

INTROVERSION AND NEURODIVERGENCE

Understanding Neurodiversity

Neurodiversity refers to the natural variation in the human brain and nervous system. It encompasses a range of neurological differences, including but not limited to autism, ADHD, dyslexia, and Tourette's syndrome.

It's important to understand that neurodivergent people are not "broken" or in need of fixing. Their brains simply work differently, and this diversity should be celebrated and accommodated.

Neurodiversity is not a new concept, but it has gained more attention in recent years as society has become more aware of the challenges faced by neurodivergent people. It's important to recognize that neurodivergent people have unique strengths and abilities that should be valued and leveraged.

What does neurotypical, neurodivergent, and neurodiverse mean?

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The word “neurotypical” describes someone who thinks and processes information in ways that are typical within their culture. They tend to learn skills and reach developmental milestones around the same time as their peers.

In contrast, the term “neurodivergent” describes someone who processes information in a different way. Autistic people and those with [attention deficit hyperactivity disorder \(ADHD\)](#) and similar conditions sometimes identify as neurodivergent.

These words can be a way of moving discussions away from focusing on a disease or mental health disorder, implying instead that people simply have a different way of understanding and interacting with the world.

However, [some argue](#) that the term “neurodiversity” is better still. This word refers to various ways that individuals think and behave. Rather than frame one way as typical and the other as atypical, “neurodiversity” embraces a continuum of possibilities.

In this article, we will look at what it means to be neurotypical and neurodivergent and explore some traits that share associations with these words. We will also look at neurodiversity and its benefits.

What does neurotypical mean?

The term neurotypical describes someone who thinks and processes information in an expected way for their culture and setting.

Some characteristics that people associate with neurotypical development include:

- reaching developmental milestones at a similar time to other children, such as learning to speak
- having social or organizational skills that are similar to someone's peers
- being able to tolerate some sensory discomfort, such as loud noises, without much difficulty
- being able to adapt to changes in routines
- being able to focus in class or at work for prolonged periods
- having varied interests or hobbies typical for the person's age

A neurotypical person does not necessarily have all of these traits or have them in all situations to identify as neurotypical.

For example, some people without [autism](#) may feel overwhelmed by certain sensory experiences, such as being in a crowd. Some children also have delays in learning speech or other skills that are not a result of any diagnosis.

The meaning “neurotypical” is also subjective, to an extent. What people consider typical can vary according to context.

For example, a [2018 study](#)[Trusted Source](#) comparing data from the United States, India, and Japan looked at the characteristics doctors use to distinguish autistic from allistic — or nonautistic — people. Researchers found that while many traits were consistent across groups, others depended on the culture.

What does neurodivergent mean?

The term “neurodivergent” describes people who process information and behave in a way that differs from the actual or perceived norms of a particular culture. It is a way to discuss diagnoses, such as autism, in a way that does not frame it as a problem or an illness.

According to the United Kingdom charity ADHD Aware, [30–40%](#) of the population are neurodivergent. As with the term “neurotypical,” though, the term has no fixed meaning.

Neurodivergence comes in many forms. People with the following may consider themselves neurodivergent:

- **ADHD:** People with ADHD [often](#)[Trusted Source](#) have high levels of energy, which may cause hyperactivity and difficulty sitting still at school or work. Therefore, staying focused or organized can also be difficult. However, these traits can also mean people with ADHD are spontaneous and dynamic.
- **Learning disabilities:** Learning disabilities affect how someone learns or takes in information. For example, [dyslexia](#) affects a person’s ability to read, while [dysgraphia](#) affects handwriting and fine motor skills. People with these diagnoses are not unintelligent or incapable of learning — in fact, they [often](#) have average or above-average intelligence. However, they can benefit from learning in different ways.
- **Autism:** Autism affects how someone processes sensory information and how they think and communicate. For example, an autistic individual may be very sensitive to certain sounds and noises or have trouble reading social cues. Others may have very specific, in-depth interests. The effects vary greatly from person to person.

- **Tourette's syndrome:** People with [Tourette's syndrome](#) have a neurological condition that causes them to make involuntary movements or sounds, known as tics.
- **Synesthesia:** Individuals with [synesthesia](#) experience the senses in different ways. They may see colors or shapes when they hear music or taste certain flavors when they hear words. They may only experience this in their “mind's eye,” or externally in the world around them.

Some consider rare forms of giftedness to be part of neurodivergence too. For example, people with hyperthymesia have a highly accurate memory of their own life experiences.

Does neurodivergence include mental health?

The above diagnoses are not [mental health](#) conditions — they are neurodevelopmental in origin. They come with long term traits that do not change over time.

However, some people consider mental health conditions to be part of neurodivergence because they can also change how someone thinks and behaves. People with these conditions can also face some of the same challenges, such as feeling misunderstood or experiencing stigma.

However, mental health conditions have some characteristics that make them distinct:

- **Quality of life:** Being neurodivergent does not necessarily reduce quality of life. In the right circumstances, people who identify as such can lead fulfilling lives. However, a supportive environment does not prevent mental health conditions from affecting quality of life.
- **Identity:** For many, neurodiversity is part of their identity. Some may also feel this way about their mental health condition. In some

situations, this viewpoint could cause harm. For example, seeing [anorexia](#) as a lifestyle or identity can mean people do not seek treatment, which could be fatal.

- **Treatment:** Finally, many mental health conditions are treatable and can improve significantly with support and therapy. The same is not true for autism, learning disabilities, and other types of neurodivergence. Though there is no cure for these diagnoses, appropriate support can help people learn the skills they find challenging.

[ADHD Aware](#) states that eventually, some long term conditions that people consider psychological, such as [schizophrenia](#) or antisocial [personality disorder](#), may ultimately become part of the concept of neurodivergence or neurodiversity.

The more scientists discover how these conditions work, the more the language will evolve.

What is neurodiversity?

Neurodiversity refers to the wide spectrum of ways that people think. It frames differences in cognition as variations, all of which are equally normal and valuable.

The concept became popular in the [1990s](#), when sociologist Judy Singer proposed that autism arises from the brain working differently from nonautistic individuals. She also highlighted that this is not a fault but a difference. Neurodiversity has since become a movement, changing how people see autism and other diagnoses.

Neurodiversity advocates may still use the terms “neurotypical” and “neurodivergent” to identify where they are on the neurodiversity spectrum or

talk about others. However, [everyone is included](#) in neurodiversity, regardless of how their brain functions.

Which terms are better?

There are mixed opinions on whether the terms “neurotypical” and “neurodivergent” are helpful.

Some feel that “neurotypical” is an accurate reflection of how many people understand the world and social interactions in a similar or typical way.

The word can also reflect the privileges from which neurotypical people can benefit. Because their peers consider them “typical,” people who fall into this category [often](#) have an easier time in school, the workplace, and relationships.

However, others say that calling one group “typical” reinforces the idea that while some people think typically, others think atypically. A [2021 paper](#) argues that this is both scientifically inaccurate and harmful.

The authors say that diversity in how people think is a natural product of evolution and that it is natural for human brains and bodies to vary. To consider one type of cognition “typical” ignores this fact.

How a person identifies and describes themselves is ultimately a personal choice. Generally, it is a good idea to use the terms an individual prefers.

What are the benefits of neurodiversity?

Supporters for neurodiversity believe that variations in thinking are beneficial to society, adding different perspectives and ideas. Teaching children about neurodiversity [may](#):

- reduce fear about the way their brain works or how they differ from others
- encourage them to see differences as normal and natural
- teach them about being aware of harmless behaviors, such as stimming
- help cultivate healthy self-esteem
- empower children to advocate for their needs, for example, if they are have reading difficulties in class
- feel confident about their unique abilities

On a personal level, the benefits for adults are very similar. Learning about neurodiversity can change how people see themselves or those around them.

On a broader scale, acceptance of neurodiversity may:

- help parents and caregivers understand and care for their children
- help teachers understand how best to educate children with a range of needs
- encourage employers to hire neurodiverse people, reducing unemployment
- increase positive representations of neurodiversity in the media
- decrease stigma, bullying, and discrimination

Summary

The word “neurotypical” refers to people who have brains that function in a similar way to most of their peers. Individuals who are neurotypical develop skills, such as social or organizational skills, at around the same rate as others their age. They can also tolerate change, disruption in routines, and distractions without too much difficulty.

In contrast, people who consider themselves neurodivergent have brains that function differently. They may have a diagnosis such as ASD, ADHD, dyslexia, or Tourette’s syndrome. Neurodivergence comes in many forms, and they affect people with these diagnoses differently.

'Noisy' autistic brains seem better at certain tasks. Here's why neuroaffirmative research matters

Autism is a [neurodevelopmental difference](#) associated with specific experiences and characteristics.

For decades, autism research has focused on behavioral, cognitive, social and communication difficulties. These studies highlighted how autistic people face issues with everyday tasks that allistic (meaning non-autistic) people do not. Some difficulties may include recognizing emotions or social cues.

But some research, including our own study, has explored specific advantages in autism. Studies have shown that in some cognitive tasks, autistic people [perform better](#) than allistic people. Autistic people may have greater success in identifying a simple shape [embedded within a more complex design](#), arranging blocks of [different shapes and colors](#), or [spotting an object within a cluttered visual](#)

[environment](#) (similar to Where's Wally?). Such enhanced performance has been recorded in [babies as young as nine months](#) who show emerging signs of autism.

How and why do autistic individuals do so well on these tasks? The answer may be surprising: more "neural noise."

What is neural noise?

Generally, when you think of noise, you probably think of auditory noise, the ups and downs in the amplitude of sound frequencies we hear.

A similar thing happens in the brain with random fluctuations in neural activity. This is called neural noise.

This noise is always present, and comes on top of any brain activity caused by things we see, hear, smell and touch. This means that in the brain, an identical stimulus that is presented multiple times won't cause exactly the same activity. Sometimes the brain is more active, sometimes less. In fact, even the response to a single stimulus or event will fluctuate continuously.

Neural noise in autism

There are many [sources of neural noise](#) in the brain. These include how the neurons become excited and calm again, changes in attention and arousal levels, and biochemical processes at the cellular level, among others. An allistic brain has mechanisms to [manage and use this noise](#). For instance, cells in the hippocampus (the brain's memory system) can make use of neural noise to enhance memory encoding and recall.

Evidence for high neural noise in autism can be seen in [electroencephalography \(EEG\) recordings](#), where increased levels of neural fluctuations were observed in autistic children. This means their neural activity is less predictable, showing a wider range of activity (higher ups and downs) in response to the same stimulus.

In simple terms, if we imagine the EEG responses like a sound wave, we would expect to see small ups and downs (amplitude) in allistic brains each time they encounter a stimulus. But autistic brains seem to show bigger ups and downs, demonstrating greater amplitude of neural noise.

Many studies have linked this noisy autistic brain [with cognitive, social and behavioral difficulties](#).

But could noise be a bonus?

The [diagnosis of autism has a long clinical history](#). A shift from the medical to a more social model has also seen advocacy for it to be reframed as a difference, rather than a disorder or deficit. This change has also entered autism research. Neuroaffirming research can examine the uniqueness and strengths of neurodivergence.

Psychology and perception researcher [David Simmons and colleagues](#) at the University of Glasgow were the first to suggest that while high neural noise is generally a disadvantage in autism, it can sometimes provide benefits due to a phenomenon called [stochastic resonance](#). This is where optimal amounts of noise can enhance performance. In line with this theory, high neural noise in the autistic brain might enhance performance for some cognitive tasks.

Our 2023 research [explores this idea](#). We recruited participants from the general population and investigated their performance on letter-detection tasks. At the same time, we measured their level of autistic traits.

We performed two letter-detection experiments (one in a lab and one online) where participants had to identify a letter when displayed among background visual static of various intensities.

By using the static, we added additional visual noise to the neural noise already present in our participants' brains. We hypothesized the visual noise would push participants with low internal brain noise (or low autistic traits) to perform better (as suggested by [previous research](#) on stochastic resonance). The more interesting prediction was that noise would not help individuals who already had a lot of brain noise (that is, those with high autistic traits), because their own neural noise already ensured optimal performance.

Indeed, one of our experiments showed people with high neural noise (high autistic traits) did not benefit from additional noise. Moreover, they showed superior performance (greater accuracy) relative to people with low neural noise when the added visual static was low. This suggests their own neural noise

already caused a natural stochastic resonance effect, resulting in better performance.

It is important to note we did not include clinically diagnosed autistic participants, but overall, we showed the theory of enhanced performance due to stochastic resonance in autism has merits.

Why this is important?

Autistic people face ignorance, prejudice and discrimination that can [harm well-being](#). Poor mental and physical health, reduced social connections and increased "camouflaging" of autistic traits are some of the negative impacts that autistic people face.

So, research underlining and investigating the strengths inherent in autism can help reduce stigma, allow autistic people to be themselves and acknowledge autistic people do not require "fixing."

The autistic brain is different. It comes with limitations, but it also has its strengths.

To understand cognition and its dysfunction, neuroscientists must learn its rhythms

It could be very informative to observe the pixels on your phone under a microscope, but not if your goal is to understand what a whole video on the screen shows. Cognition is much the same kind of emergent property in the brain. It can only be understood by observing how millions of cells act in coordination, argues a trio of MIT neuroscientists. In a new article, they lay out a framework for understanding how thought arises from the coordination of neural activity driven by oscillating electric fields—also known as brain "waves" or "rhythms."

The paper is [published](#) in the journal *Current Opinion in Behavioral Sciences*.

Historically dismissed solely as byproducts of neural activity, brain rhythms are actually critical for organizing it, write Picower Professor Earl Miller and research scientists Scott Brincat and Jefferson Roy. And while neuroscientists have gained tremendous knowledge from studying how individual brain cells connect and how and when they emit "spikes" to send impulses through specific circuits, there is also a need to appreciate and apply new concepts at the brain rhythm scale, which can span individual—or even multiple—brain regions.

"Spiking and anatomy are important but there is more going on in the brain above and beyond that," said senior author Miller, a faculty member in The Picower Institute for Learning and Memory and the Department of Brain and Cognitive Sciences at MIT. "There's a whole lot of functionality taking place at a higher level, especially cognition."

The stakes of studying the brain at that scale, the authors write, might not only include understanding healthy higher-level function but also how those functions become disrupted in disease.

"Many neurological and psychiatric disorders, such as schizophrenia, epilepsy and Parkinson's involve disruption of emergent properties like neural synchrony," they write. "We anticipate that understanding how to interpret and interface with these emergent properties will be critical for developing effective treatments as well as understanding cognition."

The emergence of thoughts

The bridge between the scale of individual neurons and the broader-scale coordination of many cells is founded on electric fields, the researchers write. Via a phenomenon called "ephaptic coupling," the electrical field generated by the activity of a neuron can influence the voltage of neighboring neurons, creating an alignment among them. In this way, electric fields both reflect neural activity but also influence it.

In [a paper in 2022](#), Miller and colleagues showed via experiments and computational modeling that the information encoded in the electric fields generated by ensembles of neurons can be read out more reliably than the

information encoded by the spikes of individual cells. In 2023, Miller's lab [provided evidence](#) that rhythmic electrical fields may coordinate memories between regions.

At this larger scale, in which rhythmic electric fields carry information between brain regions, Miller's lab has published numerous studies showing that lower-frequency rhythms in the so-called "beta" band originate in deeper layers of the brain's cortex and [appear to regulate](#) the power of faster-frequency "gamma" rhythms in more superficial layers. By recording neural activity in the brains of animals engaged in working memory games the lab has shown that beta rhythms carry "top down" signals to control when and where gamma rhythms can encode sensory information, such as the images that the animals need to remember in the game.

Some of the lab's latest evidence suggests that beta rhythms apply this control of cognitive processes to physical patches of the cortex, essentially acting like stencils that pattern where and when gamma can encode sensory information into memory, or retrieve it. According to this theory, which Miller calls "[Spatial Computing](#)," beta can thereby establish the general rules of a task (for instance, the back and forth turns required to open a combination lock), even as the specific information content may change (for instance, new numbers when the combination changes).

More generally, this structure also enables neurons to flexibly encode more than one kind of information at a time, the authors write, a widely observed neural property called "mixed selectivity." For instance, a neuron encoding a number of the lock combination can also be assigned, based on which beta-stenciled patch it is in, the particular step of the unlocking process that the number matters for.

In the new study, Miller, Brincat and Roy suggest another advantage consistent with cognitive control being based on an interplay of large-scale coordinated rhythmic activity: "Subspace coding." This idea postulates that brain rhythms organize the otherwise massive number of possible outcomes that could result from, say, 1,000 neurons engaging in independent spiking activity. Instead of all the many combinatorial possibilities, many fewer "subspaces" of activity actually arise, because neurons are coordinated, rather than independent.

It is as if the spiking of neurons is like a flock of birds coordinating their movements. Different phases and frequencies of brain rhythms provide this

coordination, aligned to amplify each other, or offset to prevent interference. For instance, if a piece of sensory information must be remembered, neural activity representing it can be protected from interference when new sensory information is perceived.

"Thus the organization of neural responses into subspaces can both segregate and integrate information," the authors write.

The power of brain rhythms to coordinate and organize information processing in the brain is what enables functional cognition to emerge at that scale, the authors write. Understanding cognition in the brain, therefore, requires studying rhythms.

"Studying individual neural components in isolation—individual neurons and synapses—has made enormous contributions to our understanding of the brain and remains important," the authors conclude. "However, it's becoming increasingly clear that to fully capture the brain's complexity, those components must be analyzed in concert to identify, study, and relate their emergent properties."

More information: Earl K Miller et al, Cognition is an emergent property, *Current Opinion in Behavioral Sciences* (2024). DOI: [10.1016/j.cobeha.2024.101388](https://doi.org/10.1016/j.cobeha.2024.101388)

Provided by Massachusetts Institute of Technology

People who didn't receive enough emotional support as a child display these traits as adults

These traits stem from a lack of emotional support in childhood.

A healthy and happy childhood is largely reliant on having emotionally healthy carers. But the world isn't always kind or easy, and some adults struggle to provide the love and support a child needs to feel safe. If emotional support is lacking in childhood, an adult might display many of these traits.

They may have low self-esteem.

While not set in stone, a person's self-esteem is largely developed in childhood through the love and support of the people around them. Those who receive no encouragement or are emotionally abused never have the opportunity to develop healthy self-esteem. The result is that they often feel undeserving of love and success.

They may fear rejection.

These individuals may struggle with the fear of abandonment or rejection. They are always anticipating being let down by others because they were let down by their childhood caregivers. In order to protect themselves, they may be overly cautious in relationships and avoid emotional vulnerability. That prevents them from forming healthy relationships.

They may have difficulty expressing emotions.

People learn to process emotions almost from the moment they are born. Without proper support from emotionally stable adults, they struggle to identify, manage, and express their emotions. That often leads to unhealthy behaviors like emotional suppression or outbursts that they struggle to control.

They may need external validation.

Children who receive positive reinforcement develop a healthy sense of internal validation. They don't need to seek approval to be told they are good enough by an outsider. Instead, they can see the intrinsic value that they have by just looking within. When that reinforcement is lacking, or when it is negative, a person may grow up needing others to confirm their worth on a regular basis.

They may have difficulty trusting others.

Trust issues are common in those who lacked emotional support as a child. The person learned early on that other people can be unreliable or cruel. They may find it hard to form close relationships because they are overly guarded and suspicious of others' motives. Distance is a way to protect themselves from harm.

They may experience anxiety.

Chronic anxiety or hypervigilance can be caused by a lack of emotional safety and stability as a child. A person who is constantly on edge, overly sensitive, or overthinking fuels their own anxiety because they are trying to perceive emotional threats before they present themselves.

They may not want any conflict.

Adults who lacked emotional support as a child may avoid confrontation so they can avoid rejection. That means that they will often not express their true feelings or needs in a relationship. Instead, they will just put up with not having their needs met at their own expense.

They may have attachment issues.

Emotional neglect can lead to anxious or avoidant attachment styles. They may cling to others out of fear of abandonment or maintain emotional distance to protect themselves from being hurt. These maladaptive coping skills make it very difficult for the person to form or maintain healthy relationships.

Things About Introversion That Most People Misunderstand

Introverts DO enjoy spending time with other people, but only when certain conditions are met.

The whole aversion to too much social interaction does kind of confirm that an introvert is particularly happy when spending time by themselves.

This doesn't mean they are always found engaged in solitary activities, but it suggests that they prefer them...to an extent.

They can enjoy spending time with others, but typically for shorter periods of time, in small groups, or when discussing deep, existential topics.

Introverts are NOT shy.

Shyness is often thought of as interchangeable with introversion, but where introverts shun social situations to prevent overload, shy people do so because of a fear or anxiety they have about the negative judgment cast on them by others.

It is true that introverts are more likely than extroverts to be shy, but it cannot be said that all introverts are shy.

So there is a correlation, but no causation.

Introverts are NOT antisocial.

Just because they sometimes find group activities more stressful, it doesn't follow that all introverts are maladjusted, antisocial hermits.

It is just that introverts enjoy a different kind of socializing to extroverts; they aren't so much into large gatherings full of unknown people, and are more

likely to arrange intimate events in a quieter location like their house or a cozy corner of a coffee shop.

Introverts are daydreamers.

Thanks to the rewards they receive when looking inwards rather than outwards, they are very likely to enjoy getting lost in their heads.

Again, it's not to say that extroverts don't ever daydream, but you will catch an introvert at it far more frequently.

Introverts hate small talk, but they can do it.

A little bit of small talk is fairly typical even for introverts, but they like to quickly dispense with pleasantries and get into a serious conversation.

They don't find it nearly as rewarding to indulge in gossip or the biographical accounts of your life; they just don't find it as interesting.

Introverts have analytical minds.

The thickness of certain areas of gray matter discussed above suggests that introverts like to think carefully about things.

Another way to put this is that they like to analyze a topic, issue, or challenge from every conceivable angle over and over before deciding on the best course of action.

They tend not to act spontaneously but prefer to contemplate their options before making their move.

Introverts are overthinkers.

The same thing that makes them analytical also makes them prone to bouts of overthinking.

An introvert's mind may dwell on a certain train of thought for many hours, to the point where it actually becomes a problem in itself.

For the most part, looking inwards like this gives them some reward from the chemical acetylcholine, but even its effect wanes eventually.

Introverts prefer written communication over verbal.

Yes, it is very often the case that introverts will prefer to send an email, text, or even a good old fashioned letter rather than pick up the phone or meet with someone in person.

This allows them to avoid social interaction and remain cocooned in the bubble their minds create.

Introverts are necessarily sensitive to the people and energy around them.

While it is true that many empaths and highly sensitive people are introverts, the converse is not necessarily true.

It is quite possible for an introvert to have low levels of empathy and low sensitivity to their surroundings.

The confusion occurs because introverts find large social gatherings rather stressful.

However, this is not because they are sensing the emotions of other people, but because, as we have seen, they become overstimulated by the dopamine hit in such situations.

Introverts do like having friends, but they prefer to keep a small, close group of them.

Because of their penchant for more intimate gatherings, introverts will tend to have fewer friends in total.

They simply don't care to keep casual acquaintances because these are less conducive to the type of activity that introverts enjoy.

Having to maintain lots of more distant relationships would eat up the alone time that introverts are so fond of, so they keep friendship group tight and few.

Now, the true and false statements above aren't intended to apply to every introvert all of the time, but rather look at how the vast majority of introverts act and think.

There will always be exceptions to any rule and it is no different here.

Tracking the cellular and genetic roots of neuropsychiatric disease

A new analysis has revealed detailed information about genetic variation in brain cells that could open new avenues for the targeted treatment of diseases such as schizophrenia and Alzheimer's disease.

The findings, [reported May 23 in Science](#), were the result of a multi-institutional collaboration known as [PsychENCODE](#), founded in 2015 by the National Institutes of Health, which seeks new understandings of genomic influences on neuropsychiatric disease. The study was published alongside related studies in *Science*, *Science Advances*, and *Science Translational Medicine*.

Previous research has established a strong link between a person's genetics and their likelihood of developing neuropsychiatric disease, says Mark Gerstein, the Albert L. Williams Professor of Biomedical Informatics at Yale School of Medicine and senior author of the new study.

"The correlations between genetics and your susceptibility to disease are much higher for brain diseases than for cancer or heart disease," said Gerstein. "If your parents have schizophrenia, you're much more likely to get it than you are to get heart disease if your parents have the disease. There is a very large heritability for these brain-related conditions."

What's less clear, however, is how this genetic variation leads to disease.

"We want to understand the mechanism," said Gerstein. "What is that gene variant doing in the brain?"

For the new study, researchers set out to better understand the genetic variation across individual cell types in the brain. To do so, they performed several types of single-cell experiments on more than 2.8 million cells taken from the brains of 388 people, including healthy individuals and others with schizophrenia, bipolar disorder, autism spectrum disorder, post-traumatic stress disorder, and Alzheimer's disease.

From that pool of cells, the researchers identified 28 different cell types. Then they examined gene expression and regulation within those cell types.

In one analysis, the researchers were able to link gene expression to variants in "upstream" regulatory regions, bits of genetic code situated before the gene in question that can increase or decrease the gene's expression.

"That's useful because if you have a variant of interest, you can now link it to a gene," said Gerstein. "And that's really powerful because it helps you interpret the variants. It helps you understand what effect they're having in the brain. And because we looked across cell types, our data also allow you to connect that variant to an individual cell type of action."

The researchers also assessed how particular genes, such as those associated with neurotransmitters, varied across individuals and cell types, finding variability was usually higher across cell types than across individuals. This pattern was even stronger for genes that code for proteins targeted for drug treatment.

"And that's generally good for a drug," Gerstein said. "It means that those drugs are homing in on particular cell types and not affecting your whole brain or body. It also means those drugs are more likely to be unaffected by genetic variants and work in many people."

Using the data generated by the analysis, the researchers were able to map out within-cell type genetic regulatory networks and between-cell communication networks, and then plug those networks into a machine learning model. Then, using an individual's genetic information, the model could predict whether they had a brain disease.

"Because these networks were hard coded in the model, when the model made a prediction we could see which parts of the network contributed to it," said

Gerstein. "So we could identify which genes and cell types were important for that prediction. And that can suggest candidate drug targets."

In one example, the model predicted an individual with a particular genetic variant might have bipolar disorder, and the researchers could see that prediction was based on two genes in three cell types. In another, the researchers identified six genes in six cell types that contributed to a schizophrenia prediction.

The model also worked in the opposite direction. The researchers could introduce a genetic perturbation and see how that might affect the network and an individual's health. This, Gerstein says, is useful for drug design or previewing how well drugs or drug combinations might fare as treatments.

Together, the findings could help facilitate precision-medicine approaches for neuropsychiatric disease, said the researchers.

To further this work, the consortium has [made its results and model available](#) to other researchers.

"Our vision is that researchers interested in a particular gene or variant can use our resources to better understand what it's doing in the brain or to perhaps identify new candidate drug targets to investigate more," said Gerstein.

More information: Prashant Emani et al, Single-cell genomics and regulatory networks for 388 human brains, *Science* (2024). DOI: [10.1126/science.adi5199](https://doi.org/10.1126/science.adi5199). www.science.org/doi/10.1126/science.adi5199

Provided by Yale University

Neurodivergence and Normality: The Need to Challenge Fraught Terminology



Neurodivergence and Normality: The Need to Challenge Fraught Terminology

Ever since I have come to understand I am neurodivergent, more of the world has opened up to me. I now understand why I found certain environments so difficult, why some people have become inexplicably annoyed by me, and why I might respond to people in ways they don't expect.

Finding neurodivergent communities online, particularly on X (formally known as Twitter) was immensely supportive. I saw others talk about their own challenges and I was often able to relate. A common topic was how the world does not appear designed for the neurodivergent, with the workplace as the number one offender. This constant pain in dealing with the public world is why the neurodivergent movement has thrived.

The neurodivergent movement has gained traction, in part, because the prefix *neuro* has the habit of making anything sound legitimate. *Neuro* is always contemporary regardless of the year, makes people pay attention, and carries with it the command of being taken seriously, something those with autism crave.

A major benefit to neurodivergent culture is that it helps to raise questions over identification. It encourages those with autistic traits to interact with others and discuss similar experiences, which enables them to better understand themselves. This is not dissimilar to coming out of the closet with a growing sense of private understanding and a drive to interact publicly with an accepting community.

The trouble is *neurodivergent* lacks a solid foundation and appears arbitrary. The term lacks a literal meaning, other than to imply that different neural arrangements lead to different types of people. There are 8 billion people on Earth, each with a brain made up of billions of neurons with trillions of synaptic connections that are constantly changing throughout the expanse of the person's life; moment to moment, person to person, divergency *is* the norm.

Neurodivergent people are divergent from other neurodivergent people. Neurotypical people are divergent from other neurotypical people. A dog is neurodivergent from a cat. I am neurodivergent to the me of ten years ago, even ten seconds ago. And if the criteria for acceptance into neurodivergent is to merit neurological difference from a *normal*, then it must also be accepted that psychopaths and pedophiles are neurodivergent.

The term *neurotypical* is frequently used to describe the *other*. The term provides a target with which to level criticism against. This is not dissimilar to *homophobe* or *racist* or *misogynist*. When seeking measures of equality and acceptance, it is crucial to have a label for people that are the problem. Names for the oppressor help to ease cohesion, prevent in-fighting, build enthusiasm, and drive momentum forward, picking up social and political capital. These are all good things and would not be necessary if everyone was receiving the respect and understanding they deserve.

The downside is that the *other* is caricatured and subject to picking up as many stereotypes as the person seeking equality. Perhaps even without intention, an us-vs-them mentality is established, which questions the likelihood of future integration. Unlike white on black racism, neurotypicals are not actively seeking to oppress the neurodivergent; the major problems appear to be ignorance and stigmas and an unwillingness to change the status quo. Neurotypicals, for the most part, do not identify as *neurotypical*, which undermines the movement because as far as the rest of the world is concerned, neurotypicals do not exist.

This is not the first time the prefix *neuro* has been co-opted to re-brand academic subjects or promote business. Technological advancement at the end of the 90s saw fMRI become a popular method for understanding the brain. Thoughts that a participant had while being scanned could be tentatively linked with specific areas of the brain. This caused great excitement and resulted in the prefix *neuro* being added to many traditional areas of study to boost interest.

Fortunately, the limitations of fMRI are now widely known and even though this was a movement of sorts, the focus had not drifted too far from discussions of neurons. The *neuro* in neurodivergent appears mostly untethered.

At some point, all activism must lead to a pragmatic assimilation into the status quo. In order for this to happen an unambiguous and broadly accepted terminology must be present. *Autism*, *ADHD*, and other personalities need to be seen as normal and human, and thus inclusion is necessary and obvious.

The bitter truth behind the good intentions of a diagnosis, something which is done to facilitate treatment or therapy, becomes an event in history that forever tethers the patient from personal growth and in some cases, relationships. During the diagnosis, the person is deemed to be *in need of care*, after all, they are now the *patient*. But even after many years of good therapeutic habits, the person is still considered to be in need of care and liable to others – a liability.

A diagnosis also implies a deviation from *healthy* or *normal* and will become a defining feature of the medical record, which will always make other people question if the person is healthy or normal in the present. A mental health diagnosis can become a sinister stigma, because there will always be doubt over whether the person is normal or healthy – in some cases preventing relationships before they can even start.

Many of those diagnosed with autism, ADHD, bipolar disorder, Tourette's Syndrome, etc. could be forced to deal with these problems and have to work hard and struggle to be treated as an independent, autonomous person. The neurodivergent movement has partly been successful because *neurodivergent* is not a term of diagnosis, but a voluntary label that hinges on the fact that difference is not disorder.

Some of the terms used to define the traits within autism diagnosis, under other circumstances, might simply be seen as eccentric. Terms like *disturbances*, *difficulties*, *rituals*, *deficits*, *hypo-*, *hyper-*, etc. The definition of *normality* appears to have been randomly decided and anything that deviates from this definition is therefore *abnormal*. An autist would be well within their rights to reverse the view of these traits and determine that it is the *allist* who needs the diagnosis.

Many autists do struggle in a world that has been determined and structured by allists, particularly in educational and work settings. Theoretically, if these environments can be re-structured and re-determined so that an autist can flourish, the ease with which they interact with this environment would mean anybody observing would think everything was normal. This means that those who control the environment control what is normal.

The diagnostic behavioral traits are also an issue. Usually, if somebody demonstrates a high enough frequency of a particular trait, they will have a high score and that score will become the determination of a diagnosis. In a world of traits and spectrums, it is likely that many allists will also share autistic traits, such as being comfortable with routine, or a level of fatigue when it comes to prolonged eye contact, or having a somewhat obsessive private interest (in allistic speak, these would be hobbies and pastimes).

That fact that allists can have autistic traits suggests that if social and civil changes were made to benefit somebody with autism, they would also benefit the allist. In addition, because allists and autists can share traits commonly associated with each other, taken together it could just be representative of the traits that make people human.

Many autists have to find and train different behaviors that allows them to mask and deal with being out in the workplace with other people, but this is not synonymous to those with autism as all workers have to find ways to manage long days and increased productivity in difficult environments. Often, workplaces are thought of as normal and the ability for an employee to advance has more to do with a willingness to endure. But this demonstrated struggle is not necessarily useful and if workers could have power over how they get the job done, morale would be higher and productivity would be maximized.

Making changes for those who are neurodivergent would also create an environment where all can be happy. Having less meetings and time for people to decompress on their own would help all workers, as work that is done in solitude is just as important as necessary meetings.

An environment that recognizes diversity would dissolve the need for the term *neurodiversity*. But what about *normality*?

In behavioral science, normality appears defined as the absence of the characteristic being studied. Behavioral research experiments typically recruit at least two groups of people; one group that has been screened to ensure they show behavioral traits of the abnormality being studied, and another group that does not display these traits – the control group. Any number of tests can then be given to all groups and any differences that appear based upon group identity can be verified statistically and the difference published as a *finding*.

However, it is worth noting that there are no studies determining normality in mental health, after all, in a field that struggles with resource and funding, what would any research team have to gain by pursuing a credible diagnosis for *normality*? This means that normality is not scientifically verified and is made all the more impossible to pursue by the ever changing nature of a person's mental health.

Yet, for such a cherished moniker of considering oneself *normal*, is it good enough to define it simply by the traits/dysfunctions/disorders that you do not have? It appears to be a travesty of thought to make an observation of somebody displaying *difference* to you and declaring that you are normal because you are not *that*. How satisfied would we be in situations where we needed to learn about another person, in knowing simply what they are not?

How do you determine a person's *substance* by the *absence* of traits?

Lennard J. Davis notes in 'The Disability Studies Reader' (4th Ed.) that the terms *norm* and *average* only entered European languages in the 19th Century. Their arrival coincided with ideas that were being used in the field of statistics. What had been applied in the mathematical determination of astronomical events bled over into the study of human characteristics, such as height and weight. However in this natural accretion, unguided and subject to nineteenth century prejudices, the search for normal behaviors quickly became marred by the assumptions of the privileged.

Statistics is a powerful tool and can be used with great effect to convince scientists of the objectivity of research, but they are only as powerful as their interpretation. Statistics can demonstrate difference like nothing else, but the basis of comparison is loaded with assumptions of deviance versus absence of deviance. When it comes to understanding something as precious as humanity, is that good enough for us? Every single study should have a rigorous definition of

what has been considered normal in light of the research question. *Normal* is needed for statistics to work.

Normality seems to be everything about humanity that we do not consider different or deviant, yet when pressed would struggle to define. This leads one to ask, "Is normality more of a *feeling* than a state of being?" Normality appears to have a lot in common with the mathematical concept of *zero*. Both concepts trick us into thinking they are well defined when it is in fact the opposite. The infinity of the absence tricks us into thinking there is substance.

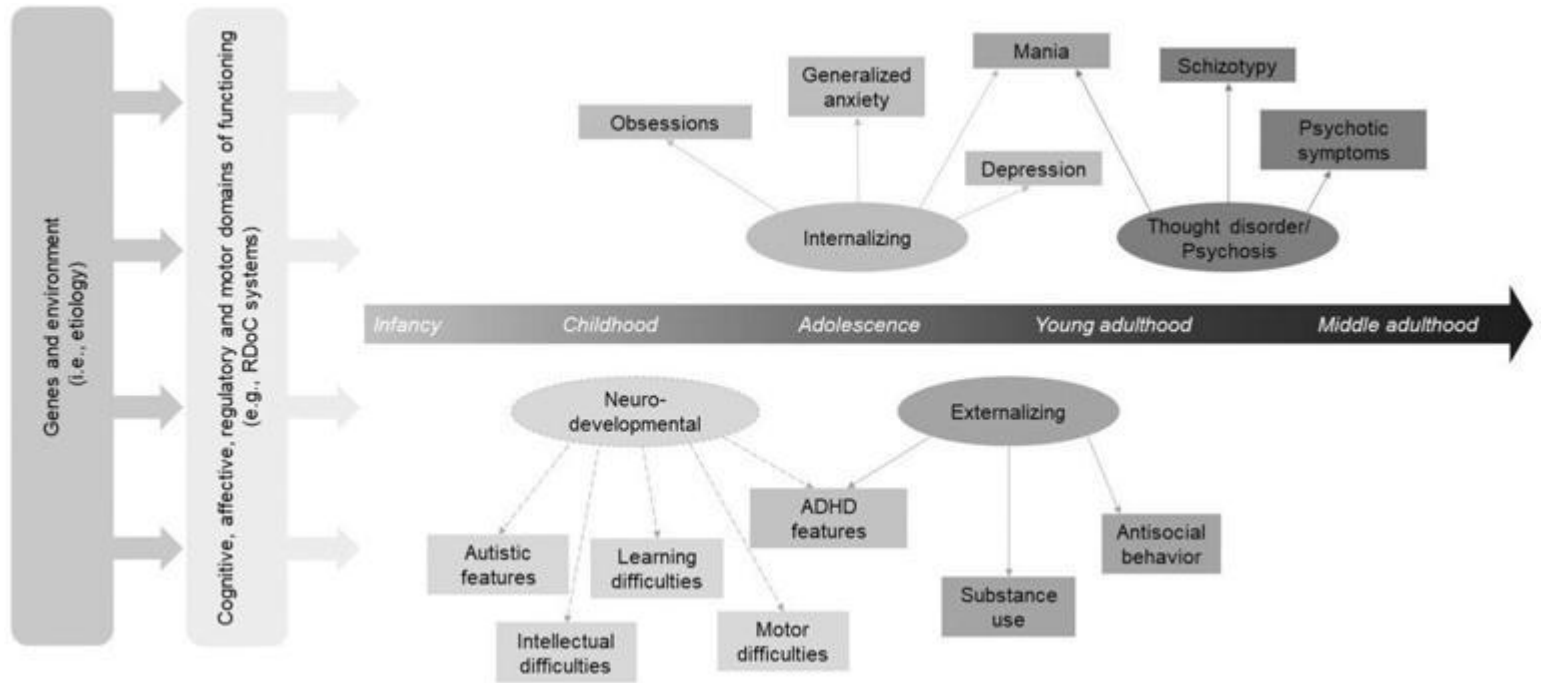
In a world of scientifically and medically confirmed diagnoses, the definition of a normal person is one who would without fail qualify for the control group in any research (unless their socioeconomic markers do not match). Normality is a permanent membership in the control group for every possible behavioral experiment, yet this is clearly impossible, and even *inhuman*.

In a world where those who have been deemed different are having to fight for more inclusion and equal rights, conversations around normality matter.

If only there was a condition called *Manifestly Normal Disorder*, a list of symptoms to define *normal* would have to be rigorously defined in order to screen for the experimental group.

It is worth reminding ourselves that the middle of the bell curve is not where to find normal. Normal is *the* bell curve.

Beyond labels: A new framework for neurodiversity and mental health



Representation of the proposed neurodevelopmental spectrum alongside dimensions currently in transdiagnostic frameworks. Credit: *World Psychiatry* (2024). DOI: 10.1002/wps.21225

A study published in *World Psychiatry* challenges the traditional approach to diagnosing neurodivergent conditions (also known as "neurodevelopmental disorders" in the medical literature), such as autism, ADHD, and learning disabilities.

The research introduces a new transdiagnostic framework that views these conditions as points on a spectrum rather than distinct categories and recognizes their frequent overlap with mental health challenges, such as depression and anxiety.

Approximately 15% of the global population is neurodivergent, often experiencing multiple conditions simultaneously. Current diagnostic systems, like

the DSM-5 and ICD-11, separate these conditions into distinct categories (or "labels"), overlooking their shared characteristics and complex interplay.

Leading an international group of experts in the field, Dr. Giorgia Michelini, Lecturer in Psychology at Queen Mary University of London, proposes a more holistic approach, focusing on their commonalities.

"By recognizing the overlapping features of neurodivergent conditions, we can develop a more accurate and comprehensive understanding of their diverse manifestations," said Dr. Michelini. "This new perspective has the potential to revolutionize how we identify, assess, and support the mental health needs of neurodivergent individuals."

The study introduces the concept of a "neurodevelopmental spectrum," which encompasses the shared characteristics of various neurodivergent conditions. This approach acknowledges that individuals vary in the degree to which they exhibit these characteristics, allowing for a more nuanced and personalized assessment. It also provides a better way to identify and support additional mental health challenges, which affect the majority of neurodivergent people.

"Moving beyond rigid diagnostic labels will enable clinicians to provide more tailored support and interventions for the wide range of difficulties experienced by neurodivergent people," explained Dr. Michelini. "By focusing on an individual's unique strengths and challenges, we can improve their overall well-being and quality of life."

This research marks a significant step forward in the field of neurodiversity and mental health. By challenging the status quo and offering a fresh perspective, Dr. Michelini's work has the potential to transform the lives of millions of neurodivergent individuals.

More information: Giorgia Michelini et al, Where do neurodevelopmental conditions fit in transdiagnostic psychiatric frameworks? Incorporating a new neurodevelopmental spectrum, *World Psychiatry* (2024). DOI: [10.1002/wps.21225](https://doi.org/10.1002/wps.21225)

Provided by Queen Mary, University of London

Neuroscience sheds light on brain mechanisms underlying exceptional creativity



(Photo credit: DALL-E)© PsyPost

A new study sheds light on how highly creative individuals, such as visual artists and scientists, may have brains that function differently compared to others. The research, published in [Psychology of Aesthetics, Creativity, and the Arts](#), reveals that people who exhibit exceptional creativity—referred to as “Big C” creative individuals—demonstrate more random patterns of connectivity in their brains. By using functional MRI (fMRI) technology, the researchers observed that highly creative brains bypass typical neural hubs, making distant connections between different regions of the brain more quickly and efficiently.

The purpose of the study was to explore the biological foundations of exceptional creativity. Despite over seventy years of research on creative achievement, there has been limited data to support the biological mechanisms that differentiate highly creative individuals from others. Most studies of brain function in creativity have focused on everyday or professional-level creativity.

However, few have investigated what happens in the brains of those who make transformative, world-changing contributions in the arts and sciences—people often referred to as “Big C” creative types. These individuals are not only

distinguished by their high levels of creative achievement but also by their ability to think in novel and non-linear ways.

The new study sought to fill the gap in understanding how the brains of these exceptional individuals work differently from both typical people and those who are merely highly intelligent. The researchers were specifically interested in how brain regions responsible for creativity, problem-solving, and artistic or scientific invention interact during tasks that demand creative thinking.

"I became interested in the topic of creativity because creativity is elusive," said study author Ariana Anderson, an assistant research professor at the Semel Institute for Neuroscience and Human Behavior at UCLA. "People can be highly creative without being highly educated, yet most studies of creativity have compared highly intelligent and creative individuals with 'garden variety' average people."

"This confound suggests that the studies might be identifying what makes some individuals more clever than others, but not necessarily more creative. Our study compared creative people, who tend to be smarter than average, with garden variety smart people with equal intelligence."

To investigate the neural basis of exceptional creativity, the research team recruited highly creative visual artists and scientists, as well as a comparison group of individuals matched for intelligence but not necessarily known for creative accomplishments. The study's sample consisted of 66 participants: 21 Big C visual artists, 21 Big C scientists, and 24 "smart" individuals from the general population who served as a control group.

Each participant underwent brain scanning using fMRI technology, which measures brain activity by detecting changes in blood flow. The researchers captured brain connectivity both while participants were at rest and while they completed tasks designed to test their creative thinking. These tasks included:

- **The Alternative Uses Test**, which required participants to think of as many different uses as possible for a common object (for example, an umbrella).
- **The Remote Associates Test**, which presented three seemingly unrelated words and asked participants to find a fourth word that connected them (for example, the word "horse" connects the words "sea," "rocking," and "shoe").

The researchers used a mathematical approach called graph theory to analyze the brain's connectivity patterns. In this context, the brain's regions were treated as "nodes," and the connections between them as "edges." The goal was to see how efficiently information flowed through these networks and whether Big C individuals exhibited distinct connectivity patterns compared to the control group.

During the resting-state scans, when participants were not engaged in any specific task, the Big C individuals showed more random patterns of brain connectivity compared to the control group. Specifically, they exhibited less "small-worldness", a feature of brain networks that indicates an efficient balance between local and global connections. Instead of maintaining a highly organized structure, their brains displayed less clustering of connections between nearby regions, with more randomness overall.

However, locally, the creative individuals had increased clustering and efficiency, meaning certain brain areas were more specialized or active at rest. This suggests that while their overall brain network was more random, specific regions were more densely connected, potentially preparing them for creative thinking.

During the Alternative Uses Test, the Big C individuals had lower local efficiency and clustering compared to the control group. In other words, their brain activity was less organized and efficient while performing the task, which aligns with the idea that their brains may function in a more exploratory and less constrained manner during creative tasks. This reduced local connectivity suggests that, instead of focusing on specific brain regions, the creative individuals' brains may adopt a more flexible approach, allowing for the generation of diverse and novel ideas.

"Our study found that creative individuals exhibited more random connectivity in their brains," Anderson told PsyPost. "This suggests that to be creative, we need to focus less and relax more. However, relaxing doesn't mean watching TikTok—it means resting our brains so they can generate their own internal content, rather than being influenced by external sources. In fact, our study showed the greatest differences in brain activity when creative individuals were doing nothing—not when they were actively trying to be creative or clever. Mind-wandering can be the optimal time for our creative brains to shine."

Interestingly, no significant differences in brain connectivity were found during the Remote Associates Test. The lack of differences during this task suggests that while the Big C individuals excel in making broad, random connections during divergent thinking, their brain connectivity during tasks that require finding one correct solution may be similar to that of non-creative individuals.

"The creative group did not show significant differences in verbal word-play tasks compared to the IQ-matched group," Anderson explained. "For example, if given the words 'house, horse, dragon,' both a creative and non-creative person would display similar brain activity when identifying the common word that links them ('fly')."

Despite these intriguing findings, the study has some limitations. One challenge in studying exceptional creativity is that it is difficult to recruit large samples of individuals who have achieved such high levels of success in their fields. As a result, the sample size in this study was relatively small, which limits the ability to detect more subtle differences between groups.

"Major caveats of our study include that we compared individuals already well-known for their creativity," Anderson noted. "It doesn't address the question of what makes some people highly creative, nor whether creativity is an inherent trait, or something that can be acquired or diminished. Many studies have shown that creativity rapidly diminishes in early childhood, so it's crucial to explore how cultural shifts in parenting and screen time may be stifling the creative potential of children."

"My long-term goals for this research are to determine how we can foster creativity in children. Do we become more creative through exposure to the arts or nature, or do we merely learn to mimic others' styles, thus limiting originality? How does screen time affect children's ability to generate new ideas, given that they are constantly exposed to repetitive content?"

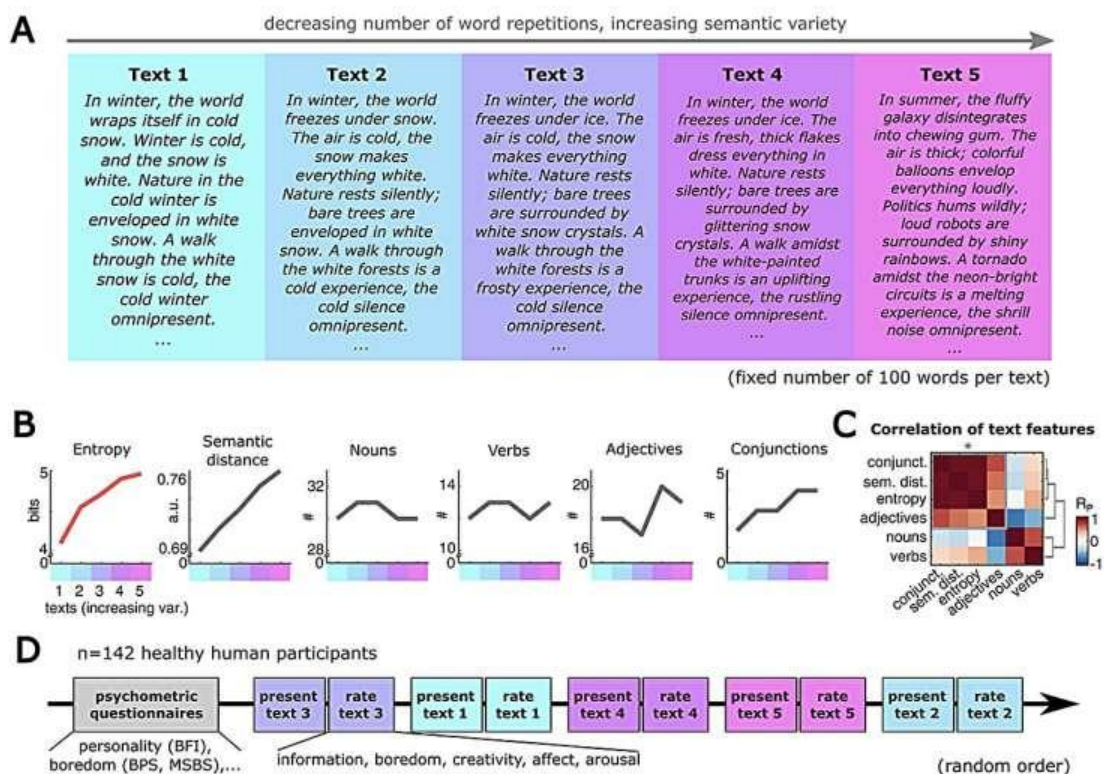
"A 2019 study showed that [today's children are much less creative](#) than previous generations of children," Anderson added. "With post-COVID education being highly dependent on screens, it's likely this trend is worsening. This will inevitably result in decreased innovation from future generations, which could have economic consequences."

The study, "[Big-C Creativity in Artists and Scientists is Associated With More Random Global but Less Random Local fMRI Functional Connectivity](#)," was authored by Ariana Anderson, Kevin Japardi, Kendra S. Knudsen, Susan Y. Bookheimer, Dara G. Ghahremani, and Robert M. Bilder.

APRIL 9, 2025 **FEATURE**

Sensory perception linked to boredom in both ADHD and non-ADHD individuals

by Ingrid Fadelli, Medical Xpress



Estimating the conveyed information of text stimuli with defined information content.

Credit: Seiler et al. (*Communications Psychology*, 2025).

Throughout their everyday life, most people engage in many activities that require varying degrees of attention. As they take part in these activities, the brain processes the sensory information it receives from their surroundings, creating representations that guide their current and future behavior.

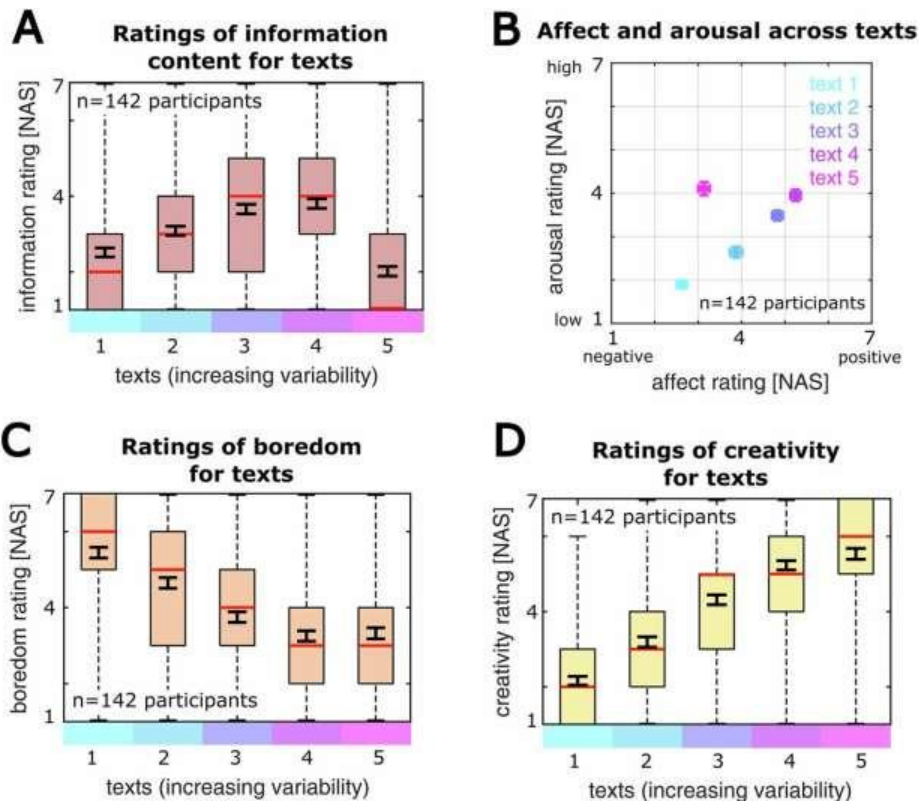
In similar situations, different people can experience varying levels of engagement and interest. Individuals diagnosed with [attention deficit hyperactivity disorder](#) (ADHD) are known to struggle to focus their attention on things for prolonged periods, often experiencing feelings of [boredom](#) in a wide range of situations.

Researchers at Johannes Gutenberg University Mainz and other institutions in Germany recently set out to explore the relationship between the perception of [sensory information](#) and boredom, both in individuals diagnosed with ADHD and those who are not. Their findings, [published](#) in *Communications Psychology*, suggest that a reduced perception of sensory stimuli is linked to higher levels of boredom in people with and without ADHD.

"The perception of sensory information and subsequent responses, such as boredom, vary across situations and individuals, as impressively depicted by patients with attentional disorders who show extensive boredom across many situations," wrote Johannes P.-H. Seiler, Jonas Elpelt and their colleagues in their paper.

"Despite these implications, it remains unclear how environmental features and individual traits act together to allow effective transmission of sensory information, and how both factors relate to boredom experience. We present a framework to address this issue, exposing human participants to text stimuli with defined objective information content while assessing their perceived information, boredom and text sentiment."

Seiler, Elpelt and their colleagues recruited 142 students without ADHD from the University of Mainz, as well as 19 patients diagnosed with ADHD, who took part in two similar experiments. Firstly, the study participants were asked to complete a questionnaire designed to collect their demographic information, as well as assess their [personality traits](#) and other psychological qualities.



Text perception varies with the objective information content. Credit: *Communications Psychology* (2025). DOI: 10.1038/s44271-025-00233-6

Subsequently, they completed a task devised by the researchers, which required them to read five short texts on the same topic, varying in their semantic diversity and word repetitions. The participants were asked to rate how informative, boring, creative, pleasant and arousing they found each of the texts on a scale from 1 to 7.

In addition, they completed other tasks, including a language-based divergent thinking task, as well as auditory tasks in which they were asked to rate the similarity between different white noise stimuli, while also rating their degree of boredom. The researchers analyzed all the data they collected to determine whether there was a link between the participants' perception of sensory information during these tasks and the extent to which they felt bored.

"Using information theory to formalize external and internal factors of information transmission, we find that lower information transmission predicts higher boredom," wrote the researchers.

"Moreover, individuals with ADHD show lower information transmission, compared to a control sample. Together, delineating the interaction of sensory information content with individual traits, boredom emerges as a situational consequence of reduced information-decoding, heightened in ADHD."

The results gathered by Seiler, Elpelt and their colleagues suggest that the extent to which individuals were perceptive to stimuli in their environment was related to the boredom they

experienced, irrespective of whether they had ADHD or not. Nonetheless, people diagnosed with ADHD exhibited a reduced sensitivity to [external stimuli](#), which is consistent with previous findings.

In addition, the researchers found correlations between people's perceptions of sensory information and both their individual traits and external features. In the future, their study could potentially inform the development of new interventions designed to improve people's engagement with educational or other activities.

More information: Johannes P.-H. Seiler et al, A reduced perception of sensory information is linked with elevated boredom in people with and without attention-deficit hyperactivity disorder, *Communications Psychology* (2025). DOI: [10.1038/s44271-025-00233-6](https://doi.org/10.1038/s44271-025-00233-6).

Journal information: [Communications Psychology](#)

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Neuro-affirming care values the strengths and differences of autistic people, those with ADHD or other profiles

We've come a long way in terms of understanding that everyone thinks, interacts and experiences the world differently. In the past, autistic people, people with attention deficit hyperactive disorder (ADHD) and other profiles were categorized by what they struggled with or couldn't do.

The concept of neurodiversity, [developed by autistic activists in the 1990s](#), is an [emerging area](#). It promotes the idea that different brains ("neurotypes") are part of the natural variation of being human—just like "[biodiversity](#)"—and they are vital for our survival.

This idea is now being applied to research and to care. At the heart of the [National Autism Strategy](#), currently in development, is neurodiversity-affirming (neuroaffirming) care and practice. But what does this look like?

Reframing differences

[Neurodiversity](#) challenges the traditional [medical model](#) of disability, which views neurological differences solely through a lens of deficits and disorders to be treated or cured.

Instead, it reframes it as a different, and equally valuable, way of experiencing and navigating the world. It emphasizes the need for brains that are different from what society considers "neurotypical," [based on averages and expectations](#). The term "[neurodivergent](#)" is [applied](#) to Autistic people, those with ADHD, dyslexia and other profiles.

[Neuroaffirming care](#) can take many forms depending on each person's needs and context. It involves accepting and valuing different ways of thinking, learning and experiencing the world. Rather than trying to "fix" or change neurodivergent people to fit into a narrow idea of [what's considered "normal" or "better"](#), neuroaffirming care takes a person-centered, strengths-based approach. It aims to empower and support unique needs and strengths.

Adaptation and strengths

Drawing on the [social model of disability](#), neuroaffirming care acknowledges there is often disability associated with being different, especially in a world not designed for neurodivergent people. This shift focuses away from the person having to adapt towards [improving the person-environment fit](#).

This can include providing accommodations and adapting environments to make them more accessible. More importantly, it promotes "thriving" through greater participation in society and meaningful activities.

At school, at work, in clinic

In educational settings, this might involve using [universal design for learning](#) that benefits all learners.

For example, using [systematic synthetic phonics](#) to teach reading and spelling for students with dyslexia can [benefit all students](#). It also could mean

incorporating [augmentative and alternative communication](#), such as [speech-generating devices](#), into the classroom.

Teachers might allow extra time for tasks, or allow [stimming](#) (repetitive movements or noises) [for self-regulation](#) and breaks when needed.

In [therapy settings](#), neuroaffirming care may mean a therapist [grows their understanding of autistic culture](#) and learns about how [positive social identity](#) can impact self-esteem and well-being.

They may make efforts to bridge the gap in communication between different neurotypes, known as the [double empathy problem](#). For example, the therapist may avoid relying on body language or [facial expressions](#) (often different in autistic people) to interpret how a client is feeling, instead of listening carefully to what the client says.

Affirming therapy approaches with [children](#) involve "tuning into" their preferred way of communicating, playing and engaging. This can bring meaningful connection rather than compliance to "neurotypical" ways of playing and relating.

In [workplaces](#), it can involve [flexible working arrangements](#) (hours, patterns and locations), allowing different modes of communication (such as [written rather than phone calls](#)) and [low-sensory workspaces](#) (for example, low-lighting, low-noise office spaces).

In public spaces, it can look like providing a "sensory space," such as at [large concerts](#), where neurodivergent people can take a break and self-regulate if needed. And staff can be trained to recognize, better understand and assist with [hidden disabilities](#).

Combining lived experience and good practice

Care is neuroaffirmative when it centers "[lived experience](#)" in its design and delivery, and [positions people with disability as experts](#).

As a result of being "different," people in the neurodivergent community experience high rates of [bullying and abuse](#). So neuroaffirming care should be combined with a [trauma-informed](#) approach, which acknowledges the need to understand a person's life experiences to provide effective care.

Culturally responsive care acknowledges limited access to support for culturally and racially marginalized Autistic people and higher rates of LGBTQIA+ identification in the neurodivergent community.

Authentic selves

The draft National Autism Strategy promotes awareness that our population is neurodiverse. It hopes to foster a more inclusive and understanding society.

It emphasizes the societal and public health responsibilities for supporting neurodivergent people via public education, training, policy and legislation. By providing spaces and places where neurodivergent people can be their authentic, unmasked selves, we are laying the foundations for feeling seen, valued, safe and, ultimately, happy and thriving.

Study highlights best meditation postures for individuals with ADHD

The infographic is divided into several sections. At the top, a teal background features a central illustration of a person sitting at a desk with a laptop, looking stressed with question marks above their head. To the left of this illustration, white text states: 'Mindfulness-based training programs can help alleviate symptoms of attention-deficit/hyperactivity disorder (ADHD)'. To the right, white text states: 'However, mindfulness training such as static meditation can be challenging for individuals with ADHD tendencies'. Below this teal section is a dark blue banner with white text: 'Mindfulness Encouraging/Discouraging Reactions Scale (MERS/MDRS) was developed and used to identify the most helpful posture'. Underneath the banner, yellow text reads: 'For individuals with hyperactivity/impulsivity tendencies performing the body-scan meditation in:'. The bottom section contains three panels. The first panel shows a person slumped over in a chair, with a yellow warning icon and the text 'Slumped posture was a challenge'. The second panel shows a person lying flat on their back on a bed, with a green checkmark icon and the text 'Supine posture was easier'. The third panel shows a person sitting upright in a chair, with a green checkmark icon and the text 'Upright posture was easier'.

Mindfulness-based training programs can help alleviate symptoms of attention-deficit/hyperactivity disorder (ADHD)

However, mindfulness training such as static meditation can be challenging for individuals with ADHD tendencies

Mindfulness Encouraging/Discouraging Reactions Scale (MERS/MDRS) was developed and used to identify the most helpful posture

For individuals with hyperactivity/impulsivity tendencies performing the body-scan meditation in:

Slumped posture was a challenge

Supine posture was easier

Upright posture was easier

Researchers assessed the ease of practicing mindfulness meditation using novel scales. They found that a supine or upright posture may improve the ease of doing meditation for people with ADHD tendency. Credit: Dr. Ayano Fukuichi from Ritsumeikan University, Japan

ADHD is a developmental condition of the brain with symptoms such as inattention, hyperactivity or impulsivity. People with ADHD may struggle with self-control as well as experience anxiety, depression, academic failure, and low self-confidence. These symptoms can be alleviated by a holistic approach such as mindfulness-based stress reduction and mindfulness-based cognitive therapy.

These practices encourage patients to pay attention to the present moment with purpose and without judgment. However, these practices involving meditation require sitting in certain postures which can be challenging for patients with high ADHD tendency.

To address this, a group of researchers led by Dr. Ayano Fukuichi of the Research Organization of Open Innovation and Collaboration, Ritsumeikan University (Graduate School of Psychology, Kansai University at the time the study was conducted), Japan, along with Prof. Takafumi Wakita and Prof. Genji Sugamura from Kansai University, Japan, examined the ease of meditating in various postures among participants.

Their findings were [published](#) on 6 August 2024 in *Japanese Psychological Research*.

"Although mindfulness programs have been devised for patients with ADHD, there are challenges with respect to mindfulness meditation. To overcome this, we explored various postures that can be adopted by both patients with high and low ADHD tendencies for performing meditation easily without the need of special tools," says Dr. Fukuichi.

In this study, the participants enrolled were divided into four groups: combined, hyperactive/impulsive, inattentive, and without ADHD tendencies. They were then asked to perform body-scan meditations with upright, slumped, leaning-back sitting, and supine postures and to answer a questionnaire.

To assess their responses to various postures during meditation, researchers developed Mindfulness Encouraging Reactions Scale (MERS) and the Mindfulness Discouraging Reactions Scale (MDRS).

The researchers found that participants with hyperactivity/impulsivity tendency found body-scan meditation challenging in a slumped posture and easier to perform in the supine and upright postures. These findings suggest that people with hyperactivity/impulsivity tendency should adopt upright or supine postures for ease of performance of body-scan meditation for sustained care.

In addition, the MERS and MDRS scales developed in the course of the study may help psychiatrists, psychotherapists, and other health professionals decide the best meditation interventions for people with various psychological profiles. Moreover, it can aid in evaluating the feasibility and planning the course of intervention.

"Ours is the first study to develop a scale for assessing the ease or difficulty of practicing mindfulness meditation. Overall, the findings of our study highlight important considerations for practicing meditation for people with ADHD to improve their quality of life," concludes Dr. Fukuichi.

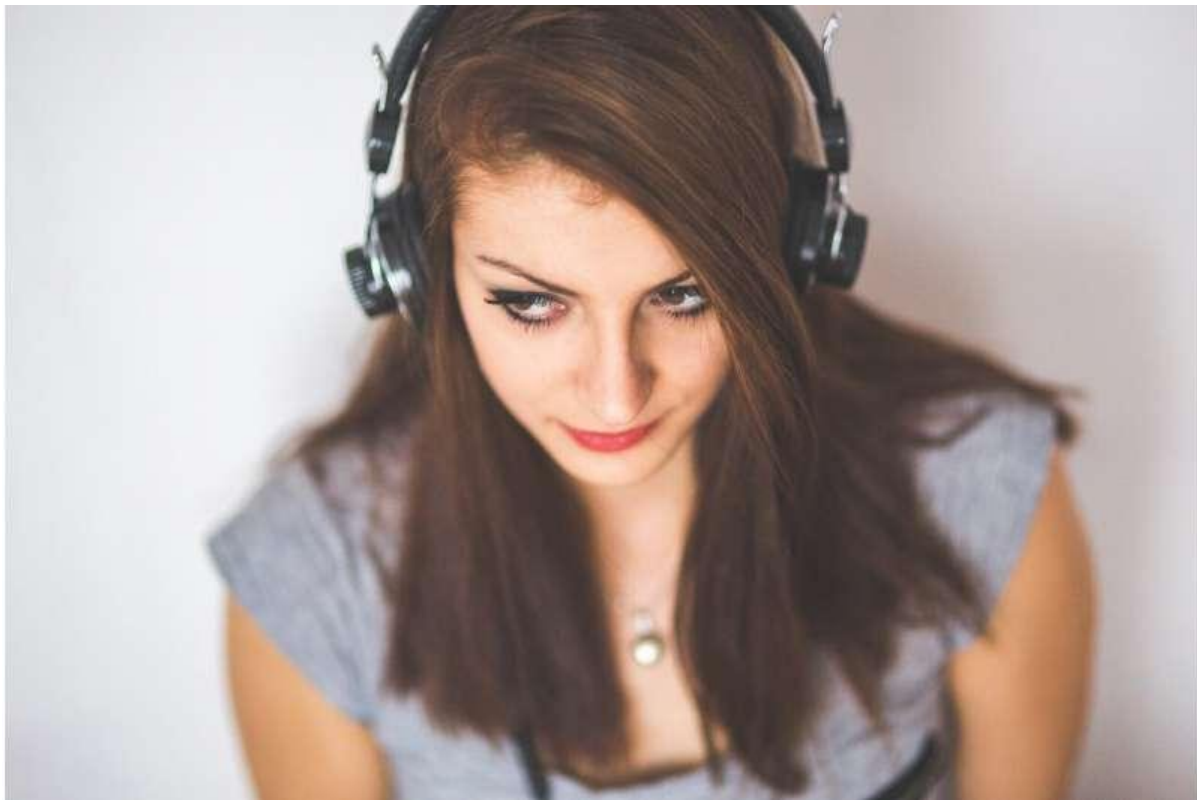
More information: Ayano Fukuichi et al, What is the most helpful body-scan posture for people with attention-deficit/hyperactivity disorder tendency? *Japanese Psychological Research* (2024). DOI: [10.1111/jpr.12541](https://doi.org/10.1111/jpr.12541)

Provided by Ritsumeikan University

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Music to their ears: People with ADHD may prefer background music while performing daily tasks

by [University of Montreal](#)



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Are people with attention deficit disorder with or without hyperactivity (ADHD) more likely to listen to background music while performing daily tasks?

Kelly-Ann Lachance, a doctoral student in clinical neuropsychology at Université de Montréal, decided to find out.

She and her supervisor, neuropsychologist and psychology professor Nathalie Gosselin, analyzed the responses of 434 young adults between the ages of 17 and 30 to an [online survey](#) about music listening habits.

"In [lab studies](#), we rarely ask about listening habits, and yet it's important because people differ in the amount of stimulation they need to perform a task optimally," said Lachance.

The results were [published](#) in *Frontiers in Psychology* in January 2025. Lachance said she chose to publish in an open-access journal because she wanted to share her findings with a broader audience.

"As a future clinician, I want to use research to help the individuals I follow," she said.

Launched at the end of the pandemic, the study relied entirely on data collected through the survey.

"Some parts of it already existed, so we took the questions on music-listening habits and the subjective effects of [background music](#) and put them in an online questionnaire that could be completed in under 15 minutes," explained Lachance.

To determine whether respondents were ADHD or neurotypical, the survey included questions from the Adult ADHD Self-Report Scale for DSM-5 (ASRS-5); 118 of the respondents screened as ADHD and 316 as neurotypical.

"The ASRS-5 is a quick way to assess ADHD symptoms," Lachance noted.

Other questions in the survey assessed each respondent's recent emotional state, level of anxiety and depressive symptoms.

"Music is used to modulate emotions, so we wanted to include emotional functioning in the study," explained Gosselin, who is also director of UdeM's Music, Emotions and Cognition Research Laboratory (MUSEC Laboratory) and a researcher at its parent organization, BRAMS (International Laboratory for Brain, Music and Sound Research).

Playing sports or studying

The study examined differences in background music listening during a host of daily tasks, including cognitive activities such as reading, writing and studying, and less cognitive activities such as cooking, taking [public transport](#) and playing sports.

It found that people with ADHD reported listening to background music while playing sports and while studying significantly more than did neurotypicals.

However, neurotypicals spent more hours per week listening to music while not doing anything else.

While the researchers weren't completely surprised by the results, they didn't see them as a foregone conclusion.

"You could also imagine that music might interfere with performing a cognitively demanding task," which could have made individuals with ADHD less inclined to listen to music at the same time, said Gosselin.

In fact, not only do young adults with ADHD like to have music in the background while studying, they prefer music that is stimulating rather than relaxing.

"Why stimulating music? The literature shows that people with ADHD need more activation to perform at the same optimal level as neurotypicals. Music could help with this, regardless of the type of activity," explained Lachance.

"However, this is a hypothesis that requires future testing," Gosselin pointed out.

A beneficial habit?

Is music in fact beneficial for [young adults](#) with ADHD? How does it affect their concentration and motivation? Gosselin has been wondering about this for a long time.

"My first neuropsychology internship was in child psychiatry," she recalled. "In one of my first cases, a father asked me if it was a good idea for his teen with attention difficulties to listen to music while studying. I didn't know what to say because there was no conclusive data in the literature. But the question stayed with me."

Since music is ubiquitous and readily available, it could be valuable in helping people manage ADHD symptoms.

"I'm not suggesting it could replace medication, but it could complement it," said Lachance. "The question is how we can use the full potential of music to promote optimal performance."

More information: Kelly-Ann Lachance et al, Listening habits and subjective effects of background music in young adults with and without ADHD, *Frontiers in Psychology* (2025). DOI: [10.3389/fpsyg.2024.1508181](https://doi.org/10.3389/fpsyg.2024.1508181)

Journal information: [Frontiers in Psychology](#)

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Neurodivergence and Normality: The Need to Challenge Fraught Terminology

Ever since I have come to understand I am neurodivergent, more of the world has opened up to me. I now understand why I found certain environments so difficult, why some people have become inexplicably annoyed by me, and why I might respond to people in ways they don't expect.

Finding neurodivergent communities online, particularly on X (formally known as Twitter) was immensely supportive. I saw others talk about their own challenges and I was often able to relate. A common topic was how the world does not appear designed for the neurodivergent, with the workplace as the number one offender. This constant pain in dealing with the public world is why the neurodivergent movement has thrived.

The neurodivergent movement has gained traction, in part, because the prefix *neuro* has the habit of making anything sound legitimate. *Neuro* is always contemporary regardless of the year, makes people pay attention, and carries with it the command of being taken seriously, something those with autism crave.

A major benefit to neurodivergent culture is that it helps to raise questions over identification. It encourages those with autistic traits to interact with others and discuss similar experiences, which enables them to better understand themselves. This is not dissimilar to coming out of the closet with a growing sense of private understanding and a drive to interact publicly with an accepting community.

The trouble is *neurodivergent* lacks a solid foundation and appears arbitrary. The term lacks a literal meaning, other than to imply that different neural arrangements lead to different types of people. There are 8 billion people on Earth, each with a brain made up of billions of neurons with trillions of synaptic connections that are constantly changing throughout the expanse of the person's life; moment to moment, person to person, divergency is the norm.

Neurodivergent people are divergent from other neurodivergent people. Neurotypical people are divergent from other neurotypical people. A dog is neurodivergent from a cat. I am neurodivergent to the me of ten years ago, even ten seconds ago. And if the criteria for acceptance into neurodivergent is to merit neurological difference from a *normal*, then it must also be accepted that psychopaths and pedophiles are neurodivergent.

The term *neurotypical* is frequently used to describe the *other*. The term provides a target with which to level criticism against. This is not dissimilar to *homophobe* or *racist* or *misogynist*. When seeking measures of equality and acceptance, it is crucial to have a label for people that are the problem. Names for the oppressor help to ease cohesion, prevent in-fighting, build enthusiasm, and drive momentum forward, picking up social and political capital. These are all good things and would not be necessary if everyone was receiving the respect and understanding they deserve.

The downside is that the *other* is caricatured and subject to picking up as many stereotypes as the person seeking equality. Perhaps even without intention, an us-vs-them mentality is established, which questions the likelihood of future integration. Unlike white on black racism, neurotypicals are not actively seeking to oppress the neurodivergent; the major problems appear to be ignorance and stigmas and an unwillingness to change the status quo. Neurotypicals, for the most part, do not identify as *neurotypical*, which undermines the movement because as far as the rest of the world is concerned, neurotypicals do not exist.

This is not the first time the prefix *neuro* has been co-opted to re-brand academic subjects or promote business. Technological advancement at the end of the 90s saw fMRI become a popular method for understanding the brain. Thoughts that a participant had while being scanned could be tentatively linked with specific areas of the brain. This caused great excitement and resulted in the prefix *neuro* being added to many traditional areas of study to boost interest. Fortunately, the limitations of fMRI are now widely known and even though this was a movement of sorts, the focus had not drifted too far from discussions of neurons. The *neuro* in neurodivergent appears mostly untethered.

At some point, all activism must lead to a pragmatic assimilation into the status quo. In order for this to happen an unambiguous and broadly accepted terminology must be present. *Autism, ADHD*, and other personalities need to be seen as normal and human, and thus inclusion is necessary and obvious.

The bitter truth behind the good intentions of a diagnosis, something which is done to facilitate treatment or therapy, becomes an event in history that forever tethers the patient from personal growth and in some cases, relationships. During the diagnosis, the person is deemed to be *in need of care*, after all, they are now the *patient*. But even after many years of good therapeutic habits, the person is still considered to be in need of care and liable to others – a liability.

A diagnosis also implies a deviation from *healthy* or *normal* and will become a defining feature of the medical record, which will always make other people question if the person is healthy or normal in the present. A mental health diagnosis can become a sinister stigma, because there will always be doubt over whether the person is normal or healthy – in some cases preventing relationships before they can even start.

Many of those diagnosed with autism, ADHD, bipolar disorder, Tourette's Syndrome, etc. could be forced to deal with these problems and have to work hard and struggle to be treated as an independent, autonomous person. The neurodivergent movement has partly been successful because *neurodivergent* is not a term of diagnosis, but a voluntary label that hinges on the fact that difference is not disorder.

Some of the terms used to define the traits within autism diagnosis, under other circumstances, might simply be seen as eccentric. Terms like *disturbances, difficulties, rituals, deficits, hypo-, hyper-*, etc. The definition of *normality* appears to have been randomly decided and anything that deviates from this definition is therefore *abnormal*. An autistic would be well within their rights to reverse the view of these traits and determine that it is the *allist* who needs the diagnosis.

Many autists do struggle in a world that has been determined and structured by allists, particularly in educational and work settings. Theoretically, if these environments can be re-structured and re-determined so that an autist can flourish, the ease with which they interact with this environment would mean anybody observing would think everything was normal. This means that those who control the environment control what is normal.

The diagnostic behavioral traits are also an issue. Usually, if somebody demonstrates a high enough frequency of a particular trait, they will have a high score and that score will become the determination of a diagnosis. In a world of traits and spectrums, it is likely that many allists will also share autistic traits, such as being comfortable with routine, or a level of fatigue when it comes to prolonged eye contact, or having a somewhat obsessive private interest (in allistic speak, these would be hobbies and pastimes).

That fact that allists can have autistic traits suggests that if social and civil changes were made to benefit somebody with autism, they would also benefit the allist. In addition, because allists and autists can share traits commonly associated with each other, taken together it could just be representative of the traits that make people human.

Many autists have to find and train different behaviors that allows them to mask and deal with being out in the workplace with other people, but this is not synonymous to those with autism as all workers have to find ways to manage long days and increased productivity in difficult environments. Often, workplaces are thought of as normal and the ability for an employee to advance has more to do with a willingness to endure. But this demonstrated struggle is not necessarily useful and if workers could have power over how they get the job done, morale would be higher and productivity would be maximized.

Making changes for those who are neurodivergent would also create an environment where all can be happy. Having less meetings and time for people to decompress on their own would help all workers, as work that is done in solitude is just as important as necessary meetings.

An environment that recognizes diversity would dissolve the need for the term *neurodiversity*. But what about *normality*?

In behavioral science, normality appears defined as the absence of the characteristic being studied. Behavioral research experiments typically recruit at least two groups of people; one group that has been screened to ensure they show behavioral traits of the abnormality being studied, and another group that does not display these traits – the control group. Any number of tests can then be given to all groups and any differences that appear based upon group identity can be verified statistically and the difference published as a *finding*.

However, it is worth noting that there are no studies determining normality in mental health, after all, in a field that struggles with resource and funding, what would any research team have to gain by pursuing a credible diagnosis for *normality*? This means that normality is not scientifically verified and is made all the more impossible to pursue by the ever changing nature of a person's mental health.

Yet, for such a cherished moniker of considering oneself *normal*, is it good enough to define it simply by the traits/dysfunctions/disorders that you do not have? It appears to be a travesty of thought to make an observation of somebody displaying *difference* to you and declaring that you are normal because you are not *that*. How satisfied would we be in situations where we needed to learn about another person, in knowing simply what they are not?

How do you determine a person's *substance* by the *absence* of traits?

Lennard J. Davis notes in 'The Disability Studies Reader' (4th Ed.) that the terms *norm* and *average* only entered European languages in the 19th Century. Their arrival coincided with ideas that were being used in the field of statistics. What had been applied in the mathematical determination of astronomical events bled over into the study of human characteristics, such as height and weight. However in this natural accretion, unguided and subject to nineteenth century prejudices, the search for normal behaviors quickly became marred by the assumptions of the privileged.

Statistics is a powerful tool and can be used with great effect to convince scientists of the objectivity of research, but they are only as powerful as their interpretation. Statistics can demonstrate difference like nothing else, but the basis of comparison is loaded with assumptions of deviance versus absence of deviance. When it comes to understanding something as precious as humanity, is that good enough for us? Every single study should have a rigorous definition of what has been considered normal in light of the research question. *Normal* is needed for statistics to work.

Normality seems to be everything about humanity that we do not consider different or deviant, yet when pressed would struggle to define. This leads one to ask, "Is normality more of a *feeling* than a state of being?" Normality appears to have a lot in common with the mathematical concept of *zero*. Both concepts trick us into thinking they are well defined when it is in fact the opposite. The infinity of the absence tricks us into thinking there is substance.

In a world of scientifically and medically confirmed diagnoses, the definition of a normal person is one who would without fail qualify for the control group in any research (unless their socioeconomic markers do not match). Normality is a permanent membership in the control group for every possible behavioral experiment, yet this is clearly impossible, and even *inhuman*.

In a world where those who have been deemed different are having to fight for more inclusion and equal rights, conversations around normality matter.

If only there was a condition called *Manifestly Normal Disorder*, a list of symptoms to define *normal* would have to be rigorously defined in order to screen for the experimental group.

It is worth reminding ourselves that the middle of the bell curve is not where to find normal. Normal is *the* bell curve.

The Key To Healthy Friendships Between Autistic And Neurotypical People, According To Autism Experts

In 2023, after one too many too-relatable [TikToks from autistic creators](#), I realized I was autistic. I chose to self-diagnose, both because I couldn't afford the full neuropsychological evaluation *and* because I've had a bad experience in the past with said test. Three years before my self-diagnosis, I went into an evaluation knowing absolutely nothing about autism, and the therapist told me [she suspected I might be autistic](#), but I made too much eye contact and was "too well socialized." Little did she know I *learned* that I had to make eye contact, and that it's still very difficult for me to do so. Back then, I shrugged and accepted it even if it didn't sound quite right. Now, I know better: I was a high-masking autistic.

At the time, I didn't know what autistic masking was, but I was doing it way too well. This is a very common issue with women, and high-masking autistic women specifically. "Some research puts the misdiagnosis of autistic women as high as 80 percent. Learning disabilities, in general, are often missed in people with above-average IQ scores," says [Sydney Faith Rose](#), LCSW, an NYC-based trauma therapist. "Many people feel disconnected from therapy and frustrated by having their concerns and experiences dismissed by mental health professionals. Self-diagnosis is becoming common across disciplines; people who have traumatic experiences with health care or who can't find a doctor they can afford with experience treating their condition often turn to alternatives because they need help."

Masking is something most autistic people do, sometimes subconsciously, because they've been conditioned to hide obvious autistic traits in order to blend in with neurotypicals. Masking is exhausting and takes a lot of energy, and once

you start unlearning the instinct to mask autistic traits, you will likely lose people—specifically, friends who are allistic (or non-autistic).

For the most part, I've always had an easy time forming new friendships, but a difficult time maintaining them. At 27 years old, I've known most (if not all) of my closest friends since first grade, and we're still very present in each others' lives. These people know everything that makes me *me*, and they understand me simply because they've been around for so long. With friends like these, who needs new ones?

Plus, it's always felt like a lot of effort to start fresh with new people—especially because meeting *someone new* meant I had to *explain* and attempt to put into words the way my brain worked, when I could barely do that for myself. But in 2022, something shifted. I'd spent a year living in Brooklyn on my own, and I was tired of not having people I could rely on in the city. I realized I wanted vulnerable relationships, and I wanted a community in the same physical space as I was. So, I vowed to really try—for the first time since childhood—to forge close, lasting friendships.

I've always carried myself as “what you see is what you get,” so I didn't think I masked that much. I was wrong. Once I realized the subtle ways I put others' comfort and society's unfair expectations above my own well-being, I started my journey of unmasking. And while I've lost people, I've also gained so much. It's possible to have meaningful friendships while unmasking, and writing this article has taught me that. Ahead, experts explain how autistic and allistic friends can have healthy, fulfilling relationships that make everyone feel seen, heard, and loved.

As an autistic person, accept yourself first.

Although it may be easier said than done, the key to finding your people is to accept yourself first. “Do the best that you can to accept yourself as you are, and allow your allistic friends to figure out how to deal with it,” says Devon Price, PhD,

author of [Unmasking Autism](#) and clinical associate professor at Loyola University Chicago. "If they can't deal with [your unique needs as an autistic person], they will never be a good friend to you."

Advocate for what you need.

"Sensory overstimulation is something that autistic people are always trying to avoid or always needing to avoid, even if they're not actively thinking of it that way," says Deirdre Malinske, LMHC, a therapist at the [Live Your Truth Counseling](#) center. Because of this, they will need accommodations from allistic friends in order to live a fulfilling life.

It can be extremely difficult to identify the problem *and* request the right accommodation because every day is a new sensory experience. Consequently, an autistic person's needs will differ day by day. So, the best thing you can do for your relationships is to practice self-advocacy by identifying what you need, and growing more comfortable articulating it, says Price. Some ways to start: Ask a friend to turn the music down when it's too noisy at a party, request to have dinner with a friend privately at home rather than going to an unfamiliar, busy restaurant, or leave an overstimulating environment when you feel like you've reached your limit.

Stim without fear.

Many autistic people also find comfort in stimming, or repeating certain movements or noises to regulate themselves. "Stim openly in front of your friends, talk to them about your special interests, and ask them questions about their life that you genuinely wish to hear the answers to," says Price. Allowing your closest friends the opportunity to love the authentic and autistic you is a gift—one that the people who love you will cherish.

If you're allistic, ditch your ableist assumptions and do your homework.

There's a major (and unspoken) factor that plays a role in whether an allistic and autistic friendship will last: ableism. The truth is that people have a very specific (and often very ableist) view of what autism looks like. If you're allistic, you might *think* you understand your friend based on other autistic folks you've met or media you've consumed, but reality is very different, and autistic people are not a monolith.

"Autistic people are just as diverse as neurotypical people—sometimes even more diverse, in terms of wants and needs in friendships," says Rose. "There are people who have a high need for social interaction but a high amount of social anxiety; and then there are people who have a low amount of social anxiety and a low amount of desire for intimate relationships."

As is the case in any relationship where one member is part of a marginalized community, the ally has a responsibility to educate themselves and break the pattern of ableism that is embedded in society. "Your friend's specific needs and feelings will be different, of course, but it's good to do your homework on autism and just how diverse our disability can really be. You may also find that you stand to gain from a stronger understanding of disability justice and unmasking," Price says.

Btw, it's okay if this doesn't happen overnight—ableist thinking is so socially accepted that it takes *actual* effort to not think or behave in that way. What matter is that you keep trying, rather than give up because it's too hard. A wonderful place to begin is Price's book, [Unmasking Autism](#), as well as other books written by autistic authors, like [UNMASKED](#) by Ellie Middleton and [Different, Not Less](#) by Chloe Hayden. You can also follow autistic content creators that share posts and videos about their experiences, like [@neurodivergent_lou](#) and [@autisticthrifter](#) on Instagram and [@morgaanfoley](#) and [@saranne_wrap](#) on TikTok.

Listen and ask questions to prevent miscommunications.

Autistic and allistic people may clash for several reasons ([research shows that our brains are wired differently](#), after all), but in all the conversations I've had with autistic therapists and researchers, conflicts between allistic and autistic friends can be boiled down to one theme: miscommunication. "A lot of what I see in talking with allistic and autistic folks is that there's just a lot of communication barriers, and that causes a lot of frustration," says Malinske.

One common communication barrier is an autistic person's pattern recognition, as they tend to be very sensitive to change and notice differences in routine. For example, you may be used to a friend always inviting you to their house, but one day, they suggest meeting at a coffee shop instead. "An autistic person might interpret that as maybe they don't want me in their house anymore, or maybe they're uncomfortable with me?" Malinske says. On the other side, allistic people tend to infer meaning to non-verbal cues in general. "If an autistic person is speaking with a flat tone, or a louder voice, or speaking really slowly, an allistic person might interpret that as maybe they're being condescending to me," they explain.

If neither person asks their friend a clarifying question about what they're **actually** thinking or feeling, they will accept their inferences as facts, and that's where we misunderstand each other. "And often when we don't understand somebody, we are likely to project things onto them," says Malinske.

Avoid projection.

Projection is a common experience in relationships between allistic and autistic people. Ask any autistic person in your life, and they'll have plenty of stories of

people projecting onto them, or reading intention and meaning where the autistic person didn't have any in mind.

Remember, autistic people always try to or need to avoid sensory overstimulation, per Malinske, even if they're not actively thinking about it. "And for allistic people, that can be really confusing, especially if they're interpreting meaning to it," she adds. "[They think] 'Why did you turn the lights off? Why did you rip your sweater off angrily? Does that mean you're angry with me?'" Because there are two different interpretations of the same situation, the truth gets muddy and the relationship is strained.

Malia Rogers, a relationship therapist at the [Live Your Truth Counseling](#) center, sees this happen to a lot of her clients: The autistic friend will sign up to do something with the allistic friend, but when the day comes, they're too overstimulated, it feels impossible for them to do anything at all, and they have to cancel. "It has nothing to do with how much the person cares about that friendship, and everything to do with the course of events and stimuli that happened up until that moment that just became too much," Rogers explains. "And if you don't have that [established] understanding with your friends, it often turns for the worst pretty quickly." Of course, the autistic friend didn't *want* to cancel (and was probably really looking forward to the hangout), but they needed to look after themselves and their wellbeing. The allistic friend, though, may assume the autistic person canceled on purpose or perhaps didn't want to prioritize the friendship.

It can be difficult to avoid projection because, sometimes, you can't help but take these things personally. I've experienced projection firsthand. No matter how much effort I devoted to translating my experience so my friend would understand, they felt hurt by my actions, and I felt frustrated and betrayed by their lack of understanding.

Ultimately, communication isn't possible if there's no intent for comprehension. So, instead of jumping to conclusions, "challenge and be willing to question your initial interpretation of why someone is doing something," Malinske says.

Give your autistic friend the benefit of the doubt—and give them grace. “The biggest thing allistic folks can do is assume the best intention, and assume that the person is trying,” Rogers says. “If you take it from that positive perspective, you’re able to navigate whatever snafus or misunderstandings happens after that. Assuming worst intentions really bogs down these types of friendships.”

All friendships require work. The allistic friend may feel like they’re being asked to accommodate a lot, and that’s because they are. But think about it like this: The world is already telling your autistic friend that they need to change who they are. Why wouldn’t you want your friendship to be the one place that says otherwise? I’ve learned that the secret to a good friendship, regardless of neurotypes, is compassion and a willingness to accommodate each other.

Machine learning algorithm identifies three unique autism subtypes in males

In a recent study published in [Autism Research](#), researchers discovered three distinct subtypes of autism spectrum disorder (ASD) in males, each associated with unique brain structure patterns and behavioral traits. These findings suggest that there is considerable diversity in the neural profiles of individuals with ASD, which may influence their specific needs and how they respond to treatment. Autism spectrum disorder (ASD) is a complex neurodevelopmental condition primarily characterized by difficulties in social interaction, communication, and repetitive behaviors. People with autism experience these symptoms to varying degrees, which is why it is often referred to as a “spectrum.” In addition to these common traits, individuals with ASD may have unique sensory sensitivities, cognitive abilities, and motor skills, contributing to the diversity of the disorder. Autism’s complexity poses challenges in understanding its causes and developing effective interventions. Despite increased awareness and research, there remains

a substantial need for personalized approaches that account for the wide variability in autism's presentation.

The rationale behind this study stems from the limitations of current diagnostic methods, which often focus on categorizing autism based on symptom severity alone. While helpful, this approach does not fully capture the underlying biological differences that may give rise to similar behaviors. In other words, two individuals may display the same level of social or communication difficulties but could have fundamentally different brain structures contributing to these challenges. This has led researchers to explore other ways to categorize ASD that go beyond outward symptoms, aiming to develop a more nuanced understanding of the brain structures involved in the disorder.

"The incidence of autism has been showing an increasing trend year by year, placing a heavy burden on families and society," said study author [Xinwei Li](#), a professor at Chongqing University of Posts and Telecommunications. "Currently, there is no effective cure for this neurodevelopmental disorder; however, it is certain that the heterogeneity of the brains of patients is a breakthrough point in revealing the mechanisms of this disease. Recent international research directions and our paper's findings also support this point."

The researchers used a dataset called the Autism Brain Imaging Data Exchange, which includes magnetic resonance imaging data for individuals with autism and healthy individuals as a control group. For this study, they focused on 225 male participants with autism and 255 males without the condition, with ages ranging from around 10 to 20. They selected only male participants because most autism cases are diagnosed in males, and including females could introduce confounding effects, as the structural characteristics of autism in females can differ significantly from those in males.

Using T1-weighted MRI images, the researchers analyzed brain structures, focusing on gray matter—one of the key components of the brain involved in processing information. They constructed brain networks based on the similarities in gray matter structure between various brain regions, known as the gray matter network. This analysis allowed them to view the brain's network in individual participants, giving insight into each person's unique neural architecture. By applying a specialized machine learning method, called

Heterogeneity through Discriminative Analysis, they were able to divide the autism participants into subtypes.

The researchers identified three main subtypes of ASD, each distinguished by differences in how certain brain regions were connected. The first subtype exhibited high connectivity in the left anterior and right posterior central gyri, regions associated with sensorimotor functions, indicating that these participants may experience heightened sensitivity or altered sensorimotor processing.

The second subtype showed decreased connectivity in the left anterior central gyrus, a region associated with motor control, but increased connectivity in the left fusiform gyrus and the lingual gyrus, which are associated with visual and language processing. These findings suggest that individuals in this subtype may face challenges in motor and social visual functions.

The third subtype displayed alterations in the left medial superior frontal gyrus and the left middle frontal gyrus, both regions involved in higher-order cognitive processes, implying that these participants may experience difficulties with planning, decision-making, and social cognition.

"Several aspects of our research findings were unexpected," Li told PsyPost. "For instance, we observed that the differences in comparisons between different subtypes and control groups were mostly concentrated in the same brain regions, indicating that these areas are likely closely related to the patients' cognition and functioning. Additionally, we found that the numbers of each subtype were quite similar, which is inconsistent with some studies and necessitates a deeper exploration of individual differences. Overall, these surprises highlight the complexity of the issues we are studying and reinforce the importance of continued research in this area."

In addition to these brain connectivity differences, the study found significant variations in clinical measures across the three subtypes. For instance, participants in the third subtype scored higher in verbal and performance intelligence tests than those in the other subtypes, while those in the first subtype had more challenges in communication and social interaction. These differences provide further insight into how the brain's structure correlates with autism's diverse behavioral and cognitive manifestations.

"The average person should be aware that autism is a complex neurodevelopmental disorder with a rising incidence, which highlights the importance of early detection and intervention," Li said. "At the same time, autism has different subtypes, and targeted interventions should be conducted based on the specific subtype."

However, the study has some limitations. First, it included only male participants, meaning that these subtypes may not fully capture the variation in females with ASD. "The exclusion of females from the study restricts the broader applicability of the findings," Li noted. "Future study is necessary to explore whether our results could be generalized to females with ASD."

Additionally, the cross-sectional nature of the study does not allow for observing changes over time, which would be important to track developmental trajectories within each subtype. Furthermore, the sample size, though large, may not encompass the entire range of ASD presentations, especially among individuals with intellectual disabilities, as most participants had IQs above 70.

In the future, the researchers aim to build on their findings by incorporating data from other types of brain imaging and conducting long-term studies to see how these brain patterns change over time in relation to behavior and cognition. By expanding the data and exploring additional brain network properties, they hope to develop diagnostic tools that can detect autism subtypes more quickly and precisely, ultimately leading to treatments tailored to each individual's unique brain structure.

"Next, we hope to expand the dataset by incorporating multimodal data to explore the mechanisms of the patients' conditions," Li explained. "Additionally, we aim to conduct in-depth follow-ups on the long-term changes in patients and how these changes affect cognitive and behavioral aspects, as well as to enable rapid diagnosis and prediction of the disease."

Neurodiversity isn't an obstacle in business, it's an intrinsic driver of success



Elon Musk has spoken openly about being on the autism spectrum© Provided by City AM

Awareness around neurodiversity – and the unique assets it can bring – is improving, but the narrative of it as an obstacle to success, rather than a driver of it, needs to change, writes Eamonn Ives

Neurodiversity has long been an overlooked force in the business world. While iconic entrepreneurs like Richard Branson and Elon Musk have spoken openly about being on the autism spectrum or having conditions like ADHD and dyslexia, still too few neurodiverse founders feel able to talk freely about their diagnoses. What's more, neurodiversity repeatedly continues to be framed as just an obstacle to overcome, rather than an [intrinsic driver of success](#).

It's time we rewrite that outdated narrative. As [new research from The Entrepreneurs Network in partnership with Barclays Eagle Labs reveals](#) neurodiversity and entrepreneurship can often be highly complementary. We surveyed British entrepreneurs who have been diagnosed with at least one neurodivergent condition, and found that fully two thirds believe their neurodiversity actually makes them better as a business leader – perhaps by enabling them to harness a knack for creativity, hyper-focus and unorthodox approaches to problem-solving.

On a variety of tasks that are part and parcel of being a modern-day founder – from thinking creatively to networking to managing finances – more of the entrepreneurs we surveyed than not saw their neurodiversity as an asset rather than a hindrance to them performing them well.

Data like these help shatter the deeply entrenched stigma that can surround neurodivergent individuals in the world of work. Yet for all the optimism and positive self-perception, the report also lays bare the harsh realities facing this entrepreneurial cohort.

A shocking 96 per cent of neurodiverse founders told us they face discrimination due to their condition, with almost half reporting experiencing it either 'regularly' or 'always'. Moreover, fully 78 per cent said they have felt compelled to actively hide their neurodivergence in business settings. While we all might play up a certain side of ourselves at work, these findings bring to light the extent to which neurodiverse people feel they cannot be their true, authentic selves in the course of their day-to-day lives.

It's perhaps not unsurprising, therefore, that we also heard how two thirds of respondents reported struggling to find traditional employment prior to launching their business precisely because of their neurodivergence. No doubt because of this, 64 per cent agreed that their neurodiversity meant that setting up a company of their own was the only way they could earn a living.

Fortunately, the survey data offers glimpses of a cultural shift already underway. When asked whether it had become easier to be a neurodiverse founder compared to when they were starting out, three fifths agreed it has. In addition, more neurodiverse founders than not say that there is an adequate level of understanding about neurodiversity in the business community, and slightly more agree than disagree that neurodiversity is well represented in the media.

That being said, however, on both of these questions, still large minorities of founders felt there was further room for improvement.

Faced with this evidence, it's incumbent upon all of us to consider what can be done to bring about further positive change. But that's easier said than done. Indeed, because neurodiversity manifests itself in a variety of forms it would be wrong to think that any one set of policies will necessarily do the job.

One of the clearer messages we took from our survey, however, was that a society which is pro-entrepreneurship is almost by definition pro-neurodiversity too. Improving access to finance and exposing more people to entrepreneurship at a younger age would help everyone – but especially those for whom the 'traditional economy' may not be an attractive or viable option.

Ideas upon which the most innovative companies are based so often germinate from the fertile minds of those who process the world a little differently – we should be unstinting in our ambition to empower them to flourish.

What is autism spectrum disorder?

People often talk about being on the spectrum, but what are the signs, symptoms and causes of autism spectrum disorder (ASD)?

Given the number of undiagnosed people in England, research suggests the total autistic population could be over 1.2 million

With a possible 750,000 undiagnosed autistic people aged 20 and above in England alone, what are the signs that a person may be on the spectrum – and what are the pros and cons of seeking a diagnosis in adulthood?

What is autism?

Thought to be caused by a combination of genetic and environmental factors, autism is a lifelong condition affecting how a person communicates and experiences the world around them.

Dr Sue Smith, head of the National Autistic Society's Lorna Wing Centre in Kent and a specialist in assessing adults, describes it as a "neurodevelopmental difference" present throughout a person's life.

She explains: "Autistic people will experience differences in the way they process information. These may be noticeable but also may be very subtle. Others may find they respond to differences without realising it.

"These differences from the 'neuro majority' will include their social communication, thinking and possibly sensory differences."

Experts now recognise that all ages are affected and awareness of autism in adults is increasing.

Despite this, research by University College London suggests there may be around 750,000 undiagnosed autistic people aged 20 and above in England alone, which would bring the total autistic population to over 1.2 million – approaching double the figure of 700,000 people with autism of all ages in the whole of the UK.

But as the diagnostic criteria for autism have changed and attitudes in society have shifted, more adults are questioning whether the challenges they have experienced throughout their lives may be down to autism.

Prof Joshua Stott, a clinical psychologist at UCL, explains: "Generally, people are [diagnosed with autism in childhood](#), although adult diagnosis is increasing. In the past, the criteria needed for diagnosis were very different to what they are now, meaning that far fewer people were diagnosed. This has created a 'lost generation' of older people who would now meet [those] criteria."

Signs and symptoms of autism in adults

For a long time, a stereotypical picture of someone with autism persisted – people thought of a boy ([it was seen as largely affecting males](#)) with single-minded interests who couldn't interact with others.

But nowadays, the understanding of autism is both broader and more nuanced. In adults, who may have tried to mask autistic traits or to disguise them through “compensatory strategies”, autism can look very different.

Remembering that autism is a lifelong condition, where the traits will have been [present in some form since childhood](#), these are some of the potential signs of autism in adults:

- Communication differences such as taking things very literally, or being overly honest or direct, which may come across as rude, blunt or insensitive
- Regularly appearing to misunderstand what someone means or saying things that go down badly with other people
- Experiencing sensory issues such as being affected more than most people by light or sounds
- Being triggered by physical contact or seeming to experience pain more easily than other people
- Needing a high degree of certainty to feel secure or safe, which can present as someone seeming a bit rigid, awkward or controlling
- Avoiding doing things unless they have organised it themselves

Hayley Brackley was diagnosed with autism three years ago

Eight years ago, when she was 27, Hayley Brackley suffered a breakdown which she now links largely to undiagnosed autism.

Hayley, now 35, had been diagnosed with [attention deficit hyperactivity disorder \(ADHD\)](#) when she was 14, but at that time was “categorically told” she was not autistic.

As a new mother, and after years of feeling labelled awkward and difficult at her job in the fire service, the sense of not fitting in overwhelmed her. She went into what she now sees as an autistic shutdown, a state of numbness where she could barely speak, and over the next two years crippling anxiety and detailed suicidal thoughts pushed her very close to the edge.

For a long time, Hayley did not consider that she was autistic, partly because she didn't fit the autistic stereotype.

"I haven't got a particular affinity to Lego or trains and I don't flap my arms.

"But I do have difficulty with some things on a social level. At school, I struggled with managing my anger, was over-emotional and had a very strong sense of right and wrong. At work I struggled to understand what was dark humour and what was inappropriate.

"I also found it hard to manage my energy and would feel completely depleted by things that didn't seem to exhaust other people. Going to the supermarket, with its lights, sounds and decision-making, would [leave me wrung out](#).

"I also lack flexibility in the way I think – though I can see both sides of an argument, once I make a decision I can't deviate from it."

As she recovered, had therapy and set up Great Minds Don't, a coaching company for neurodivergent people, she realised that the experiences of her female autistic clients often mirrored her own, and she began to ask herself "Am I autistic?" The married mother-of-two from Kettering, Northants, was finally diagnosed three years ago.

Causes of autism

For all the increased and evolving understanding of autism, there is still a frustrating lack of concrete knowledge about what causes it.

While the genetic link is established, there is still much about it that is unclear, with variations in around 100 genes potentially linked to autism. And as for environmental factors, these are even harder to pin down with so many variables at play.

Experts are now clear that this is not a childhood condition that people grow out of. It's simply that up until very recently, few were diagnosed in adulthood.

Dr Smith says: "Evidence would suggest that the percentages of autistic people will be the same throughout age groups. The reasons for the lower levels of diagnosis in adults will be multiple, but they'll certainly reflect very different thinking about autism at different points in time."

Diagnosis and treatment

More adults are seeking an autism diagnosis, but there are still huge numbers of people who may not be aware that they are on the spectrum or who come up against colossal waiting lists, or simply choose not to know.

According to Prof Stott's team at UCL between 150,000 and 500,000 people aged 20 to 49 in England may be autistic but undiagnosed. For those over 50, between 250,000 and 600,000 could be undiagnosed.

Taking the midpoint of these estimations gives a figure of around 750,000 undiagnosed people aged 20 and over.

He says: "You don't have to get a diagnosis. It is a personal choice. On balance, though, I believe for most people the advantages of doing so appear to outweigh the disadvantages.

"For someone who has experienced trauma, bullying or discrimination, all of which autistic people are more likely to go through, understanding that it wasn't their fault, can be really important.

“Also, having a diagnosis means that someone can advocate for their right to reasonable adjustments and the support they need whether in healthcare, work or other areas of life, and that others can know of the need to make adjustments for them.”

This is particularly important when you consider that a third of autistic adults have attempted suicide, eight in 10 have a mental health condition and just 30 per cent of autistic adults are in paid employment.

So how do people pursue a diagnosis?

Most NHS assessments require a referral from a GP, which may require persistence depending on a doctor’s understanding of how autism can present differently, especially in adults.

A referral isn’t necessary for a private assessment, though the assessor should be registered with a body such as the Health Care Professional Council (HCPC) and should follow the NICE (National Institute for Clinical Excellence) guidelines for autism assessments.

Getting a private assessment is expensive but it is quicker than via the NHS, where waiting lists for autism have risen 39 per cent in England in the last year alone, with more than 180,000 people waiting for an NHS assessment.

Others turn to online diagnostic services or opt for a diagnostic opinion rather than a full assessment, as Hayley did. Some adults choose to self-identify as autistic without getting a formal diagnosis.

Dr Smith says a diagnosis can be a “game changer”. “Immediately, people might feel emotionally thrown or they may feel relieved and validated. They may also need to process previous experiences and while that can ultimately be positive, it can also be quite painful.”

If they can be well supported, she says, it can help to validate who they are and accommodate the different ways that autistic and non-autistic people think.

Autistic burnout: Symptoms and solutions

Many of us have heard of burnout, that grinding exhaustion and loss of motivation driven by [pressures from work](#), but for those suffering from autistic burnout it stems from the demands of everyday life.

“It’s a very new field of research,” says Francesca Happé, a professor of cognitive neuroscience at King’s College London. “We know anecdotally that autistic burnout is a state of exhaustion, when the demands of the environment outstrip capacity, and there’s insufficient support. For autistic people the sensory world can be overwhelming”, says Prof Happé, as can everyday social demands.

The National Autistic Society (NAS) estimates that more than one of every 100 people is [on the autism spectrum](#) and there are around 700,000 autistic adults and children in the UK. To understand the triggers of burnout, and how to manage episodes, read on.

Jump to:

- What exactly is autistic burnout?
- How autistic burnout differs from normal burnout
- What are the symptoms?
- Causes of autistic burnout
- Coping strategies
- How to prevent autistic burnout

What exactly is autistic burnout?

Autistic adults describe the primary characteristics as:

- Chronic exhaustion
- Loss of skills
- Reduced tolerance to stimulus

A study on autistic burnout conducted by the Academic Autism Spectrum Partnership in Research and Education described it as “having all of your internal resources exhausted beyond measure and being left with no clean-up crew”.

Autistic people tend to work incredibly hard to manage and compensate for their differences by “masking” – attempting to blend in. “That in itself can be exhausting because your brain’s having to do an extra load,” says Dr Sarah Lister Brook, a clinical director at the National Autistic Society.

Unlike neurotypical people going into a social situation, for whom conversation flows and feels comfortable, “for some autistic people, they will be monitoring and rehearsing in their mind what to say, micro-analysing facial expressions and trying to assimilate social information at a micro level,” says Dr Lister Brook. Overthinking every detail is exhausting. “If you do that over a period of time, and in lots of different situations at work and in your social life, and you’ve got no opportunity to recharge and re-energise – [the risk is burnout.](#)”

How autistic burnout differs from normal burnout

Both result in chronic stress, but the cause of occupational burnout is pressures of work, while autistic burnout is due to the pressures of living and working in a “neurotypical” world and coping with social and sensory stressors.

“While burnout isn’t defined diagnostically, it’s a descriptive term for people who, for whatever reason, have reached a point of exhaustion and burnout of their energy,” says Dr Lister Brook.

What are the symptoms?

The symptoms of autistic burnout can vary, and many mirror the effects that stress can have on the body. These include:

- Exhaustion
- Issues with gut health and inflammation
- Difficulty speaking, concentrating or moving
- Decrease in libido
- Withdrawing from work or social contact
- Increased slowness in movements

“There’s exhaustion and also sometimes a sort of inertia or difficulty speaking, moving or initiating when you’re in that very burnt-out state,” says Prof Happé.

For some it can mean exhaustion to the point of being in bed for a few days or even weeks. “In the state of complete exhaustion autistic people will withdraw. For some it will mean giving up their job, even if they liked it, because of the sensory and social demands of the workplace. They may withdraw from social contact even with people they enjoy spending time with just because it’s so exhausting,” Prof Happé adds.

“But it can get to the point where an individual [with autistic burnout] has real challenges just moving. That might start off with increased slowness in movements. It may manifest itself as freezing and getting stuck mid-movement. There may be jerky movements, blinking, grimacing, or postural abnormalities such as twisting into postures that are unusual,” says Dr Lister Brook.

Causes of autistic burnout

- Overwhelming of the senses, external and internal
- Too much competing noise, bright lights and crowds can compound the problem

Dr Lister Brook says every autistic person she's worked with in a clinical context has had sensory differences. "For some individuals, they may have certain sensory inputs that are overwhelming for them, and they have to avoid certain situations."

The most common overwhelming sensory experience is one in which you have competing sounds in a busy environment, like a supermarket or a tube station.

"With lots of different voices talking at once, for most of us, our brains will just adapt to that and focus in on the voice we need to attend to, screening out the rest. Whereas a lot of autistic people have described how in that situation every sound has equal value and it's all coming at them at the same level," adds Dr Lister Brook. This excess of information can be overwhelming, and if you add the sensory challenges of bright lights, sights and sensations of crowds brushing past, the whole outing becomes too much.

[Interoception](#) is an internal sensory system in which the physical and emotional states of the person are consciously or unconsciously noticed, recognised and responded to, and it's something autistic people can struggle with.

"It's internal awareness, the signals you get that you need to go to the toilet or feel thirsty, but also that you're starting to feel irritated or angry. If you have difficulty picking up on those cues and recognising what they are, it can add to the overwhelm that leads to emotional dysregulation and losing control," says Dr Lister Brook. This is sometimes referred to as a meltdown, and the cumulative effect of all the sensory and emotional factors can be burnout.

Coping strategies

Calming activities

Build some sensory activities into the day that are calming and energising in a positive way.

"This could be an activity that provides sensory feedback [like swinging or bouncing] that helps the autistic person rebalance and feel better. With children, think about reducing the social demands and ensuring they have the opportunity for recovery time, because kids won't necessarily know they need that. Autistic adults can be very insightful and aware of their need to opt out of social situations in order to recover, perhaps needing a whole day at the weekend without social contact," says Dr Lister Brook.

Energy accounting

Make a list of the things that deplete your energy and a list of the things you enjoy doing that restore your energy, such as listening to music or being in nature. It helps to plan the day ahead, considering how depleted your energy stocks are and how you can restore them. "Some people find that helps them keep their energy stocks about right, so that they're not perpetually exhausting their energy and heading towards burnout," says Prof Happé.

Self-soothing activities

Known as stimming, most autistic people say that the sensation of rocking, finger flicking or flapping their hands is soothing, although for other autistic people it [can be a sign that they're in distress](#).

"If you work with somebody who's autistic, ask them: 'Is that a sign that you're overloaded? Should I step back and leave you in peace?' Autistic people are very honest and if you ask respectfully, that's how you'll learn more about autism," says Prof Happé.

How to prevent autistic burnout

1. Get professional help

The first port of call is getting professional support to understand what is causing the burnout. "It will be an individual constellation of things. It's not just one thing for everyone," says Dr Lister Brook. For information on getting help and support go to NAS.

2. Make reasonable adjustments

Being able to control lighting where they work, or to wear ear defenders or headphones, if they're working somewhere noisy, can help. "Give an autistic child at school opportunities to come out of that very busy, noisy, demanding environment, or just be there for short spells, not the whole duration, thus diluting the sensory overload," says Dr Lister Brook.

Despite most autistic people wanting to work, just three in 10 are currently in employment due to stigma and lack of understanding of their needs.

3. Ask for flexibility

Understanding autism, so autistic people don't have to mask and can be more honest about their needs and feeling overwhelmed, can make a world of difference. "Offer flexibility at work, enabling autistic employees to avoid the sensory overload of rush hour. Being able to work from home for some people works very well, and for others will be too isolating," says Prof Happé. "Asking for an honest conversation about how they can be facilitated is the best way forward."

10 myths about autism – from MMR to the 'spectrum'

Diagnosis and self-diagnosis of the condition have rapidly increased, but too many assumptions are still being made about autism

One in 36 children are believed to have autism spectrum disorder

Eighty years ago, autism was thought to affect only one in 2,500 – yet today one in 36 children are believed to have [autism](#) spectrum disorder (ASD). And a study in 2021 found a 787 per cent increase in the number of diagnoses in the UK between 1998 and 2018.

What experts can't decide on is whether this exponential rise is due to a deeper understanding and greater awareness of the condition leading to more people being diagnosed; or whether it's genuinely affecting more people in today's modern world. Or a combination of all the above. What is clear is that over the decades since autism was named, many myths have shrouded those affected.

We talked to the experts to sort the fact from fiction.

10 autism myths that need to be busted

Autism is a linear spectrum

Historically, there was a belief that the condition graduates from “least” to “most”. But that’s now outdated. “It’s more of a constellation of different features,” explains Francesca Happé, a professor of cognitive neuroscience at King’s College London. “We now see autism as more of a colour wheel than a rising linear graph, as everyone is so different.”

Autism only affects boys

“It’s true that many more boys than girls are diagnosed as autistic,” says Prof Happé. “Boys are diagnosed younger and more frequently, but that’s often because girls may exhibit different social and communication patterns. For example, they might present as ‘clingy’ rather than ‘aloof’ and sometimes learn to ‘mask’ behaviours.”

It would equally be a mistake, however, to start believing that just as many girls are affected as boys simply because of better “camouflaging” or “masking” abilities, says Dame Uta Frith, an emeritus professor of cognitive development at UCL. “It remains true that more boys are affected,” she confirms. “Statistically, it used to be that we thought autism affected four males to every female, but [we now estimate that it’s more likely to be three](#) to one.”.

Autistic people lack empathy

There may be difficulties interpreting non-verbal cues and body language, says Prof Happé. “But most autistic people have lots of emotional empathy.”

“We sometimes use the word ‘mentalising’,” explains Dame Uta. “In very simple terms, this means the ability to track another person’s mental state, by picking up on unsaid things such as body language. “I think

confusion has arisen because while it can be common for autistic people not to have strong mentalising abilities, it's not the same as not having empathy. For instance, a psychopath would commonly have excellent mentalising skills – but very poor empathising ones. It's all quite nuanced.”

Autism affects intellect

People on the spectrum are neither all prodigies with [Rainman-like memories](#) or intellectually disabled, so broad generalisations just don't work, insists Prof Happé. “Some autistic people will have intellectual or language disabilities, others will have average intelligence (maybe with a spiky profile across tests), and some will have a very high IQ.”

“Autism does affect how people think, and autistic people process information differently from non-autistic people,” explains Dr Rosa Hoekstra, a reader in global perspectives on neurodevelopmental disabilities at King's College London. “But in terms of intellectual ability, then no generalisations can be assumed. Autism occurs on the full spectrum of intellectual ability.”

Autistic people aren't sociable

“Although some social interactions can be puzzling for autistic people, many are very sociable, and you can be autistic and an extrovert,” says Prof Happé.

“[Social anxiety](#) is not a characteristic of autism,” adds Dame Uta.

“However people who have some kind of social anxiety have started saying things like ‘I'm a little bit autistic’. And it may be that many people who have autism are also socially anxious, but not necessarily because of the condition.”

“Some autistic people are socially isolated and feel lonely, but it's not true that autistic people are not interested in making social connections,” adds Dr Hoekstra.

Autistic people lack emotions

They might have a different way of expressing emotions, but it's certainly not true that they're lacking. "For some autistic people, it can be hard for them to identify and then express their own emotions in a way that is commonly understood (which is known as 'alexithymia'), explains Prof Happé.

In Greek, alexithymia loosely translates to "no words for emotion". But this is also true for some non-autistic people. For instance, it's estimated that one in 10 people has alexithymia, whereas one in five autistic people have alexithymia.

Autism can be "cured"

"Autism is now recognised as a different, not deficient, 'neurotype', which doesn't need to be 'cured' and should be respected," says Prof Happé. But this doesn't mean measures to improve life in general can't be put in place.

"Many autistic people have co-occurring challenges like epilepsy, [sleep problems](#), or anxiety and depression – these do need treating to improve quality of life," she adds.

Dame Uta suggests that there are times when a person might "lose" their autism diagnosis, meaning that it might have been accurately diagnosed when they were younger, but because they have become so adept at managing or "masking" their symptoms as an adult, they would not be diagnosed at a later stage in life.

Fundamentally, however, many autistic people do not want to be cured, as autism is part of their identity.

Autism is a result of bad parenting... or the MMR jab

All the experts say this is a notion that should have long died away. “Autism is a complex condition with a strong genetic component, so while it can affect more than one person in families, it’s not caused by parental behaviour in any way. Genes may be inherited from parents, or there may be new genetic mutations not inherited from the parents,” says Dame Uta.

And neither does autism have any affect on people’s ability to parent themselves.

“Autistic people can also be excellent parents,” says Megan Freeth, a psychology professor from the University of Sheffield. “Autistic mothers (i.e. those who were themselves diagnosed as autistic) tend to experience feelings of intense connection and love with their children.”

Fears that the [MMR jab](#) can lead to higher incidence of being on the spectrum have also been rigorously discredited. “There’s also no evidence to link autism to vaccination; the original studies suggesting this have since been retracted as false and misleading,” Prof Happé clarifies.

Autistic people are violent

“While some people with autism may exhibit challenging behaviours, it’s usually an attempt to communicate or escape an overwhelming situation,” explains Prof Happé. “Many autistic people are extremely sensitive to sensory stimulation, such as bright light, light touch or loud noises, and others who have communication difficulties will experience understandable frustration.”

“More children with autism may suffer what we would call ‘tantrums’,” says Dame Uta. “But that’s likely due to frustrations and overwhelm, and not what I would call ‘violence’.”

Autism only affects children

Most autistic people are adults and autism is a lifelong condition, confirms Prof Happé. “Because diagnostic criteria have broadened, some autistic people are getting their diagnosis for the first time in midlife or later; a recent study of GP records suggested one out of 10 autistic adults over the age of 50 are undiagnosed.”

One of the benefits of being diagnosed, especially after a late diagnosis, is it allows a person who has been self-critical for many years to be more self-compassionate.

I Was Diagnosed With Autism At 46 – Here's 5 Things I've Learned

Like many late-diagnosed autistics, my diagnosis didn't really come as a surprise to me. I'd always known I was different, but put that down to other factors. As I gradually got to learn more about autism and what it can look like, I came to the realisation that I could be autistic. After a few years stewing on a waiting list, some form filling, and a couple of assessments, I got my official diagnosis.

So while that wasn't a surprise, many things about being autistic have been. Let's take a look at 5 of them.

Being autistic doesn't necessarily make you “feel” autistic

This is quite a common response amongst late-diagnosed people, particularly women, I've found. I mean, we don't know what it's like to feel not autistic, so the way we feel is just normal to us. Sometimes, it has us questioning our diagnosis,

particularly when we meet other autistics whose traits are more stereotypical or pronounced.

We're so used to seeing autism presented one way, that it can be hard to understand that it presents in a huge variety of ways and it can be hard to reconcile our view of autism with our own experience of it. I've found that sharing interests, behaviours and preferences with other autistic people can help dispel doubts about my own diagnosis.

A diagnosis can make your autistic traits more pronounced

This was one of the weirdest things that happened to me, and I've heard of it happening to other late-diagnosed autistics.

While we might not necessarily feel autistic much of the time, we can react or behave with stronger autistic traits post-diagnosis. For example, I was never much bothered by crowded spaces before, but now they drive me bananas. I used to mask heavily in social situations but now I just walk off if I'm bored.

Of course, some of these things will be the effect of other life changes for late-diagnosed people, especially women. The menopause, caring for kids (often also neurodivergent), elderly parents (ditto) and the fact that once you get to a certain age you stop caring so much about people-pleasing and decide to spend your limited energy on yourself.

Prejudices don't go away (at least, not immediately)

As a Gen X person, I grew up with the same prejudices as the rest of my generation. Autism meant Rain Man or Sheldon from the Big Bang Theory. Autistic people are white men with unfashionable hair, square glasses and a flat way of speaking.

While some autistic people are indeed like that, it's not universal. But it takes time to unlearn prejudices – and an autism diagnosis is as much about unlearning as it is about learning!

It's not our fault that we grew up with such a narrow view of autism, but it is our responsibility to address it. I'm grateful to the autistic people I've met who've helped me break down these prejudices and shared their version of autism with me.

Advocacy is hard work

I was involved in autism advocacy before my diagnosis, but after diagnosis, it shifted from being a public project to a more personal pursuit. In other words, I started advocating for myself as well as other people.

It's much harder!

Many people, autistic and otherwise, find it easier to stand up for their friends than for themselves. I also found that my personal requests for accommodations were more likely to fall on deaf ears than the reasonable adjustments that I talked about in my training. Asking to be included, in my experience, often results in silence or defensiveness, so it's frequently a waste of time. Those organisations which listen make it all worthwhile though.

Being autistic doesn't automatically make you part of the autism community

When I found out I was autistic, I looked forward to meeting other autistic people. To understand myself and other people more deeply. To be part of a new gang.

While the first two happened, the last one didn't. And that was really disappointing to me initially, the feeling that I wasn't accepted by "my own people". Having spoken about it, I've discovered I'm not the only one – a minority within a minority within a minority – which makes it feel less isolating.

On the plus side, I've met many autistic people who are brilliant and welcoming and open-minded about our differences. Advocates, academics, comedians and just ordinary autistic people trying to make their way in life. And in connecting with, learning from and befriending them, I am, in a way, creating my own little community. One where everyone is welcome.

High-functioning autism: Symptoms, diagnosis and support

A 'high-functioning' autistic person may excel in a field that plays to their strengths, but still be incapacitated by anxiety - Liam Tooher

High-functioning autism isn't an official medical diagnosis, but is often used to pin down a complicated set of behaviours. Yet the term itself is not without controversy. Commonly used to describe autistic people with normal to high intellect, and no speech or language delay, many feel the term itself is both unhelpful and even harmful.

Jump to:

- Why is it considered controversial?
- What is high-functioning autism?
- Characteristics
- Diagnosis
- Support options

Why is it considered controversial?

"Many find the label offensive," says Dr Rachel Moseley, an autism researcher at Bournemouth University. "It simplifies the complexity of an individual person and gives no actual impression of what they struggle and excel at, and where they need help." On the other hand, those perceived as being low-functioning often have their autonomy and independence written off which leaves them marginalised in society.

What is 'high-functioning autism' and how does it relate to a person?

Dr Moseley explains that a 'high-functioning' autistic person might well excel in a field that plays to their strengths, like science or mathematics, but still be [incapacitated by anxiety](#) and feel [overwhelmed in the face of navigating the social world](#).

Some have IQs in the average range (or above), while others have learning disabilities and/or are non-speaking. Yet the specific support needs for many can range from needing help with sensory sensitivities or communication to self-care or independent living skills.

"The person might maintain a [challenging job](#), but it may take all of their energies and they may struggle with all the social complexities of it – such that they need a lot of emotional and practical support at home," she says.

Instead of using what they term a 'functioning label', the National Autistic Society refers to autistic people in terms of having high or low support needs.

Dr Moseley says that when a person receives their diagnosis, it will assign them a level of one to three, where level one means they require *some* support, while level three indicates the need for very substantial support.

Characteristics of high-functioning autism

Some of the most common characteristics include:

- Sensory overload
- Challenges picking up on social cues or differences in communication

- Anxiety or mood disorders
- Challenges with organisation
- Repetitive actions

Sensory overload

Studies have shown that sound is one of the most commonly experienced examples of sensory overload.

"Many autistic people will experience sounds as unusually intense or intrusive, possibly even physically painful," says Dr Moseley. She adds that sounds may "also trigger strong emotions, like anxiety or anger, and many struggle to tune out the sounds in the environment – for example, when trying to listen to one person while conversation is going on around them."

But this is just one of many sensory sensitivities which can be experienced.

According to the National Autistic Society, autistic people can experience under or over sensitivities to light, touch, smell, taste and balance.

"An important flip side is that sensory sensitivities can, in some circumstances, be experienced as joyful," says Dr Moseley. "Autistic people may experience feelings of peace or delight when able to touch a certain texture, see coloured lights or moving objects, as well as from saying or hearing a particular sound."

Challenges picking up on social cues or differences in communication

Many autistic people experience issues when it comes to reading social or nonverbal cues, as well as having a tendency to interpret language literally.

Dr Moseley, who herself is autistic, says that this often contributed to her own struggles while growing up. "My difficulties were always around understanding other people," she says. "Since I was a very small child I was often confused by what was going on around me. I didn't always understand when adults asked me

to do things, or forbade me from picking up fragile objects or trying to hide in crowded places. Later on, I'd sometimes struggle to understand what teachers wanted from me, even though I was academically quite bright."

Challenges with organisation

Research has also found that autistic people can sometimes struggle with initiating and completing tasks, managing time effectively, and staying organised, which can lead to them [feeling overwhelmed](#) – both at school and in the workplace.

Dr Rebecca Flower, a psychologist at La Trobe University in Melbourne says that while it is very possible for many autistic people to work in any role, employers need to communicate their expectations clearly.

"Make it clear what needs to be prioritised," she says, "and what might be unpredictable in a role, why this is the case and what to do when something comes up unexpectedly."

Anxiety or mood disorders

According to the National Autistic Society, around 40-50 per cent of autistic people will go on to receive a diagnosis of anxiety. Shockingly, almost 32 per cent of autistic women are hospitalised with some kind of mental illness by the age of 25.

Dr Moseley says her own mental health became progressively worse as she reached adulthood. "Mental illness and suicidality are especially [severe in autistic women](#) without intellectual disability, who society will often deem high-functioning," she says. "My mental health worsened along with my growing awareness of how different I was."

Repetitive actions

Some autistic people will engage in repetitive behaviours such as finger-flicking, arm or hand flapping and head banging. There are thought to be a number of reasons for this, which range from enjoyment from the behaviour, a coping mechanism for dealing with stress and anxiety, or an attempt to modulate sensory input; as focusing on one particular sound can reduce the impact of an excessively noisy environment.

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Diagnosing high-functioning autism

The current diagnosis procedure involves a clinician asking questions about a person's experiences and making assessments about their behaviour.

In children

The autism assessment involves

- Assessing the child's level of development through watching how they interact and play
- Consulting with the parents to gain an understanding of whether they've reached different developmental milestones
- Examining reports from their GP, nursery and school
- A school or nursery visit may be undertaken to observe how they interact in class and at break time

In adults

- They are typically asked to complete a form and provide information relating to their lifelong developmental history, starting from infancy up to the present day, with the help of a family member or lifelong friend
- Questions will examine how they have developed physically, socially and emotionally – as well as asking for information on rigid and repetitive behaviours, sensitivities, and lifelong challenges that the person has faced
- If considered eligible, the person will then have two appointments to continue these assessments in person. According to the NHS, it can take up to two years for a final diagnosis to be reached

Dr Suzi Sapiets, a researcher at the University of Kent, who was [diagnosed with autism](#) in her 20s, feels that many of the diagnostic tools need to be broadened to take into account the fact that autistic people can have multiple forms of neurodivergence, from dyslexia to learning disabilities and Tourette's.

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Support options

- Tailoring sensory preferences at work
- Counselling and access to mental health services
- Practical financial and living advice

Dr Flower says that common forms of support which can help autistic people, especially in the workplace, involve being aware of sensory sensitivities and being very clear about communication.

"This can include asking about sensory preferences and needs, changing a lightbulb to a warmer or yellow bulb, fitting a window blind, or allowing employees to wear noise cancelling headphones," she says.

With research showing that mental health difficulties and suicidal thoughts are most common in autistic people who would have been described as 'high-functioning', Dr Moseley says it is important to be aware that an autistic individual excelling at their job may also be struggling in other areas of their life.

Recommended

Can a healthy diet help autistic children to thrive?

[Read more](#)

Psychologists at the University of Nottingham have found that improving access to mental health support, such as counselling, is particularly important to prevent self-harm and suicide in autistic people.

"The person might be channelling all their energies into their work and activities, but struggle to maintain their home and finances, and take care of their health," says Dr Moseley. "For me, however well I appear to be coping, I would likely have died long ago if not for my family's intervention. My mother still helps me with everything from social worries and issues at work, to understanding bills and staying on top of my house."

Living with autism

Looking back, Dr Sapiets says that growing up prior to her autism diagnosis was one of the most challenging times of her life. "I thought there was something wrong with me, due to bullying and trauma I've experienced," she says. "But discovering I am autistic, and my subsequent journey to understand and accept myself as I am, has been one of the biggest things that's helped me."

During her teenage years and early 20s, she describes attempting to alter her behaviour to fit in with others, something which had a negative impact on her mental health. However, since being diagnosed she has been able to take steps to understand her strengths and needs more acutely, as well as receiving trauma therapy from an autistic therapist.

"There are some challenges I experience – for example, I can get extremely anxious in social situations – and I sometimes find it difficult to articulate myself," she says. "I often struggle with lots of different noises at once and strong smells and I can easily get overwhelmed with unexpected changes."

She describes one of the biggest things which has helped her has been being assigned a mentor through the Government's Access to Work scheme. The mentor helps plan her work, prepare for and process stressful situations, and provide emotional coping strategies in the workplace.

"From personal experience, most of the difficulties I have experienced in my life have not been due to me being autistic, but due to a lack of understanding, acceptance and support from others," she says. "It's so important to understand each autistic person's individual needs and strengths to enable them to thrive."

What Does It Mean to be Neurodivergent? A Therapist Explains

What do the following celebs have in common? Sir Anthony Hopkins,

Florence Welch, Simone Biles, Dan Aykroyd, Albert Einstein, Elon Musk, Sir Isaac Newton, Richard Branson, Billie Eilish, Tim Burton, Justin Timberlake... Apart from being on a dream dinner party list (imagine the conversation!) they've also self-disclosed as being neurodivergent.

'Neurodivergence' is a relatively new term that aims to reflect the different ways our brains help us to engage with the world – and people – around us. Importantly, neurodivergence is a social concept and not a diagnosis. You cannot be diagnosed as neurodivergent, but you can be diagnosed with attention-deficit/hyperactivity disorder (ADHD), dyslexia, down syndrome, autism spectrum disorder (ASD), etc – all of which can see a person's mental function differ from those of an average person, a 'neurotypical'.



What is neurodivergence? | Image: Annie Spratt© Provided by Man of Many US

The term was first coined by Judy Singer, a popular '90s sociologist who used it with a view to reframe how we feel and treat the people who show signs of neurodivergence. When we say 'treat' here, we mean in terms of respectful engagement with people, instead of treatment in the medical sense – as neurodivergence is a social term and not a diagnosis, there actually is no treatment for it.

Singer said that neurodiversity is 'a state of nature to be respected', an 'analytical tool for examining social issues', and 'an argument for the conservation and facilitation of human diversity'. Put simply, it's not a negative word and actually

can help us to better interact as humans, by being aware of the differences in which individuals' brains develop and work.

What are the Signs of Neurodiversity?

A neurodivergent person's brain works slightly different to the average person's brain. Within the group of neurodivergent people, each individual's brain may also work and process slightly differently – it's a spectrum and everyone must be treated as an individual.

Neurodivergence can first become apparent when reaching growth milestones established by medical professionals and society for children. The individual may not process information as their peers do, or have trouble interacting socially with other people, or difficulty communicating 'appropriately' (i.e. being 'too loud'), all of which become especially visible during school.

Later in life, differences in processing emotion or the inability to work in groups can also be demonstrative of the different mental functions experienced by those who are neurotypical. However, there are also some positives to being neurodivergent – the ability to problem solve, render 3D images imaginatively, and fight for fairness are just some of them.

How We Think About Neurodiversity Matters

It's an innate human need to make sense of something, especially when we may not understand it. That's why neurodiverse individuals may have previously had trouble fitting the rigid structure of schooling that the Department of Education previously had, or difficulty working in traditionally corporate companies. We believed as a society that neurodivergent individuals should work, play and live in neurotypical structures.

We've come a long way, though, in knowing how to identify, assist and support neurodivergent individuals – and society is slowly catching up. The belief now is that there is no 'right' way to learn or think. We simply process and communicate in unique ways – sometimes with strengths and sometimes with struggles if compared to a 'neurotypical' individual.

What to Do If You Think You May Be Neurodivergent

If you identify with some of the behaviours mentioned above and think you may be neurodivergent, a medical doctor can refer you to a specialist who can provide support – be that a neurocognitive assessment for a specific disorder, medication, resources, or simply tools to better manage neurodivergence in the world.

There are long waitlists for these assessments in Australia, and so it can be handy to talk with a therapist about concerns you have around social or learning challenges while you wait for any formal support. Counsellors can help you to identify and leverage your strengths within the specific contexts you need – at work, at home, with your relationships.

Becoming your own self-advocate does a world of good. Have a think about what your friends, family, employer and team can do to support you. This may be as simple as shifting your desk to a quieter zone in the open-plan office, or going to a particular supermarket instead of that noisy one that can make you feel overwhelmed.

Finally, one of the best things you can do if you think you may be neurodivergent is identify your superpowers – those strengths in mental processing and behaviour that neurotypical people may not have access to. Identify them and own them. It's our differences that make us awesome – just think of that dream celeb dinner party list.

This Sensory-Friendly Tech Helps Me Function as a Neurodivergent Person



Sensory-friendly tech helps you self-regulate your emotions and focus on critical tasks. John Carlsen/CNET

Sensory sensitivity is a common trait among neurodivergent individuals that can quickly turn a good day into a bad one. As an ADHDer, someone with [attention deficit hyperactivity disorder](#), I can attest to the role of sensory input in my life. In my case, sensory processing is like a metal detector shifting between under- and over-stimulation at any moment.

It's taken a lot of practice to spot my sensory sensitivities -- and decades to find practical strategies for regulating them at home, work, school and everywhere in

between. When I successfully manage my senses, I tend to [sleep better](#), have fewer mood swings, be more productive and [enjoy socializing](#).

There's a fantastic resource on [sensory differences](#) from the U.K.-based National Autistic Society if you want some examples of how sensory sensitivity presents in individuals.

For this article, I want to explore some sensory-regulating tech that has helped me and other neurodivergent folks around me.

I should first clarify that sensory sensitivity hits every neurodivergent individual differently, so my suggestions may not be helpful to everyone.

To help keep things accessible for readers with [Autism](#) and ADHD, I'll skip the creative headings so you can find your way around easier.

No-tech sensory regulation strategies

Spending time in nature is one of my favorite no-tech tactics for overcoming sensory overload. John Carlsen/CNET

Many no-tech strategies can ease sensory issues. This is particularly true for self-care like a [balanced diet](#), exercise, meditation, [stimming](#), personal hygiene and household chores. It's best to work with a doctor or therapist to identify sensory triggers and address their impact.

It's often beneficial to share your sensory stimuli with the people who regularly interact with you, like family members and coworkers. Some things are harder to accommodate, especially in a busy workplace, but finding [reliable allies](#) is vital.

Allies can help you communicate genuine concerns with others:

- Asking to sit in a quiet corner of the office temporarily or permanently.
- Requesting a partition to help with visual distractions.

- Finding alternatives to physical greetings like hugs and handshakes.
- Suggesting restaurants with consistent, sensory-safe options if you're feeling unadventurous.
- Politely asking others to eat food in a designated kitchen or break room.

There are too many no-tech sensory regulation hacks to list here, but hopefully, these examples can give you some ideas.

Sound sensitivity

four-sound-machines-on-desk.jpg



White noise machines, like the LectroFan and Sleep Easy, have multiple sound options to help you find the perfect tone. John Carlsen/CNET

Sound is my biggest sensory trigger by a mile. When there's not enough noise, I laser-focus on intermittent sounds around me, like the fridge, pipes, electrical circuits, air-conditioning and what other people are doing. On the opposite end of the spectrum, a baby's piercing cry or overlapping conversations in a tightly-crowded room can be [downright debilitating](#).

Auditory under-stimulation

Most of the time, I'm understimulated, which brings new meaning to the "it's quiet, too quiet" movie trope. The fix is as easy as it comes: white noise. At the very least, I suggest running a [fan](#) in the background of the room you're in, even if you're not using it for cooling. A [sound machine](#) is an even better option.

My go-to sound machine is the [LectroFan Evo](#), which comes with 22 non-looping sounds, including white, pink and brown noise alongside various fans and ocean noises. It runs off USB, making it super portable -- although LectroFan sells a couple of battery-powered variants with fewer sound options. I mostly use the LectroFan Evo when I sleep, but it works well for ambient noise if needed.

Video, music and audiobooks can work for ambient sound as well. You may need to curate options that require minimal brainpower to avoid becoming distracted.

When I work, I often listen to instrumental soundtracks or white noise podcasts on [Spotify](#) -- lyrics and writing don't mix well for me. I occasionally revisit an [Ambient Engine Noise](#) video on YouTube that a colleague shared years ago.



Thin pillow speakers can help create ambient noise in bed. John Carlsen/CNET

My wife who is also an ADHDer listens to audiobooks to fall asleep. She tried earbuds for my sake, but they were uncomfortable. Eventually, she discovered pillow speakers, like these [ultra-thin models](#), that connect with a Bluetooth receiver like the [Anker Soundsync](#).

You can find wireless pillow speakers, they may be too thick to be comfortable, even under a pillow. Plus, pillow speakers tend to take a beating and cheap models remove some stress around wear and tear. Fortunately, a pillow speaker is unnecessary if you don't share a room with anyone.

Auditory overstimulation



Noise-canceling headphones are potent weapons against overstimulation. John Carlsen/CNET

I have two tech recommendations for auditory overstimulation: [smart plugs](#) and [noise-canceling headphones](#). With smart plugs, you can quickly turn off any device causing sensory issues. You can even set up an Alexa or Google routine to control groups of devices. A simple voice command can make a world of difference the moment you feel overwhelmed.

Noise-canceling headphones are a godsend for overstimulation. You don't even need to be listening to anything. This is helpful when my ever-present white noise fails to cover up low-frequency bass outside my home.

Whether you get over-the-ear headphones like the [Sony WH-1000XM5](#) depends on your preferences and comfort. Still, plenty of [noise-canceling earbuds](#) are available if that's more your speed. I usually toss my [Pixel Buds Pro](#) in a pocket when I go out, especially when I know I'll be in a crowded place.

You can opt for [budget noise-canceling headphones](#) if you don't mind a decrease in effectiveness compared to pricier brands or skip active noise-canceling altogether in favor of hearing protectors with Bluetooth audio. My nephew with Autism adores his [3M WorkTunes](#), which provide ample noise reduction for less than \$50 while he watches [binaural beats videos](#).

Sight sensitivity



The decorations in my home office keep things visually interesting so I can better focus on repetitive tasks. John Carlsen/CNET

Aside from unpleasant car headlights, sight-related sensitivities can be trickier to identify. Ultimately, it boils down to how you perceive light and movement. Dull environments without much visual variety can sap your motivation, while too much light -- or the wrong kinds of light -- can prevent you from relaxing.

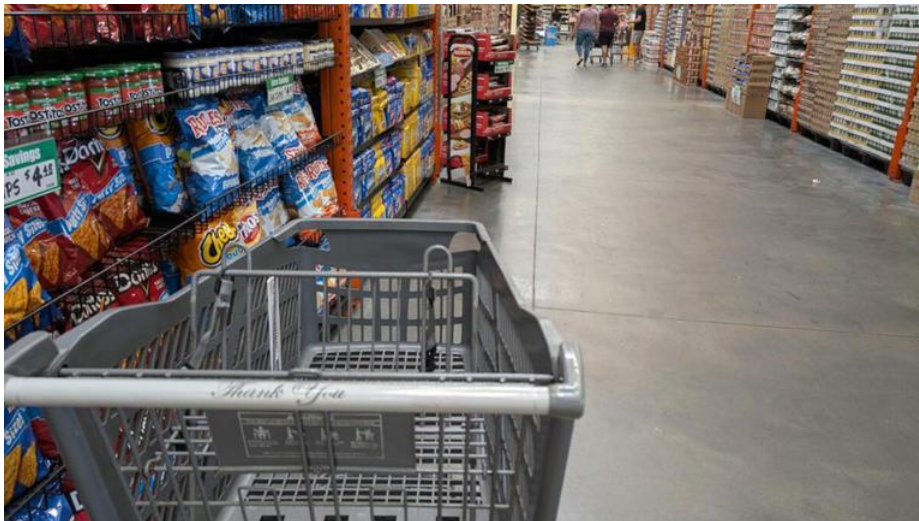
Visual understimulation

Many neurodivergent people rewatch the same TV shows, and I'm no exception. Even if I'm not actively watching the show, there's a benefit in having the extra visual variety while I do chores, read or assemble a Lego set.

Comfort media like this makes context-switching easier since there's a baseline stimulation to keep the mind active. Best of all, it works with any [streaming service](#) if the right show is available.

You can also experience visual understimulation in places with bland colors and subdued lighting, especially office buildings. Consider adding a few colorful decorations and extra light sources to your desk.

Visual overstimulation



A crowded grocery store can be visually overwhelming, but reducing audio stimuli with noise-canceling headphones can lessen the impact. John Carlsen/CNET

Light is a major contributor to visual overstimulation, but it's not always about brightness. You should also consider the color and visibility of light sources. Interior lighting is generally easier to manage since you can craft an [ambient](#)

lighting environment to meet your needs using [smart lighting](#) and strategic [smart home routines](#).

For a low-tech option, consider keeping a hat or sunglasses handy to deal with excess light -- indoors and outdoors. I've worn cowboy hats at my desk to deal with overhead fluorescent lighting.

Natural and exterior lights are harder to control making it difficult to stay on task or [sleep well](#). Try putting up blackout curtains and smart blinds in your home or wearing a comfortable [sleep mask](#).

Touch, taste and smell sensitivity



My primary fidget toy is a flexible silicone ring . John Carlsen/CNET

I spend a surprising amount of time regulating my other senses through fidgeting, sitting in odd positions that make my back hurt, adding way too much

garlic salt to a meal or rushing to see if my cat successfully buried his daily gift in the litter box.

Only recently did I make the connection that these were coping mechanisms to deal with sensory problems.

Touch sensitivity



Stress balls, fidget spinners and weighted blankets are known to help with touch understimulation. Speks

Our sense of touch plays a significant role in physical pain and pleasure. Without enough tactile stimulation, we start to feel anxious and isolated from the people around us. It's just as easy to overload our sense of touch with unwelcome textures and physical discomfort.

Studies have shown that [hugging and self-soothing](#) can reduce stress in everyone. Still, it may be even more valuable to neurodivergent individuals

dealing with social anxiety. Although a daily supply of touch from others is your best option, [weighted blankets](#) can help balance tactile understimulation.

Similarly, try using [fidget toys](#) if you have restless hands and legs during a meeting or while watching a movie. The simple, repetitive nature of fidget toys provides just the right amount of tactile stimulation so you can focus on active listening.

Texture is a source of tactile stimulation that varies among neurodivergent individuals. Smooth surfaces, lotions, breathable clothing and comfortable [bed sheets](#) are often suitable for soothing sensory overload, but some people may prefer heavier and rougher textures.

Taste sensitivity



Keeping track of conflicting spice combos can help you find sensory-safe recipes to try. John Carlsen/CNET

The sense of taste is one of the more manageable sensory inputs since it boils down to what you put in your mouth. If you're like me, flavorful foods and chewing gum can help with understimulation. It is a good opportunity to try a new hot sauce or a [food-grade silicone sensory chew](#).

If you struggle to drink enough water, you should think about why. [Water filters](#) and flavor enhancers can help adjust the flavor to your preferences. The texture also matters, so try using ice cubes or a [soda maker](#) to add variety.

Mouthfeel is an essential aspect of food to consider if you're neurodivergent. Unexpected textures can quickly ruin a meal, so many of us like our food to feel consistent. Despite their flaws, [processed foods](#) are consistent enough for most sensory-safe meals. Fresh ingredients can work with some preparation, like steamed vegetables or using an [immersion blender](#) for a smoother sauce.

People sensitive to food items touching each other can find durable [divided dinner](#) and [portion-control plates](#) without decorations or graphics. We used to have [melamine cafeteria trays](#) from a thrift store, although admittedly more for an ADHD impulse than food separation.

Smell sensitivity



Air purifiers are some of the best tools for fighting indoor odors. John Carlsen/CNET

[Smells](#) from food, trash, perfume, body odor and household chemicals are the worst offenders in this category. Unfortunately, you're limited to two options for dealing with overpowering smells: removing or covering them up.

Opening the windows for fresh air can quickly remove smells if the outside air is clean enough, but this isn't always an option during colder months. If you live near an industrial area or busy road since, you're trading one odor for another. Investing in an [air purifier](#) with an activated charcoal filter can help remove smells without opening the windows.

Air purifiers are great for odor control, but they take time to achieve results. If you can handle pleasant smells, an air freshener or [essential oil diffuser](#) is a reliable way to curb odors. Cat owners might enjoy how a [Whisker Litter-Robot 4](#) reduces how often you need to clean the litter box, even if you still need to empty the stinky waste bin.

With any luck, you've found a few strategies to help manage your senses and prevent sensory overload.

The information contained in this article is for educational and informational purposes only and is not intended as health or medical advice. Always consult a physician or other qualified health provider regarding any questions you may have about a medical condition or health objectives.

I Wish I'd Prioritized These 5 Self-Care Habits Sooner in My Entrepreneurial Journey

Being an entrepreneur can be very exciting and rewarding. It often comes from passion and can result in good money and [personal happiness](#). However, it can also cause stress and emotional pressure. This becomes even more important when you think about mental health and how to manage your time well.

Good time management can help you finish tasks in less time each day. Every day, you will face many challenges. If you do not pay attention to health and wellness, even the most successful entrepreneurs might lose [track of their goals](#), making them harder to reach. Entrepreneurs feel more stress than many others, and it is easy for them to feel overwhelmed quickly.

Taking care of yourself regularly is important for success, whether you run a store, serve clients or host a podcast. Many entrepreneurs tend to focus on work, forgetting about self-care, which is a popular term now. Even doing one self-care practice can improve your productivity over time. It can also lead to a happier life and a [positive attitude](#). This helps you feel fulfilled, just like the best entrepreneurs feel in their careers. Here are some great self-care habits to practice as you build your empire.

1. Fill your body with good nourishment

Have you heard the phrase, "Your body is your temple"? If you have, think about why you would put cheap food into your body. If you want the energy and strength to run a business, you must eat healthy meals. It's also important to get enough rest and exercise often. When people work for themselves, they may stay up late chasing their dreams. This can lead them to eat whatever food is nearby, which may not be good for them.

Even if you have to work long hours, eating a balanced diet can really help you. A good choice is to use a meal delivery service that brings you ready-to-cook meals or meals that you can heat up. Also, remember to stay hydrated! Keep a jug of water at your desk.

2. Prioritize sleep

The saying "I'll sleep when I'm dead" and the idea of "Work, Hustle, Grind" are outdated. Many entrepreneurs feel they should not sleep just to work on their businesses. However, going to bed at the same time each night can help you feel more productive.

A regular sleep schedule gives you a clear mind and can improve your health. The CDC says that 1 in 3 adults do not get enough sleep each night. Aiming for about 7 hours of sleep is important for an average adult.

Though resting seems simple, [many entrepreneurs struggle to relax](#). They often think, "I need to send just one more email," or get stuck in "hustle mode," which affects their rest. Creating a regular sleep schedule helps you discover the number of hours you really need to sleep. Resting isn't difficult, but allowing ourselves to rest is the challenge. I started using high-quality magnesium for better sleep.

3. Business boundaries are a must

When you start your business, you may feel like you need to take calls all day, reply to emails quickly and always be available for your clients and team. However, not having limits can lead to problems. It can make you lose sleep, feel exhausted and choose unhealthy food. Before you know it, burnout may show up at your door.

Many people who want to be CEOs believe owning a business lets them make their own rules. They think they can do whatever they want and pick their own hours. While this is somewhat true, running a business is about meeting your

clients' needs and solving their problems. It is very important to tell your clients when you are available for calls and your hours. A good tip I have found useful is to put my response times in my email signature.

4. Take time to disconnect

You might notice a common theme in these self-care tips. A lot of entrepreneurs work too hard and get distracted by [social media](#). Even if you feel the need to keep working, you should make it a priority to take short breaks in your daily routine. These breaks are a great way to recharge. They can also help you with networking.

A quick break could be sitting outside and enjoying a nice day. Taking time away from the front of a screen helps you stop thinking about your tasks and solving problems. It also stops you from wasting energy on calls. This is a good way to feel refreshed.

5. Don't be a solopreneur - learn to say 'no'

Taking care of yourself means understanding when to say "no." It also means knowing which tasks you can let others manage. Everyone has their own way of doing things. We may expect others to do them a certain way. But you can add more value to your work when you think about your limits.

Touch and the Autism Spectrum

How to help those on the autism spectrum who have touch **aversion**.

*"Persons with **autism** may exhibit repeated body movements (hand flapping, rocking), unusual responses to people or attachments to objects and resistance to changes in routines. Individuals may also experience sensitivities in the five senses of sight, hearing, touch, smell and taste." — Autism Society of Delaware, 2005*

Here is an often too common scenario:

An NT (neurotypical) mother (or father) has a child on the autism spectrum. The parent wants to show love to her child. But she has a secret. Her young one hits her, turns away from her, and does not want to even be close to her. The NT mother wonders, what is she doing wrong?

Or here's another scenario:

Aspie guy meets NT girl. NT girl wants to show her affection to her boyfriend. She comes up behind him and gives him a hug. He stiffens and pushes her away. She is bewildered, confused, and sad. Why doesn't he want her hug?

To all of you on the autism spectrum, I have a request: Please be patient with us. We have a lot to learn.

Fortunately, there is more and more information available about autism characteristics. One of these has to do with strong sensitivity to touch. And it's not just touch. It can be light, sound, and smells.

But the focus of this article will be how many individuals with autism experience touch, some of the challenges with touch, and how both individuals with autism and individuals without can understand and relate to each other better in light of the facts.

Why the Difficulty with Touch?

I don't know. I have to admit that I'm open to your comments on this one. In fact, it may be the topic of a future article. I had the same question, and I read a lot of different hypotheses, but I'm not sure that any one of them is conclusive. I could be wrong. Occupational therapists, please let me know if you know of any new research.

Suffice it to say that even on the autism spectrum, each individual may be different in how he or she experiences touch, light, sound, or smell.

Common Autism Experiences with Touch

I sincerely thank some individuals on the autism spectrum forum at Wrong Planet for sharing some of their experiences with touch.

Most of the individuals who responded indicated the following issues with touch:

- Light touch, in general, seemed to be more unpleasant than deep touch.
- Unexpected touch, even from a loved one, could be very unpleasant.
- Touch from distant acquaintances or from strangers, even if meant to be reassuring, is not. (Come to think of it, this sounds like a pretty good practice for anyone, right?)

What Touch Aversion Might Look Like

- Your child tells you on no uncertain terms that all the tags **MUST** be cut out of her clothing.
- Your child may resist having his hair combed or teeth brushed because of the very uncomfortable sensations.
- Your partner might pull away from you when you try to hug her or kiss her.
- Children, teens, and adults on the autism spectrum may only be able to tolerate foods with certain types of textures (e.g., crunchy versus smooth, hard versus "slimy").

Solutions for Sensory Issues

- Brian King, diagnosed with [Asperger's](#) and father of three kids on the spectrum, wrote a fantastic article called [6 Simple Sensory Solutions for the Autism Spectrum](#). Read the full article for ways that you can use a rolling pin, a hanging bar, a bean bag chair, a back pack with weights, an indoor trampoline, or a wall to regulate your tactile system! One of his own personal favorite relaxation and de-stressing techniques is to have his wife or kids given him the rolling pin treatment. They take a regular rolling pin and slowly give him a deep pressure massage while he is [lying](#) down on his stomach.
- Weighted vests can often bring a deep sense of calm and relaxation for kids, teens, and adults alike.
- Weighted blankets have also been shown to be very comforting to children and adults on the autism spectrum.

Occupational [Therapy](#)

Occupational therapy can also be a helpful way to get professional help with any touch aversion issues that may be causing a lot of stress or pain in your life.

[Education](#) and Communication

If you are a parent or partner who does not have autism, take the time and show that you care by making the commitment to become a student of autism spectrum facts and characteristics.

For example, just reading this article may help you separate yourself from your autism loved one's sensory issues. In other words, maybe you're not disgusting, loud, annoying, and unbearable to be around, but rather, your partner or child is wired differently, and has varying tolerance for different sounds, smells, and touch.

For example, I have often been mystified as to why certain loved ones with autism spectrum conditions seemed so irritable and [stressed](#) out.

But now that I understand some of these facts about sensory challenges, I think of it this way. What if I couldn't stand hearing someone scratch their nails on a chalkboard? Now imagine hearing this all day continuously. Do you think I might be stressed out?

If you are an individual with autism, be equally open to getting some relief and learning how to navigate around some of your touch issues. As I learned from my acquaintances at Wrong Planet, it helps for parents and kids, boyfriends and girlfriends, etc. to talk to each other and learn what works and what does not work.

Signs of Asperger's or High-Functioning Autism in Adults

If you're an adult and you've always felt "different" or deeply anxious in social situations, or you're just really struggling with aspects of adulting, you may be wondering if you are autistic.

With increasing awareness of autism and higher percentages of [kids being diagnosed since 2000](#), many adults who would have previously been considered for what was previously referred to as Asperger's Syndrome (Aspies), high-functioning autism, or "mild" autism are recognizing [signs of autism in themselves](#).

Today, the formal diagnosis for all of these is Autism Spectrum Disorder (ASD) Level 1, and many who qualify slipped through the cracks when they were younger.

Note: There are people in the autism community who oppose the use of Hans Asperger's name or functioning labels, but these older terms help people connect with what autism is. Banishing their use does not help the people still trying to figure out if they are part of the autism community, and for this reason, I will use them here.

While there are no definitive tests for autism (for example, you can't take a blood test or have an MRI done to find out if you have autism), there are certain signs that can point to it.

Let's take a closer look!

What is ASD Level 1?

ASD Level 1, like the other two levels of autism (ASD Level 2 and ASD Level 3), is characterized by difficulty with social interaction and communication, as well as repetitive behaviors, interests, or activities.

The latter can look like repetitive physical movements or verbal utterances, inflexible behavior, narrow interests, or hyper- or hypo-reactivity to sensory input.

Often, ASD Level 1 doesn't come with delays in speech though, something pediatricians look for that leads to earlier autism diagnoses.

This is one way people with ASD Level 1 get missed. Another factor that leads to later diagnoses is their relatively stronger abilities to "mask," or fit into normative behavior. Unfortunately, [masking](#) can lead to burnout and even mental health issues eventually.

They may end up with a series of incremental diagnoses that don't explain the entire constellation of symptoms, such as ADHD, depression, anxiety, OCD, or bipolar disorder.

If they get diagnosed at all, it's not until life's demands outstrip their ability to compensate that they end up with a correct diagnosis. They end up struggling for much longer without supports and interventions, sometimes for years or decades.

Signs of ASD Level 1 in Adults

[ASD Level 1](#) can involve a variety of social, emotional, and behavioral difficulties.

Common signs of ASD Level 1 in adults include problems with social interaction, a narrow range of interests, and repetitive behaviors or mannerisms.

Trouble With Social Interactions

Adults with ASD Level 1 may have difficulty with social interactions. They may feel socially awkward and have difficulty understanding jokes or sarcasm.

They may also struggle with social rules, such as taking turns in a conversation, when to speak in a group conversation, or how to respond to someone's social outreach via text message.

Adults with ASD Level 1 may have not learned the "hidden curriculum" of social relationships. This refers to everything people learn about social interactions that they were never explicitly taught. It includes unwritten rules and expectations that people are expected to intuit from their environment.

Challenges in Making or Keeping Friends

One of the most common signs of ASD Level 1 in adults is challenges in making and/or maintaining friendships. This is because they may have difficulty understanding social cues or reading nonverbal communication, which can make it difficult to interact with others or understand what others expect from them.

They may also tend to be more literal in their thinking, which can make it hard to understand jokes or sarcasm. In addition, they may be narrowly focused on a specific interest or hobby, which can make it hard to relate to others who don't share that interest.

They may also struggle to spend time in situations where they might meet others with similar interests due to sensory challenges.

One common myth about people with ASD Level 1 is that they prefer to be alone. People with ASD Level 1 have varying social "appetites" just like anyone else. There are many extroverted autistic people who strongly prefer being around other people, and if their social interactions are strained, this can cause great distress.

Sensory Issues

Many adults with ASD Level 1 have pronounced sensory issues. They can be either hyper-sensitive (very sensitive to the slightest input) or hypo-sensitive (craving the input).

This can cause them to strongly like or dislike things such as bright lights, different types of touch like hugs, smells, sounds, crowd noise, or scratchy fabrics to name just a few.

People with autism may also be very picky eaters due to their experience of certain tastes, textures, or smells as highly unpleasant.

In addition to the five senses we learn about in school, there are three others that can be impacted by autism – interoception (what's happening inside our bodies), proprioception (our position in space), and vestibular (sense of balance).

When these other three senses are impacted, you may experience problems with balance, coordination, or things our bodies tell us like knowing when you are hungry, full, cold, hot, or tired.

Not being able to control one's environment and the unpleasant sensory input that can occur can lead to anxiety in unfamiliar environments.

Narrow Interests

The narrow interests of someone with ASD Level 1 can create obsessions that lead to both positive and negative situations.

When someone is only interested in a few things, they can focus on them for long periods of time and become expert in them. For example, they might be especially interested in video games, math, or collecting certain items.

While these interests can be helpful in some cases – for example, a person with a strong interest in math or history or archeology may excel at that subject in school – they can also cause problems.

A person with a video game obsession may have trouble keeping a job or maintaining friendships because he or she spends too much time playing games instead of interacting with other people.

The flip side of this same trait is that interests can be the keys to friendships and even careers. For example, if you love role playing games, you can make friendships based on this shared interest. Regarding careers, Dr. Temple Grandin, one of the most famous people with autism, found her career through her love of farm animals and engineering more humane ways of handling them.

Trouble With Change

As any parent of a child with autism knows, routine is important. It helps to provide a sense of order and predictability in an otherwise chaotic world. For children with autism, routine can help to minimize anxiety and maximize functioning.

However, what happens when children with autism grow up? Do they still need the same level of routine and predictability? The answer appears to be mostly yes.

Many adults with autism report feeling overwhelmed by change. They may have difficulty understanding why a change is taking place, and this can lead to intense anxiety.

In some cases, adults with autism may become so attached to their routines that they are unable to adapt to change at all. While this may seem inflexible, it is important to remember that routine provides a sense of stability for people with autism.

Anxiety and Depression

While the exact prevalence is unknown, studies suggest that a significant proportion of the autistic population suffers from anxiety and depression. Years of struggle and not getting one's needs met takes a toll.

Common symptoms of anxiety and depression include persistent worry, low mood, difficulty concentrating, and withdrawal from social activities. They may also experience additional symptoms such as obsessive thoughts, motor tics, and sleeping difficulties.

Struggles With Social, Occupational, or Other Areas of Functioning

If you're reading this post, you might be thinking, "Okay, I have some of these characteristics, at least to a certain extent. But so do many of the other people I know. How do I know if it's truly ASD Level 1 - or just a quirk?"

In addition to the main criteria detailed above, physicians, when making a diagnosis of ASD Level 1, will consider how much the symptoms impact everyday life.

Do you have trouble sustaining [employment](#) or with basic activities of daily living? Is it challenging for you to maintain a social life or integrate with your community, perhaps despite profound educational achievement?

If so, then you might qualify for a diagnosis of ASD Level 1.

"I Never Had These Symptoms Before - Why Now?"

A final concern you might have is if these symptoms have suddenly appeared seemingly out of nowhere.

The short answer - probably not. For a diagnosis of ASD Level 1 in adults, the symptoms must have been present in the early developmental period of your life. However, you may

not have noticed that they manifested until later, particularly if you developed strategies to cope with them.

They can also seem to suddenly appear when you reach a stage in life where the expectations change rapidly, like the transition from high school to college, or college to career, or to independent living. Also, a change in circumstances (like a traumatic event) may impact the coping strategies you've developed and make those characteristics more pronounced – which is why you're noticing them now.

The opposite can be true, too, whereby you once noticed these symptoms and no longer do (because you've developed certain coping strategies that make the characteristics more manageable and less pronounced).

Final Thoughts

ASD Level 1 is a lifelong condition that can result in some challenges, but also creates great strengths that can be leveraged.

If you think you or someone you know may have ASD Level 1, whether or not you get a formal diagnosis is a very personal decision.

Many adults experience great self-acceptance and even a sense of vindication upon getting a formal [diagnosis](#), but there is also often a period of adjustment and grieving. Other adults feel their self-acceptance is enough if they don't require supports at work or therapy that requires a formal diagnosis.

Many autistic adults who are struggling to achieve what they know is their true potential find working with an autism life coach like the ones at Thrive Autism Coaching to be a very rewarding experience. With self-understanding, self-acceptance, self-advocacy, and appropriate supports, they can lead fulfilling and successful lives.

Level 1 Autism in Adults: Symptoms, Diagnosis, and Support Strategies

Whisper-thin threads of connection weave through the tapestry of adulthood, revealing the subtle yet profound impact of Level 1 Autism Spectrum Disorder on millions of lives. As our understanding of autism evolves, we're beginning to recognize the diverse ways in which it manifests, particularly in adults who may have gone undiagnosed for years. Level 1 Autism Spectrum Disorder (ASD), formerly known as Asperger's Syndrome, represents the mildest end of the autism spectrum, yet its effects can be far-reaching and significant for those who experience it.

Understanding Level 1 Autism Spectrum Disorder

Level 1 ASD is characterized by mild to moderate difficulties in social communication and restricted, repetitive behaviors or interests. Unlike more severe forms of autism, individuals with Level 1 ASD often have average or above-average intelligence and language skills. However, they may struggle with the nuances of social interaction and experience challenges in adapting to change or managing daily life tasks.

The prevalence of Level 1 ASD in adults is difficult to pinpoint precisely due to historical underdiagnosis and evolving diagnostic criteria. However, recent studies suggest that approximately 1 in 100 adults may meet the criteria for ASD, with a significant portion falling into the Level 1 category. This prevalence underscores the importance of understanding and recognizing Level 1 ASD in adulthood, as many individuals may have navigated life without a formal diagnosis or appropriate support.

Recognizing Level 1 ASD in adults is crucial for several reasons. First, it can provide a framework for understanding lifelong challenges and differences that may have been previously unexplained. Second, a diagnosis can open doors to appropriate support services and accommodations in various life domains, including education, employment, and relationships. Finally, understanding Level 1 ASD can foster self-acceptance and community connection for individuals who may have felt “different” throughout their lives without knowing why.

Signs and Symptoms of Level 1 Autism in Adults

The manifestation of Level 1 ASD in adults can be subtle, often masked by years of learned coping strategies. However, several key areas of difficulty are common among adults with Level 1 ASD:

1. Social Communication Challenges:

- Difficulty interpreting non-verbal cues such as facial expressions, tone of voice, or body language
- Challenges in maintaining reciprocal conversations
- Tendency to interpret language literally, missing nuances or implied meanings
- Difficulty understanding social norms and unwritten rules

2. Restricted Interests and Repetitive Behaviors:

- Intense focus on specific topics or hobbies
- Rigid adherence to routines or rituals
- Repetitive movements or speech patterns (stimming)
- Difficulty with transitions or changes in plans

3. Sensory Sensitivities:

- Heightened sensitivity to certain sounds, lights, textures, or smells

- Difficulty filtering out background stimuli
- Sensory seeking behaviors or avoidance of certain sensory experiences

4. Executive Functioning Difficulties:

- Challenges with organization and time management
- Difficulty with task initiation and completion
- Problems with flexible thinking and adapting to new situations
- Struggles with prioritizing and decision-making

5. Emotional Regulation Issues:

- Difficulty identifying and expressing emotions
- Challenges in managing stress and anxiety
- Tendency towards meltdowns or shutdowns when overwhelmed
- Struggles with empathy or understanding others' emotional states

It's important to note that these symptoms can vary widely among individuals with [Level 1 Autism Symptoms](#), and not all individuals will experience all of these challenges to the same degree.

Diagnosis of Level 1 ASD in Adults

Diagnosing Level 1 ASD in adults can be challenging, as many individuals have developed coping mechanisms that may mask their symptoms. Additionally, the diagnostic criteria for ASD have evolved over time, meaning that some adults who meet current criteria may have been overlooked in the past.

The diagnostic criteria for Level 1 ASD, as outlined in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), include:

1. Persistent deficits in social communication and social interaction across multiple contexts
2. Restricted, repetitive patterns of behavior, interests, or activities
3. Symptoms present in early developmental period (but may not become fully manifest until social demands exceed limited capacities)
4. Symptoms cause clinically significant impairment in social, occupational, or other important areas of current functioning
5. These disturbances are not better explained by intellectual disability or global developmental delay

Challenges in diagnosing ASD in adulthood include:

- Lack of historical information about early development
- Masking or camouflaging of symptoms due to learned coping strategies
- Co-occurring mental health conditions that may complicate the diagnostic picture
- Gender differences in presentation, with females often being underdiagnosed

Assessment tools and methods for diagnosing Level 1 ASD in adults may include:

- Comprehensive clinical interviews
- Standardized diagnostic tools such as the Autism Diagnostic Observation Schedule (ADOS-2)
- Self-report questionnaires
- Neuropsychological testing
- Interviews with family members or close friends (when possible)

The importance of professional evaluation cannot be overstated. A thorough assessment by a clinician experienced in adult ASD is crucial for accurate diagnosis and appropriate treatment planning. Self-diagnosis, while often a starting point for many adults suspecting they may have ASD, should always be

followed up with a professional evaluation to ensure accuracy and access to appropriate support services.

Differences Between Level 1 ASD and Other Levels

Understanding the differences between Level 1 ASD and other levels of autism is crucial for proper diagnosis and support. The DSM-5 introduced a three-level system to describe the severity of ASD and the level of support required:

- Level 1: “Requiring support”
- Level 2: “Requiring substantial support”
- Level 3: “Requiring very substantial support”

[Understanding the Levels of Autism in Adults](#) is essential for tailoring support and interventions appropriately. Here’s a brief comparison:

Level 1 ASD:

- Mild to moderate difficulties in social communication
- Some inflexibility in behavior
- Problems with organization and planning
- Can generally live independently with some support

[Level 2 Autism](#):

- More noticeable deficits in verbal and nonverbal social communication skills
- Marked difficulties in coping with change
- Restricted/repetitive behaviors obvious to casual observers
- Requires substantial support for daily functioning

[Level 3 Autism](#):

- Severe deficits in verbal and nonverbal social communication skills

- Extreme difficulty coping with change
- Restricted/repetitive behaviors markedly interfere with functioning
- Requires very substantial support for daily living

It's important to note that these levels are not fixed, and individuals may show characteristics across different levels depending on the context and the specific skill or behavior in question.

Common misconceptions about Level 1 ASD include:

- The belief that it's not "real" autism or is less challenging than other forms of ASD
- The assumption that individuals with Level 1 ASD don't need or want support
- The idea that all individuals with Level 1 ASD have savant skills or exceptional abilities

Living with Level 1 ASD as an Adult

Adults with Level 1 ASD face unique challenges in daily life and relationships. These may include:

1. Social difficulties:

- Trouble making and maintaining friendships
- Challenges in romantic relationships
- Difficulty navigating workplace social dynamics

2. Sensory overload:

- Struggling in environments with excessive noise, light, or other stimuli
- Difficulty with certain textures in clothing or food

3. Executive functioning challenges:

- Trouble with time management and organization
- Difficulty with multitasking and prioritizing

4. Emotional regulation:

- Struggling to manage stress and anxiety
- Difficulty expressing emotions appropriately

Despite these challenges, many adults with Level 1 ASD develop effective coping strategies and self-advocacy skills. These may include:

- Creating structured routines to manage daily tasks
- Using visual aids or technology for organization and time management
- Practicing social scripts for common interactions
- Engaging in regular self-care activities to manage stress
- Learning to identify and communicate their needs and limitations

Employment and education considerations for adults with Level 1 ASD are significant. Many individuals excel in fields that align with their interests and allow for structured, detail-oriented work. However, they may require accommodations such as:

- Clear, explicit instructions and expectations
- A quiet work environment or noise-cancelling headphones
- Flexible work hours or the option to work remotely
- Regular breaks to manage sensory overload
- Written communication for important information

Building a support network is crucial for adults with Level 1 ASD. This may include:

- Joining support groups or online communities for adults with ASD
- Seeking out mentorship programs or peer support
- Educating family and friends about ASD and specific needs
- Connecting with disability services at work or school
- Engaging with therapists or coaches specializing in adult ASD

Treatment and Support for Adults with Level 1 ASD

While there is no “cure” for ASD, various treatments and support strategies can significantly improve quality of life for adults with Level 1 ASD. These include:

1. Therapy options:

- Cognitive-behavioral therapy (CBT) to address anxiety, depression, and social challenges
- Social skills training to improve communication and interpersonal relationships
- Mindfulness-based therapies for stress management and emotional regulation

2. Occupational therapy and sensory integration:

- Strategies for managing sensory sensitivities
- Techniques for improving executive functioning skills
- Adaptations for daily living tasks

3. Medication management:

- While there are no medications specifically for ASD, some individuals may benefit from treatment for co-occurring conditions such as anxiety, depression, or ADHD

4. Support groups and community resources:

- Peer support groups for adults with ASD
- Skill-building workshops and classes

- Vocational rehabilitation services
- Online communities and forums for sharing experiences and advice

It's important to note that the effectiveness of these interventions can vary widely among individuals. A personalized approach, often involving a combination of strategies, is typically most beneficial.

Conclusion

Level 1 Autism Spectrum Disorder in adults represents a complex and often misunderstood condition that affects millions of individuals worldwide. While it presents significant challenges in social communication, behavior, and daily functioning, many adults with Level 1 ASD lead fulfilling lives with the right support and understanding.

Early recognition and support are crucial for improving outcomes and quality of life for adults with Level 1 ASD. By providing appropriate interventions, accommodations, and understanding, we can help individuals with ASD navigate the complexities of adult life more effectively.

Encouraging acceptance and understanding in society is paramount. As awareness of adult ASD grows, it's essential to foster inclusive environments in workplaces, educational institutions, and communities that recognize and value neurodiversity. Future research and advancements in adult ASD support hold promise for improving diagnostic methods, developing more targeted interventions, and enhancing overall quality of life for individuals with Level 1 ASD. As we continue to unravel the complexities of autism across the lifespan, we move closer to a world where all individuals, regardless of neurological differences, can thrive and contribute their unique strengths to society.

For those wondering [“Am I Autistic?”](#), it’s important to seek professional guidance. While self-reflection and research can be valuable starting points, a formal evaluation by a qualified healthcare professional is essential for accurate diagnosis and appropriate support.

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Understanding Mild Autism

Symptoms in Adults

Understanding Mild Autism

Definition and Characteristics

Mild autism, commonly referred to as autism spectrum disorder level 1, describes individuals who exhibit less noticeable traits and may effectively mask their symptoms. These individuals often experience social communication challenges, difficulties in interpreting social cues, and understanding body language. Mild autism typically requires the least support for daily activities, yet individuals still confront hurdles such as resistance to changes in routine and sensory sensitivities.

Common characteristics of mild autism may include:

Characteristic	Description
Social Interaction	Difficulty in initiating and maintaining conversations
Communication	Challenges in interpreting non-verbal cues and tone of voice
Routine	Preference for predictable routines and reluctance to change
Sensory Sensitivities	Heightened response to sensory input, such as textures or sounds

Assigned females are often more likely to display mild autism traits that may go unnoticed until later in life. They might appear shy or withdrawn, making it harder for healthcare professionals to diagnose their condition accurately. As a result, some may face delays in receiving the necessary support and interventions.

Diagnosis Challenges

Diagnosing [mild autism](#) presents unique challenges. Autistic individuals on the lower support needs spectrum frequently mask their traits to conform to societal expectations, which can lead to delayed or missed diagnoses, particularly in adulthood. This masking behavior can obscure the true nature of their symptoms, making it harder for both the individual and evaluators to recognize the need for diagnosis.

Seeking a diagnosis involves a comprehensive evaluation by healthcare specialists experienced in autism spectrum disorders. This evaluation typically includes interviews, observations, and standardized assessments, which are crucial for an accurate diagnosis. For those interested in learning more about the

symptoms, [mild autism characteristics](#) provide additional insights into the traits of individuals on the spectrum.

Understanding the foundational aspects of mild autism and the challenges faced during the diagnostic process can empower individuals and families to navigate their experiences more effectively. The journey to diagnosis is essential for accessing appropriate support and resources, ultimately enhancing the quality of life for those with mild autism. For further exploration of treatment options, consider reading about [treating mild autism](#).

Traits and Behaviors of Mild Autism

Individuals with mild autism may exhibit a range of traits and behaviors that can vary significantly among those diagnosed. Understanding these characteristics can foster awareness and offer insights into the experiences of adults living with mild autism.

Social Interaction Difficulties

Social interactions can often be challenging for those with mild autism. They might struggle with understanding social cues and may have difficulties initiating or maintaining conversations. These challenges can lead to feelings of isolation or misunderstanding in social settings.

In many cases, individuals may possess advanced academic abilities but find it hard to engage socially due to deficits in social skills or organization. Individuals may avoid crowded places, preferring one-on-one communication or small groups where they feel more comfortable. This can affect their relationships with friends and family, potentially leading to emotional distress.

Sensory Sensitivities

Sensory sensitivities are common in adults with mild autism. Many may experience heightened sensitivity to textures, sounds, lights, or other sensory inputs. This can sometimes result in overwhelming feelings in certain environments, such as crowded places or those with excessive noise.

Sensory Sensitivity	Description	Common Reactions
Auditory	Sensitivity to sounds, such as loud music or conversations	Discomfort, anxiety, or the need to cover ears

Visual	Discomfort with bright lights or busy patterns	Eye strain, irritability, or avoidance
Tactile	Sensitivity to certain fabrics or temperatures	Avoiding specific clothing or surface textures

These sensory challenges can impact everyday activities and contribute to stress or anxiety. Appropriate strategies or sensory accommodations can help individuals manage these sensitivities effectively.

Cognitive Strengths

Despite the challenges, many adults with mild autism possess remarkable cognitive strengths. Some individuals may exhibit exceptional abilities in specific areas, such as mathematics, art, or music. This phenomenon is often referred to as savant abilities, and while not common for everyone on the spectrum, it highlights the diversity of talents and skills present in autistic individuals.

The specialized interests or hyper-focus on particular subjects can offer opportunities for personal growth and career development. Supportive environments that nurture these strengths can lead to fulfilling and successful careers.

Understanding the traits and behaviors of mild autism can help demystify the condition and aid in fostering a supportive community. For more information on [mild autism characteristics](#) or to learn about [mild autism spectrum disorder](#), readers can explore further resources.

Challenges Faced by Adults with Mild Autism

Adults with mild autism often navigate a variety of challenges that can impact their daily lives and overall well-being. Understanding these difficulties is crucial for providing appropriate support and interventions.

Employment and Support Services

For many [adults diagnosed with mild autism](#), employment can be a significant challenge. They may excel academically but struggle with social interaction and organizational skills, which are critical for success in the workplace. According to [Verywell Health](#), these individuals may have advanced academic abilities but encounter difficulties in social settings, limiting their job options.

Vocational rehabilitation programs can be beneficial. These programs can help individuals cope with career-related challenges while exploring further educational opportunities, volunteering, or job changes. Access to tailored support services can facilitate better job matching and enhance workplace integration.

Support Service	Description
Vocational Rehabilitation	Assists with job placement and career counseling
Social Skills Training	Improves interpersonal communication and interaction skills
Work Adjustment Training	Tailors individual skills to specific job roles

Coping Strategies for Daily Life

Adults with mild autism may also face difficulties in daily life. Coping strategies tailored to individual needs can help manage challenges effectively. For example, routines and structures can provide the predictability they often find comforting. Many adults employ various methods to cope with sensory sensitivities, social interactions, and organizational tasks.

Strategies may include:

- Using planners or digital tools for organization
- Implementing mindfulness techniques to manage stress
- Creating a sensory-friendly environment at home

These coping techniques can enhance daily functioning and overall quality of life. Therapy goals often focus on improving social skills, communication, and managing sensory issues.

Navigating the complexities of mild autism symptoms in adults requires a multi-faceted approach that incorporates both support services and effective coping strategies. Understanding these challenges is vital for enhancing life experiences for those affected. For more information on characteristics and need for support, consider reviewing our articles on [mild autism characteristics](#) and [treating mild autism](#).

Treatment Options for Mild Autism

Individuals diagnosed with mild autism often benefit from various therapeutic approaches. These interventions can help enhance skills, manage symptoms, and improve overall quality of life. Here are three common treatment options explored in more detail: Applied Behavior Analysis (ABA), Cognitive Behavioral Therapy (CBT), and Occupational Therapy.

Applied Behavior Analysis (ABA)

Applied Behavior Analysis (ABA) therapy is considered the gold standard for autism treatment. It is specifically designed for individuals on the autism spectrum and addresses a broad range of skills, including communication, socialization, and reducing challenging behaviors. ABA utilizes highly individualized, data-driven approaches tailored to meet the unique needs of each person.

ABA techniques may include:

ABA Techniques	Description
Discrete Trial Training	Breaks down skills into small, teachable components.
Natural Environment Training	Teaches skills in natural settings that promote generalization.
Pivotal Response Training	Focuses on key areas that significantly improve a person's performance.

ABA therapy can provide essential skills that help individuals navigate various social situations more effectively.

Cognitive Behavioral Therapy (CBT)

Cognitive Behavioral Therapy (CBT) is another valuable treatment option for adults with mild autism, particularly those who experience anxiety, obsessive behaviors, or depression. CBT equips individuals with practical tools to manage their emotions and develop coping strategies.

Key components of CBT include:

CBT Components	Description
Identifying Negative Thoughts	Recognizing harmful patterns in thinking.
Challenging Distorted Cognitions	Learning to reframe or question illogical beliefs.
Implementing Positive Coping Strategies	Developing healthier response mechanisms.

CBT helps many individuals gain insight into their thoughts and feelings, promoting emotional regulation and resilience.

Occupational Therapy

Occupational therapy is particularly beneficial for individuals with mild autism who struggle with sensory processing issues, fine and gross motor skills, and activities of daily living. Occupational therapists work to enhance independence and overall quality of life by focusing on practical skills and adapting tasks to fit individual needs.

Key focus areas of occupational therapy include:

Focus Areas	Description
Sensory Integration	Helping individuals process sensory information more effectively.
Daily Living Skills	Teaching skills like cooking, grooming, and budgeting.
Social Skills Training	Developing interpersonal skills to improve interactions.

Occupational therapy fosters an individual's ability to achieve their personal goals, creating a more balanced and fulfilling life.

These treatment options cater to diverse aspects of living with mild autism, addressing a range of symptoms and promoting overall well-being. Additional resources on [mild autism characteristics](#) and [mild autism diagnosis](#) may provide further insights into understanding and managing mild autism. For those looking to explore more about [treating mild autism](#), these interventions serve as valuable starting points in their journey towards improved mental health and quality of life.

Seeking a Diagnosis for Mild Autism

Obtaining a diagnosis for mild autism can be a critical step in understanding one's unique traits and behaviors. This process involves several stages and highlights the importance of early identification to provide appropriate support and interventions.

Evaluation Process

The evaluation process for mild autism usually starts with a comprehensive assessment conducted by a qualified professional, such as a psychologist or psychiatrist. This assessment includes interviews, observation, and standardized tests that gauge behavior, social skills, and communication abilities.

Here's a general outline of the evaluation steps:

1. **Initial Screening:** A preliminary assessment is often conducted through questionnaires or interviews with the individual and their family members.
2. **Clinical Evaluation:** A detailed evaluation may follow, which examines various aspects of functioning, including emotional, behavioral, and social factors.
3. **Diagnostic Criteria:** The professional will refer to the [DSM-5 criteria](#) to determine if the individual's symptoms align with mild

autism. It's important to distinguish these symptoms from other related conditions.

4. **Feedback Session:** After the evaluation, a feedback session is held to discuss findings and possible next steps.

Evaluation Step	Description
Initial Screening	Preliminary assessment via questionnaires.
Clinical Evaluation	Detailed examination of various functioning aspects.
Diagnostic Criteria	Evaluation based on published diagnostic standards.
Feedback Session	Discussion of results and further recommendations.

For those interested in more information on the nuances of a proper diagnosis, consider visiting our section on [mild autism diagnosis](#).

Importance of Early Identification

Early identification of mild autism is crucial as it leads to better outcomes in terms of support and intervention. When a diagnosis is made early, individuals can receive tailored strategies and resources that cater to their specific needs.

[Research](#) indicates that addressing mild autism symptoms early on can significantly enhance an individual's ability to navigate social situations, develop independent living skills, and pursue educational and occupational opportunities. A timely diagnosis also alleviates some of the challenges related to misunderstandings and misinterpretations of autistic traits.

The early involvement of family members and support systems can also foster a positive environment for the individual, facilitating coping strategies for daily life. Family training programs can be beneficial in providing tools to manage behavioral concerns and encourage productive social interactions.

In summary, the evaluation process for mild autism is a systematic approach aimed at understanding the individual's unique challenges and strengths. Early identification plays a pivotal role, not only in providing immediate support but also in fostering long-term growth and acceptance. For further insights on traits associated with mild autism, check out our section on [mild autism characteristics](#) or our guidance on [treating mild autism](#).

Progress and Recovery

Understanding progress and recovery in individuals with mild autism is vital for fostering growth and independence. Milestones and individualized support play significant roles in this journey.

Milestones and Celebrating Progress

Recovery from mild autism is a continuous process that varies for each individual, focusing on improving daily living and functional skills. Celebrating milestones, regardless of size, can provide motivation and a sense of achievement. Milestones may include:

Milestone	Description
Improved Social Skills	Engaging in conversations or making new friends
Increased Independence	Performing daily tasks without assistance
Reduced Anxiety	Coping effectively in social situations
Enhanced Communication	Expressing thoughts and feelings more clearly

With the right treatment, understanding, and support, individuals can achieve these milestones. Recognizing and celebrating these achievements fosters a positive outlook and encourages further progress.

Individualized Support and Interventions

Individuals with mild autism may require tailored interventions and support to enhance their functional abilities and improve their quality of life. Support strategies may include:

Support Type	Description
Behavioral Therapy	Techniques like Applied Behavior Analysis (ABA) to strengthen desired behaviors
Occupational Therapy	Helping develop daily living skills and sensory processing
Social Skills Training	Fostering effective communication and relationship-building skills
Educational Support	Access to resources and services that accommodate learning needs

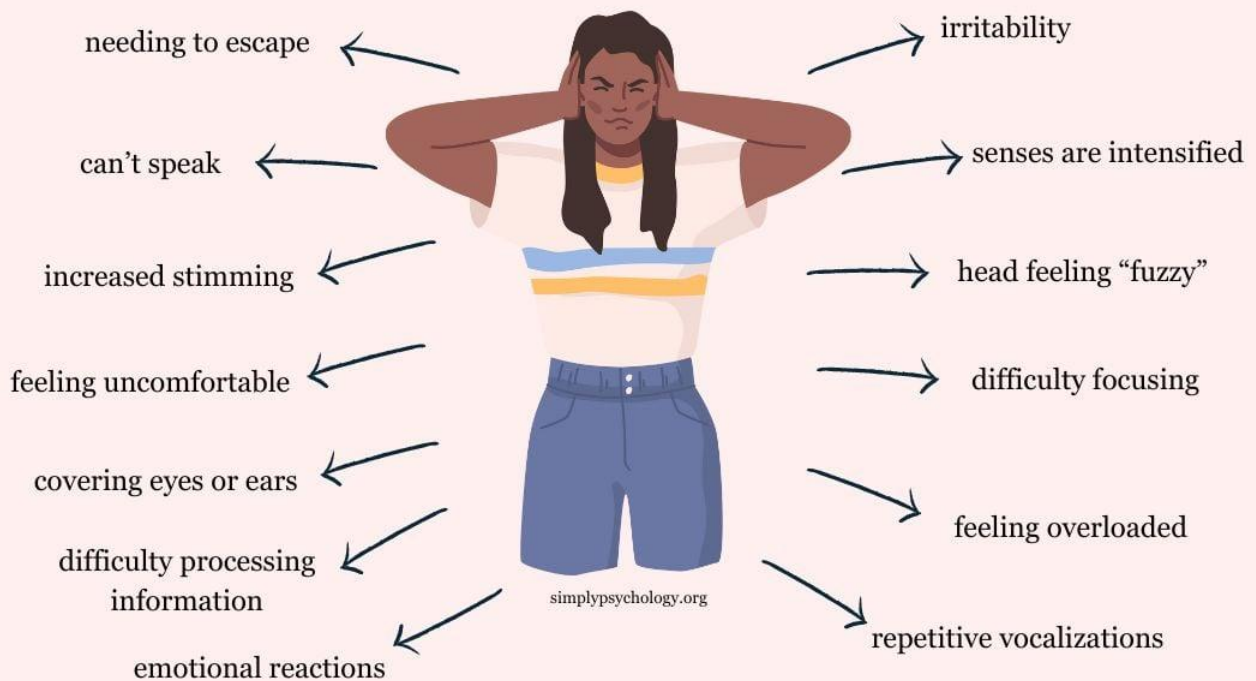
Targeted interventions aim to promote independence and autonomy in individuals with mild to moderate autism. Understanding the specific needs of individuals allows families and caregivers to implement appropriate strategies that encourage development and empower individuals in their daily lives. For further insights into interventions, visit our section on [treating mild autism](#) or learn about the [mild autism characteristics](#).

Autism Overstimulation And Sensory Overload

Sensory overload and overstimulation are common [signs associated with autistic individuals](#). They are terms used to describe what happens when an individual receives more sensory input than they can comfortably process.

This experience is often discussed within the context of [autism](#), as autistic people may experience sensory input differently. Sensory overload can happen in anyone but is more likely to occur in autistic individuals.

SIGNS OF OVERSTIMULATION IN AUTISM



The signs that an autistic person may be experiencing overstimulation are different depending on the person and the cause of this overwhelm, but these are some common signs.

The experience of sensory overload is often described as an inability to categorize the influx of sensory stimuli in the way that neurotypical people can. In other words, the brain struggles to make sense of and

organize the incoming sensory information, leading to feelings of overwhelm.

Signs of overstimulation in autism

“I tend to withdraw when overwhelmed. Not physically, I just stop interacting. I can still see/hear everything going on around me, but none of it sticks. The world looks and feels like somebody just sliced a bunch of different recordings and then spliced the segments together at random.”

‘Max’

“

“I tend to withdraw when overwhelmed. Not physically, I just stop interacting. I can still see/hear everything going on around me, but none of it sticks. The world looks and feels like somebody just sliced a bunch of different recordings and then spliced the segments together at random.”

An autistic person's experience of feeling overwhelmed

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Signs of overstimulation in autism can vary from person to person, but some common indicators include:

- Increased irritability or agitation
- Increased sensory sensitivity, e.g., lights feel brighter, noises feel louder
- Physical symptoms such as heart racing, jaw clenched, or headaches
- Difficulty focusing on what is going on
- Difficulty with processing information
- Feeling the need to escape or be alone
- Changes in speech, such as becoming monotone or repetitive vocalizations
- Being unable to speak at all
- Increased self-stimulatory behaviors (stimming)
- Feeling hot or uncomfortable
- Needing to cover eyes or ears to limit sensory input
- Emotional outbursts or reaching a meltdown point

Autistic people often describe overstimulation as experiencing too much input. My most common indicator that I am feeling overstimulated is that my head feels all “fuzzy,” like there is too much swirling around in my brain.

Ella ([from the YouTube channel Purple Ella](#)), an autistic woman, explains that when input is coming in, it is manageable at first, but then it becomes too much.

She compares the feeling to being at a supermarket checkout, where the cashier is scanning items too quickly. You try to keep up with packing

your items, but then it all begins to pile up, and there is pressure to keep going, but it all feels like too much at once.

“If I am upset/emotional about something, I can go completely mute. It almost feels like my jaw is locked or my throat closes off, like I am physically incapable of talking in that moment. It has resulted in some misunderstandings due to me not being able to defend myself or disagree with someone.”

‘Bryan’

What triggers overstimulation?

There are many ways in which an autistic person may become overstimulated. Primarily, these triggers can be related to the senses but can also come from unexpected events or social situations:

- **Noise:** Loud noises, such as the sound of a fork scraping against a plate or crowds, can be particularly overwhelming. Background noises such as televisions, alarms, telephones, and ticking clocks may also contribute to overstimulation. A high pace of communication can also contribute to feelings of stress.
- **Bright Lights:** Bright lights, especially fluorescent lights, can be irritating and overwhelming for autistic individuals. Some may compare the experience of bright lights to a “buzzing noise.” This sensitivity extends to flickering lights, such as fluorescent lamps and Christmas lights.
- **Textures:** Some individuals may find certain textures or types of touch uncomfortable or even painful. Examples can include itchy clothing, labels on clothes, and certain food textures.
- **Smells:** Strong smells, such as perfumes, certain foods, or cleaning products, can be experienced more intensely for some autistic people and be very overwhelming, especially if there are multiple smells at once.

- **Social Demands:** Social situations, such as attending a wedding or interacting with others, can be challenging and lead to feelings of overwhelm for autistic individuals due to factors such as the volume of talking and the amount of sensory and social input. [Social interactions](#) that require [masking](#) or suppressing autistic traits can also contribute to this.
- **Visual Clutter:** A visually cluttered environment with too many objects or patterns can be distracting and difficult to process. Visual clutter [can negatively impact an individual's social and cognitive abilities](#), as irrelevant stimuli can draw attention away from conversations and make communication difficult.
- **Crowds:** The presence of many people, particularly in confined or enclosed spaces, can also trigger sensory overload. The senses may be overloaded with many people being too close, feeling enclosed and unable to escape, and the noise may feel like too much.
- **Unpredictability:** Unpredictable environments or situations, especially those involving human interaction or sensory input, can cause a sense of stress and contribute to feeling overwhelmed. Having to quickly make a decision between several choices [can also lead to difficulty for some individuals](#).

What can trigger shutdowns or meltdowns?

Oftentimes, there can be multiple triggers for overstimulation, which can result in autistic people experiencing **shutdowns** or **meltdowns**.

A shutdown involves withdrawing and becoming non-responsive, while a meltdown is an outward expression of [overwhelming emotions](#).

I will use an example of a time when I experienced an intense feeling of overstimulation to describe this:

I was at a gig with my husband, and we were standing pretty close to the stage before the show started. When the band came onstage, many people around us started closing in and jumping around, bouncing off me.

I felt like I had no control over my movements and was stuck. My face kept landing into the hair of the girl in front of me, and other people's drinks spilled down my back. I was also more aware of how loud the music was.

I felt really unsafe and became so overwhelmed that I broke down in tears. I turned to my husband and couldn't communicate with him aside from just showing him my crying face and shaking my head.

He then pulled me out of the crowd to a quieter spot to recover. For about 20-30 minutes after this, I still could not speak and kept crying so it took me a while to calm down.

In this instance, I became overstimulated by a combination of being in a crowded space and having different negative sensory experiences that heightened my sensitivity, resulting in an intense emotional response.

If this was a situation in which only one negative sensory thing happened (e.g., if someone bumped into me), I might have felt somewhat irritable but could have easily recovered. But, combined with everything else going on, it resulted in a more intense response and longer recovery time.

Other ways autistic people may reach a shutdown or meltdown include:

1. Prolonged exposure to challenging environments (e.g., noisy offices, busy shopping centers)
2. Unexpected changes in routine or plans
3. Social interactions that are too intense or prolonged
4. Accumulation of minor stressors throughout the day
5. Sensory overload from lights, sounds, smells, or textures

6. Difficulty communicating needs or feelings
7. Fatigue or lack of sleep affecting coping abilities
8. Hunger or thirst impacting sensory processing
9. Emotional stress from conflicts or misunderstandings
10. Processing complex information or instructions

It's important to note that triggers can be cumulative. What seems like a small issue might be the final straw after a day of managing various stressors. Additionally, an autistic person's threshold for overstimulation can vary depending on their overall well-being and energy levels.

How to prevent and recover from overstimulation

Below are 7 ways in which you can use to prevent or recover from autistic overstimulation. Some of these may not work for you specifically, but others might be useful. Try some of them out that appeal to you:

Managing Overstimulation In Autism

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Identify your triggers



Reduce sensory input



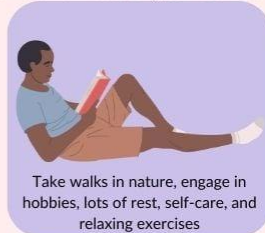
Create a sensory-friendly space



Communicate your needs



Make the most of your downtime



Plan ahead



Utilize personal strategies



1. Identify your triggers

Take time to reflect on situations, environments, and sensory experiences that overwhelm your nervous system or cause you to feel overstimulated, anxious, or distressed. This self-awareness is crucial for managing autistic overstimulation effectively.

Create a list of specific triggers that lead to sensory overload or emotional overwhelm in a journal. You could group these triggers into categories based on type:

- Sensory Triggers (e.g., visual and auditory)
- Environmental Triggers (e.g., crowded spaces, disorganized environments)
- Social Triggers (e.g., extended social interactions, misunderstandings in communication)

- Cognitive Triggers (e.g., information overload, complex instructions or tasks)

By identifying and categorizing your specific overstimulation triggers, you can develop more targeted strategies to manage or avoid these situations, reducing the likelihood of reaching sensory overload or meltdown.

2. Adjust the environment

If you feel yourself becoming overwhelmed, try to adjust your environment as much as you can to limit sensory input. Obviously, this all depends on the situation you are in and what is causing you to feel overstimulated.

For example:

- Dim the lights or turn them off completely
- Reduce background noises, such as turning off TVs, music, and closing windows to avoid the noise of outside traffic and chatter
- Switch to comfortable clothing
- Add a weighted blanket
- Step outside if the indoor space is causing the stimulation
- Declutter the room

Something that often works for me is I will put headphones on and play some calming sounds, either some chilled lo-fi, classical music, white noise, or the sound of a fireplace or rain. I make sure to keep the volume low so as to not make this itself overwhelming.

3. Create a sensory-friendly environment

Creating a sensory-friendly environment at home in a way that suits your particular needs can make all the difference in preventing overstimulation.

For example:

- Having a designated quiet space for low-intensity activities at home
- Well-ventilated spaces to allow cool air in and let out unwanted odors
- Designated storage boxes to put clutter out of sight
- Painting the walls a dark or muted color
- Use modular furniture that can be easily rearranged for different needs
- Analog clocks and physical calendars to reduce digital overstimulation

Because I know that bright overhead lights make me feel overstimulated, I make sure I have plenty of lamps or other light fixtures in each room of my home.

For example, strip lights and projector lights that can change color and intensity are both calming to look at and less intense than overhead lighting.

4. Communicate needs

Ideally, communicating with people you live with, friends, and family is helpful for them to understand what your triggers are and how they can help you.

Below are some ways in which you can communicate your needs:

- Agree on specific non-verbal gestures with close friends and family as an indicator of when you need a break.
- Practice assertive phrases to express your needs, e.g., “I need a quiet space for 10 minutes.”
- Use smartphone apps to type out your needs when speaking is difficult.
- Use colored badges or wristbands to indicate current tolerance level, e.g., green for “I’m okay,” yellow for “I’m getting overwhelmed,” and red for “I need immediate help.”

It’s important not to rely on another person to help you entirely as you still need to put in the work yourself, but there may be things that they can feasibly do to help.

You may also need to compromise if your sensory needs clash with theirs. In this case, try to find some middle ground or a way in which you can reduce sensory input for yourself while not impacting others.

5. Make the most of your downtime

When you have free time, use this as an opportunity to recalibrate your sensory system and prevent overstimulation. This can be particularly useful if your everyday life (e.g., work or school) is a prolonged stressor for you.

Remember that you will need to return to potentially stimulating environments afterward, so use this time effectively to prepare yourself.

Below are some ideas for sensory-friendly activities during your reset time:

- Take a quiet walk in nature, focusing on soothing sensory input like the rustling of leaves or the feel of grass underfoot

- Engage in a repetitive, calming activity like solving jigsaw puzzles or coloring mandalas
- Create a sensory cocoon with weighted blankets and soft textures, allowing yourself to simply rest
- Listen to white noise or nature sounds through noise-cancelling headphones
- Engage in your special interest in a low-pressure, sensory-friendly way
- Try [mindfulness exercises](#) specifically designed for sensory regulation, such as body scans or guided visualizations

Remember, the goal is to give your sensory system a chance to reset and prepare for future stimuli. Choose activities that feel calming and regulating for you personally.

6. Plan ahead

Planning ahead is important because it can allow you to anticipate and prepare for challenging environments or situations.

By thinking through potential triggers and having strategies ready, you can reduce [your anxiety](#) and be better equipped to navigate potentially overwhelming experiences.

Some examples of planning ahead include:

- Previewing new environments or situations where possible
- Carrying a “sensory emergency kit” with items such as sunglasses, earplugs, and comforting objects
- Establishing exit strategies or finish times for overwhelming situations

- If you already have a hectic schedule, say no to additional plans or schedule in low sensory breaks
- Avoiding situations where you know you will feel overstimulated

For me, going to the supermarket is very overwhelming, especially when there are so many food options to choose from.

So, if I plan to go there, I try to have an idea in mind for what exactly I want to get. I plan my route out for the supermarket based on where my desired items are to limit the amount of time spent there.

7. Utilize personal strategies

Try to keep in mind some personal strategies you can use in times when you start to feel overstimulated.

Some ideas of these include:

- **Mindfulness:** Engaging in mindfulness practices can help manage sensory overload.
- **Sensory Breaks:** Taking breaks in a calming environment, even for short periods, can help reduce sensory overload. This could involve finding a quiet space or engaging in calming activities.
- **Sensory Tools:** Using sensory tools like sunglasses, headphones, or fidget toys can help regulate sensory input and reduce overload.
- **Personal rating system:** Regularly check in with yourself about current stimulation levels and take action based on your personal threshold rating.

I often find it helpful to excuse myself for a few minutes if I am in an overwhelming social situation or in a noisy environment.

I can go to an outdoor space or the bathroom and take a few minutes to breathe deeply and close my eyes as a respite from sensory overload.

I also find it helpful to try some mindfulness exercises while I am taking this break. For instance, I might wash my hands in the bathroom and take my time massaging the soap into my hands and being aware of the feel of the water and the sound it makes coming out the faucet.

How to support someone experiencing overstimulation

Dan ([from the YouTube channel The Aspie World](#)), an autistic man, gives some advice that someone can use to support someone who is experiencing overstimulation (such as, if you are in a [relationship with someone who is autistic](#)):

- Remove the person from the overwhelming environment: This could involve turning off lights, moving to a quieter space, or going outside.
- Once the person is calmer, provide opportunities for them to engage in calming activities: This could include spending time in a sensory room, using sensory toys, or pursuing hobbies and interests.
- Dan suggests that sensory stimuli can be used in a positive way to help autistic people feel calm and relaxed: He provides examples such as bubble lamps, lava lamps, and fish tanks.

Other ways in which you can support them can include:

- Using clear and calm communication, avoiding complex language
- Not forcing verbal responses but encouraging alternative forms of communication (e.g., writing, typing, or gestures).

- Guide them through deep breathing exercises
- Respect their need for alone time if requested
- Allow time to recover without rushing
- Once recovered, discuss strategies for future situations

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MANAGING OVERSTIMULATION IN AUTISM

**Identify your
triggers and write
them in a journal**



**Reduce sensory
input such as
dimming lights and
using headphones**



**Create a sensory-
friendly space with
mood lights and
fidget toys**



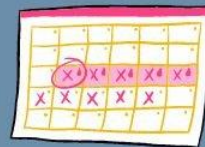
**Communicate your
needs such as
asking for breaks**



**Make the most of
your downtime
engaged in self-care
and hobbies**



**Plan ahead and have
strategies equipped
for stressful events**



Autism and Relationships: A Guide for Autistic Adults and Their Partners

Love speaks in a thousand languages, and autism adds a fascinating dialect to the conversation of the heart. Autism Spectrum Disorder (ASD) is a neurodevelopmental condition that affects how individuals perceive and interact with the world around them. When it comes to relationships, autism brings unique challenges and strengths that can profoundly shape the dynamics of love and partnership.

Understanding autism in the context of relationships is crucial for fostering healthy, fulfilling connections. Many misconceptions surround autistic individuals and their capacity for romantic relationships. These misunderstandings can lead to unfair stereotypes and barriers to meaningful connections. By exploring the intersection of autism and relationships, we can shed light on the diverse experiences of autistic adults in love and provide valuable insights for both autistic individuals and their partners.

Autism and Love: Debunking Myths

One of the most pervasive myths about autism is that autistic individuals are incapable of feeling or expressing love. This couldn't be further from the truth. Autistic people are fully capable of experiencing deep emotional connections and love, albeit sometimes in ways that may differ from neurotypical expressions.

Emotional connections in autistic individuals can be intense and profound. Many autistic people report feeling emotions very deeply, sometimes even more intensely than their neurotypical counterparts. However, the way these emotions are processed and expressed may vary. Some autistic individuals may struggle with identifying or verbalizing their feelings, which can sometimes be misinterpreted as a lack of emotion.

The expressions of love and affection in autistic relationships can take many forms. While some autistic individuals may be uncomfortable with physical touch due to sensory sensitivities, others may express their affection through acts of service, shared interests, or verbal affirmations. It's essential to recognize and appreciate these diverse expressions of love, as they are no less valid or meaningful than more conventional displays of affection.

Challenges in Autistic Relationships

While autistic individuals are certainly capable of forming loving relationships, it's important to acknowledge that autism can present unique challenges in romantic partnerships. Understanding these challenges is the first step in addressing them effectively.

Communication difficulties are often at the forefront of challenges in [autistic couples](#). Autistic individuals may struggle with interpreting non-verbal cues, understanding sarcasm or figurative language, or expressing their own thoughts and feelings clearly. This can lead to misunderstandings and frustrations for both partners.

Sensory sensitivities can also impact intimacy in autistic relationships. Many autistic individuals experience heightened sensitivity to touch, sound, or other sensory inputs. This can make physical intimacy challenging or overwhelming at times. It's crucial for partners to have open discussions about sensory needs and boundaries to ensure both individuals feel comfortable and respected.

Autism and controlling behavior in adults is another aspect that can affect relationships. Some autistic individuals may exhibit rigid thinking patterns or a strong need for routine and predictability. While these traits can be strengths in many situations, they can sometimes manifest as controlling behaviors in relationships. It's important to distinguish

between autism-related needs for structure and unhealthy controlling behaviors, addressing any issues compassionately and constructively.

Struggles with changing plans and routines can also pose challenges in relationships. Many autistic individuals find comfort and security in predictable routines. Unexpected changes or spontaneous plans can cause significant anxiety or distress. This can sometimes lead to conflicts with partners who may desire more flexibility or spontaneity in the relationship.

Recognizing signs of autism in adult relationships is crucial for both partners. Some signs may include difficulties with social communication, intense focus on specific interests, sensory sensitivities, and a preference for routines and predictability. Understanding these signs can help partners navigate challenges more effectively and build stronger, more supportive relationships.

Strategies for Successful Relationships with Autistic Partners

Despite the challenges, there are many strategies that can help foster successful relationships with autistic partners. These strategies focus on mutual understanding, respect, and effective communication.

Effective communication techniques are paramount in any relationship, but they take on added importance in [autism and intimacy](#). Clear, direct communication is often appreciated by autistic individuals who may struggle with interpreting subtle hints or indirect messages. Using “I” statements, being specific about needs and expectations, and providing written or visual aids can all enhance communication.

Understanding and respecting sensory needs is crucial for building intimacy and comfort in the relationship. This might involve creating a sensory-friendly environment at home,

being mindful of touch preferences, or finding alternative ways to express affection that align with the autistic partner's sensory profile.

Establishing routines and managing changes can help provide the structure that many autistic individuals find comforting while also allowing for flexibility when needed. This might involve creating a shared calendar, discussing plans in advance, or developing strategies for coping with unexpected changes.

Balancing independence and togetherness is important in any relationship, but it can be particularly crucial when [navigating high-functioning autism and romantic relationships](#). Many autistic individuals value their alone time and may need more independent space than their neurotypical partners. Finding a balance that works for both partners is key to a harmonious relationship.

Addressing autistic relationship problems constructively involves approaching issues with empathy, patience, and a willingness to understand each other's perspectives. It's important to focus on problem-solving rather than blame, and to celebrate the strengths that each partner brings to the relationship.

Neurotypical-Autistic Partnerships

Neurotypical-autistic partnerships bring their own unique dynamics to the table. These relationships can be incredibly rewarding, but they also require mutual understanding and effort from both partners.

For neurotypical partners, understanding autism is crucial. This involves educating oneself about autism, its characteristics, and how it may manifest in relationships. It's important to approach this learning process with an open mind and a willingness to challenge preconceived notions about autism.

Bridging the gap between neurotypical and autistic perspectives involves finding common ground and fostering mutual understanding. This might involve developing shared interests, creating a “relationship language” that works for both partners, or finding compromises that honor both individuals’ needs and preferences.

Supporting an autistic partner without compromising one’s own needs is a delicate balance. It’s important for neurotypical partners to offer support and understanding while also maintaining their own well-being. This might involve setting healthy boundaries, seeking support from friends or professionals, and engaging in self-care practices.

Fostering Long-term Success in Autistic Relationships

Building long-lasting, fulfilling relationships involving autistic individuals requires ongoing effort, growth, and mutual support.

Self-awareness and personal growth are crucial for both partners. For autistic individuals, this might involve developing a deeper understanding of their own autism and how it impacts their relationships. For neurotypical partners, it might involve challenging their own biases and learning to appreciate neurodiversity.

Seeking professional support and couples therapy can be incredibly beneficial for [navigating relationships affected by autism](#). A therapist experienced in working with autistic individuals can provide valuable insights, communication strategies, and tools for addressing challenges specific to autism in relationships.

Building a support network is important for both partners. This might involve connecting with other autistic-neurotypical couples, joining support groups, or fostering relationships with friends and family who understand and support the unique dynamics of the relationship.

Celebrating neurodiversity in relationships involves recognizing and appreciating the unique strengths and perspectives that autism brings to the partnership. This might include the autistic partner's attention to detail, loyalty, honesty, or unique way of viewing the world.

Embracing the strengths of autistic partners is key to building a positive, affirming relationship. Many autistic individuals possess qualities such as deep loyalty, honesty, analytical thinking, and passionate interests that can greatly enrich a relationship.

Conclusion

Navigating autism and relationships requires patience, understanding, and open communication. By recognizing the unique challenges and strengths that autism brings to relationships, both autistic individuals and their partners can work towards building fulfilling, lasting connections.

It's important to remember that [autistic people can and do get married](#), form long-term partnerships, and experience deep, meaningful love. The key lies in mutual respect, understanding, and a willingness to embrace neurodiversity.

For [autistic women in relationships](#), the journey may present unique challenges, but it also offers opportunities for growth, self-discovery, and deep connection.

Similarly, [when an autistic man falls in love](#), the experience can be intense, beautiful, and transformative.

Ultimately, successful relationships involving autistic individuals are built on the same foundations as any healthy relationship: love, respect, communication, and mutual support. By fostering these qualities and embracing the unique aspects of autism, couples can create strong, lasting bonds that celebrate neurodiversity and enrich both partners' lives.

Whether you're an autistic individual navigating the world of relationships, a neurotypical partner seeking to understand and support your autistic loved one, or simply someone interested in learning more about autism and love, remember that every relationship is unique. Embrace the journey, celebrate the strengths, and approach challenges with compassion and understanding. In doing so, you'll discover that love truly does speak in a thousand languages, and autism adds a beautiful, complex dialect to that rich tapestry of human connection.

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Autism and Intimacy: Navigating Relationships on the Spectrum

Love's language may be universal, but for those on the autism spectrum, intimacy often speaks in a unique dialect that requires patience, understanding, and a willingness to explore uncharted emotional territories. Autism Spectrum Disorder (ASD) is a neurodevelopmental condition characterized by differences in social communication, sensory processing, and behavioral patterns. These differences can significantly impact how individuals with autism experience and express intimacy in their relationships.

The journey of intimacy for autistic individuals is often misunderstood, with many misconceptions clouding the public's perception. One common myth is that autistic people are incapable of forming deep emotional connections or maintaining romantic relationships. However, this couldn't be further from the truth. While challenges may exist, many autistic individuals desire and actively

seek out intimate relationships, often bringing unique strengths and perspectives to their partnerships.

Addressing intimacy issues in autistic individuals is crucial for several reasons. Firstly, it promotes emotional well-being and personal growth. Secondly, it helps combat social isolation, which is a common struggle for many on the spectrum. Lastly, it fosters a more inclusive society where neurodiversity is celebrated and understood.

Autism and Intimacy Issues: Challenges and Solutions

One of the primary challenges autistic individuals face in intimate relationships is navigating sensory sensitivities. These sensitivities can significantly impact physical intimacy, making certain touches, textures, or even smells overwhelming or uncomfortable. For instance, a gentle caress that might be soothing for a neurotypical person could be distressing for someone with autism due to heightened tactile sensitivity.

To address these sensory challenges, open communication and experimentation are key. Partners can work together to identify comfortable forms of physical affection, such as finding the right pressure for hugs or exploring alternative ways of showing physical love that don't trigger sensory overload. [Navigating Autism and Relationships: A Comprehensive Guide for Autistic Adults and Their Partners](#) offers valuable insights into managing sensory issues in relationships.

Communication difficulties in expressing emotional needs present another significant hurdle. Autistic individuals may struggle with identifying and articulating their feelings, leading to misunderstandings or unmet needs in relationships. This challenge can be particularly pronounced in romantic partnerships, where emotional expression is often expected and valued.

Strategies for overcoming these communication barriers include:

1. Using visual aids or written communication to express emotions
2. Establishing clear, direct communication patterns
3. Practicing emotional recognition and expression through therapy or self-help techniques
4. Utilizing technology, such as emotion-tracking apps, to assist in identifying and communicating feelings

The role of therapy and counseling in addressing intimacy issues cannot be overstated. Professional support can provide autistic individuals and their partners with valuable tools and strategies for navigating relationship challenges. Cognitive Behavioral Therapy (CBT), for example, can help in developing social skills and managing anxiety related to intimacy. Additionally, couples therapy tailored for neurodivergent relationships can foster understanding and improve communication between partners.

Building and Maintaining Relationships: Autistic Couples

Relationships between autistic partners often have unique dynamics that differ from neurotypical relationships. These partnerships can benefit from shared experiences and understanding of autism-related challenges. However, they may also face specific hurdles, such as difficulties in emotional regulation or executive functioning that can impact daily life and relationship satisfaction.

[Navigating Love and Life: A Comprehensive Guide for Autistic Couples](#) provides in-depth information on the nuances of autistic partnerships. One key aspect of successful autistic relationships is developing strategies for effective communication. This might involve:

1. Establishing clear communication protocols, such as scheduled check-ins or using specific phrases to indicate emotional states
2. Utilizing written or digital communication to supplement verbal exchanges
3. Creating a shared vocabulary for expressing needs and emotions
4. Practicing active listening and validation techniques

Navigating social expectations and norms as a couple can be challenging for autistic individuals. Society often has preconceived notions about how relationships should function, which may not align with the needs or preferences of autistic couples. It's essential for partners to define their own relationship standards and communicate these to friends, family, and the broader community when necessary.

Supporting each other's needs and respecting boundaries is crucial in any relationship, but it takes on added importance in autistic partnerships. This might involve:

1. Creating a sensory-friendly home environment
2. Respecting each other's need for alone time or special interests
3. Developing routines that provide structure and predictability
4. Being flexible and understanding when plans need to change due to sensory overload or anxiety

Intimacy and Autism: Emotional Connection

Understanding and expressing emotions can be a complex process for autistic individuals. Many experience alexithymia, a condition characterized by difficulty identifying and describing one's own emotions. This can create challenges in forming deep emotional connections with partners.

To address this, autistic individuals can work on developing their emotional awareness through various techniques:

1. Keeping an emotion journal to track and analyze feelings
2. Using emotion wheels or charts to expand emotional vocabulary
3. Practicing mindfulness to become more attuned to bodily sensations associated with emotions
4. Engaging in therapy or counseling to explore emotional experiences in a safe environment

Developing emotional intimacy through shared interests is often a successful approach for autistic couples. Special interests, a hallmark of autism, can serve as a foundation for building connection and understanding. Partners can engage in activities related to these interests together, fostering closeness and creating shared experiences.

The importance of trust and safety in building intimate connections cannot be overstated, especially for autistic individuals who may have experienced rejection or misunderstanding in past relationships. [Navigating Love and Connection: High-Functioning Autism and Romantic Relationships](#) explores how to create a secure emotional environment in autistic partnerships.

Techniques for fostering emotional closeness in autistic relationships include:

1. Establishing regular “connection time” free from distractions
2. Practicing vulnerability by sharing thoughts and feelings gradually
3. Engaging in activities that promote bonding, such as cooperative games or shared projects
4. Using touch or physical proximity in ways that are comfortable for both partners to create emotional intimacy

Sexual Intimacy and Autism

Sexual intimacy can be a complex area for autistic individuals due to sensory sensitivities, communication challenges, and potential anxiety around physical closeness. Addressing sensory issues in sexual experiences is crucial for creating a positive and comfortable environment. This might involve:

1. Experimenting with different textures and materials for bedding and clothing
2. Using lighting and sound adjustments to create a sensory-friendly atmosphere
3. Incorporating sensory-friendly lubricants or toys
4. Taking breaks or using calming techniques during intimate moments

Communication and consent in sexual relationships are paramount. Autistic individuals may benefit from explicit discussions about boundaries, preferences, and comfort levels. Using visual aids, checklists, or written agreements can help clarify expectations and ensure mutual understanding.

[Autism and Virginity: Understanding the Unique Challenges and Experiences](#) provides valuable insights into navigating sexual experiences for autistic individuals who may be new to physical intimacy.

Exploring sexuality and personal preferences is an important journey for autistic individuals. This process may involve:

1. Researching different aspects of sexuality and relationships
2. Engaging in self-exploration to understand personal desires and boundaries
3. Discussing sexuality openly with trusted partners or professionals
4. Attending workshops or support groups focused on sexuality and autism

Resources and support for autistic individuals regarding sexual health are increasingly available. These may include specialized sex education programs, books tailored for autistic readers, and online communities where individuals can share experiences and advice.

Support Systems and Resources for Autistic Individuals and Couples

Professional support plays a crucial role in helping autistic individuals and couples navigate relationship challenges. Therapists, counselors, and sex educators specializing in autism can provide tailored guidance and strategies. When seeking professional help, it's important to find practitioners who have experience and understanding of autism spectrum disorders.

Support groups and online communities for autistic couples offer valuable peer support and shared experiences. These groups can provide a sense of belonging and understanding that may be difficult to find elsewhere. [Navigating Love and Life: Comprehensive Help for Autistic Couples](#) offers information on finding and engaging with support networks.

Educational resources on intimacy and autism are becoming more readily available. These may include:

1. Books written by autistic authors about relationships and sexuality
2. Online courses focusing on social skills and relationship building for autistic adults
3. Podcasts discussing autism and intimacy
4. Webinars and workshops led by experts in the field of autism and relationships

Self-advocacy and empowerment in relationships are essential skills for autistic individuals to develop. This involves:

1. Learning to communicate needs and boundaries effectively
2. Understanding and asserting one's rights in relationships
3. Recognizing and addressing potential power imbalances
4. Seeking support when needed and knowing when to end unhealthy relationships

Conclusion

Navigating intimacy and relationships as an autistic individual or couple presents unique challenges, but it also offers opportunities for deep connection and personal growth. By understanding the specific needs and experiences of autistic individuals in relationships, we can foster more inclusive and supportive environments for love to flourish.

Key points to remember include:

1. Sensory sensitivities and communication differences can impact intimacy but can be managed with understanding and adaptation.
2. Emotional connection can be built through shared interests and clear communication strategies.
3. Sexual intimacy may require additional consideration of sensory needs and explicit consent discussions.
4. Professional support and community resources are valuable tools for navigating relationship challenges.

It's crucial to emphasize the importance of understanding and acceptance in all relationships, but particularly in those involving autistic individuals. Partners,

whether autistic or neurotypical, should approach the relationship with an open mind and a willingness to learn and adapt.

Encouraging open communication and continuous learning in relationships is essential. As [Navigating Autism Relationship Challenges: How to Strengthen Your Bond](#) suggests, viewing relationship difficulties as opportunities for growth and deeper understanding can strengthen the connection between partners.

Finally, it's important to maintain a positive outlook on intimacy and relationships for individuals with autism. While challenges may exist, many autistic individuals form loving, lasting partnerships. [Autism and Marriage: Understanding Relationships and Love on the Spectrum](#) explores how autistic individuals navigate long-term commitments and build fulfilling lives together.

By embracing neurodiversity in relationships and providing the necessary support and resources, we can create a world where autistic individuals can fully explore and enjoy the rich tapestry of human connection and intimacy. Remember, love may speak in many dialects, but with patience, understanding, and respect, its message can be beautifully translated in any relationship.

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How Does Autism Affect Sex and Intimacy?

Autism doesn't affect your sexual development — but by affecting your communication, sensory perceptions, and other areas, it can influence your sexual relationships.

Any relationship can encounter hurdles with sex and intimacy, and neurodiverse people may face certain challenges that make sex a sensitive topic.

[Autism spectrum disorder \(ASD\)](#) is a neurodevelopmental (brain development) condition. Like many neurodiversity conditions, autism exists on a spectrum based on how much it impacts daily function. In diagnosis, these are known as the [levels of autism](#).

While autism can influence how you communicate and interact with others, it doesn't prevent you from developing sexually, or from finding mutually fulfilling relationships that involve intimacy and sex.

Does autism affect sexual interest, behavior, and intimacy?

Being autistic doesn't mean a person is uninterested in sex. In fact, most people on the autism spectrum want to have romantic relationships, sexual relationships, or both. Autistic people have [the same range](#) of sexual experiences and behaviors as allistic (non-autistic) people.

How sexuality emerges in a relationship can be influenced by ASD, however.

"In neurodiverse relationships, partners' brains are wired differently, which impacts beliefs, thoughts, and opinions," says [Leslie Sickels](#), LCSW, a neurodiverse couple's therapist from New York City. "These differences in neurodevelopment can result in varying needs in intimacy and sex within a partnership."

Communication about sex

Autism may affect how you communicate your sexual wants and desires. One partner may not realize the other is feeling unfulfilled, for example, if they don't have clear communication about it.

“Without a firm understanding of how neurodevelopmental differences are coming up in a partnership, couples can sometimes believe their partners do not have the best intentions for them or the relationship,” explains Sickels.

Hypersexuality

Core [symptoms of autism](#), such as hyposensitivity and hypersensitivity, as well as repetitive behaviors, may also influence sexual behaviors.

A [2017 review](#)[Trusted Source](#) reported that autistic people may experience hypersexual and [paraphillic fantasies](#) more frequently than allistic people.

Limited or negative sexual experiences

A person's past experiences with sex can influence their attitude toward it.

An exploratory [2021 study](#) found there were more similarities than differences in how autistic and allistic people approach romantic relationships. However, autistic people in the study had less varied sexual experiences, and around half of the females reported negative experiences with sex.

The autistic participants also reported feeling they had limited knowledge about sexuality and found it hard to understand their sexual education.

Educational barriers

The 2021 study authors concluded that autism may make it more challenging to understand standard sexual education as it's currently taught in curriculums.

Classrooms may not accommodate diverse learning styles, creating significant barriers to sexual education in ASD.

“For some autistic individuals, navigating sex, sexuality and relationships may be confusing or overwhelming,” says [Julie Landry](#), PsyD, a board certified clinical psychologist from San Antonio, Texas.

“Self-report often reflects that autistic teens and adolescents feel they have limited knowledge about sex compared to non-autistic peers. This is likely due to the lack of information provided to them.”

The importance of sex education in autism

While many educational programs and [accommodations](#) exist to assist neurodiverse students with cognitive tasks and support their learning styles, these classes usually focus on general functionality and academic skills.

Sexual education is often left at the basic standard level, and autistic youth in alternative learning programs may not participate in standard sex education classes.

However, sexual education is just as important in autistic youth, states Landry.

“It is particularly important for the sexual health of autistic adolescents and young adults since sexual knowledge is often more limited for autistic

individuals, especially during the crucial period of adolescence or the first years of adulthood,” she says.

“Autistic adolescents and young adults often receive less sexual guidance, support, and education than their neurotypical peers due to barriers such as ableism, assumptions, stigmatization, and exclusion.”

Tips for navigating sexual relationships with autism

Autism doesn’t have to stop you from enjoying sexual intimacy or having positive sexual experiences.

Learning about your partner

Sickels recommends learning about your partner — neurodiverse or neurotypical. This can mean:

- open communication
- self-education
- a partnership with medical experts

“Once a couple is able to see how the differences in brain wiring are [impacting their relationship](#), they can begin to re-establish trust,” she says.

Approach things practically

Some hurdles in autism and sex may be related to physical ability.

Landry recommends discussing, as a couple, practical workarounds. “Consider any issues with motor coordination and whether any deliberate planning with these issues in mind would be helpful,” she says.

Understanding consent

Not everyone communicates in the same way. When you’re in a neurodiverse relationship, social cues may appear as one thing, but mean another.

Understanding your partner’s cues of consent can be important to maintaining trust and intimacy.

“Communicate explicitly with your partner to decrease miscommunication related to social cues; this is likely easier to do when it’s not in the heat of the moment,” suggests Landry.

The golden rules of sex — for everyone

Whether you’re autistic or not, Landry says everyone can benefit from the following guidelines:

- know and accept that your sexuality is not the same as everyone else’s
- embrace your desires and preferences
- spend time getting to know your body and what you enjoy
- understand consent
- [communicate with your partner](#) before, during, and after sexual activity

Let's recap

Autism doesn't impact sexual development or the ability to experience sex. While there appears to be a link between autism and gender dysphoria, the exact nature of this relationship is unclear.

Open communication, education, and practical problem-solving can help your neurodiverse relationship thrive.

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Understanding Autism Level 1

If your child exhibits a high level of focus and intelligence but struggles with conversation and social cues, they might have Autism Level 1, a mild form of autism. This condition is part of a spectrum known as autism spectrum disorder (ASD), encompassing various challenges in social skills, repetitive behaviors, speech, and [nonverbal communication](#). The American Psychiatric Association categorizes ASD into three levels of severity, with Level 1 being the mildest.

Autism affects approximately 1 in 36 children in the U.S., according to the [Centers for Disease Control](#). ASD's broad definition includes a range of conditions under one umbrella to better understand and support those affected. Level 1 autism, in particular, highlights individuals who may require minimal support but face notable challenges in social interactions and communication.

What Is Autism-Level 1?

Level 1 is the mildest form of ASD, but children in this category still require support. Generally, children at this level have more mild symptoms, but still have a hard time communicating appropriately or engaging with others. For example, they may not say the right thing at the right time or have difficulty reading social cues and body language. This is what most people previously referred to

when they used the terms “[Asperger's syndrome](#)” or “[high-functioning autism](#)”.

Autism (Level 1) Symptoms

Autism symptoms differ for each child. However, generally speaking, there are common symptoms for children with Autism-Level 1. Some of these symptoms may be viewed as strengths, while other symptoms can be considered challenges.

Strengths can include:

- Remarkable focus and persistence
- Aptitude for recognizing patterns
- Attention to detail

Challenges can include:

- Hypersensitivities to lights, sounds, or other stimuli
- Difficulty maintaining a typical conversation
- Difficulty with nonverbal conversation skills, such as distance, loudness, or tone during conversations
- Uncoordinated movements or clumsiness

If you believe that your child may be demonstrating Autism-Level 1 symptoms, Ascend Autism is ready to answer your questions about how to best support your child.

Related Reading:

- [Early Signs of Autism](#)
- [Signs of Autism in Boys](#)
- [Signs of Autism in Girls](#)
- [Life Before an ASD Diagnosis: Pre-Testing or Screening](#)

Autism-Levels 2 & 3

- **Level 2:** Children at this level require substantial support as there are typically more obvious problems with verbal and social communication compared to those diagnosed with Level 1 autism. Children with Level 2 tend to have very narrow interests and engage in repetitive behaviors that can make it difficult for them to function or participate in certain situations.
- **Level 3:** This is the most severe form of ASD. Children in this category tend to have many of the same difficulties or behaviors as those with Levels 1 and 2, but to a heightened degree. Children at this level have severe deficits in verbal and nonverbal social communication skills that cause severe impairments in functioning, very limited initiation of social interactions, and minimal response to social overtures from others. People at this level require the most support, which can include full-time aides.

About Ascend Autism

[Ascend Autism](#) is a valuable resource for children with autism and their families. Over a decade ago, Ascend Autism was founded by a highly-qualified team of healthcare operators and Board Certified Behavior Analysts (BCBA).

Ascend Autism provides interventions using evidence-based practices (EBPs) for children with high-functioning autism symptoms. EBPs are therapies and treatments that have gone through rigorous research and review and have been found to be effective for treating children with high-functioning autism. Children with high-functioning autism symptoms who have participated in EBPs have shown positive results and better outcomes.

Along with [our therapy programs](#), we provide a safe environment for children with autism so that they feel secure and free to achieve their treatment goals.

Autism Therapy Programs at Ascend Autism

At Ascend Autism, we offer ABA programs for our students, including:

- [Early intervention program](#)
- [Targeted intervention program](#)
- [Social skills work](#)
- [Parental services](#)

Find Out How Ascend Autism Can Help Your Child with High-Functioning Autism

Our Ascend Autism team is ready to help children with high-functioning autism. We have treatment programs that are based on methods that are scientifically proven to be effective.

Learn more about Ascend Autism and our track record of success for children with high-functioning autism. [Contact us](#) today by calling us or completing our secure online form for more information. We offer [center-based ABA therapy](#), in-home, and telehealth services to maximize opportunities.

Understanding Mild Autism Symptoms in Depth

Welcome to our comprehensive guide on mild autism symptoms, also known as autism spectrum disorder level 1. If you or someone you know has been diagnosed with mild autism, it's important to gain a thorough understanding of this condition. Mild autism is characterized by subtle traits and lower

support needs, but it still presents challenges in social interactions, understanding social cues, and sensory experiences.

Diagnosing mild autism can often occur at an older age, sometimes even in adulthood, as the symptoms may not be immediately noticeable during early intervention screenings in childhood. However, early identification and support are crucial for individuals with mild autism to navigate their daily lives successfully.

In this guide, we will delve into the definition of mild autism, explore the characteristics of mild autism in both children and adults, discuss the diagnosis process, and examine the prevalence and possible causes of mild autism. We will also touch on common comorbidities associated with mild autism and provide insights into treatment and support options available for individuals with this condition.

By gaining a deeper understanding of mild autism, we can contribute to creating a supportive environment and promoting inclusivity for individuals with this condition. Stay with us as we shed light on the unique experiences of those with mild autism and how we can all play a role in their journey towards a fulfilling and successful life.

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What is Mild Autism?

Mild autism, also referred to as autism spectrum disorder level 1, is a form of autism with lower support needs. Individuals with mild autism may excel academically but can face challenges in various areas of daily life.

People with mild autism often experience difficulties in social skills, sensory challenges, and organization. Social communication may be a struggle, and they may resist changes in routine. Additionally, individuals with mild autism may be hypersensitive to noise, smell, touch, and other sensations.

The level of support needed for individuals with mild autism varies from person to person. While some may require minimal assistance, others may benefit from structured support systems that help them navigate daily challenges.

Mild Autism Characteristics at a Glance

- Excelling academically
- Challenges with social skills and communication
- Difficulties adapting to changes in routine
- Hypersensitivity to sensory stimuli

Understanding the unique characteristics and support needs of individuals with mild autism is crucial in providing them with the necessary assistance to thrive.

Characteristics	Impact
Challenges in social skills	Difficulty forming and maintaining relationships
Sensory sensitivities	Overwhelmed by certain sensory stimuli
Rigid adherence to routines	Anxiety and distress when routines are disrupted

It is important to recognize and support individuals with mild autism in order to promote their well-being and ensure they have the tools to succeed in their daily lives.

Characteristics of Mild Autism in Children

Children with mild autism may exhibit a range of traits that can provide early signs of their condition. It’s important to recognize these characteristics to facilitate timely intervention and support. Here are some common traits associated with mild autism in children:

Social Interaction and Communication

- Difficulty with eye contact
- Appearing distant or “in their own world”
- Challenges in understanding others’ perspectives
- Struggles with social situations and forming relationships

Routines and Flexibility

- Rigid adherence to routines
- Difficulty adapting to changes

Behavior and Interests

- Repetitive behaviors

- Limited range of interests

Sensory Sensitivities

- Sensory sensitivities, such as being hypersensitive or hypo-sensitive to noises, smells, touch, or other sensations

It's essential to note that the intensity and expression of these traits may vary among children with mild autism. Early recognition of these characteristics can expedite appropriate support and effective strategies to help children with mild autism thrive.

Characteristics	Description
Social Interaction and Communication	Difficulty with eye contact, appearing distant or “in their own world,” challenges in understanding others’ perspectives, struggles with social situations and forming relationships
Routines and Flexibility	Rigid adherence to routines, difficulty adapting to changes
Behavior and Interests	Repetitive behaviors, limited range of interests
Sensory Sensitivities	Hypersensitivity or hypo-sensitivity to noises, smells, touch, or other sensations



Characteristics of Mild Autism in Adults

Adults with mild autism often exhibit similar traits to children, although their coping mechanisms and masking strategies may make their condition less noticeable. Here are some common characteristics of mild autism in adults:

Social Challenges:

- Difficulty relating to others
- Challenges in maintaining friendships
- Difficulties with back-and-forth communication

Expressive Difficulties:

- Trouble expressing oneself verbally

Sensory Sensitivities:

- Strong need for routine and dislike of change
- Anxiety in social situations

Intense Interests:

- Intense interests in specific subjects

Average to Above-Average Intelligence:

- Intellectual capabilities ranging from average to above-average intelligence

Characteristic	Description
Social Challenges	Difficulty relating to others and maintaining friendships
Expressive Difficulties	Trouble expressing oneself verbally
Sensory Sensitivities	Strong need for routine and dislike of change, anxiety in social situations

Intense Interests	Intense interests in specific subjects
Average to Above-Average Intelligence	Intellectual capabilities ranging from average to above-average intelligence

Diagnosis of Mild Autism

Diagnosing mild autism can be challenging, both in adults and children. Adults with mild autism may have developed masking strategies or may have been missed during childhood screenings, making it harder to identify their condition. For adults, evaluations conducted by professionals specializing in adult autism are often necessary to determine the presence of autism traits.

In children, the diagnosis of mild autism typically involves assessments conducted by child psychologists, child psychiatrists, or developmental pediatricians. These assessments comprehensively evaluate the child’s behavioral, social, and communication patterns to determine if they align with the characteristics of mild autism.

It is crucial to conduct a thorough evaluation when diagnosing mild autism, as it helps individuals receive appropriate support and interventions tailored to their needs. By understanding the behavioral, social, and communication patterns, professionals can provide targeted strategies and therapies to help individuals with mild autism thrive.

	Diagnosing Autism in Adults	Diagnosing Autism in Children
Evaluations	Conducted by professionals specializing in adult autism	Assessments by child psychologists, child psychiatrists, or developmental pediatricians
Focus	Evaluating presence of autism traits	Comprehensive evaluation of behavioral, social, and communication patterns
Significance	Helps individuals receive appropriate support and interventions	Provides a foundation for targeted strategies and therapies



Missed Autism Diagnoses

Undiagnosed autism in adults is not uncommon, and there are several reasons why mild autism may go unnoticed or missed. Understanding these reasons can help shed light on the challenges faced by individuals with undiagnosed autism.

1. Traits overlooked in assigned females: Assigned females with mild autism may have their traits overlooked or misinterpreted. Autism symptoms can present differently in girls and women, leading to missed diagnoses. The focus on male-dominated diagnostic criteria and studies has contributed to this oversight.

2. Masking and coping strategies: Individuals with mild autism often develop masking and coping strategies to camouflage their autistic traits. They may mimic neurotypical behavior to fit into social norms, making their autism less noticeable. These strategies can make it challenging for professionals and even the individuals themselves to recognize the underlying autistic traits.

3. Misdiagnosis as mental health conditions: Mental health diagnoses such as anxiety and depression may be mistaken for autism or be results of autistic

burnout, a state of exhaustion experienced by autistic individuals due to the demands of navigating a neurotypical world. The similarities between these conditions can complicate the diagnostic process.

It is important to improve awareness and understanding of the unique presentations of autism in different individuals, especially in adults. By addressing these barriers to diagnosis, we can create a more inclusive and supportive environment for individuals with undiagnosed autism.

Reasons for Missed Autism Diagnoses
Traits overlooked in assigned females
Masking and coping strategies
Misdiagnosis as mental health conditions

Prevalence of Adult Autism

Understanding the prevalence of adult autism is essential for raising awareness and ensuring appropriate support for individuals on the autism spectrum. While the prevalence of autism is commonly associated with children, it is important to recognize that adults can also be affected by this developmental disorder.

Research suggests that the prevalence of autism among adults is similar to that among children, with an estimated 1-3% of the adult population being on the autism spectrum. This means that there are millions of adults worldwide who may have autism but may be undiagnosed or unaware of their condition.

The reasons for undiagnosed autism in adults can vary. Autism traits may present differently in adults, making recognition and diagnosis more challenging than in children. Additionally, many adults with autism have developed masking strategies or coping mechanisms to hide their symptoms, further contributing to underdiagnosis.

Prevalence of Adult Autism in India

In India, the prevalence of adult autism remains a topic of ongoing research. Limited studies have been conducted on the prevalence of autism in this

specific population, but it is believed to be consistent with the global estimates of 1-3%. The lack of awareness and understanding surrounding adult autism in India may contribute to a significant number of undiagnosed individuals.

Efforts are being made to improve the recognition and diagnosis of autism in adults in India. Increased awareness among healthcare professionals, educators, and the general public is crucial for identifying and supporting adults with autism and ensuring their access to appropriate resources and services.

Country	Prevalence of Adult Autism
United States	1-3%
United Kingdom	1-3%
India	Research ongoing

As awareness and understanding of adult autism continue to grow, it is hoped that more individuals will be accurately diagnosed and receive the support they need to thrive.

Possible Causes of Mild Autism

Mild autism, also known as autism spectrum disorder level 1, is thought to have various contributing factors. Research suggests that genetic factors, environmental influences, and brain changes play a role in the development of mild autism.

Genetic studies have identified specific gene mutations associated with autism. These mutations can affect the development and functioning of the brain, leading to the manifestation of autistic traits. Although there isn't one single gene responsible for autism, the presence of certain genetic variations increases the likelihood of developing the condition.

Differences in brain structure and function have also been observed in individuals with autism. Brain imaging studies have shown that there are distinct changes in the structure and connectivity of the brain in people with autism. These changes can affect how the brain processes and interprets

information, leading to difficulties in social interaction, communication, and sensory experiences.

Furthermore, researchers are exploring the role of neuroinflammation and neurotransmission anomalies in the development of mild autism.

Neuroinflammation refers to inflammation in the brain, which can disrupt normal brain development and functioning. Similarly, abnormalities in neurotransmission, the process by which nerve cells communicate, can impact the way information is transmitted and processed in the brain.

Understanding the causes of mild autism is essential for developing effective interventions and support strategies for individuals with the condition. By identifying the underlying factors contributing to autism, researchers can pave the way for targeted treatments and therapies that address the specific needs of individuals with mild autism.

Common Comorbidities in Mild Autism

Individuals with mild autism may experience various comorbidities that can impact their mental and physical health. It is important to recognize and address these comorbidities to provide comprehensive support for individuals with mild autism.

Mental Health Issues

Mental health issues are commonly associated with mild autism. Individuals with mild autism may be more prone to:

- Anxiety disorders
- Mood disorders
- Obsessive-compulsive disorder

Mental health challenges can significantly affect the overall well-being and quality of life for individuals with mild autism.

Physical Health Issues

Physical health problems can also be prevalent in individuals with mild autism. Some common physical health issues include:

- Sleep disturbances
- Gastrointestinal issues
- Epilepsy
- ADHD

It's essential to address these physical health concerns alongside the management of mild autism symptoms to ensure optimal health and functioning.

Treatment and Support for Mild Autism

While there is no cure for mild autism, there are various treatment options and support available to help individuals manage their symptoms and improve their quality of life. Treatment strategies for mild autism focus on addressing the specific challenges and needs of the individual.

Behavioral Therapies

Behavioral therapies, such as Applied Behavior Analysis (ABA), can be highly effective in helping individuals with mild autism develop essential life skills and improve their social interactions. ABA involves breaking down complex tasks into smaller, more manageable steps and using positive reinforcement to encourage desired behaviors.

Social Skills Training

Social skills training programs provide structured learning opportunities for individuals with mild autism to develop and enhance their social communication skills. These programs may involve role-playing, group activities, and real-life scenarios to help individuals navigate social interactions and improve their relationships.

Sensory Integration Therapy

Sensory integration therapy focuses on helping individuals with mild autism better process and respond to sensory information. It involves engaging in activities that stimulate the senses, such as swinging, jumping, or playing with textured materials, to help individuals regulate their sensory experiences and improve their sensitivity to sensory inputs.

Coping Strategies and Support

Support from professionals, family members, and a supportive environment plays a crucial role in managing mild autism symptoms. Professionals can provide guidance and teach individuals effective coping strategies to handle stress, anxiety, and sensory challenges. Family members and peers can offer understanding, patience, and encouragement, creating a positive and inclusive support system.

Managing mild autism symptoms requires a holistic approach that takes into account the unique needs and strengths of each individual. With the right treatment and support, individuals with mild autism can lead fulfilling lives and reach their full potential.

Conclusion

Understanding mild autism, also known as autism spectrum disorder level 1, is crucial in providing the necessary support for individuals with this condition. Although mild autism may have subtle traits that can go unnoticed, early identification is key to helping individuals navigate their social interactions, sensory challenges, and daily activities.

Each person's experience with mild autism is unique, and it is essential to recognize and respect their individual needs. By understanding the characteristics of mild autism and providing appropriate support, we can make a positive impact on the lives of individuals with this condition.

Early identification and intervention play a significant role in ensuring that individuals with mild autism receive the support they require. By identifying and addressing their needs at an early stage, we can help them develop

essential skills, improve their overall well-being, and facilitate a fulfilling and successful life. Through empathy, understanding, and early support, we can create a more inclusive society where individuals with mild autism can thrive.

FAQ

What is mild autism?

Mild autism, also known as autism spectrum disorder level 1, is a form of autism with lower support needs. People with mild autism may excel academically but struggle with social skills, sensory challenges, and organization.

What are the characteristics of mild autism in children?

Children with mild autism may display traits such as difficulty with eye contact, rigid adherence to routines, challenges in understanding others' perspectives, struggles with social situations and relationships, repetitive behaviors, limited range of interests, and sensory sensitivities.

What are the characteristics of mild autism in adults?

Adults with mild autism may exhibit traits such as difficulty relating to others, challenges in maintaining friendships, difficulties with communication, a strong need for routine, anxiety in social situations, intense interests in specific subjects, and average to above-average intelligence.

How is mild autism diagnosed?

Diagnosing mild autism requires a comprehensive evaluation of behavioral, social, and communication patterns. Professionals specializing in adult autism may conduct evaluations in adults, while assessments by child

psychologists, child psychiatrists, or developmental pediatricians are common in children.

Why are missed autism diagnoses common?

Mild autism may go undiagnosed or missed for several reasons, including differences in how autistic traits present in females, masking strategies adopted by individuals with mild autism, and mistaken mental health diagnoses.

What is the prevalence of autism in adults?

The prevalence of autism among adults is estimated to be 1-3% of the adult population, with many adults being undiagnosed or unaware of their condition due to differences in the presentation of autism traits.

What are the possible causes of mild autism?

Mild autism is believed to have multifactorial causes, including genetic factors, environmental influences, brain changes, neuroinflammation, and neurotransmission anomalies.

What are common comorbidities in mild autism?

Individuals with mild autism may be more likely to experience comorbidities such as anxiety disorders, mood disorders, obsessive-compulsive disorder, sleep disturbances, gastrointestinal issues, epilepsy, and ADHD.

What treatments and support are available for mild autism?

While there is no cure for mild autism, appropriate support and interventions such as behavioral therapies, social skills training, sensory integration therapy,

and coping strategies can help individuals manage their symptoms and improve their quality of life.

How does early identification and support impact mild autism?

Early identification and support are crucial in helping individuals with mild autism navigate social interactions, sensory challenges, and daily life activities, contributing to a fulfilling and successful life.

The pink elephant test: What your visual imagination predicts about your ability to control your thoughts

"Tell a man he shouldn't think of a pink elephant and he can't get that beast out of his mind!"

This [quote](#), from Curt Siodmak's 1974 novel "City in the Sky," describes how hard it can be to suppress our thoughts. "Don't think of a pink elephant" has become a classic example of how difficult it can be to intentionally avoid visualizing.

Research [suggests](#) many of you, having read about a pink elephant, will have imagined seeing one.

However, some people, like us, have aphantasia—we cannot visualize. So we are a little confused at the idea that other people can imagine seeing things that aren't there.

In a [new study](#), we have found evidence the pink elephant problem is not universal. Some people—including people with aphantasia—can block involuntary visual thoughts from their minds.

What is aphantasia?

People with aphantasia cannot voluntarily imagine seeing things in our [mind's](#) eye. So if you ask us not to think about a pink elephant, we won't visualize one, because we can't.

Aphantasia is typically described as a deficit. When people first learn they have aphantasia they are often upset, as they realize other people can do things they cannot. It might be nice to

imagine seeing the characters described in a book, for example, or to visualize an absent loved one.

However, deficits are often balanced by benefits. There are [suggestions](#) people with aphantasia (or aphantasics, as we're sometimes called) may have a heightened resistance to involuntary intrusive thoughts.

Another way to look at it is that aphantasics are one portion of a natural diversity of human minds, with people having different capacities to visualize. Where aphantasics have no capacity, most people would have an average ability, and a small number of people would have an extremely strong ability to visualize.

Vivid mental imagery and involuntary visualizations

In our new study, we looked at links between the intensity of people's visual imaginations and their tendency to visualize, even when they try not to. People with vivid visual imaginations were more likely to have involuntary visualizations, and we could predict these outcomes by measuring [brain activity](#).

Some people might enjoy being able to imagine seeing detailed scenes whenever they wish. However, this seems to come at the cost of not being able to shut down these experiences.

Most people have less vibrant imagery, but they seem to be more able to suppress these thoughts.

Do aphantasics have peaceful minds?

Aphantasics are unlikely to have involuntary visualizations. Does that mean they have peaceful minds?

In our study, people who reported having weak imagery were less likely to imagine seeing things they were trying not to think about. However, they were more likely to report mind-wandering.

If this describes aphantasics, instead of visualizing things we are told not to think about, we may turn our minds to other thoughts, such as what's for dinner. So we would not have more peaceful minds, just a resistance to think about things we are trying to put out of mind.

If aphantasics do not visualize, do they have daydreams?

From our own experience, we can confirm at least some aphantasics have minds that wander. But when our minds wander, neither of us imagines seeing things. Our experiences are different.

When Derek's mind wanders, he imagines hearing and engaging in purely audio conversations. As daydreaming is typically associated with vision, he did not realize until very recently these imagined conversations could be described as his experience of daydreaming.

Loren cannot visualize *or* imagine hearing things. She experiences her thoughts as different sensations of texture and imagined feelings of movement—and these are what she experiences when her mind wanders.

Are aphantasics resistant to trauma from re-living events?

Perhaps.

While our evidence suggests aphantasics are resistant to involuntary visualizations, more research will be needed to work out if we are resistant to reliving traumas, or if these will simply trigger different types of imagined experience.

What is clear is that Siodmak was wrong. If you tell people they shouldn't think of a pink elephant, some of us will happily put that beast out of our minds, and turn our thoughts to other matters. What's for dinner?