

Adverse Childhood Experiences (ACES)

What are ACES?

Aces are stressful events that occur in childhood. Many schools will choose to use an ACES tracker as part of their pastoral and SEND support systems. This information is redacted to an appropriate level and shared with all staff that come into contact with pupils.

It is widely recognised that there are 10 ACES. The primary study of ACES was carried out in the CDC – Kaiser Permanente Adverse Childhood Experiences Study. This list is not exhaustive and setting should be encouraged to develop their own list based on the needs of the particular cohorts and communities of pupils you are serving.

Five are personal:

1. physical abuse.
2. Verbal abuse.
3. Sexual abuse.
4. Physical neglect.
5. Emotional neglect.

Five are related to other family members:

6. Parent who's an alcoholic.
7. Witnessing or involved in domestic violence.
8. Family member in jail.
9. Family member diagnosed with a mental illness.
10. Experiencing divorce of parents.

Key Facts

It was originally recognised by the CDC – Kaiser Permanente ACES study that two thirds of people will have experienced 1 ACE. 1 in five people will experience more than 3 ACE's.

A strong attachment with an adult in the early years development can mitigate the impact of ACES on cognitive development, wellbeing and mental health.

ACE's have a major impact on a young person's ability to learn. Sensory input perceived as a threat within the amygdala causes the brain to release the stress hormone cortisol. This instigates the fight, flight, freeze, fawn response.

This process inhibits the ability of the prefrontal cortex to carry out even simple cognitive tasks when threat is detected. Working memory is quickly overloaded and because of cortisol release the hippocampus is unable to encode memories into long term stores.

During stressful situations positive neural pathways are not developed and long-term potentiation of the learning that should be happening in class is slowed if not stopped. This process is inhibited by the lack of dopamine release during learning for pupils that regularly experience significant stress responses– this slows the growth of helpful new neural synapses.

The more regularly a young person encounters a stressful situation the stronger the neural pathways become that reinforce the threat and danger response. In fact, pupils become more able to recall negative events and outcomes related to the stressing stimulus. This process leads young people to become hyper vigilant and leads to patterns of negative thinking.

Recent investigations into poly vagal theory are showing how young people who become hypervigilant to stressors develop unhelpful physiological responses to stress such as quickened endocrine response and stimulation of the sympathetic nervous system. This leads to heightened breathing and heart rate and increased blood pressure.

Continued stress response leads to other long term physiological changes such as increased myelination of the vagal nerve and increased vagal tone. All of which decreases the young person's ability to regulate their emotions when in a stressful situation. Continued cortisol release will actually change the structure of a young person's DNA meaning that unhelpful stress responses could be passed from generation to generation.

Cortisol is also a powerful anti-inflammatory. Continued and regular over production of cortisol actually has a negative effect on the ability of the immune to fight off illness meaning pupils who have experienced ACE's are more likely to become physically ill. School absence compounds the learning challenges already being faced.

It is vitally important that staff working with young people have an understanding of the stress response, in particular noting that the behaviour exhibited during a stress response is not a matter of choice for the young person but rather a learned coping mechanism to help them avoid the stressor. Positive stress responses can be trained and research into cognitive behaviour therapy based approaches show this can be achieved quickly in many cases although the young person will require a multi-faceted approach to achieving this.

Useful strategies to support pupils who have experienced ACE's

- Keep in mind the neurological and physiological effects of ACE's on a young person.
- It is vital that the adults understand the regulation process that each young person needs. Many schools choose to use a Zones of Regulation style approach to this.
- Guide pupils through the process of understanding triggers that stimulate a stress response.

- Work with young people on gaining an understanding of the appropriateness of their stress response with regards to specific stimulus i.e. is the stress response proportionate to the perceived threat.
- Maintain a predictable, calm and safe environment. Young people who have experienced trauma may well become hypervigilant of the physical environment, tone/pace/volume of voice and are likely to be very aware of their senses including vestibular, proprioceptive and in particular their interoceptive sense as a result of sympathetic nervous system responses to stress.
- Show unconditional positive regard to all pupils at all times. Relationships that take months to build can be damaged very quickly.
- Adults must take the lead in modelling effective social interactions and development of relationships. Due to the high likelihood of a young person who has experienced ACE's also having associated attachment disorders adults will need to invest considerable time into the process of building a relationship. This can be most effective outside of the classroom.
- In very specific circumstances a gradual exposure therapy can be used to systemically desensitise the young person to the perceived threatening school-based stimulus. For example learning to enter a classroom when no other young people are in the building to get used to the environment.
- Consider the regulation strategies that work for each child. Co-regulation is a positive starting place for many young people. Gradually pupils will become more adept at using the agreed strategies and self-regulation becomes more likely. Remember that sometimes these strategies may be frustrating to the adult but vitally important to the pupil. Schools should consider reviewing the regulation strategies at regular intervals, gradually weening the young person off of them if possible.
- Ensure that the pupils voice is heard. The pupil can record concerns in a thoughts or emotions diary. This can be used to remind pupils of when they have positively handled a stressful situation.
- Using consequence or decision mapping processes for older pupils or social stories for younger pupils can help them plan positive courses of action when they come across a stressor.
- Remember that the stress response from a young person that has experienced ACE's could be activated over something that other may perceive as being trivial. This doesn't make it less trivial for the pupil experiencing the frustrating and worry psychological and physiological stress responses. Remember the behaviour exhibited at these times are not directed at you but are as a direct result of trauma that may have occurred years before.
- Refer to the local areas trauma informed guidance policy for further advice.
- For newly discovered trauma school should always consider the need to safeguarding the pupil through referral to relevant children services and appropriate agencies.
- Consider reading the advice on attachment disorder in conjunction with this guidance.

- Schools will want to consider regulation strategies in conjunction with the advice given in “what survival looks like in secondary schools”.