

Acquired Neurodiversity: An Overview

Acquired neurodiversity is a type of neurodivergence that can impact individuals in different ways. To explain more, let's get into some details about acquired neurodiversity and its impact on the people who have it.



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What is Acquired Neurodiversity?

Acquired neurodiversity refers to changes in a person's brain functioning following an injury, disease, or health condition. Acquired neurodivergence means that someone has developed changes to their cognition and behavior within their lifetime. So while it is a neurodivergent condition, people with acquired neurodivergence have the potential to improve their condition.

It's important to note that it is not possible to be born with an acquired neurodivergence. But it is possible for conditions that fall under acquired neurodiversity to improve or deteriorate with time.



Acquired Neurodiversity Examples

Acquired neurodiversity incorporates a range of disorders and mental health conditions. But which examples would illustrate the nature of acquired neurodivergences? Let's explore a few now.

Obsessive Compulsive Disorder (OCD)

Obsessive Compulsive Disorder, aka OCD, is a mental health condition that's also classed as an acquired neurodivergence. The syndrome has two characteristics – obsessive or unwanted thoughts and repetition. OCD can affect 1 in 100 people, according to the charity Mind, and it's something that appears during a person's lifetime.

Post-Traumatic Stress Disorder (PTSD)

As another acquired neurodiversity, PTSD can affect up to 10% of the population, which amounts to around 2.5M people. Plus, for every person who experiences a traumatic life event, around 20% will find that they experience the effects of PTSD.



So is PTSD neurodivergent? In simple terms, yes. This is because the brain structure goes through changes after intense traumatic experiences. Research from [NHS Wales](#) suggests adults with PTSD have reduced function in their prefrontal cortex and their hippocampus.

Bipolar Disorder (BD)

Bipolar Disorder or BD is another neurodivergent condition that can emerge during a person's teens or adolescence. BD can manifest as periods of mania and hyperexcitability followed by low moods, low self-esteem, and negative thinking.

Acquired Brain Injuries (ABI)

Abbreviated to ABI, Acquired Brain Injuries are insults to the brain that happen in someone's lifetime. ABI incidents can have a devastating impact on individuals, and their families, and alter the course of their lives.



Causes of Acquired Brain Injury

A long list of causes can result in ABI, including traumatic injuries from falls, accidents, and even physical assault. It's worth noting that physical injuries have a separate classification – Traumatic Brain Injuries aka TBI. And so TBI brain damage is a subcategory of ABI.

Causes of ABI that go beyond TBI include the following:

- Stroke
- Aneurysm
- Surgery
- Seizures
- Tumors
- Infections
- Toxins and alcohol
- Diseases such as Alzheimer's and Parkinson's



Acquired Brain Injury behaviours

ABI can lead to some challenging behaviours. This can create stress in sufferers and the people close to them. A recent Randomised Controlled Trial suggests that challenging behaviours can include “increased aggression, lack of initiation, perseveration, and sexual inappropriateness”. Such negative behavioural displays can lead a sufferer to experience job loss, social isolation, and relationship breakdown, along with the burden of extra responsibilities for families.

ABI has a distressing impact on caregivers and parents. The Children’s Trust charity explains how children can “become more irritable, overactive, more impulsive and easily agitated” following ABI. And this is something for parents, teachers, and guardians to be mindful of.



What is Neurodiversity Affirming?

Many clinicians, therapists, and healthcare professionals treat neurodiverse patients with a 'Neurodiversity-affirming' approach. Put simply, therapists who use a neurodiversity-affirming approach have recognised the differences between clinical, applied, and acquired neurodiversity. And they will apply a different approach to therapy depending on the type of neurodivergence their patients have.

Many people with acquired neurodivergence prefer to be in a different category to traditional neurodivergent conditions. For instance, people with conditions like dyslexia and dyspraxia do not have a medical condition. Since their condition is innate, it stands to reason that any therapeutic approach will need to be specific to their needs. Whereas acquired neurodivergence offers the opportunity to improve a condition when applying particular therapies.



Much of the approach behind Neurodiversity affirming lies in providing a person or patient-centred approach to therapy. But it can also be a way to avoid perceived stigmas that may exist. For instance, [up to 80% of people with ASD are not in work](#). And it may be that people with acquired neurodiversity would prefer to avoid any potential discrimination at work.



Can Trauma Cause Neurodivergence?

Most of us will experience some form of trauma during our lifetimes. And as we've already shared, around 20% of people who experience a form of trauma go on to experience PTSD.

Trauma can take many forms. According to the [Mental Health Foundation](#), a traumatic event is something that puts you or someone close to you at risk of serious harm or death. Such an event can overwhelm our senses and leave us feeling frightened and unsafe. In particular, trauma can happen from the following:

- Accidents, violent attacks, or natural disasters
- Ongoing stress like childhood abuse or intimate partner abuse, bullying, long-term illness, or a global event like a pandemic
- Unstable and unsafe environments
- Witnessing assault on someone else



It's important to note that trauma includes physical and psychological injury to someone during their lifetime. And in the book "[The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma](#)", author Bessel van der Kolk suggests that the emotional part of the brain can experience functional and chemical changes following trauma. PTSD is the result of trauma for many people. Yet trauma can also be the cause and result of other neurodivergent conditions.

What's the Relationship Between Trauma and ADHD?

ADHD can emerge from the influence of many different factors. But can trauma trigger ADHD? Well, research does link the onset of ADHD in adults to stressful life events. And exposure to childhood trauma can predict ADHD onset and the chances of experiencing ADHD in adulthood.



Can Trauma Trigger Autism?

The relationship between Autistic Spectrum Disorder and trauma is complex. Continued research seeks to uncover the connections between traumatic physical and emotional experiences and the prevalence of ASD.

Some evidence suggests trauma could trigger or influence the onset of ASD, but not everyone with ASD has experienced trauma. So while it's unlikely that trauma could trigger autism, traumatic experiences can exacerbate symptoms for people who have autism.

Is Tourette's a Result of a Traumatic History?

Can trauma trigger Tourette's? Evidence suggests physical trauma such as head injuries can result in Tourette's Syndrome. One research paper showed how a 33 year-old man developed several symptoms, including personality change and a severe tic, after a road traffic accident that damaged his spine.



Further research backs up the impact of physical trauma in developing Tourette's. And when it comes to the impact of psychological trauma, evidence is less strong for stressful events having a singular cause. Instead, there is research to suggest [a stressful period may have 'unmasked' the manifestation of Tourette's](#) for a man who had an observed motor tic and obsessive traits that dated back to childhood.



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