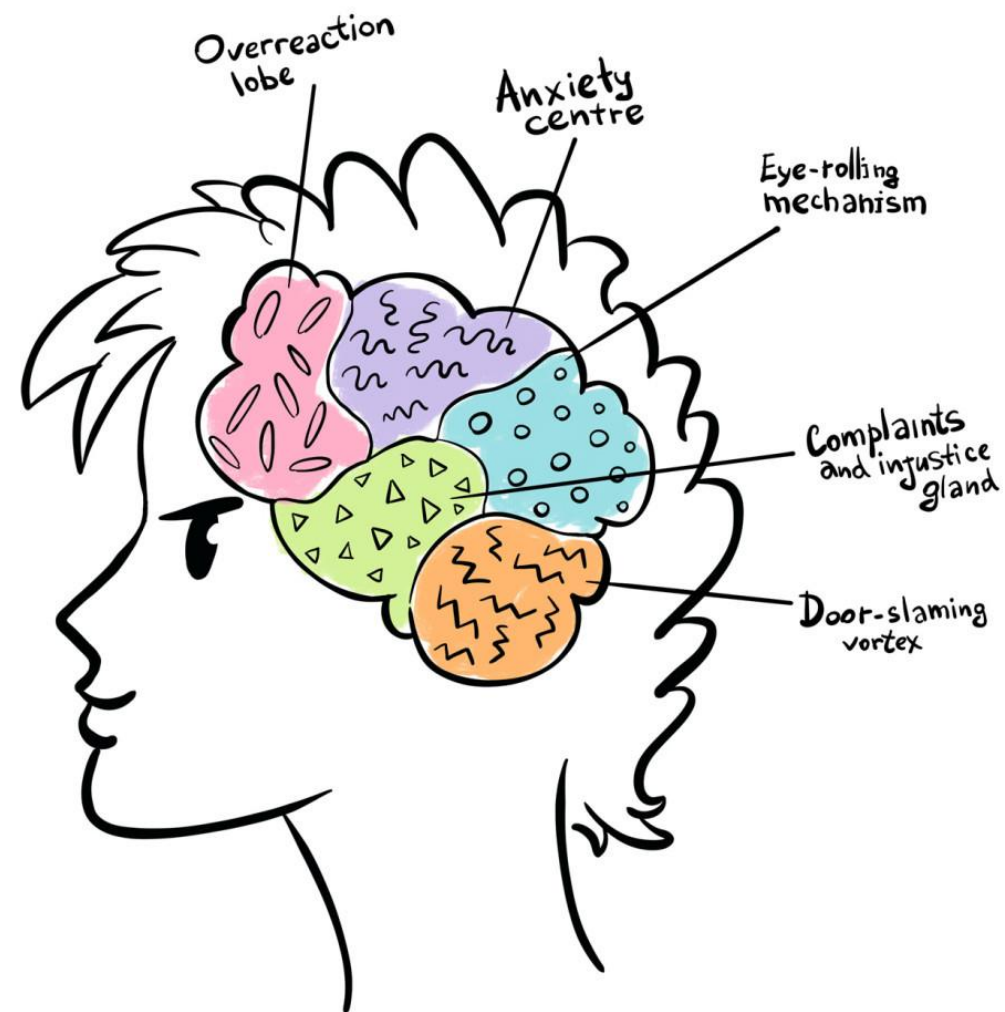


Teenage Brain



Introductions



Kirsty Longbottom – Mental Health in Schools Coordinator

Alice Lilley – Mental Health in Schools Practitioner

What is **Open Minds (CAMHS)**?

- **1:1 specialist mental health interventions** for children and young people.
- **Advice** and **signposting** to other services.
- **Resources** for young people, parent/carers and professionals.
- Access to **SWYFT** – ‘Getting more help’
- **Neurodevelopmental** support and assessment

Group agreement



- **Listen** and **respect** each other.
- A **safe space** to talk and share experiences.
- Mobile phones on **silent**.
- A space to talk openly – maintain **confidentiality**.
- If you need a break/toilet, please feel free to have 5mins.
- **Feedback** is required at the end!

Any to add?

Aims



- To understand some of the **key changes that occur in the brain** during adolescence.
- To identify how brain changes may impact on **behaviour, emotional regulation, sleep** and **relationships**.
- To know how to **promote healthy brain development**.

Adolescence



Teenage behaviour can be **confusing, frustrating, stressful, hurtful**, and lots more! Many of the behavioural problems that parents find difficult during this time are part of the **natural process of becoming an adult, puberty and growing up.**

Bodies and brains are changing at this time. Teenagers may experience a **range of emotions** during these years, but these emotions help them to make sense of the world around them.

During adolescence, teenagers have to cope with **surges of hormones, changes to their brain development, body changes**, struggling to find an **identity, peer pressure** and finding **independence** – there's a lot going on!

Teenage behaviour



All of this means that during this time, your teenager may:

- Want more time **alone** or **with friends**
- Become **aloof**
- Feel **misunderstood**
- **Reject attempts** to show affection or talk
- Appear **moody**
- Experience **heightened emotions**
- Feel **tired** all the time
- Find it **difficult to make decisions**



Hormones!



During adolescence, there are significant hormonal changes:

- **Sex hormones** – testosterone!
- **Serotonin** – the ‘feel good’ hormone.
- **Dopamine** – linked to reward-motivated behaviour and, sensation seeking and risk taking.
- **Oxytocin**
- **Melatonin** – sleep hormone.

Teenage brain

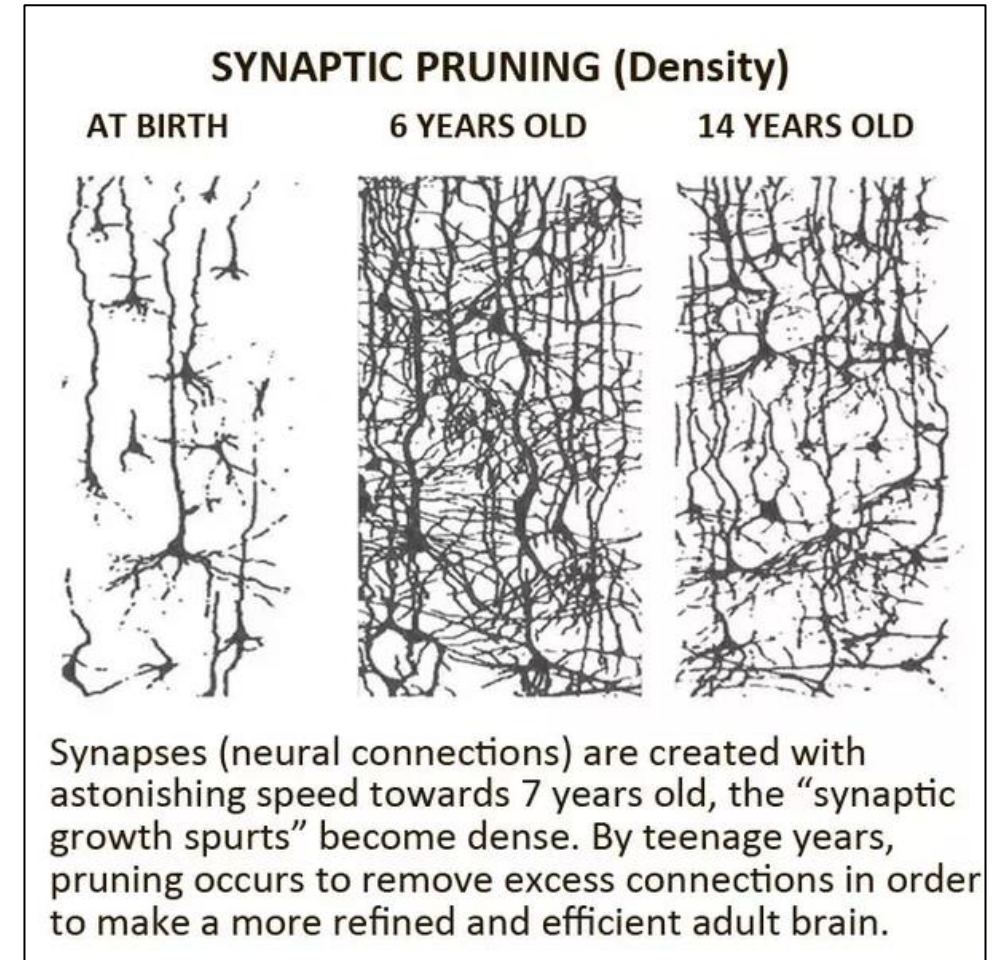


Neurological changes



Adolescence is an important time of **neurological change**. Brain changes that occur during this time include:

- Development of **all areas of the brain**, from **back to front**
- **Myelin formation** – increases white matter
- **Better connections** between the two brain hemispheres
- **Synaptic pruning**



What does this mean?



All of this leads to the following positive changes:

- Increased **intelligence**
 - ✓ Memory
 - ✓ Abstract thinking
 - ✓ Communication skills
 - ✓ Language skills
- Improved **connectivity**
 - ✓ More parts of the brain are used
 - ✓ Both sides are working together

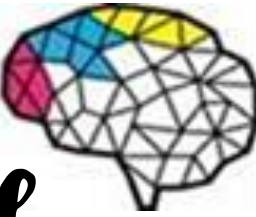


Brain changes and behaviour



So we have seen how teenagers are experiencing a lot of changes – to their **hormones** and their **brains**! This can cause some of the following behaviours:

- Feeling **confused** or **uncertain** – finding it **difficult to make decisions**
- **Not knowing what to think**
- **Irritability**
- **Mood swings**
- Prioritising **fun, new things**, getting **rewards**
- **Sleep difficulties**
- Increased **risk taking**
- Sensitivity to **stress**

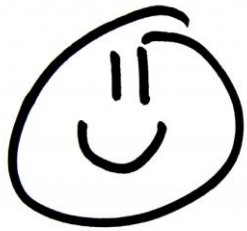


The Social Brain

- The **prefrontal cortex** plays an important part in **social relationships**, but we know this develops **later on in adolescence**.
- **Empathy** skills and **facial recognition** skills are still developing.



The Social Brain



- Better at **recognising emotions** of others
- Able to **evaluate social situations**
- Increased **pro-social behaviour**
- Better at thinking about **consequences of behaviour** and how this may **impact others**



- An **imaginary audience!**
- **Egocentrism**
- More **influenced by peers**
- Less likely/willing to take **adult guidance**
- **Avoiding social risks** can be more important than other risks

The brain and the environment



-
- The brain and the environment **interact**.
 - Experiences at this time can be **really important for the remainder of life**.
 - **Trauma** can affect brain development.
 - Adults are a **vital part of the environment** and have an **important role** to play in **influencing and supporting brain development**.
 - **Enriched environments** aid brain development.
 - There is **greater neuroplasticity** in adolescence – good experiences and interventions can overcome earlier negative experiences.

The teenage brain and sleep

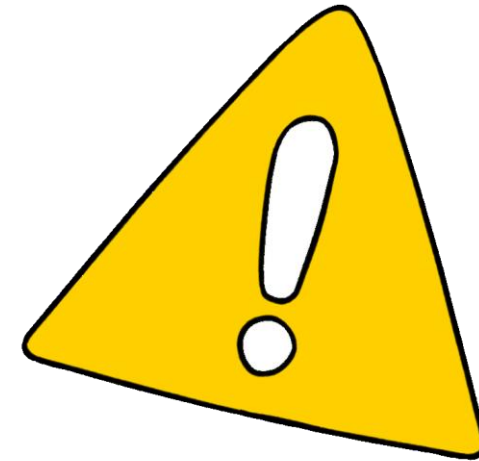


- Sleep is important – but melatonin release is **delayed** in teenagers
- School age teenagers need between **8-10 hours** of sleep
- Lacking sleep can impact on **learning** and **behaviour**
- **Teenage girls** may be more affected by sleep deprivation than boys
- Sleep deficit is linked to an **increased risk of developing mental health difficulties**
- Lack of sleep can lead to increased **attention difficulties, mood swings, aggressive behaviour, anxiety** and it can also affect **cognitive function**

Unhelpful brain practices!



- **Zero tolerance** behaviour management
- Not allowing teenagers **enough sleep!**
- Not enough time for **breaks** and **exercise**
- **Emotionally flat** home environment
- Avoid **shaming, embarrassing, arguing in public**





How can you
support teenagers?

What can you do?



- Understanding that it's a **difficult time**, full of change for your teenager
- Manage your **reactions**
- Remember your **own experiences** – what were you like as a teenager?
- Remember that the **neuroplasticity** of the brain at this age means that **change is possible**
- Encourage **good routines**
- Adolescent **reward pathways are strengthened** in response to happy faces!

What can you do cont.



- Give teenagers the **opportunity to choose**
- Practice **self-awareness activities**
- Point out **positive learning from their peers**
- Work on your teenager's **emotional learning**
- Have a go at **creative arts** activities
- Introduce them to **greater autonomy**
- Play **memory games** and **puzzles**

What can you do cont.



- Practice **gratitude**
- **Meditation**
- Develop their **emotional literacy** and **coping strategies**
- Help them to develop a **healthy sleep routine**
- Use **screen time**

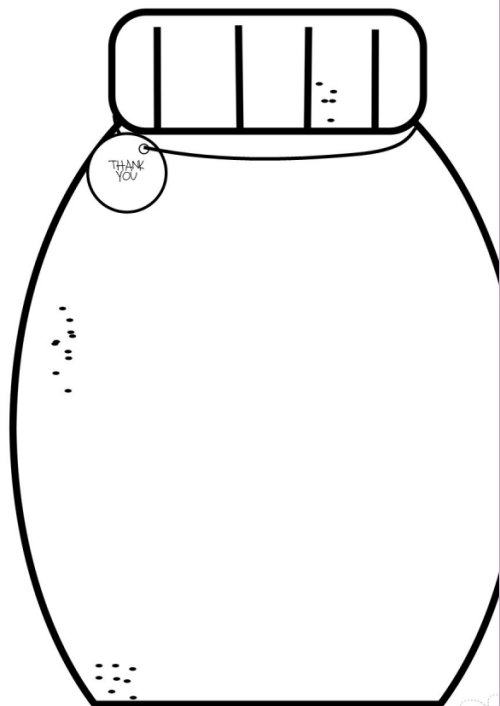


Resources



JAR OF GRATITUDE

Fill the jar with all the things you are grateful for right now



Breathing Techniques

When we feel anxious, upset or distressed, it can be difficult to know what to do to feel better. Using these breathing techniques, we can reduce our anxiety and lower our blood pressure rate. This helps us feel calmer and more focused.

Balloon Belly Breathing



- Take a deep breath in and fill your belly like you're inflating a balloon.
- As you do this, count 1, 2, 3, 4 to breath in and fill the balloon in your belly.
- Pause and then let all of the air out of your belly like you're letting a balloon deflate.
- As you do this, count 1, 2, 3, 4 to breath out and let the balloon go down from your belly.

Square Breathing

- Imagine you're drawing a square with your finger in the air.
- Breath in while counting 1, 2, 3, 4 as you draw the top line and then pause.
- Breath out while counting 1, 2, 3, 4 as you draw the line down the side and then pause.
- Breath in while counting 1, 2, 3, 4 as you draw the bottom line and then pause.
- Breath out while counting 1, 2, 3, 4 as you draw the line up the side to make the square.



Finger Breathing



- Use your index finger to trace around the edges of the fingers on your opposite hand.
- Count 1, 2, 3, 4 and breath in as you go up the first finger.
- Count 1, 2, 3, 4 and breath out as you go down the finger.
- Repeat until you have traced up and down all five fingers, breath in 1, 2, 3, 4 in and 1, 2, 3, 4 out each time.

Top Tip! Practise these breathing techniques when you're calm so that you're better prepared to use them when you need to.



Count *slowly* when breathing in and *repeat* the technique as many times as you need to until you feel calm.

Keeping Calm

Calming or Grounding techniques are a good way to reduce our heart rate/blood pressure when feeling worried or anxious. It helps us refocus our attention and overcome those unpleasant feelings so we can feel better and do more.

54321

Take notice of your senses by thinking of:
5 things you can see
4 things you can hear
3 things you can feel/touch
2 things you can smell
1 thing you can taste



Facts

Think about and name facts about what is going on right now. For example, think:
My age is...
My name is...
I am wearing...
The weather is...
I am in...



Room Search

Think of a category and search the room for it. For example, look for:
Everything that is a _ colour
Everything that is a _ shape
Things that feel of _
Things made of _



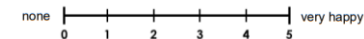
The Link



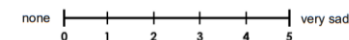
By thinking about how we feel, we can then do what we want/need to feel better and more focused.

Basic Emotion Assessment

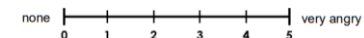
Happiness



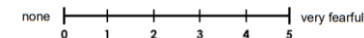
Sadness



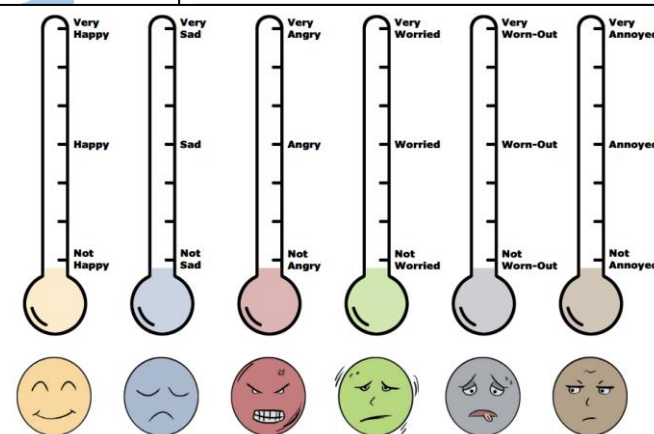
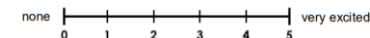
Anger



Fear



Excitement



What to do if more support is needed?



Look at the **Open Minds website** – this has lots of great resources and tips for young people.

The **Open Minds Partnership** includes different services in Calderdale which offer different kinds of support:

- **Time Out** – guidance about emotional wellbeing, managing worries and looking after yourself. 10-19 years.
- **Kooth** – online, anonymous counselling. 10-25 years.
- **Barnardo's Positive Identities** – advice and support for those who identify or are questioning their gender and/or sexual identity. 8-25 years.
- Calderdale **Young Carer's** Service – advice and guidance on being a young carer. 8-18 years.
- **Branching Out** – specialist support and advice around drugs and alcohol. 10-21 years.
- **The Brew Project** – 1:1 support sessions or 1:1 'walk and talk' service. 5-17 years.
- **Calderdale School Nursing Team** – help to manage long and short-term conditions in education settings for children and young people. 5-19 years.
- **Open Minds (CAMHS)** – advice and signposting, 1:1 specialist mental health support. 5-18 years.



SilverCloud: Digital Mental Health Support

Currently, SilverCloud offers children and young people five programmes of mental health support. Three for young people and two for parents/carers of children and young people.

Free, minimal wait times, early intervention for mild/moderate anxiety/low mood

- **Space From Anxiety** –This programme is an online intervention aimed at alleviating psychological distress arising from anxiety related symptoms. This programme has been developed to help young people aged 14 years and over manage these feelings and the causes of them, ultimately offering welcome space from anxiety.
- **(NEW) Space From Low Mood** – Another online programme that has been designed to relieve the symptoms of low mood in young people by focusing on developing more flexible ways of thinking, increasing awareness and understanding of emotions and understanding their mood, as well as their triggers. This is aimed at supporting young people 14 and above.
- **(New) Space from Low mood & Anxiety** - The *Space from Low Mood & Anxiety* programme has been designed to relieve the symptoms of low mood and anxiety in young people by focusing on developing more flexible ways of thinking, increasing awareness and understanding of emotions and understanding their mood, as well as their triggers, and warning signs of low mood and anxiety. This is aimed at young people 14 and over
- **Supporting an Anxious Child (4-12 years)** and **Supporting an Anxious Teen (13 plus)** are online interventions for parental use alongside their child. The programmes are based on CBT and built in conjunction with leading clinical experts. These programmes provide psychoeducation, tools and activities in a safe confidential space to help parents support their children or teens.

For more information please contact silvercloud@northpoint.org.uk or 01422 300 001. Referrals can be made here:

[Silvercloud | Northpoint Wellbeing - Open Minds \(CAMHS\) \(openmindscamhs.org.uk\)](https://openmindscamhs.org.uk)



Kooth



Prevention through to support for most vulnerable



Night Owls



A screenshot of a website banner for 'Night Owls'. The banner has a dark blue background. In the top left corner, there is a logo featuring a stylized owl and the text 'NIGHT OWLS'. In the top right corner, there is a phone number '0800 148 8344' and a teal circular button with the text 'CALL NOW'. The main content of the banner consists of three white speech bubbles arranged horizontally. The first bubble on the left contains the text 'OR JUST SIMPLY', the middle bubble contains 'WANT TO', and the third bubble on the right contains 'TALK'. Below these bubbles, at the bottom center of the banner, is the text 'Or just simply want to talk.' in a smaller, white font.

Q&A



Any **questions?**

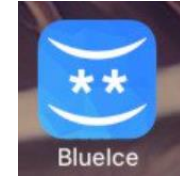
Review aims of the session.



Useful apps



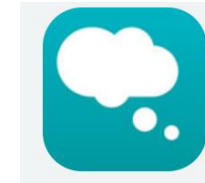
BlueIce - BlueIce is an evidenced-based app to help young people manage their emotions and reduce urges to self-harm. It includes a mood diary, a toolbox of evidence-based techniques to reduce distress and automatic routing to emergency numbers if urges to harm continue.



Calm Harm - Calm Harm is an app designed to help people resist or manage the urge to self-harm. It's private and password protected.



Catch It - Learn how to manage feelings like anxiety and depression with Catch It. The app will teach you how to look at problems in a different way, turn negative thoughts into positive ones and improve your mental wellbeing. *(This app is currently under reassessment for Data Protection following changes introduced by GDPR.)*



ThinkNinja - ThinkNinja is a mental health app designed for 10 to 18 year olds. Using a variety of content and tools, it allows young people to learn about mental health and emotional wellbeing, and develop skills they can use to build resilience and stay well.



MeeTwo - The MeeTwo app provides a safe and secure forum for teenagers wanting to discuss any issue affecting their lives. You can anonymously get advice from experts or other teenagers going through similar experiences in areas such as mental health, self-harming, relationships and friendships.



Smiling Minds (Mindfulness) The smiling mind is a mindfulness app that supports positive mental health and wellbeing. The programs education app is designed for both primary and secondary aged children.



Useful links



Open Minds website – advice and resources for young people, parents and schools.

www.openmindscalderdale.org.uk



Mentally Healthy Schools website by Anna Freud – resources for young people and schools.

www.mentallyhealthyschools.org.uk

Kooth – safe, online, anonymous counselling for 10—25 year olds.

www.kooth.com



Time Out – simple guidance around emotional wellbeing, managing worries and looking after yourself. 10 – 19 years.

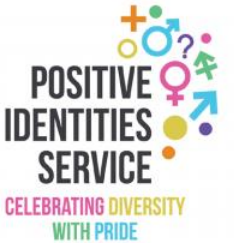
www.timeoutcalderdale.co.uk

Useful links



Barnardo's Positive Identities – specialist advice and support to those who identify or are questioning their sexual and/or gender identity. 8-25 years.

Contact details: 01422 371993 or PositivIdentities@barnardos.org.uk



The Brew Project – 1:1 support sessions with a wellbeing officer or a 1:1 walk and talk service. 5-17 years.

Contact details: 01422 730015 or support@invictuswellbeing.com



Branching Out – specialist support and advice around drugs and alcohol. 10-21 years.

Contact details: 01422 415550



Calderdale School Nursing Team - help to manage long and short-term conditions in education settings for children and young people. 5-19 years.

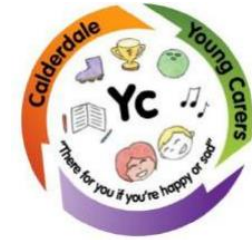
Contact details: 030 3330 9974 (duty line) or online referral via [online referral form](#)

Useful links



Calderdale Young Carer's Service – advice and guidance on being a young carer. 8-18 years.

Contact details: 01422 261208 or www.calderdale.gov.uk/ycs



Noah's Ark – therapeutic services for young people and bereavement support group. Paid service.

www.noahsarkcentre.org.uk

Open Minds (CAMHS) – signposting, advice and mental health interventions for children aged 5-18 years.

Also offers consultation, support, advice, training and referral guidance to parents/carers, young people and professionals.

Contact details: 01422 300 001. www.openmindscamhs.org.uk

Useful links



- Dan Siegel 'The Adolescent Brain'

<https://youtu.be/0O1u5OE5eY>

- Dan Siegel 'The Hand-Brain Model'

<https://www.youtube.com/watch?v=gm9CIJ74Oxw&t=1s>

Thank you
for listening!

