Understanding the teenage brain

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Being a teen is tough!

- What are some of the challenges that teenagers face in today’s culture?
- What is easier about being a teenager today than when you were a teenager, and what is harder?
Growing and changing

- There are many obvious physical changes during puberty.
- The brain is rewiring the system for adulthood.
- From before or around the age of 11 to about the mid twenties for females and the late twenties for males.
Changing differently

- Every teen develops differently.
- Each brain works differently.
- The brain is rearranging and re-organising itself to prepare for adulthood.
- Unwanted and weaker connections are pruned to make the brain more efficient and stronger.
It's complicated!

- Brain changes influence everything else.
- Genetics, environment, education, experiences, relationships, etc. also influence behaviour.
- Good news! Their brain is at its peak performance level for learning and creativity.

Photo by Jon Tyson on Unsplash
Construction sites - amygdala

- The amygdala changes rapidly in teens.
- The amygdala is most responsible for sensations, emotions and arousal.
- This may explain why teenagers are more prone to risky and spontaneous behaviour.
During teenage years, the prefrontal cortex is undergoing rapid development.

This is the area in the brain most responsible for intellectual activity, self-awareness, planning, problem solving, decision making and appropriate social interaction.
Construction sites – prefrontal cortex

- Some studies suggest that this area of the brain doesn’t develop as fast as the amygdala.
- This may explain why teenagers appear to behave irrationally at times, and why they don’t always think ahead, plan and assess the consequences.
- Joel’s jump…
How adults can help

- Be understanding and supportive rather than frustrated and critical.
- Give teenagers space to develop in their unique way.
- Remember that each teenager has many different influences that can affect their behaviour.
- Strong connections - family, school, community, mentors, and role-models, can all help to support the teenager.
How conflict escalates

- When teens experience criticism, a lack of support and connection, it is much harder for their brains to handle conflict well.

- Stress, anxiety and fear stimulate the hypothalamus and the adrenal glands.

- Cortisol (stress hormone) is released and they are more likely to become verbally aggressive, to shout, to hurt other people’s feelings, and even become violent.
How conflict escalates

- When our cortisol levels are raised it is much harder for us to respond appropriately in conflict situations.
- When Fight or Flight reactions dominate our behaviour, we struggle to be thoughtful, unselfish, empathic and caring.
We don't feel cared for

Cortisol and adrenaline are released...
(stress hormones)

...blocking our ability to listen, show empathy, and be compassionate

Cortisol and adrenaline are released in others

We hurt others by our words and actions

...blocking their ability to listen, show empathy, and be compassionate

Distress cycle
Underneath the argument the teen is really asking:

- Do you love me/care about me?
- Are you able to understand what I am feeling right now? Can you empathise with me?
- Are you willing and able to help me when I am struggling?
- Will you always be there for me? Can I depend on you?
Helping Teen brains to manage conflict better

- Empathy, compassion, kindness, support and appreciation release the hormone oxytocin into the body.
- Oxytocin helps us to feel safe, happy, loved and loving.
Helping Teen brains to manage conflict better

- When teens feel cared for they are able to connect with the cognitive and reflective parts of their brains.
- This helps them to respond more wisely, kindly, creatively, humbly and unselfishly to their challenges and potential conflicts.
We feel cared for

Others have a better ability to express and process their emotions and care

Oxytocin/dopamine release in self

Oxytocin/dopamine release in others

Better ability to listen, show empathy, and be compassionate

Helps us to care better for others

Compassion cycle
Risky behaviour

- Teens are *trainee adults*.
- Low self-esteem, a sense of hopelessness, a disconnection from parents, peer pressure, lack of future goals, and challenges at school and home are some of the factors that might increase the incidence of risk-taking behaviour.
Risky behaviours might include:

- Leaving homework to the last minute.
- Not studying for exams and tests.
- Self harm.
- Experimenting with drugs, sex, alcohol, and smoking.
- Trying dangerous activities and challenges.
Managing risky behaviour

- Teenagers are likely to take risks.
- Help them to stop and think through the different consequences of their actions and choices.
- Make safety/escape plans with them.
- Be there to catch them when they make mistakes.
Protective factors

- Warm, open, supportive and trusting relationships with parents and family.
- Parents and teachers who help teens when they get into difficulties.
- Faith, responsibility, good mentors and positive hobbies can all help to protect the teen.
During and after puberty the sex hormones are released into the body – oestrogen and testosterone.

Feelings of stress, anxiety and fear can also flood their brain with the hormone cortisol.

Teens can feel overwhelmed by the effects of these hormones and make it harder for them to make good choices.
High levels of stress hormones in the body can affect the development of the brain, especially when it is in the rapid development phase of adolescence.

Help teens to manage their stress levels and anxiety.
How adults can help

- Teenagers can be illogical, irrational, inconsistent and unpredictable.
- Help them manage mood swings by showing empathy, love, acceptance and understanding.
- Your calming presence will help them to calm down too.

Photo by Anastasia Vityukova on Unsplash
Sleep deprived?

- Teenagers release sleep hormone melatonin about two hours later than children or adults.
- This explains why they stay up late and why they are so sleepy in the morning.
- But they still need lots of sleep to help them learn well, reduce their stress, and for their wellbeing.
How parents can help with sleep

- Understand their sleep patterns.
- Encourage a calming, regular night-time routine, including putting away phones and devices, winding down, and relaxing.
- Encourage them to read before bed rather than using screens and phones.
- Let them catch up on their sleep at the weekend.
LOVE
Comfort
Acceptance
Affection
Appreciation
Attention
Respect
Encouragement
Security
Being valued
Support

ALONENESS
Neglect
Rejection
Abuse
Criticism
Being ignored
Shame
Discouragement
Fear
Being put down
Abandonment
Be available and caring

- Meet teens’ relational needs as often as possible.
- Be aware of what causes painful aloneness in teens and avoid doing these things.
Be present and connected

Be humble enough to apologise to teens when you mess up, or when you cause them pain and hurt.

After a conflict – it’s best if the adult moves to mend the relationship as quickly as possible because teens and young people don’t always know how to do this.

Disconnection can lead to guilt and depression – look for their body language.
Love them anyway, always...

- Teens need to know that they will always be loved, unconditionally, no matter what they do, say, or how they look.
- Let them know you will always be there for them – whatever their life choices and mistakes.
Catch them doing something good

- As often as possible – even daily – affirm them for something they have done well or right.
- This is powerfully encouraging and shapes their character.
Why teens don’t always talk

Sometimes teens grunt, turn away, go silent, or show indifference. But this doesn’t mean they don’t want to talk to you.

They need to feel safe first.

If we listen to them when they are young, they will listen to us when they get older.
Why teens don’t talk

- Avoid asking lots of questions and interrogating them. They can find this confusing and unsafe.
- Make them feel comfortable and safe first.
Watch your face

- Adults read the emotions in people’s faces in the rational and thinking part of their brains.
- Teens read people’s faces in the amygdala of the brain – which focuses on sensing and responding to danger.
- They can be hyper-alert to ‘threat’, disagreement or disapproval.
- Fight – respond angrily and aggressively
- Flight – run out and slam the door

Photo by Elizeu Dias on Unsplash
Listening well

- Respond to the feelings fueling the words rather than reacting to their words and tone of voice.
- Listen for their unspoken needs and emotions (help, respect, affection, time with you, comfort, security, encouragement, etc.)
- Ask them how you can help.
- Keep your promises and their secrets.
Speaking well

- Choose a good time for both of you.
- Stay calm and speak quietly – this reduces the release of stress hormone cortisol in their brain.
- Let them know you care about them.
- Express appreciation.
- Turn complaints into polite requests:
  - In this situation...when this happens...I feel...and it would really help me if you would... and then I can help you by... What ideas do you have?
Respect

- Show respect for teens by asking for their opinion and listening to their ideas.
- If you have different opinions state them calmly and clearly and say why you don’t agree.
- Invite teens to help you make good rules for their safety and well-being.
- If they break the rules, invite them to suggest possible disciplines that involve logical consequences.
Boundaries

- Many conflicts happen because teens want to push the boundaries.
- Boundaries help them to feel safe and loved.
- Enforce boundaries warmly and make it easy for them to comply.
- Rules should be made for the benefit of the teen, not for the parent or teacher's convenience.
Enforcing boundaries

“I love you too much to let you do that!”

- Rules without a warm relationship leads to rebellion.
- Help the teen understand the importance of complying with the rules – safety, well-being, future hopes, etc.
- Avoid harsh punishment – it can lead to greater conflict.
- Don’t taking away personal property like phones and tablets.
Resilience

1. Nurture, affirm and encourage the teen's positive character strengths.

2. Help them to persist with difficult things.

3. Support them well so that they can bounce back from challenges with your help and love.
<table>
<thead>
<tr>
<th>Kind</th>
<th>Be kind and compassionate.</th>
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<tbody>
<tr>
<td>Warm</td>
<td>Have a warm and welcoming face and body.</td>
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<tr>
<td>Calm</td>
<td>Try not to be triggered by their words and behaviour.</td>
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<tr>
<td>Responsive</td>
<td>Listen to the needs of their heart and respond to them.</td>
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<tr>
<td>Helpful</td>
<td>Be supportive and understanding.</td>
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<tr>
<td>Brain-aware</td>
<td>Remember how their brains are developing.</td>
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<tr>
<td>Risk &amp; safety</td>
<td>Help them to anticipate risk and make safe plans.</td>
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<tr>
<td>Boundaries</td>
<td>Set clear boundaries for their benefit and make it easy for them to maintain them.</td>
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<tr>
<td>Mental health</td>
<td>Be aware of their mental health and help them to access appropriate help.</td>
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<tr>
<td>It’s not forever</td>
<td>Remember that you were once a teenage and this too shall pass!</td>
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Resources

- Conflict with teens
- [www.scottishconflictresolution.org.uk](http://www.scottishconflictresolution.org.uk)
- Helping with troubling behaviours and helping them to flourish
- [www.handsonscotland.co.uk](http://www.handsonscotland.co.uk) – esp. emotional balance on flourishing side
- Dan Siegel – Power and purpose of the teenage brain – you tube – look for the one about 2 hours long [https://www.youtube.com/watch?v=H1pf1xTMeNg](https://www.youtube.com/watch?v=H1pf1xTMeNg)
- Brainstorm – Dan Siegel’s book for teens about what is happening in their brain