

# Understanding Adolescent Risk-taking: A Quick Snapshot



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early years last forever  
whakamana i te tamaiti

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*Beginning at puberty, adolescence is the transition from childhood to adulthood. It's a time of many changes, physically, socially, emotionally, as well as changes in the brain. Research can help us better understand why more risk-taking can occur during this stage of development.*

## What is risk-taking?

Risks have two key features:

- Uncertainty (i.e. unknown outcome)
- The possibility of an adverse outcome.

Risks-taking can vary along several dimensions. It can be:

- Adaptive (e.g. learning to drive) or maladaptive (e.g. trying alcohol or other drugs)
- Reasoned (intentional, planned), or reactive (impulsive, unplanned).

## Taiohi brain development

Important changes to the brain occur during adolescence. Two key structural changes that increase the efficiency of the brain are:

- Synaptic pruning of connections that haven't been used

- Myelination of axons.

Other brain changes include:

- Increased functional connectivity
- The way in which neurotransmitters (e.g. serotonin and dopamine) affect the brain
- Increased sensitivity to rewards.

## Individual differences

Despite some similarities as taiohi develop, there are also large individual differences.

These differences include:

- Brain development
- Experiences during development up to this point
- Behaviour
- Reward sensitivity
- Gender
- Differing opportunities.



For those individual tamaiti who already find impulse control difficult, this might increase in adolescence.

## ***Environmental factors influencing risk-taking***

A number of factors in the environment influence risk-taking by taiohi. These include:

- More independence
- Being with their friends
- Drinking alcohol
- Lack of sleep
- Stress.

## ***Points to note***

- Physiological changes, including those of the brain, do not occur in isolation and the context and purpose of these changes is important to understand.
- Brain changes in adolescence do not directly translate to certain behaviours; taiohi behaviour is influenced by both factors in their environment, as well as the biological changes they experience.
- Trying new things is important for taiohi learning and development.

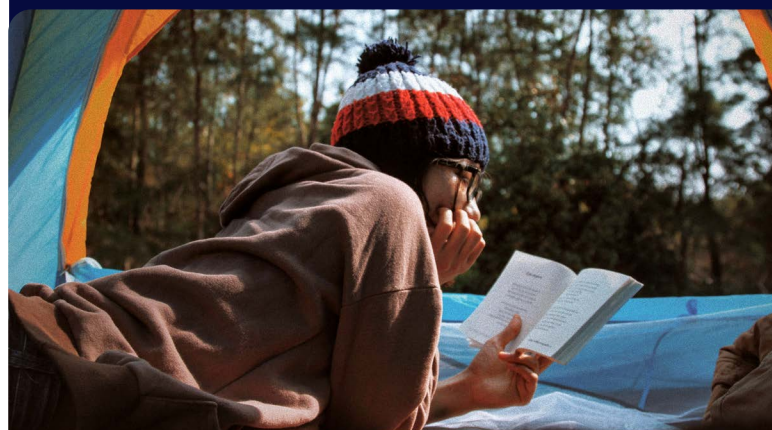
## ***To sum up***

Risk-taking in adolescence is influenced by many things, including:

- Social and biological changes of adolescence.
- Large individual differences in both adolescent brain development and in risk-taking behaviour.
- Situation specific factors (e.g. being with friends, using alcohol, lack of sleep, heightened emotions).

How an adolescent develops through this time depends on many factors, including their relationships, experiences, and the adult support available to them during adolescence, as well as their genetics and brain development up until now.

Taiohi are undergoing incredible changes and are predisposed to explore and learn about their world. For some, this leads to concerning behaviour, but it can also lead to positive contributions and activities.



## ***Glossary of te reo Māori words:***

*taiohi* – adolescents

*tamaiti* – child

## ***Want to know more?***

See this article for more detail, and references:

***Understanding adolescent risk-taking***  
<https://brainwave.org.nz/article/understanding-adolescent-risk-taking>