



Tamariki Grow With Play

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The foundations for tamariki growth and development are laid very early in their lives. The things that seem simple are often those that can have a large impact. The value of play is sometimes underestimated, and yet its benefits are many and varied.

Play is common amongst young animals including humans¹ suggesting it has “an evolutionary role in helping young animals gain the skills needed for adulthood.”²

Pēpi are naturally motivated to learn about their world – to explore, be active, and to master a variety of tasks.³ The experiences tamariki have can encourage or discourage them from playing.⁴



What is play?

Play has proven difficult to define, with a range of criteria suggested by different researchers.⁵

However, some key components include:

- Tamariki want to do it for its own sake (i.e. intrinsically motivating)⁶
- Tamariki are actively engaged⁷
- It is joyful or fun⁸
- Flexibility.⁹

To better understand play, it has been suggested that it be thought of as being on “a spectrum, or continuum, that ranges from free play... (to) guided play and games.”¹⁰ Thought of in this way, play varies on several dimensions. One of these dimensions considers who initiates the play – the tamaiti or an adult. Another dimension considers who directs the play as it is occurring.¹¹ Different types of play have varied benefits for tamariki and contribute to different outcomes.¹²

A tamaiti can play alone or with others. Play can be structured or unstructured. Structured play is often, but not always, led by adults and has a set outcome; board games and playing sports are examples. On the other hand, unstructured play is tamaiti led and doesn't have a fixed outcome. Examples include exploring outside and imaginative painting or drawing.¹³

Play is fun and so much more. It involves experimenting, taking risks and testing their limits.¹⁴

The benefits of play

Play is enjoyable and is something tamariki are naturally drawn to do. Play is more than fun – although that in itself is very important, play has many benefits for tamariki development. Their natural drive to play contributes to healthy physical and mental development.¹⁵



Unstructured play is tamaiti led and doesn't have a fixed outcome.

The whole child benefits from play, with many different types of skills being developed at the same time, including physical skills, cognition, as well as social-emotional skills.¹⁶

Following are some of the areas of tamariki development that benefit from play:

- Physical aspects of play support motor skill development and improve health¹⁷
- Supports the development of creativity¹⁸
- Play with others is essential in supporting social development including being able to get on with their peers and strengthens social relationships¹⁹
- Executive functions, including behaviour regulation and response inhibition²⁰
- Resilience and mental well-being²¹
- Lower stress levels²²
- Language and early math skills.²³

As tamariki play they learn many crucial skills including working together and negotiating with others, and coping with challenges, which supports their resilience.²⁴ The skills gained through plenty of play as tamariki help to support healthy adult development. These skills include cooperation, resourcefulness, and problem-solving.²⁵

Play reflects the culture of tamariki and the adults in their life, learning different things from play accordingly.²⁶

In a nutshell, “play is essential to the social, emotional, cognitive and physical wellbeing of children.”²⁷

Play and the brain

Many of the studies on play’s effect on the brain have been conducted in animals, particularly rats, and therefore may not be directly applicable to humans.²⁸

Play affects brain structure and functioning, both

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directly and indirectly.²⁹ Rats with more play opportunities tend to develop larger brains, stronger connections between brain regions, and better social skills than rats with fewer opportunities.³⁰

Many different areas of the brain are involved in social play between young animals, although the specifics of how this works are not yet known.³¹ This social play relies on coordinated activity in the brain

regions involved with social, emotional, and thinking processes, suggesting that play encourages these circuits to develop.³²

Play and adversity

All tamariki can benefit from play, however it has particular benefits for tamariki who are going through a difficult or stressful time.³³

Play can provide pleasure and a sense of normality which supports tamariki who are dealing with stressful or traumatic situations.³⁴ The shared enjoyment of parents and tamariki playing “downregulates the body’s stress response.”³⁵

Regular play was found to lower tamariki anxiety levels during a hospital stay.³⁶ Play can help tamariki develop strategies for handling their stress and fear in healthcare situations, and support their self-esteem.³⁷

A study of 3 and 4-year-olds beginning preschool found that 15 minutes of play lowered their anxiety twice as much as those who listened to a teacher reading a story.³⁸

The impact of play during the Covid-19 pandemic has been studied by a number of researchers. Play is thought to be “an important coping mechanism

Play has particular benefits for tamariki who are going through a difficult or stressful time.





Play is an important coping mechanism for children during times of uncertainty.

for children during times of uncertainty such as the COVID19 pandemic.”³⁹

One study found that financial concerns were linked to parental stress, which in turn linked with tamariki emotional distress. However, pandemic-related pretend play was protective of tamariki wellbeing, lessening the impact of parental stress on tamariki wellbeing.⁴⁰

Pretend play can be helpful for tamariki in stressful situations providing a safe way to process their emotions, make sense of what’s going on, and to take control of their imaginary play at a time when they may have little control in their life.⁴¹ Tamariki who “play out stressful experiences generally exhibit decreases in anxiety and distress.”⁴² For example, if tamariki naturally included pandemic related ideas in their play, it may have helped them cope with the changes and challenges of this time.⁴³

In another study conducted during the pandemic, parents reported that “their child’s mood and behavior improved after spending time outside playing in the yard, riding bikes, or taking walks with family.”⁴⁴

“High amounts of play are associated with low levels of cortisol suggesting either that play reduces stress or that unstressed animals play more.”⁴⁵

What about toys?

Thinking about play often leads to thinking about toys, yet there’s often no scientific evidence for the claims made in toy advertising.⁴⁶ The interaction between tamariki and their parent or caregiver is the crucial ingredient in supporting development, not so much the toy itself.⁴⁷

There are interesting differences found when tamariki have a greater or smaller number of toys available to them. A study of 12-month-olds and their mothers found that when fewer toys were available, they had



longer periods of joint attention and higher quality joint attention.⁴⁸ Joint attention, a shared experience in which both pēpi and adult are focused on the same thing, is important for the development of language and social skills.⁴⁹ A study of toddlers found that having fewer toys available resulted in them playing for longer with a particular toy, and playing with toys in a greater variety of ways.⁵⁰

Many traditional toys are now being made in an electronic format⁵¹ but there's no evidence to suggest that these can equal the benefits of their traditional equivalents.⁵² One possible reason for this is the tendency for parents to talk less with their tamariki when electronic toys are being used, in essence parents can “take a back seat to electronic toys.”⁵³

Given the importance of interactions between parent and tamaiti for their relationship and learning, electronic toys may not help learning, but rather get in the

way of it.⁵⁴ “Even the best-designed and most effective apps cannot replace real-life social interactions with adults and peers.”⁵⁵

Conclusions

The natural drive to play that pēpi and tamariki have supports their development in many areas. Play takes many forms, each with differing benefits. Through play, tamariki can develop their physical skills, thinking ability as well as social and emotional skills.

Play benefits all tamariki, but particularly those facing distressing or challenging times. Although toys are often used in play, the real benefits occur in the interactions between tamariki and their playmates – big and small.



The real benefits of play occur in the interaction between tamariki and their playmates—big and small.

Endnotes

- 1 Sgro & Mychasiuk, 2020
- 2 Wilkinson & Low, 2023, p. 2
- 3 National Scientific Council on the Developing Child, 2018
- 4 National Scientific Council on the Developing Child, 2018
- 5 Schlesinger et al., 2020; Zosh et al., 2018
- 6 Lillard et al., 2013; National Scientific Council on the Developing Child, 2018; Schlesinger et al., 2020; Yogman et al., 2018
- 7 National Scientific Council on the Developing Child, 2018; Yogman et al., 2018
- 8 Lillard et al., 2013; Schlesinger et al., 2020; Yogman et al., 2018
- 9 Lillard et al., 2013; Schlesinger et al., 2020
- 10 Zosh et al., 2018, p. 2
- 11 Schlesinger et al., 2020
- 12 Zosh et al., 2018, cited by Schlesinger et al., 2020
- 13 Wilkinson & Low, 2023
- 14 Yogman et al., 2018
- 15 Whitebread, 2017
- 16 Schlesinger et al., 2020
- 17 Schlesinger et al., 2020; Yogman et al., 2018
- 18 Milteer et al., 2012; Wilkinson & Low, 2023
- 19 National Scientific Council on the Developing Child, 2018; Sgro & Mychasiuk, 2020; Yogman et al., 2018
- 20 Center on the Developing Child, 2015; Jelleyman et al., 2019; National Scientific Council on the Developing Child, 2018; Yogman et al., 2018
- 21 Jelleyman et al., 2019; Gray, 2011; Milteer et al., 2012
- 22 National Scientific Council on the Developing Child, 2018
- 23 Yogman et al., 2018
- 24 Milteer et al., 2012
- 25 Yogman et al., 2018
- 26 Yogman et al., 2018
- 27 Milteer et al., 2012, p. e204
- 28 Yogman et al., 2018
- 29 Yogman et al., 2018
- 30 Wilkinson et al., 2021
- 31 Sgro & Mychasiuk, 2020
- 32 Vanderschuren & Trezza, 2014
- 33 Jesse & Gaynard, 2009, cited by Jones, 2018
- 34 Graber et al., 2021; Yogman et al., 2018
- 35 Atkinson et al., 2016, Blair et al., 2006, and, Laurent et al., 2016, cited by Yogman et al., 2018, p. 6
- 36 Al-Yateem & Rossiter, 2017, cited by Jones, 2018
- 37 Gold et al., 2014, cited by Jones, 2018
- 38 Yogman et al., 2018
- 39 Rueda-Posada et al., 2023, p. 2
- 40 Thibodeau-Nielsen et al., 2021
- 41 Thibodeau-Nielsen et al., 2021
- 42 Thibodeau-Nielsen et al., 2021, p. 2
- 43 Thibodeau-Nielsen et al., 2021
- 44 Gilbert et al., 2021, p. 8
- 45 Wang et al., 2011, cited by Yogman et al., 2018 p.5
- 46 Healey & Mendelsohn, 2019
- 47 Healey & Mendelsohn, 2019
- 48 Koşkulu et al., 2021
- 49 Koşkulu et al., 2021
- 50 Dauch et al., 2018
- 51 Zosh et al., 2015
- 52 Milteer & Ginsburg, 2012, and, Parich-Morris et al., 2013, cited by Healey & Mendelsohn, 2019
- 53 Zosh et al., 2015, p. 141
- 54 Zosh et al., 2015
- 55 National Scientific Council on the Developing Child, 2018, p. 9

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Glossary of Māori words:

Pēpi *baby, infant*

Tamaiti *child*

Tamariki *children*

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[Getting the Brain You Need for the World You Find Yourself In](#)

[A Squishy Wonder: Brain Structure & Function](#)

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