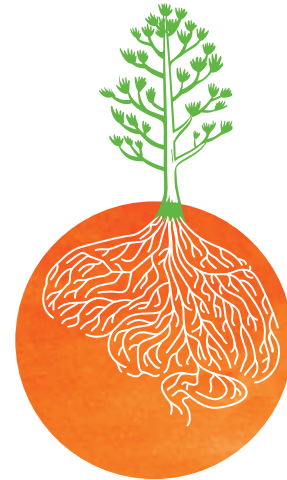




An insight into adolescence

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Adolescence is often portrayed as a time of difficult and challenging behaviours. Yet it's possible to view adolescence in a much more positive light. Recent research may help adults understand and appreciate the remarkable changes that are taking place.



The word 'mostly' is important. Adolescence is unlikely to be all smooth sailing and for some this will be a time of stress and turmoil. Their perception of their own capabilities through these years will be heavily influenced by the way in which the adults in their lives perceive them.⁴ Adolescence is no different to any other age; recognising and acknowledging strengths and qualities rather than focusing on deficits can make a difference.

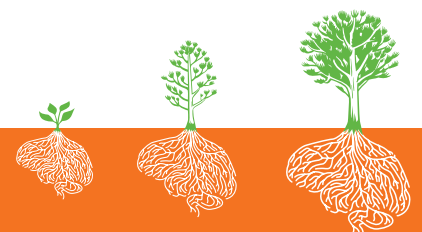
Adolescent Identity

Developing a sense of identity is an important task of adolescence. This isn't just about who they are right at this time, but who they want to be in the future. With changes in cognitive abilities adolescents are able to think in more abstract and hypothetical ways.⁵ They're now able to consciously explore and figure out who they are, who they want to be, how others perceive them and what makes them unique.⁶ These skills are important as they become more involved in making decisions about relationships, school, work and their future.

Adolescence is a time of experimenting with different ways of appearing, behaving and sounding. While some adolescent behaviour may seem inauthentic to adults, experimentation with different personalities and roles can be a normal phase of development.⁷ Inauthentic behaviour is more likely to be seen in dating or romantic situations than among close friends, as adolescents try to impress someone or hide an aspect of their personality they feel others may not like.⁸ By about 18 years, most adolescents have a strong sense of their own identity.⁹

Adolescence is the time of transition from childhood to adulthood. Puberty, the start of adolescence now starts earlier than it has in the past, sometimes as young as seven or eight years for females.¹ While parents tend to be aware of the physical changes taking place, there are also social and emotional changes that go hand-in-hand with puberty, such as different ways of socialising and behaving.² Adolescence is now thought to end in the early to mid-twenties with a transition into adult roles and responsibilities.

The majority of adolescents negotiate this transition in healthy ways.³ They're mostly committed to keeping themselves on the right track, they mostly live by strong morals and values, and they mostly function well in relationships with their peers, parents and other adults.





Please note: This article describes typical adolescent development. If a young person's emotions or behaviour are concerning due to their severity, duration, or any other reason parents should seek professional advice, such as their family doctor or school counsellor.

Young adolescents' short-term emotional states may be more negative than they were in childhood.

This is thought to be due to: life changes during puberty that may challenge their emotional and coping resources, physical changes to their body, a transition to a new school and changes in peer friendships.¹⁶ After puberty, most adolescents experience more positive emotional states than negative.¹⁷

Adolescence is no different to any other age; recognising and acknowledging strengths and qualities rather than focusing on deficits can make a difference.

Reading Social Cues

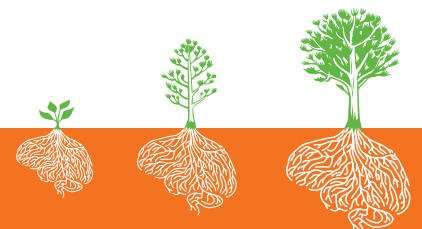
The ability to recognise and respond to basic facial expressions begins in infancy and continues to develop through childhood.¹⁸ Adolescents become increasingly skilled at identifying more complex expressions of emotion.¹⁹ They're able to recognise subtle shifts in facial expressions²⁰ and from early to mid-adolescence, tend to be more reactive to emotional expressions.²¹ This information they gain from others' faces influences how they interact and behave²² and may have more relevance as they become interested in their peers as romantic or sexual partners.²³ There may be a lost opportunity if they miss a flirtatious look!

Adolescent Emotions

With the onset of puberty and changes to the areas of the brain that process emotions, adolescents experience their emotions more intensely than children or adults.¹⁰ Emotions can be triggered more quickly and reactions can be more intense; their 'highs' seem higher and their 'lows' seem lower.¹¹ They're more sensitive to the emotions, expressions and opinions of others¹² and place more emphasis on how they think others perceive them.¹³ This heightened sensitivity subsides from mid to late adolescence.¹⁴

Is it true that, due to a surge of hormones, adolescents have a diminished ability to think? This is a myth that recent research has dispelled. While adolescents do tend to experience more extreme emotional states, both positive and negative than adults, there doesn't appear to be a strong connection with pubertal hormones.¹⁵ Young adolescents' short-term emotional states may be more negative than they were in childhood.

- ¹ Steinberg, 2014
- ² Hollenstein & Lougheed, 2013
- ³ Steinberg, 2014
- ⁴ Lerner, 2007
- ⁵ Steinberg, 2016
- ⁶ Sokol, 2009
- ⁷ Steinberg, 2016
- ⁸ Harter, 2011
- ⁹ Cote, 2009
- ¹⁰ Somerville, 2013
- ¹¹ Steinberg, 2016
- ¹² Steinberg, 2016
- ¹³ Somerville, 2013
- ¹⁴ Dahl, 2004
- ¹⁵ Duke, et al., 2014
- ¹⁶ Larson & Sheeber, 2009
- ¹⁷ Larson & Sheeber, 2009
- ¹⁸ Landy, 2009
- ¹⁹ Lawrence et al., 2015
- ²⁰ Kragel et al., 2015
- ²¹ Guyer et al., 2008
- ²² Pfeifer et al., 2011
- ²³ Motta-Mena & Scherf, 2016





Risk-Taking

Risk-taking is often seen as one of the defining features of adolescence. This has been an important rite of passage in evolutionary terms and, although it may not be so adaptive for the way we live now, it is still an inherent part of adolescent development that is 'hard-wired' in the brain.²⁴

Adolescence is a vulnerable period for risk-taking. The reward centre of the brain is easily aroused while their capacity to manage strong emotions and motivations is still developing.²⁵ Risk-taking can be compounded by an adolescent's natural drive for sensation-seeking; many are drawn to activities that fill a need for excitement, arousal and intensity.²⁶ It may be that they fully understand the risks, but decide it is worth taking them anyway.

Not surprisingly, adults often focus on negative aspects of risk such as reckless driving, smoking, drinking and unprotected sex. However, risk can also be positive and can play an important part in creativity and achievement.²⁷ Exposure to new and challenging experiences can help with learning and strengthening new skills.²⁸ Writing and delivering a speech at school, learning a musical instrument or trying a new sport are all examples of positive risk. While adolescents in the early to mid-phase may take risks they're not comfortable with to earn the approval of their peers and avoid rejection, this susceptibility to peer pressure lessens towards late adolescence.²⁹

Parents and Other Adults

Adolescence has been depicted in popular culture as a time of considerable conflict between adolescents and their parents. However, this no longer appears to be the prevailing view. Most adolescents feel close to

their parents and feel they are loved and cared for by them.³⁰ There may be a rise in conflict from early to mid-adolescence as they seek more autonomy and independence from parental control.³¹ When conflict does arise, it's usually relatively short lived.³² Conflict tends to involve normal, everyday issues such as curfews, clothing, leisure time activities, schoolwork and how tidy the bedroom is.³³

Although parents need to establish guidelines, these can be treated like 'training wheels'; they need to be consistent with the adolescent's needs and capabilities. As adolescents increase their skills for rational thinking, decision-making and problem-solving, parents are able to give them more autonomy and responsibility. "The parenting challenge of adolescence is to offer opportunities for adolescents to develop and practice autonomy while providing protection from danger and the consequences of poor decision-making".³⁴

²⁴ Steinberg, 2014

²⁵ Steinberg, 2016

²⁶ Shulman et al., 2015

²⁷ Dahl, 2004

²⁸ Steinberg, 2014

²⁹ Steinberg, 2016

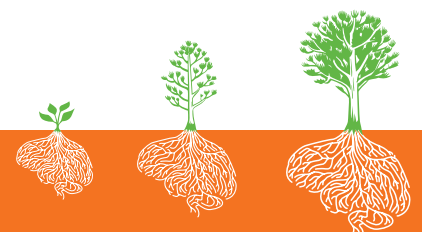
³⁰ Steinberg, 2016

³¹ Kuther, 2015

³² Martin et al., 2011

³³ Martin et al., 2011

³⁴ Kuther, 2015, p. 335





“The parenting challenge of adolescence is to offer opportunities for adolescents to develop and practice autonomy while providing protection from danger and the consequences of poor decision-making”.

The way in which parents 'parent' has an important influence from infancy and is just as important during adolescence. Parenting that is warm and supportive and has firm but fair guidelines is linked with better outcomes for adolescents.³⁵ What they learn in their family plays a big part in what they will take into their adult world. Adolescents who live in families who give each other time and attention, do things together, talk openly and listen and work together to solve problems are in a strong position to do well.³⁶

For a long time, it was thought that the early years were the only time of major brain development. However, it's now known that adolescence is another very important phase of development. Like the early years, adolescence is a time when trajectories that influence either positive or negative outcomes may develop. Lifetime problems with alcohol or drug misuse, nicotine dependency or the failure to develop the skills and knowledge that are needed to succeed in a job can all have their roots in adolescence.³⁷

Adolescents need on-going support and guidance from adults. Adults frequently withdraw their monitoring of adolescents too early, leaving them to cope with situations alone or with their peers, before they're developmentally ready.³⁸ It's not only parents who are able to support adolescents and alter trajectories in a favourable way. Other adults, including wider whanau, teachers and coaches who are involved with an adolescent can all play a part in providing the nurturing and support that young people need to become competent and productive adults.

Peers

Peer relationships are an important part of the shift as adolescents become less emotionally dependent on their parents.³⁹ They provide another context for adolescents to learn the skills and behaviours they need for more mature relationships.⁴⁰

Typically, peer relationships increase in number and complexity during adolescence.⁴¹ However, it's not the number of friendships that are important; the quality of the friendships has a greater influence.⁴² Adolescents mostly choose friends who have values and interests similar to their own such as music, fashion, extra-curricular activities, school involvement and attitude or, more negatively, alcohol and substance use.⁴³

“Fitting in” with the peer group becomes all-important and adolescents can be influenced to take part in activities they wouldn't normally be involved in.⁴⁴ Depending on the peer group, there can be both positive and negative aspects of this. An adolescent may be encouraged to join a drama group or a sports team with a friend. A less positive aspect of 'fitting in' may be pressure on a young person to join with others who are drinking alcohol at a party. Adolescents who are close to their family and perceive that their parents care for them and take an interest in them tend to be less susceptible to peer pressure.⁴⁵

Early History

Adolescents who experienced significant adversity during their early years may have a more problematic pathway as they transition to adulthood. They're at greater risk for a range of issues that may emerge during adolescence compared with those who don't have a history of adversity. These may include: mood disorders, including depression; externalising behaviours such as impulsivity, inattention, oppositional and destructive behaviours;⁴⁶ psychosis and personality disorders,⁴⁷ and auto-immune and other medical conditions.⁴⁸ They're also more likely to have difficulty in forming healthy and satisfying relationships with friends and intimate partners.⁴⁹

³⁵ Kuther, 2015

³⁶ Williams & Anthony, 2015

³⁷ Steinberg, 2016

³⁸ Dahl, 2004

³⁹ Dijkstra & Veenstra, 2011

⁴⁰ Dijkstra & Veenstra, 2011

⁴¹ Steinberg, 2016

⁴² Lerner, 2007

⁴³ Steinberg, 2014

⁴⁴ Steinberg, 2016

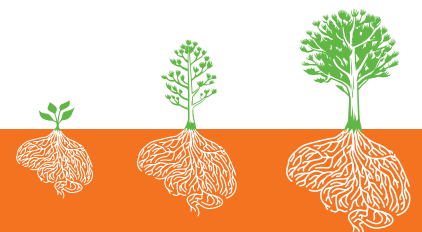
⁴⁵ Williams & Anthony, 2015

⁴⁶ Barlow, & Schrader-McMillan, 2009

⁴⁷ Spauwenet al., 2006

⁴⁸ Schecter & Willheim, 2009

⁴⁹ Steinberg, 2016





What's Happening in the Adolescent Brain?

It has been said that parts of the adolescent brain are closed for renovation. However, the adolescent brain as a whole is far from being closed. It is true that networks in the adolescent brain are going through a major period of reorganisation.⁵⁰ While some areas of the brain develop more quickly than others, all regions are progressing towards overall maturity of the brain which is generally attained between the early and mid-twenties.

Disputing the view of the adolescent brain as a 'work in progress', it has been suggested that an "adaptive adolescent story casts the teen less as a rough draft than as an exquisitely sensitive, highly adaptable creature wired almost perfectly for the job of moving from the safety of home into the complicated world outside".⁵¹

Aspects of an adolescent brain function in a different way to a child's or an adult's brain. For a long time, it was thought that the early years were the only period when the

brain was highly 'plastic', meaning it had greater capacity to change and adapt in response to experiences. While the brain continues to have some plasticity throughout life, recent research has shown that adolescence is a second period of heightened brain plasticity.⁵² Changes and adaptations in the brain may be positive and helpful for an adolescent's wellbeing or they may be harmful, depending on the type of experiences an adolescent mostly has. This is why adolescence is often described as both a time of opportunity and a time of vulnerability.⁵³

There are two primary brain regions where important changes take place over the period of adolescence. The limbic system, which plays an important part in the processing of emotions, social information and reward, becomes more easily aroused around the time of puberty.⁵⁴ Changes in this area are associated with adolescents becoming more emotional, more sensitive to the opinions and evaluations of others and being drawn to exciting and intense, sometimes risky experiences.⁵⁵

⁵⁰ Steinberg, 2014

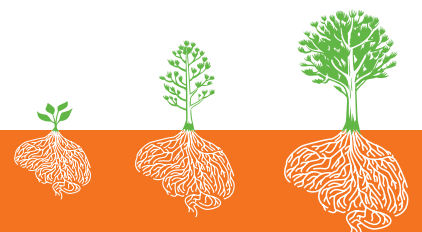
⁵¹ Dobbs, 2011, p. 38

⁵² Steinberg, 2016

⁵³ Dahl, 2004

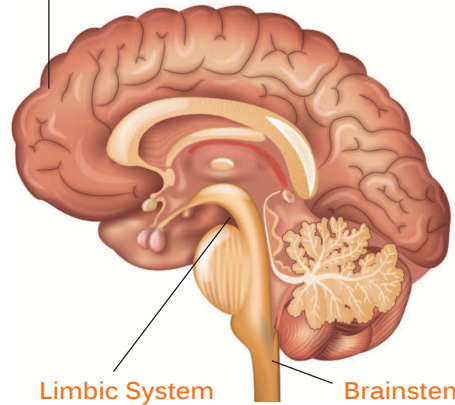
⁵⁴ Steinberg, 2014

⁵⁵ Steinberg, 2016



Aspects of an adolescent brain function in a different way to a child's or an adult's brain.

Prefrontal Cortex



If you enjoyed this article, here are some others that may be of interest

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<http://www.brainwave.org.nz/re-thinking-teen-drinking/>

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Explaining social and emotional changes in adolescence

<http://www.brainwave.org.nz/explaining-the-social-and-emotional-changes-in-adolescence/>

The prefrontal cortex, involved with planning, decision-making, reasoning ability, problemsolving, understanding consequences and controlling impulses is the last region in the brain to mature, somewhere around the mid-twenties.⁵⁶ Efficient use of these functions is essential for taking on the roles and responsibilities of adulthood. As with all learning and development, there will be mistakes along the way and it's important to remember that even though an adolescent may look like an adult, their brain doesn't yet function in the same way as an adult brain. As the prefrontal cortex becomes more organised, adolescents are able to make better decisions, control their impulses, process information more efficiently and think about long-term consequences.⁵⁷ The use of these skills may seesaw a bit from day to day and in different circumstances. Some days, or in some situations, adolescents may show great maturity; at other times these skills may be much less in evidence.

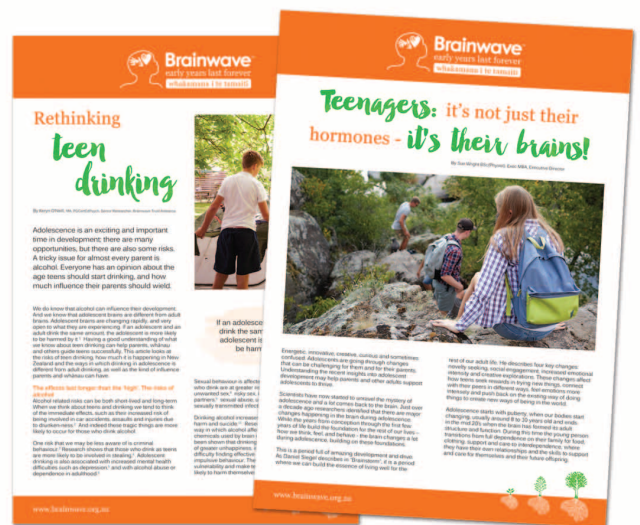
During adolescence, connections between the limbic system and prefrontal cortex become faster and more efficient, increasing adolescents' capacity to regulate emotions and coordinate their feelings and thoughts.⁵⁸

Adolescent behaviours and attitudes are not only influenced by changes in the brain. As in all development, there are on-going and dynamic interactions between biological, social, cultural and societal factors that contribute to development. What is happening in the family, at school and in the community will all play a part in the way an adolescent develops and what her future might look like.

Moving Forward

At times, adult expectations of adolescents can be unrealistic. Their brain is not a younger version of an adult brain; they are still fine-tuning the functions that are associated with adult ways of behaving. What adults may perceive as 'problem' behaviour - impulsivity or emotional intensity for example - may just be developmentally normal behaviour. However, adults may be able to channel some adolescent behaviours in positive ways. For example, their inherent drive for risk-taking may be directed into an 'action' sport rather than a fast car.

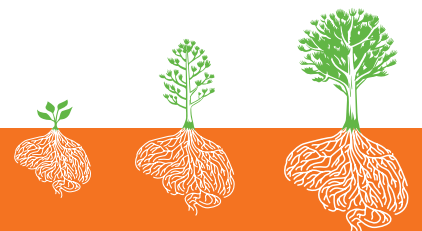
Adolescents need adults in their lives who are involved, interested, and able to show the adolescent that he or she matters. They need a balance of support and monitoring that lets them find their own way but also guides them as they navigate this transition to adulthood. By viewing adolescence through a lens of positive development, adults can reinforce the strengths and qualities that typify each adolescent's unique pathway as they transition to adulthood.



⁵⁶ Lenroot & Giedd, 2006

⁵⁷ Steinberg, 2014

⁵⁸ Dahl, 2004



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