The Brain Under Stress:
Overcoming setbacks and developing resilience.
The Brain Under Stress

Aims of the session

• To look at stress and its causes
• To explore how our brain reacts under stress
• How stress can impact on our and young people’s emotions and behaviour
• What we can do to support young people in managing stress and building resilience.
• How we can set a good example
What is stress?

- A normal physical response to events that make you feel threatened or upset your balance in some way.

- Mild or moderate stress can help you stay focused, energetic, alert and rise to meet challenges (drive and motivation).

- It is designed to be a short term response and will vary from person to person.

- When the experience of stress is prolonged (chronic or toxic stress), this adaptive response can become corrosive.
What causes stress?

Discuss: What do you think are the Top 10 causes of everyday stress in the UK?
Top 10 Everyday Stresses in the UK

- Forgetting your bank card when paying for an item: 25%
- Dealing with machine operated customer service: 26%
- Discovering you are out of toilet roll whilst on the loo: 30%
- Running out of battery on your phone whilst out: 31%
- Printer not working when you need to print something: 31%
- Nowhere to park: 32%
- Being stuck in traffic when already late: 33%
- Losing your keys: 35%
- Losing an important paper or document: 37%
- Not being able to sleep: 46%
Experiences of stress?

Let’s consider what happens when we are stressed ...

• What are we THINKING?
• What are we FEELING (emotionally and physically)?
• What are we DOING?
The Brain Under Stress

The science of stress

In effect, it will be difficult for us to...

• listen carefully
• focus and concentrate on a difficult task
• come up with creative ideas
• work well in a group
• be interested in what they are doing
• overcome difficulties and keep going, despite frustration
• remember information

...the same is true for children and young people.

Adapted from Teaching with the Brain in Mind (Jenson, 2005)
The Brain Under Stress

The science of stress

The brain responds to stress (real or imagined) in one of two ways. Depending on the perceived situation it will either:

- take the ‘high road’ to the neocortex
- take the ‘low road’ to the reptilian brain, activating stress responses known as ‘fight, flight or freeze.’
The Brain Under Stress

The science of stress

The three evolutionary stress response systems:

- ‘fight’ & ‘flight’ responses prepare our body for action
- ‘freeze’ response prepares our body for surrender and minimal injury
- access to the neocortex is temporarily shut off to enable our brain to operate faster for our survival.
This stress response evolved in response to physical threats.

However, humans can switch this on in response to psychological threats i.e. when we worry about things, the thought or anticipation of something stressful.
Adolescence can be a stressful time

Discussion

1. What types of things are likely to cause stress in adolescence?

2. When should we be worried?
The Brain Under Stress

When should we be worried? [Dacey & Fiore, 2000]

Some stressful behaviour is absolutely normal but if we observe MARKED changes in the following we need to check things out:

- Marked changes in school performance
- Withdrawing from favourite pastimes and friends
- Being overly clingy or excessively hostile towards family members
- Marked changes in eating and/or sleeping patterns
- Extreme risk taking behaviour.
What can we do to help?

Revisit your original stress response experiences and consider:

• What you/someone else could do in that moment that would definitely not help you?
• What would help?
Video: Helping kids with stress

https://www.youtube.com/watch?v=N8MpV1n1b0g&index=35&list=PLvwrixtADoYQzmqKnKcij0gvMyhZuInqS
The Brain Under Stress

What helps? [Bomber, 2007]

- Stay calm, listen and take the distress seriously
- Try not to take the behaviour personally
- Avoid solving the problem for them
- Support them to find strategies that help calm them when stressed
  - e.g. music, exercise, a quiet space for reflection, writing things down, being outdoors, deep breaths.
The Brain Under Stress

Listen to understand: Activity

Working in pairs:
Choose who will be the parent and who will be the young person.

As the parent, practise:
• active listening
• acknowledging feelings
• using open questions
• avoiding giving advice or solving the problem.

Try to work out the reason for the behaviour.
Help normalise the experience of setbacks

- Help them to see setbacks, challenges and stressful situations as a normal part of life (perspective).
- Use stories, video clips, examples to draw attention to how other people manage to overcome difficulties.
- Role model (e.g. talk out loud) when coping with mistakes or setbacks.
Rethinking Stress...

Study: Does the perception that stress affects health matter?  

Keller et al. 2012

- This study tracked 30,000 adults in the United States for eight years. At the start they were asked:
  - how much stress have you experienced in the last year?
  - do you believe that stress is harmful for your health?

Studies: Mind over matter & Turning the knots in your stomach into bows.  

Jamieson et al, 2012 & 2010

- Students undergoing social stress tests were taught to rethink their stress response, as this was helpful in improving cardiovascular and cognitive responses to stress.
Reflection

“The harmful effects of stress on health are not inevitable. How you think and how you act can transform your experience of stress. When you choose to view your stress response as helpful, you create the biology of courage. And when you choose to connect with others under stress, you create resilience.”

Kelly McGonigal, 2012
Help young people to develop resilience

Resilience:

“Being able to effectively cope with and recover from stressful experiences, setbacks and change.”
The Brain Under Stress

Why are some people resilient?
The Brain Under Stress

Organic & Genetic Factors

- Genetic
- Gender
- Temperament
- Personality
- Intelligence
The Brain Under Stress

External Factors (Societal and Contextual)

- Positive relationships
- Positive role models
- High expectations
- Participating in activities and groups
- Pursuing their passions and interests
- Caring for others
- Sense of meaning and belonging
- Previous experience of coping successfully with adversity

[Masten, 2001; Peters et al. Seery et al. 2010]
The Brain Under Stress

Internal Factors (Cognitive/Emotional Skills)

- Ability to self regulate emotions and impulses
- Planning and organisation
- Problem solving
- Reasoning and reflective capacity
- Self awareness
- Empathy
- Optimistic outlook
- Patience
- Perseverance
- Ability to delay gratification

Diamond & Lee, 2011; Wenzel & Gunnar, 2013
The Brain Under Stress

Video: Keith Cook role model

https://www.youtube.com/watch?v=7DISSh1E60s
The Brain Under Stress

10 things to be well and stay well

- Keep connected
- Do something you are good at
- Respect yourself
- Stay healthy
- Have fun
- Become a problem solver
- Ask for help
- Belong to a group
- Be kind to others
- Make a difference

Promoting Emotional Health & Well-being
“Making time to care for yourself is not a selfish act, it’s a selfless one that will positively impact all those around you.”

Robin Sharma
Noticing what we do?

What helps fill your well-being tank?

Jot down on the list:

- Anything that helps you relax
- Things you enjoy doing or make you laugh
- People you like spending time with
- Activities that re-energise you
- Hobbies and interests
Noticing what we feel?

Research has found that changing our body position, postures, gestures and facial expressions can be a powerful and quick way to change our mood [Cuddy, 2015]

1. Stand up
2. Smile
3. Strike a pose

Other things include like skipping, singing aloud, writing things down, interacting with nature etc.
Why is it important to look after our own emotional health & well-being?

- It will mean we are better placed to cope with the ups and downs of life.
- The way we choose to think, behave and act affects not only our wellbeing but that of those around us.
- If we want our kids to value looking after their wellbeing we need to role model what this looks like.
And finally...

“It’s not just children who grow. Parents do too. As much as we watch to see what our children do with their lives, they are watching us to see what we do with ours!”

Joyce Maynard
Journey coming to an end...

Opportunity to reflect on the different sessions and consider what you are taking away from the course.
Any questions or comments please email:

Terry.mccolm@glow.sch.uk