a broad spectrum of emotional and psychological difficulties that may begin before pregnancy through to after birth, requiring more than a focus on 'baby blues'.
- The risk of perinatal distress arises from the interaction of biological, social, and environmental factors, not just the pregnancy itself.
- Early, universal screening is essential, supported by a culturally appropriate, New Zealand-specific screening tool.
- Women need access to diverse treatment options, and families should receive tailored support to promote children's healthy early development.
- Public awareness must be improved to reduce stigma and encourage women to seek help.

## Context

At least one in seven New Zealand women experience perinatal mental distress, with a much higher prevalence among women from ethnic minorities. Close to half of all women are estimated to experience at least some level of distress during the perinatal period.

A woman's risk of perinatal mental distress is shaped by a combination of biological factors, the nature of their pregnancy and birth experience, and broader social and environmental conditions such as relationship stress, poverty, housing instability, and limited access to maternal

care. While often associated with postnatal depression, perinatal distress frequently begins during pregnancy, and can be regarded as a continuation of symptoms in women who had experienced mental distress before conception. Even if symptoms only occur after birth, care must be taken not to assume they simply reflect short-term hormonal fluctuations ('baby blues') that generally resolve by themselves.

Despite its prevalence and impact, perinatal distress symptoms are frequently missed, minimised, or misunderstood, preventing timely and effective support.

*[I]t feels like I've been eroding away. Losing who I am, the very essence of myself.*

– Linda Jane Keegan, writer and mother

There is therefore an urgent need for women to be universally screened as early as during their first visit with their lead maternity carer, using a culturally grounded tool developed specifically for the New Zealand context. Women and families should have access to a range of therapeutic options and tailored support that reflects both clinical needs and cultural values. Stigma and low awareness continue to act as barriers to help-seeking, highlighting the importance of public messaging and workforce capacity and training.

Addressing perinatal mental distress requires cross-sector coordination across health, social services, and early childhood systems. Investment in early identification and response is not only a matter of maternal health – it is a strategic investment in the wellbeing of future generations.

*I'm born from Papatūānuku, so of course I return to her for healing.*

– Joanne Rama, midwife and mother

## Actions for consideration

- Introduce universal perinatal mental health screening at early pregnancy, mid-pregnancy and postnatally, using a culturally appropriate, New Zealand-specific tool.
- Introduce screening for parent-child bonding so whānau experiencing challenges can be offered early support appropriate to their needs.
- Ensure timely access to a range of therapeutic options, including counselling, peer support, and clinical care that is delivered in ways that are responsive to cultural and individual needs.
- Invest in tailored support for affected whānau that address broader drivers of distress, such as housing instability, financial hardship, relationship stress, and lack of social support.
- Strengthen public awareness campaigns to normalise help-seeking, reduce stigma, and highlight that perinatal mental distress extends beyond the “baby blues.”
- Embed perinatal mental health as a strategic priority within child wellbeing, mental health, and equity frameworks, recognising its long-term benefits for both maternal and child outcomes.

## See also

- [\*Intergenerational disadvantage: Why maternal mental health matters\*](#)
- [\*Bonding: The importance of supporting parents to bond with their child from the earliest years\*](#)

# Promoting resilience in children and young people

## Introduction

Building resilience in children and young people is critical for supporting lifelong wellbeing and helping them navigate the challenges of a rapidly changing world. Given the concerning state of mental health among young New Zealanders, child resilience must be promoted as a population-wide preventative strategy.

This policy brief is based on the Koi Tū evidence brief *Promoting resilience in children and young people*, published in September 2024. The full evidence brief is available at:

<https://informedfutures.org/resilience/>

## Key points

- Mental health outcomes for children and young people in New Zealand are worsening.
- Building resilience in young people is a proactive way to help them reduce their risk of experiencing mental distress later in life.
- Resilience can be strengthened through the development of core skills such as executive functioning, self-regulation, and social competence, as well as through strong relationships, positive identity, and a sense of belonging.
- Targeted, culturally grounded programmes that build these underlying skills may be particularly effective.
- Families, schools, communities, policymakers, and government all have a shared responsibility to foster resilience and create environments where young people can thrive.

## Context

The mental health of children and young people in Aotearoa New Zealand is under significant strain, with rangatahi Māori, rainbow youth, and those living in poverty facing disproportionate levels of distress. While support for those in crisis remains essential, a broader, preventative approach is urgently needed. Fostering resilience, that is, children's and young people's ability to adapt positively in the face of change and adversity, offers a powerful pathway to promote wellbeing and reduce risk over the long term.

Resilience is not an entirely innate trait and can be developed over time. For example, the executive functioning skills that underpin resilience can be effectively nurtured as early as in infancy, fostered by parents/caregivers engaging in warm, responsive serve-and-return interactions (Figure 5). The child can continue to receive support across the developmental stages of middle childhood and adolescence through family, peer and community relationships that reinforce a sense of social identity, belonging, and purpose.

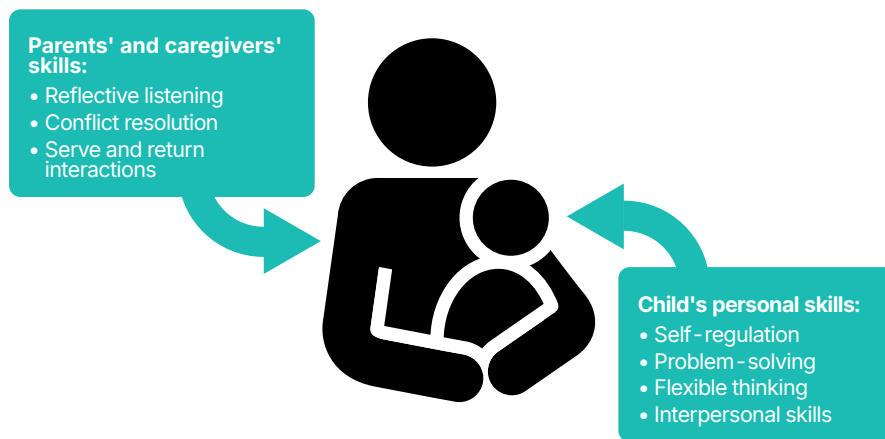


Figure 5. A warm, supportive relationship fosters child and parental skills that facilitate resilience in children.

Evidence-based programmes that promote child resilience, delivered within early childhood and school settings, are a valuable way to reach most children, while other targeted, culturally responsive initiatives may be particularly helpful for those most at risk.

In addition, it is critical to promote perinatal mental wellbeing as both prenatal and postnatal distress are linked to impaired executive functions in the child that may affect their resilience.

Resilience-building requires coordinated effort across homes, schools, communities, and policy systems. A preventive approach is needed that begins early, continues through adolescence, and reflects the diverse needs and identities of young New Zealanders so they feel safe, supported, and empowered to thrive even in the face of uncertainty. Promoting resilience is not only a response to rising youth mental distress, it is also a long-term investment in a healthier, more adaptable society.

## Actions for consideration

- Embed resilience into child and youth wellbeing strategies as a preventative response to rising mental distress, with a focus on early identification of at-risk children and families.
- Strengthen support for parents and caregivers by promoting serve-and-return interactions, enhancing parenting skills, and providing targeted services that address caregiver wellbeing and family stressors.
- Support perinatal mental wellbeing through wraparound services that address maternal distress
- Equip early childhood education centres and schools to foster resilience by developing core capabilities such as executive functioning, self-regulation, and social-emotional skills through well-evaluated, evidence-based programmes.
- Ensure services and initiatives are culturally responsive and strengths-based, reflecting the diverse identities, values, and needs of Māori, Pasifika, rainbow, and socioeconomically disadvantaged communities.
- Co-design strategies with young people, whānau, and communities, ensuring that policies and services are relevant, accessible, and tailored to lived experience.

## See also

- [\*Perinatal mental distress: An under-recognised concern\*](#)
- [\*Intergenerational disadvantage: Why maternal mental health matters\*](#)
- [\*Executive functions: A crucial but overlooked factor for lifelong wellbeing\*](#)
- [\*Bonding: The importance of supporting parents to bond with their child from the earliest years\*](#)

# Ahead of the game: Why play is the key to children's future success

## Introduction

Play is not a luxury but a necessity for development. It supports the acquisition of key cognitive, socioemotional and motor skills, promotes executive functions, increases family wellbeing, and is a fundamental driver of children's lifelong wellbeing. Ensuring all children have time, space, and support to engage in different types of play is a practical, evidence-informed way to build up future generations of thriving young New Zealanders.

This policy brief is based on the Kōi Tū evidence brief *Ahead of the game: Why play is the key to children's future success*, published in June 2023. The full evidence brief is available at:

<https://informedfutures.org/play/>

## Key points

- Play is a powerful driver of brain development, making it one of the most effective ways to support children's early learning and long-term wellbeing.
- High-quality play begins with warm, responsive adult-child interactions from birth, laying the foundation for creativity, communication, and self-regulation.
- Modern pressures, including limited access to safe outdoor spaces, high costs of living, and time-poor parenting, are diminishing children's opportunities to play.
- Enabling play requires both family understanding around its benefits and supportive policy settings such as paid parental leave, mental health support, and affordable housing that gives families time and space to connect.
- Policies must also protect and prioritise play outside the home, ensuring early learning environments remain play-centred and financially accessible, high-density urban development includes space for play, and community initiatives promoting play receive investment.

## Context

Through play, children develop executive functions that help with emotional regulation, social relationships and problem solving – all of which are increasingly important for thriving in a rapidly changing world. As a key vehicle for learning, play helps set children up for educational achievement and hence later-life success by developing the cognitive skills needed for school readiness, making learning a fun experience, and by directly enhancing early literacy and numeracy.

Despite this, a lack of awareness of the full extent of play's benefits, or misconceptions around the need for expensive technology or toys to achieve high-quality play, can act as barriers. In fact, high-quality play can begin with simple, responsive serve-and-return interactions between adults and infants, and then later evolve into more complex forms of imaginative, social, and physical exploration with everyday objects and natural resources. Both structured play (adult-led or task oriented activities like sports and jigsaws) and unstructured play (child-led, goal-free activities like drawing and building blocks) offer different and complementary benefits for children's development.

However, the nature of modern life, such as changes in family lifestyles and the wider built environment, is threatening children's ability to play (Figure 6). For example, high living costs, limited access to safe outdoor spaces, reduced parental time, and rising pressure for children to engage in adult-directed activities all erode opportunities for free, creative play. These constraints are particularly pronounced in lower-income families and high-density housing environments, where space and time are more limited.

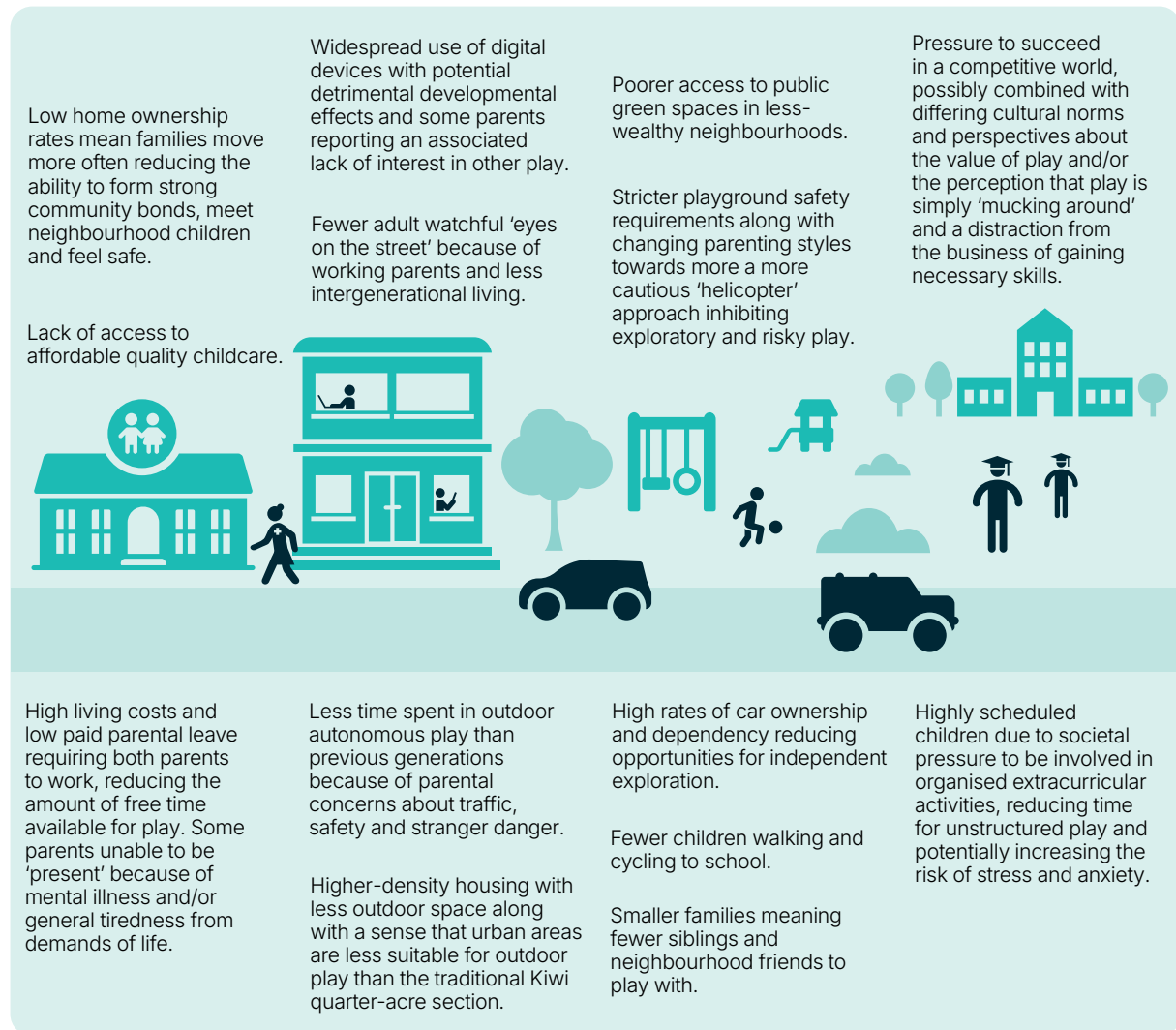


Figure 6. Multiple factors from the parental level through to systemic social and economic pressures impose risks to children's play in contemporary NZ society.

## Actions for consideration

- Invest in public messaging to empower parents and caregivers with awareness of the powerful benefits of play, and that time spent actively and warmly engaging with infants and children in play has a direct and positive impact. Families should also be reassured that a wide range of inexpensive play opportunities exists.
- Strengthen play-based learning in early education by retaining a focus on play-based learning in curriculum content and teaching practices.
- Support parents and caregivers through social policies such as paid parental leave, affordable housing and mental health services, to enable time, energy, and resources for play.

- Fund community-level initiatives that expand access to play opportunities and promote equity in children's developmental experiences.
- Prioritise play in urban design and housing policy, ensuring children have access to safe, engaging play spaces, especially in high-density and lower-income areas.
- Promote cross-sector collaboration between education, health, urban planning, and social services to ensure play opportunities are maximised across children's daily environments.

## See also

- *Bonding: The importance of supporting parents to bond with their child from the earliest years*
- *Executive functions: A crucial but overlooked factor for lifelong wellbeing*
- *Screen time: The effects on children's emotional, social, and cognitive development*
- *Beyond genes: How fathers play a biological role in the health of future generations*

# Preparing our children for language learning

## Introduction

Early language experiences are foundational to a child's cognitive, emotional, and social development. In Aotearoa New Zealand, one in five children aged five are entering school with underdeveloped oral language skills, particularly those from disadvantaged backgrounds. This brief discusses the importance of language-rich environments to support early language development, and the role of parents and caregivers, education providers, communities, and government in building these language-rich environments for children.

This policy brief is based on the Kōi Tū evidence brief *Preparing our children for language learning*, published in December 2025. The full evidence brief is available at: <https://informedfutures.org/language/>

## Key points

- Language learning begins at birth and language experiences during early childhood shape the development of the child's learning capabilities in later life.
- Parents, caregivers and educators have important roles in building language-rich environments for children.
- Caregiver-child interactions that are warm, responsive, and reciprocal are important for facilitating language acquisition.
- Conversing and reading with children, singing, and reciting nursery rhymes are effective activities that provide language-rich environments for children.
- Engaging with children in more than one language can enhance the child's language skills and learning capabilities.
- Community- and population-level policies are needed to promote the awareness of the importance of early language experiences and support caregivers to ensure that all children grow up in language-rich environments.

## Context

Many children in New Zealand are entering school with underdeveloped language skills and are experiencing difficulties with oral language and communicating their needs. This is more likely to be seen in boys and in children living in low socio-economic communities.

Exposure to language (oral and written forms) builds a strong foundation for later learning and provides a myriad of benefits for the child, including enhancing executive functioning skills, emotional understanding and interpersonal skills, communication skills, and increasing the child's capacity for learning. These skills play an important role in the development of a child's confidence and resilience. It is therefore essential to build language-rich environments and share language experiences with children early in their development.

Building environments rich in language experiences involves warm, responsive, and reciprocal interactions between the child and the caregiver, also known as 'serve and return' interactions. The responsive and warm nature of these interactions is crucial in nurturing a strong relationship between the caregiver and the child and form the basis of language-rich activities.

There are many language-rich activities that can enhance the learning capacities of children. These activities can vary depending on the developmental stage of the child. For instance, talking, reading, singing, and reciting nursery rhymes can be effective in nurturing language skills in newborns and infants; shared reading and storytelling activities can be effective for older children (Figure 7). Bilingualism is also linked with a child's learning capacity and executive functioning.



Figure 7. Reading activities that facilitate language development in infants and children.

Promoting greater awareness of the importance of creating language-rich environments for children in New Zealand, and how this can be done, are important in ensuring that children develop language skills and increase their capacity for learning.

Early childhood centres, schools, healthcare providers, and social support services have a pivotal role in increasing awareness among, and supporting parents, caregivers, and education providers in sharing language-rich experiences to children. At the community and population levels, addressing the barriers to building language-rich environments such as limited availability of, and access to, support and resources, is important to support caregivers to engage in language activities with children.

Caregiving is not an individual endeavour and community- and population-level policies supporting parents, caregivers and educators are an important component of ensuring that all children can grow up in and benefit from language-rich environments.

## Actions for consideration

- Strengthening caregiver support such as ensuring accessible and culturally responsive resources and supports are available for caregivers.
- Introduce, encourage, and promote community spaces that are rich in language experiences such as libraries, book events, and storytelling activities.
- Include early oral language outcomes in government contracts and services.
- Focus on and promote language-rich activities in early childhood education and communities.

## See also

- *Bonding: The importance of supporting parents to bond with their child from the earliest years*

# Screen time: The effects on children's emotional, social, and cognitive development

## Introduction

New Zealand children are active recreational users of digital devices, but only one in eight meet Ministry of Health screen time guidelines, and policies and public understanding have not kept pace with the rapid growth in childhood screen exposure. Most brain development occurs during the first few years of life, fuelling increasing concern about links between screen time and emotional, cognitive and behavioural problems in children.

This policy brief is based on the Kōi Tū evidence brief *Screen time: The effects on children's emotional, social and cognitive development*, published in September 2021. The full evidence brief is available at: <https://informedfutures.org/screen-time/>

## Key points

- While the effects of non-educational screen time on brain and behavioural development are complex and not yet fully understood, growing evidence points to potential negative impacts on children's attention, emotional regulation, and self-control.
- Although typically modest, negative effects are more pronounced when children consume passive, non-educational content instead of engaging in critical real-world experiences such as serve-and-return interactions with caregivers, other social interactions and hands-on play.
- Generalised recommendations on screen time limits, while simple to communicate, do not reflect the realities of modern New Zealand family life and lack a robust scientific basis to define thresholds for harm.
- To minimise risk and enhance developmental benefits, screen use guidelines that distinguish between types of screen use and support positive, age-appropriate engagement are likely to be more effective than blanket restrictions.

## Context

The landscape of childhood has been fundamentally reshaped by digital technologies. NZ children are exposed to screens from increasingly younger ages, for longer durations, and across a wider array of devices and platforms (Figure 8). Given the early years are also a time of extraordinary brain development, this pervasive integration presents complex challenges for optimal child development.

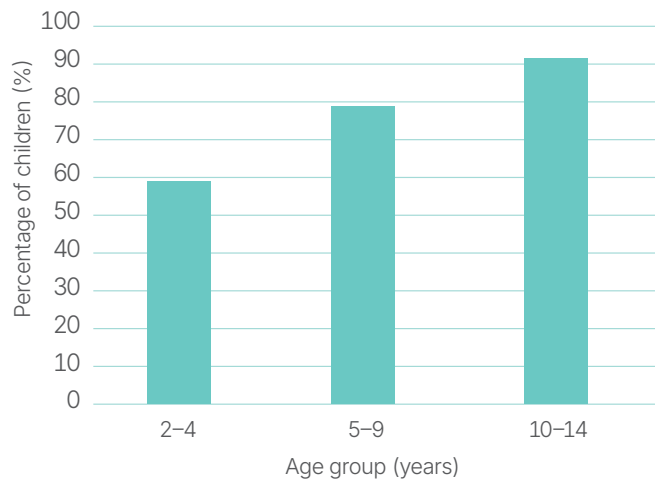


Figure 8. New Zealand children are exposed to high levels of recreational screen time (usually watching screens for two or more hours per day).

The science on screen time is still evolving, but evidence generally indicates that screen time in children under two years of age is negative as infants lack the necessary brain development to process two-dimensional media. Preschool age children also tend to score more poorly on various executive function measures and behaviours like fussiness, potentially due to lack of adult involvement, overstimulation from noisy or fantastical media, or displacement of developmentally relevant toy play. However, it is difficult to determine to what extent screen time causes the negative effects, rather than children with more challenging behaviours using screens as a calming tool.

Furthermore, lack of attentive caregiver involvement or supervision, whether due to the pressures of modern family life or distraction by device use may exacerbate socio-behavioural issues. Among adolescents, both positive and negative associations between wellbeing and social media use have been identified, and there are ongoing debates around cause-and-effect. There is some suggestion that mental wellbeing in adolescents is highest among those who spend some, but not an excessive, amount of time using screens.

Therefore, screen use is not universally harmful. Its apparent effects appear heavily dependent on the context, content and the child's age and disposition. Indeed, there is increasing evidence that rather than exposure to screen time per se, it is the replacement of serve-and-return interactions with screen time that is the basis for negative impacts. Caregivers can therefore support learning, literacy and bonding by endeavouring to engage in serve-and-return interactions where practical, and co-viewing educational, age-appropriate content to guide further discussion and interaction. What matters is not just quantity but quality, context, and timing.

Screen use often reflects real constraints in family life including financial stress, social isolation, or lack of access to alternative activities. In many cases, screens are a coping tool, showing that public messages must be realistic rather than over-moralistic about parenting choices. It must also address the structural and social conditions that influence family routines.

For policymakers, the imperative is not just to minimise screen exposure, but to maximise opportunities for rich, developmentally supportive experiences, particularly in the early years. This includes supporting caregivers, strengthening early learning environments, and ensuring equitable access to screen-free play and learning alternatives.

## Actions for consideration

- Develop and continually refine screen use guidance for parents and educators to reflect current evidence, by differentiating screen time by content, context, and age group rather than relying solely on fixed time limits.
- Support caregiver education on the importance of co-viewing, content selection, and modelling balanced screen behaviours, particularly in the early years.
- Integrate screen time awareness into broader child wellbeing and health initiatives, emphasising the importance of unstructured play, face-to-face interaction, and adequate sleep.
- Invest in public health messaging that helps families identify and respond to problematic screen use, particularly in adolescents.

## See also

- *[Ahead of the game: Why play is the key to children's future success](#)*
- *[Bonding: The importance of supporting parents to bond with their child from the earliest years](#)*

# Childhood obesity: Reducing the risk through early-life measures

## Introduction

Childhood obesity represents a significant public health challenge in New Zealand, with affected children facing numerous health problems that often persist into adulthood, contributing to chronic health conditions. While dietary and exercise habits are commonly understood factors, a child's risk of obesity is shaped by a complex interplay of influences beginning as early as conception, with prenatal exposures, caregiver feeding practices, and childhood eating behaviours contributing to this risk.

This policy brief is based on the Kōi Tū evidence brief *Childhood obesity: Reducing the risk through early life measures*, published in October 2023. The full evidence brief is available at:

<https://informedfutures.org/childhood-obesity/>

## Key points

- The risk of childhood obesity begins early – often before birth – and is shaped by many factors beyond diet and exercise.
- Prenatal influences include nutritional status of parents at conception and pregnancy complications such as gestational diabetes.
- Postnatal influences include premature introduction of solid food and early-life feeding practices that can disrupt children's ability to self-regulate their eating.
- Current public health responses overly emphasise diet and activity in later childhood, missing the opportunity to intervene earlier and more effectively.
- Policy prevention efforts should support the health of intending parents and promote healthy pregnancies, alongside guidance on appropriate feeding behaviours during infancy and early childhood that promote lifelong healthy eating habits in children.

## Context

Nearly one-third of New Zealand children aged two to 14 are overweight or obese, with marked overrepresentation of Māori and Pacific children. Having obesity puts children at greater risk of developing asthma, type 2 diabetes, digestive problems and joint pain, as well as depression and anxiety. Importantly, children with obesity often grow up to become adults with obesity, who are themselves at increased risk of many serious comorbid conditions such as type 2 diabetes, cardiovascular disease, stroke, and several types of cancer. Adult obesity imposes an immense health, social and economic burden on New Zealand.

The causes of childhood obesity are numerous, highly complex and interrelated, making it a very difficult condition to address. Nonetheless there is a strong and growing evidence base that the risk is significantly influenced by many other early life factors (Table 1). This requires much more nuance to discussion around mitigation strategies beyond simply targeting diet and exercise.

<b>Prenatal influences</b> <ul style="list-style-type: none"> <li>• Maternal nutrition</li> <li>• Obesity, excessive weight gain, gestational diabetes</li> <li>• Paternal obesity</li> </ul>	<b>Postnatal influences</b> <ul style="list-style-type: none"> <li>• Early introduction to solid food</li> <li>• Breastfeeding practices</li> <li>• Caregiver feeding and mealtime practices</li> <li>• Caregiver perception of child's weight</li> <li>• Food insecurity</li> </ul>
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Table 1. Some of the key factors acting prenatally and postnatally to influence a child's risk of obesity.

The fetal environment plays a major role. Babies whose mothers had obesity, uncontrolled gestational diabetes or uncontrolled weight gain during pregnancy tend to be heavier or obese in infancy and childhood, and similar associations are observed fathers with obesity. The rates of overweight and obesity in New Zealand adults range from 53% to 71%, and gestational diabetes is increasingly common, potentially impacting a large proportion of babies.

The infant and childhood feeding environment also plays a major role, with evidence that feeding practices such as introducing babies to solid food earlier than recommended, using food as a reward, and poor family meal habits can contribute to higher childhood body weight. More broadly, a strong predictor of childhood obesity is household food insecurity, which is experienced by one in eight New Zealand children.

Without early action, these factors create a cumulative risk that can lead to persistent obesity into adulthood, with significant individual, whānau and system-level consequences.

## Actions for consideration

- Promote preconception health literacy among youth and adults, especially those planning to start a family, through targeted public health messaging, resources for primary health providers, and school educational programmes starting in adolescence.
- Improve pregnancy care to screen for and reduce risk factors such as gestational diabetes and excessive weight gain. Ensure sensitive, culturally appropriate and accessible support for healthy weight gain and glucose control.
- Provide clear, evidence-based guidance to all new parents on age-appropriate introduction of solid foods to support healthy weight trajectories.
- Support parents and caregivers with advice on responsive feeding and mealtime practices to help children develop healthy eating self-regulation.
- Address food insecurity and ensure whānau have access to affordable, nutritious, culturally appropriate food.
- Embed early-life obesity prevention into maternal and child health strategies, ensuring coordination across antenatal care, primary health services, and early childhood programmes.

## See also

- [\*Beyond genes: How fathers play a biological role in the health of future generations\*](#)

# Beyond genes: How fathers play a biological role in the health of future generations

## Introduction

Emerging science shows that a father's health prior to conception can exert a biological influence on the health and wellbeing of his children and, potentially, grandchildren. Despite this, public health efforts continue to focus largely on pregnant women, with men's own preconception health and wellbeing remaining secondary considerations in policy and practice. Recognising the father's role in his children's health presents new opportunities to improve child and population health through more inclusive health promotion, education, and policy design.

This policy brief is based on the Kōi Tū evidence brief *Beyond genes: How fathers play a biological role in the health of future generations*, published in July 2022. The full evidence brief is available at: <https://informedfutures.org/fathers/>

## Key points

- The influence of a father's preconception health on his offspring's health may persist across generations, highlighting a biological pathway for the transmission of poor health.
- Health information and education targeting men before they become fathers remains limited, both in clinical settings and in public discourse, representing a missed opportunity for upstream intervention.
- Health advice for men preparing to conceive should be normalised, and information about the father's role in their children's health should be conveyed to the general public and integrated into school learning programmes.
- Many paternal influences are modifiable and reversible, offering potential to interrupt cycles of ill health if addressed in the preconception period.
- Policy efforts should refocus towards recognising and promoting shared biological and social responsibility to improve pregnancy, child and family outcomes, and for the health of future generations.

## Context

Multiple men's health and lifestyle factors, including poor nutrition, stress, ageing, smoking, alcohol, and drug use, have been implicated in increased disease risk in their children. A potential pathway is via molecular changes in the sperm of a father-to-be in ways that affect gene expression in his children, in turn increasing their later-life risk of health conditions (Figure 9).

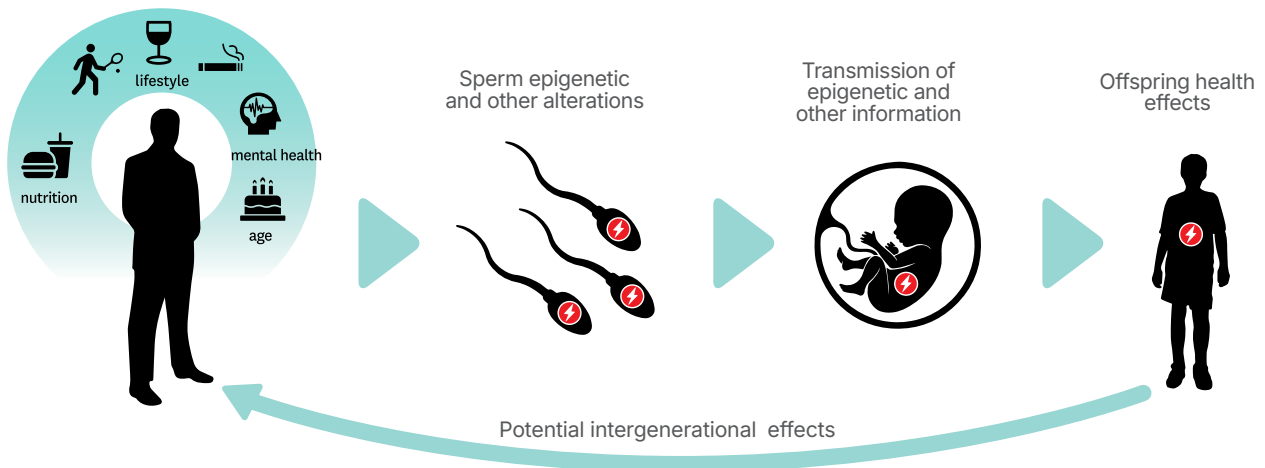


Figure 9. Potential molecular pathway by which paternal environmental exposures affect disease risk in children, with possible intergenerational consequences.

The risk factors include:

- **Physical health:** High paternal weight, type 2 diabetes and poor nutrition around the time of conception have been linked with obesity, heart disease and diabetes in children.
- **Mental health:** Depression, anxiety, bipolar disorder and post-traumatic stress disorder in fathers have been linked to worsened behaviours and emotions in their very young children and symptoms of psychiatric disorders in adulthood.
- **Age:** Older fathers are more likely to have children who are born prematurely or with low birth weight and are at increased risk of autism spectrum disorder and schizophrenia.
- **Alcohol, tobacco and drugs:** A man's exposure to alcohol, recreational drugs and smoking prior to conception is associated with birth defects and later behavioural problems in his child.

All of these health and lifestyle behaviours are common in New Zealand men, among whom rates of obesity, mental distress, hazardous drinking, and smoking are high, placing a significant proportion of children at risk of poor health outcomes. Māori and Pacific men are disproportionately affected, amplifying concerns around intergenerational health equity.

Despite this, it is likely most men lack information about the potential longer-term ramifications of their health status on their children. Public health and parenting interventions tend to exclude fathers, focusing instead on maternal behaviours, maternal mental health, and maternal screening. Although such initiatives are immensely important for women, this narrow lens not only places full responsibility on mothers, but also misses an important opportunity to intervene preconceptionally with men, when outcomes are most modifiable and before costs accumulate across the life course. Conversely, by being fully informed, men can be empowered to proactively plan for health and lifestyle improvements, not only for their benefit but also for future family plans.

Nonetheless, public health policy cannot be entirely reliant on individuals taking sole responsibility for their own health behaviours. This is because a person's ability to make healthy choices – or even choosing when to grow their family – depends not only on their level of knowledge but also their capability and opportunity. Scarcity of money, resources and time can effectively limit a person's range of 'choices'.

## Actions for consideration

- Expand public health messaging to explicitly include the biological role of fathers in influencing child health, with a focus on modifiable preconception behaviours such as nutrition, substance use, and mental wellbeing.
- Incorporate paternal preconception health into routine healthcare, ensuring primary care providers offer guidance to men considering fatherhood that extends beyond fertility.
- Integrate the science of paternal influences on health into school health and science curricula, supporting early awareness and lifelong health literacy in adolescents, particularly boys.
- Support population-wide approaches that address the structural and socioeconomic barriers to healthy behaviours, recognising that personal responsibility alone is insufficient in the absence of enabling environments.
- Normalise shared parental responsibility in health policy, education, and communication, to reduce the disproportionate burden and scrutiny placed on mothers and promote more equitable approaches to family wellbeing.

## See also

- [\*Childhood obesity: Reducing the risk through early-life measures\*](#)



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