



MBTI[®] type and neurodiversity

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MBTI® type and neurodiversity

Introduction

What is neurodiversity?

The modern world has largely been built with the needs of **neurotypical** people in mind, and this can place barriers in the way of people considered to be (or who consider themselves to be) **neurodivergent**. Neurotypical describes people whose mental functioning corresponds with what society has seen as typical or 'normal', whereas neurodivergent means that this functioning is different from what society sees as typical or has dictated to be 'normal'. 'Different' does not, of course, mean 'better' or 'worse', just different, though many organizations and workplaces are set up in a way that can make life more difficult, or more complicated, for neurodivergent people.

Rather than using the term neurodivergent, many people use **neurodiversity** or **neurodiverse**. Strictly speaking, neurodiversity refers to the whole range of neurological functioning across the whole population, and this was the meaning originally intended when Judy Singer coined the term (Singer, 1999). In this sense, we are all neurodiverse, though in the words of Atif Choudhry, Co-founder of Diversity & Ability, "We are all neurodiverse, but not all of us are marginalised for it."¹ However, as neurodiverse has become the most common way of saying 'neurologically different', and a synonym for 'neurodivergent', this report will use the terms neurodiversity and neurodiverse from this point on.

Historically, the medical model has been applied to neurodiversity. People who might now see themselves or be described as neurodiverse were seen as suffering from a medical condition or disorder, or from some form of learning disability, deficit, or impairment. The concept of neurodiversity replaces this with the idea that there is a range of human characteristics, with some people (the neurotypical) closer to the average of these and others (the neurodiverse or neurodivergent) further from the average. As such, neurodivergent people may have both strengths at work and areas they find difficult, depending on the nature of their diversity. These characteristics are described in more detail in the section 'Forms of neurodiversity' below.

Personality assessments and neurodiversity

Personality questionnaires have been accused of "screening out neurodiversity" (Wiggleton-Little & Callendar, 2023). This may sometimes be the case when personality assessments are used to screen out job applicants or at other stages of recruitment and selection, though even in this context other hiring practices, such as traditional interviews, can have a more detrimental effect (Volpone, Avery, & Wayne, 2022). The same concerns will not, however, apply to type questionnaires such as the MBTI® assessment, as these are only used in developmental contexts and not used in selection. Indeed, use of the MBTI assessment could and should have positive effects for neurodivergent people, for several reasons:

- The MBTI approach provides a positive framework for understanding differences between people. Following MBTI feedback, many people report a sense of relief that they now understand themselves better, that they can see how they are different from many other people but that this difference is OK. For a neurodiverse person, this positive

¹ Quoted at <https://www.makingbusinessmatter.co.uk/neurodiverse/>

recognition of aspects of their personality and behavior can be extremely empowering. For example, Gordon & Jackson, (2019) suggest that the type model can “provide a more positive frame through which to view Attention Deficit Hyperactive Disorder (ADHD)” and that “personality assessment, using a Jungian function model, may serve as a helpful tool for researchers, clinicians, and their clients to understand ADHD’s unique cognitive style from a balanced perspective”. One individual with autism has commented “it was the MBTI assessment that first got me to push for my own diagnosis. There is so much more that I could say here about how powerful the MBTI tool is for helping people with neurodiversity understand themselves and how they can fit into the workplace as themselves and all that they can bring”.

- The MBTI framework can also help non-neurodiverse clients to understand the positive benefits of the ways in which others are different. By understanding and valuing personality differences, individuals can learn to understand and value other differences too. Any approach that can help individuals to value the differences they see in others and hence reduce negativity and discrimination around difference will be useful. In a recent survey, 55% of neurodiverse people were worried about stigma and discrimination from colleagues, and 65% about stigma and discrimination from management (McDowall, Doyle, & Kiseleva, 2023).
- One specific area where the MBTI assessment is useful is in understanding the value of different work styles. For example, people with a Judging preference can learn to see that the Perceiving approach to a project can be useful, and that forcing someone with a Perceiving preference to behave in a Judging way will not have positive outcomes—and vice versa for Perceiving people. Similarly, one thing that neurodiverse people will often ask for is the freedom to approach work in their own way (for example, see Bastian, 2022).
- The MBTI assessment can also be useful as part of careers counselling with neurodiverse people, as shown, for example, by work with young autistic adults (Cadondon, Dawson, Carriere, Griffiths, & Gehricke, 2023). This study showed that a program using the MBTI assessment alongside the *Strong Interest Inventory*® improved participation in jobs or further education as well as self-confidence in 20 autistic young adults. To quote the researchers, “the unique use of the MBTI and SII as a strengths and challenges intervention may be a useful tool to guide youth, particularly autistic youth, as they explore and discuss post-secondary options that best fit their interests and personal strengths”.
- Teams can be prone to *group think*, especially where many of the team have the same views or approach (often the same views or approach as the team leader). This can mean that anyone who takes a different view or approach is marginalized and pushed out. This is bad news for the individual, but also bad news for the team, which is likely to make less well-rounded decisions as a result. Using the MBTI assessment in team development helps team members to see the value of other points of view and is likely to reduce group think and marginalization. As neurodiverse people have been more likely to be marginalized in this way, MBTI-led team development is likely to be beneficial.
- Historically, a medical or disability model has often been applied to neurodivergent people. This confers some advantages, by protecting them under the terms of equal opportunities or disabilities legislation, but it also tends to identify them as someone different, as a group apart. Knowing your MBTI type can help to cut across this barrier. Someone with (for example) ISTJ preferences will have a great deal in common with someone else with ISTJ preferences, whatever other characteristics they may possess and whatever other identities they may hold.

- Some forms of neurodiversity are characterized in part by difficulty in understanding one's own behavior, and/or the behavior of others. The MBTI model can provide a straightforward framework to help with this.
- One advantage that the MBTI assessment has over many other tools is the inclusion of the best-fit feedback process. Talking through someone's results and helping them to decide for themselves what type fits them best is likely to lead to more productive conversations and reflection than assessments that merely present the results.
- Many neurodivergent people, perhaps especially those in professional or managerial roles, have learned to 'mask' their natural behavior. They conceal or suppress aspects of their neurodivergent traits in order to fit in with the norms of their workplace or of wider society. For some, this masking may have become so natural as to be unconscious. Just as MBTI feedback helps some clients see (for example) their Introversion preference as OK, the discussion can help clients see their neurodiversity as OK, reducing the feelings of isolation and imposter syndrome that some may suffer from.

In general, then, using the MBTI assessment with neurodivergent people should be appropriate and useful. Some individuals completing the assessment will, however, have concerns and questions, as will some MBTI practitioners. This report attempts to answer these and provide other relevant information.

Contents of this report

The remainder of this report contains the following sections:

- **Forms of neurodiversity.** A description of some of the forms of neurodiversity most often seen in the population and the workplace. Readers already very familiar with the different forms of neurodiversity may choose to skip this section.
- **Using the MBTI assessment with neurodiverse people.** Practical recommendations and suggestions for MBTI administration and feedback. For many MBTI practitioners, this may be the most directly relevant section of this report.
- **How MBTI type relates to forms of neurodiversity.** Personality type and neurodiversity are not the same thing, and the MBTI assessment should never be used as a diagnostic tool. However, there are some links. This section describes these and the underlying research.

Forms of neurodiversity

Overview

Neurodiversity is a broad term that covers many different types of people, such as those with attention deficit hyperactivity disorders (ADHD), autism spectrum disorder (ASD, including Asperger's syndrome), dyscalculia, dyslexia, dyspraxia, obsessive-compulsive disorder (OCD), and Tourette's syndrome.

Across populations, large numbers of people will be affected by one or more of these. Between 3 and 7% of children are affected by ADHD (Kessler, et al., 2006) and an estimated 3.5% of the global workforce have the condition (de Graaf, et al., 2008). 2.8% of 8-year-old children in the US and around 2% of adults have been diagnosed with autism spectrum disorder (Centers for

Disease Control and Prevention (CDC) , 2023). Some estimates suggest that 15% of the population may be affected by dyslexia. Overall, it is estimated that around 15–20% of the population worldwide are neurodiverse (Doyle, 2020).

In the context of the MBTI assessment, it is worthwhile remembering that many of these percentages are greater than the percentages of some individual type preferences in the population. For example, it is likely that there are fewer people with preferences for INFJ, or ENFJ, or ENTJ than there are people with ADHD, and fewer people with ENTJ preferences than there are people diagnosed with ASD. In other words, some forms of neurodiversity are more common in the population, less of a minority position, than several type preferences seen as part of the 'normal' range of personality.

Several forms of neurodiversity are described in more detail below. For ease of reading, they are described separately, but of course real people in the workplace may show more than one form. Indeed, there is evidence that people are often diagnosed as having more than one neurodiverse condition.

Attention deficit hyperactivity disorder (ADHD)

People with ADHD can seem restless, may have trouble with concentration and attention, and/or may act on impulse more than other people. In the workplace, they can have problems with organization and time management, following instructions, or focusing on and completing tasks. They may seem restless, impatient, or impulsive, or take unnecessary risks. Some people with ADHD are more inattentive (not paying attention to detail, not listening, or paying attention, getting distracted, making mistakes). Some are more hyperactive or impulsive (fidgeting, never staying still, talking too much, interrupting, not staying seated). Many show a combination of the two.

Some research suggests that the behaviors associated with ADHD may have been advantageous in the distant past, for example in hunter-gatherer societies, but are less so now (Estellar-Cucala, et al., 2020). ADHD may certainly seem a poor fit for some more traditional work environments that stress attention to detail, repetitive tasks, rule-following, and strict management of time and resources. There is, however, evidence that people with ADHD can bring many benefits to the workplace:

- Creativity: research shows that people with ADHD report more real-world creative achievements and can, when sufficiently motivated, generate more original ideas than others (Boot, Nevicka, & Baas, 2017).
- High energy: this is one of the defining characteristics of ADHD.
- Hyperfocus: when they are doing a job that they enjoy and find interesting, many can focus on a task for hour after hour, avoiding distractions and producing high-quality and incisive results (Ashinoff & Abu-Akel, 2021).
- Impulsivity and spontaneity: though this can lead to taking unnecessary risks, it can also result in great successes.
- Resilience and courage: many individuals with ADHD have had to overcome barriers during their education and built resilience and developed courage as a result. Interviews with successful adults with ADHD showed resilience and courage to be key attributes (Sedgwick, Merwood, & Asherson, 2019).

Autism, autism spectrum disorder (ASD), Asperger's syndrome

Autistic people may act in a different way to other people. They may find it hard to communicate and interact with other people and find it hard to understand how other people think or feel. Some may find things like bright lights or loud noises overwhelming, stressful, or uncomfortable, and get anxious or upset about unfamiliar situations and social events. Some can take longer to understand information while some do or think the same things over and over.

Autism represents a spectrum of different behaviors. For most people, not all these issues will apply, and those that do will differ in their impact. Autism is now often referred to as autism spectrum disorder (ASD) for this reason. The term Asperger's (or Asperger's syndrome) was in the past used to describe autistic people with average or above average intelligence but poor social skills. In practice it was largely synonymous with the wording 'high functioning autistic', a phrase now considered outdated.

Some of the strengths of people with autism can include:

- A high degree of attention to detail, precision, and accuracy.
- Memorizing and learning information quickly and retaining this accurately.
- In-depth expertise and knowledge in specific areas.
- Logical thinking ability; methodical and analytical.
- Punctual, rule-following, dependable, reliable, honest.
- Able to focus for long periods of time when motivated.
- Creativity, with a different viewpoint and novel solutions.
- Thinking and learning in a visual way, good sense of direction.

Dyscalculia

Dyscalculia is a specific and persistent difficulty in understanding numbers which can lead to a diverse range of difficulties with mathematics. Those with dyscalculia may also have trouble understanding shapes, distance, or volume, or have difficulty with time, directions, recalling schedules, sequences of events, or financial planning.

People with dyscalculia often see situations in a holistic way, leading to effective strategic decisions and creative problem-solving. They often have a great love of words and a high degree of practical ability.

Dyslexia

When learning to read, children with dyslexia find it difficult to recognize the different sounds that make up words and relate these to written letters. As a result, people with dyslexia may read and write very slowly, confuse the order of letters in words, be confused by letters that look similar, write letters the wrong way round (such as "b" and "d"), and have poor or inconsistent spelling. In the workplace, they may understand information when told verbally, but have difficulty with information that is written down. Some may find it hard to carry out a sequence of directions, and they can struggle with planning and organization.

Research suggests that people with dyslexia tend to take in the whole picture rather than the details at the centre of their visual field (Geiger, et al., 2008). This can mean they have advantages over other people in areas such as big-picture thinking, lateral thinking, and creative

problem-solving. They can have an intuitive understanding of how things work and strengths in visualizing rather than verbalizing. There is some research evidence that, compared with other people, dyslexic adults may be more creative in non-written contexts, but are no more creative in verbal or written contexts. However, the effect is small and may not exist with younger people (Erbelli, Peng, & Rice, 2022). Other studies suggest that the question of whether dyslexic people are more creative depends on exactly how creativity is defined (Gutierrez-Ortega, et al., 2023).

Dyspraxia (developmental co-ordination disorder)

Dyspraxia affects movement and co-ordination, such as tasks requiring balance, playing sports, or learning to drive a car. Dyspraxia can also affect fine motor skills, such as writing or using small objects.

People with dyspraxia have often had to overcome obstacles growing up, leading to a degree of resilience and determination. Having to carry out tasks in different ways means that they can often bring a new and creative view to problems, and they can be very empathetic and caring.

Obsessive-compulsive disorder (OCD)

Obsessive-compulsive disorder (OCD) has historically been considered to be a type of anxiety disorder or a form of mental illness. While OCD can indeed create anxious thoughts and anxiety-related symptoms, it has more recently also been seen as neurodiverse in origin. People with OCD have a brain that processes and behaves differently from what is considered typical, a key characteristic of neurodivergence. As some but not all authorities see OCD as a form of neurodiversity, it has been included here for completeness.

In obsessive-compulsive disorder, a person has obsessive thoughts and compulsive behaviors. An obsession is an unwanted and unpleasant thought, image, or urge that repeatedly enters a person's mind, causing feelings of anxiety, disgust, or unease. A compulsion is a repetitive behavior or mental act that they feel compelled to do to temporarily relieve the unpleasant feelings brought on by the obsessive thought. The compulsive behavior temporarily relieves the anxiety, but the obsession and anxiety soon return, causing the cycle to begin again. Common types of compulsive behavior in people with OCD include:

- Cleaning and hand washing.
- Checking—such as checking doors are locked.
- Counting.
- Ordering and arranging.
- Hoarding.
- Asking for reassurance.
- Repeating words in their head.
- Thinking "neutralizing" thoughts to counter obsessive thoughts.
- Avoiding places and situations that could trigger obsessive thoughts.

Obsessive-compulsive disorder can be a debilitating condition. However, there can be positive aspects for some people. Those with OCD are often cautious and risk averse, which can be an advantage or a disadvantage in the workplace depending on the situation or the nature of their work. They are usually very detail-conscious, even perfectionist, and (unless compulsions get in

the way) good at meeting deadlines. Some research has suggested that people with OCD may be more creative (Furnham, Hughes, & Marshall, 2013).

Tourette's syndrome

Tourette's syndrome is a condition that causes a person to make involuntary sounds and movements called tics. These may be physical (such as blinking, eye rolling, jerking of the head or limbs, or touching objects and other people) or verbal (such as grunting, coughing, tongue clicking or saying random words and phrases). Although swearing is often depicted as a symptom, only a small percentage of people with Tourette's syndrome do this.

Suppressing tics takes energy and can be tiring. There is, however, some evidence that learning to do this gives people with Tourette's improved time processing and greater cognitive control (Vicario, et al., 2010). They may also have, on average, superior grammatical skills (Dye, Walenski, Mostofsky, & Ullman, 2016).

Using the MBTI® assessment with neurodiverse people

This section of this report contains hints and tips for using the MBTI assessment with neurodiverse people. For most purposes, and in most legal systems, people are under no obligation to disclose any form of neurodiversity and you might not know whether or not a client is neurodiverse. However, many of the points listed below will inform good practice when using the MBTI assessment with anyone.

General points

- Ensure that all communication through the whole process, including assessment, feedback, and ongoing engagement, is clear and straightforward. Use short, concise sentences and avoid ambiguous statements. In written communication, it is generally better to use sans serif fonts as these are typically clearer.
- Consider using pictures or diagrams as well as words for those who prefer a visual style of communication.
- Generally, and especially for individuals with autism spectrum disorder, be careful not to over-use metaphors, non-sequiturs, or unusual phrases.

Setting up and completing the assessment

- Clearly state the purpose for using the MBTI assessment and exactly how, when, and why the results will be used. Be prepared to answer detailed questions about the exact process. When clients are completing the questionnaire online, ensure that there is still a way for them to ask questions and be responded to.
- Allow time for people to read any instructions and make sure you are available for any questions. This will be useful for everyone, but is crucial for those who need more precise, explicit, and straightforward communication.
- In general, the questions in the MBTI assessment are straightforward. However, some people may find some questions too abstract and ask for a specific context or find it

difficult to make a choice. Set up the administration of the assessment carefully, providing clear instructions and a framework upfront—for example, the idea of your client’s ‘shoes off self’. This is especially important when individuals are completing the assessment online or otherwise remotely. If possible, be available to answer any questions.

- Many people will have previously heard of the MBTI assessment, and some may have a negative opinion about it. Some groups that are supportive of neurodivergent people’s rights have been critical of personality questionnaires. Use the information in the first section of this report to explain why and how the MBTI approach can be useful for neurodiverse people. Of course, completing the MBTI assessment is always voluntary, and ultimately some people may decide that it is not for them.

Feedback and the best-fit process

- Work through the introduction to the feedback session in a structured, ordered way, laying out exactly what is going to happen and why.
- In particular, make it clear that the discussion will be confidential and that there is no right or wrong and no better or worse type to be.
- As mentioned above, some clients may be predisposed to be critical of the MBTI assessment, be resistant to being ‘put in a box’, and so on. Use the information in the first section of this report to explain why and how the MBTI approach can be useful.
- Many neurodiverse people will have been on a journey to find out more about themselves and will have taken other type assessments. These may have been free online quizzes that may have low reliability, giving questionable results. These clients are likely to be enthusiastic about having MBTI feedback but may have misconceptions about type and what this says about them. You may need to talk through these misconceptions during the feedback session.
- Use pictures as well as words. These can be the illustrations on the feedback cards or on slides, for example.
- Avoid euphemisms and other non-literal speech. Keep things straightforward.
- In written material, pictures may work better than words. Clear bullet points or short notes might be better than lengthy paragraphs.
- Avoid the use of very wordy slides or handouts. When using materials like *Introduction to Myers-Briggs Type*, give clients plenty of time to read these and do not hurry them or appear to do so.
- In a few cases, some exercises, such as asking clients to sign their name, may work less well for clients with dyspraxia.
- In general, it is good practice to use open questions in an MBTI feedback discussion. However, with some clients, it can be useful to use some closed questions to get specific answers or to confirm what has been said.
- Some of the standard MBTI feedback questions may work less well with some neurodiverse people. Be prepared to adapt questions when needed, such as adding clarification or defining a specific context, and do not continue to persevere with a question that clearly is not working. Avoid giving clients the impression that it is their fault that the question seems difficult to answer and be aware of ‘masking’ behavior (see points below).

- In a feedback interview, we generally ask our clients questions about what they do, their behavior. It is important to remember that this behavior may come from their environment and situation, from their type preferences, or from other sources such as the way(s) in which they are neurodivergent. So, always ask “why”. For example, suppose in answer to the question “How do you typically operate in meetings?”, your client says that they usually don’t contribute a great deal. It may be tempting to assume that they have Introversion preferences and move on. Instead, ask why first. It may be, for example, that their contributions are not appreciated or taken seriously, so they have stopped contributing. Or that, as someone with Tourette’s syndrome, all their energy in a meeting is taken up with suppressing tics. Or that, as someone with ADHD, they find having to sit still in a meeting on an uninteresting topic positively painful. Never assume, always explore, always ask why.
- Some neurodiverse people have learned to ‘mask’ their natural behavior in order to fit in with the norms of the workplace or of wider society. Just as acting against one’s type takes effort and can be draining, so does neurodivergent masking. To quote the neurodiversity activist Colm McNamee, “If you ask a fish to climb a tree, it will go through life thinking it’s an idiot” (Howard, 2022). Masking will clearly affect the way in which clients will complete the questionnaire and respond to questions in feedback. This is something for type practitioners to be aware of as a possibility for any client but most especially when a client has already revealed their neurodiversity.
- It follows from these points that type and neurodiversity are not the same thing, or rather, that type is just one of the many ways in which we are all neurodiverse. The MBTI assessment is **not** a diagnostic tool and will **not** tell you whether or not a client has ADHD, ASD, or any other form of neurodiversity.
- You may be asked questions such as “what MBTI type are people with ADHD?”. The answer: they can have any one of the 16 types. Type and ADHD are not the same thing, type and autism are not the same thing, and so on. However, there are some links, with some type preferences more likely to be found in people with certain forms of neurodiversity than others. These links, and the underlying research, are described in detail in the next section.

How MBTI® type relates to forms of neurodiversity

Overview

To a degree, questions like, “is there an autistic MBTI type” are no different from questions like “are all tall people the same type”. Psychological type and the different aspects of neurodiversity are different ways of understanding people. Some forms of neurodiversity will not show any relationship with MBTI type at all. Even when research suggests that some relationship exists, neither will entirely explain the other. For example, research suggests a link between Extraverted Intuition and ADHD. However, not all people with Extraverted Intuition as their favorite process will show signs of ADHD, and not all people with ADHD will have Extraverted Intuition as their favorite process. Psychological type and neurodiversity are two different ways of helping people to understand themselves, and used together can give a richer picture.

Of course, both our type preferences and our neurodiversity contribute to our behavior and to the ways in which we see the world. It will be useful for MBTI practitioners to know where these overlaps are, with the understanding that these are relationships, not causes. They are correlations that will not hold for every individual and do not signify cause and effect.

This section describes research studies that have been carried out into the relationship between personality frameworks and ADHD, ASD, dyslexia, and OCD. No research studies were found relating to dyscalculia or dyspraxia, so these are not included. For each form of neurodiversity, some overall conclusions are given, followed by a list of studies used to draw these conclusions.

As well as studies using psychological type, studies using the Big Five, or Five-Factor Model (FFM) personality model are also included. Because there is a correlation between the FFM and type, this can provide additional information, especially where (as with dyslexia and Tourette's syndrome) no studies directly using type were found. The relationships between the FFM and the MBTI assessment are shown below.

FFM scale	Definition	Corresponding type preference	Correlation*
Neuroticism (sometimes reversed as Emotional Stability)	Emotionally reactive, vulnerable to stress, has negative emotions, anxious.	(None)	0.22 with I 0.12 with F
Extraversion	Enthusiastic, action-orientated, sociable, gregarious, assertive.	E	0.69 with E
Openness to experience	Intellectually curious, open to emotion, sensitive to beauty, and willing to try new things.	N	0.53 with N
Agreeableness	Values getting along with others, considerate, kind, generous, trusting, helpful.	F	0.31 with F
Conscientiousness	Self-disciplined, dutiful, achievement-orientated, likes planning.	J	0.40 with J, 0.22 with T, 0.18 with S

* (Arneson & Landowski, 2015)

Attention deficit hyperactivity disorder (ADHD)

Looking at checklists of ADHD symptoms (see for example [Adler, Kessler, & Spencer](#)), some of the behaviors listed seem to describe the Perceiving preference, and this has been noted by other commentators (Kise, 2007). Research studies reflect this, with several showing Perceiving as being linked to an ADHD diagnosis or ADHD-related behavior. Research using the FFM backs this up, with several showing a relationship between ADHD and the trait of Conscientiousness.

The results of a doctoral thesis (Cabak, 1998) and two large scale studies (Gordon & Jackson, 2019) suggest that people with preferences for Extraverted Intuition (Ne) in particular are more likely to be diagnosed with ADHD and show behaviors typical of ADHD. The Gordon and Jackson study goes further, drawing a distinction between inattentive ADHD (Ne more likely; Te, Si and, to some extent, Ni and Se less likely) and hyperactive/impulsive ADHD (Ne and, to some extent, Se and Fe more likely; Si, Fi and, to some extent, Fi and Ti less likely). As the MBTI model looks at functions and at the interactive combination of preferences into whole type, these results

suggest that this might be a more useful tool for people with ADHD than a trait measure looking at scores on separate, discrete scales.

List of ADHD studies using type directly

Study	Result
<p>A balanced approach to ADHD and personality assessment: a Jungian model (Gordon & Jackson, 2019)</p> <p>Two studies. Adults took a test of inattentive (DI) and hyperactive (DH) ADHD symptoms. Some had also been diagnosed with DI and/or DH forms of ADHD. Both studies used direct measures of Jungian functions rather than the MBTI assessment.</p>	<p>Study 1:</p> <ul style="list-style-type: none"> - DI scores correlated positively with Ne and negatively with Te, Ni, Si, and Se. - A DI diagnosis was positively associated with Ne and negatively with Te and Si. - DH scores correlated positively with Se, Ne, and Fe, and negatively with Ni, Si, Fi, and Ti. - A DH diagnosis was positively associated with Ne, negatively with Si and Fi. - Overall, those diagnosed with ADHD were more likely than others to have Ne and less likely to have Te, Se, or Fi. <p>Study 2:</p> <p>Overall, those diagnosed with ADHD were more likely than others to have Ne and less likely to have Te or Fi.</p>
The relationship of personality style and attention deficit hyperactivity disorder in children (Amos, et al., 2017)	Children diagnosed with ADHD were significantly more likely to have a Sensing preference.
Differentiation through personality types (Kise, 2007).	"A perusal of indicators of ADHD show that many also describe the Perceiving function".
The relationship among attention-deficit/hyperactivity disorder (ADHD), personality type, and creativity in adults using the Myers-Briggs Type Indicator (MBTI) and the Torrance Tests of Creative Thinking (TTCT) (Alt, 1999)	Individuals with ADHD were more likely to have Intuitive and Perceiving preferences than individuals without ADHD.
A Descriptive Examination of Attention Deficit Hyperactivity Disorder in Adults and Jungian Psychological Type (Cabak, 1998)	ENTP, ENFP, and INFP were over-represented amongst adults with an ADHD diagnosis.
Attention deficit disorder: A Jungian perspective (Landau, 1997)	Results suggests that ADD children have a tendency to prefer the Intuition function as their dominant function.

The relation between ADHD and Jungian psychological type: commonality in Jungian psychological type preferences among students with attention deficit hyperactivity disorder (Meisgeier, Poillion, & Haring, 1994)	Students with ADHD did not significantly differ in their type preferences from non-ADHD students.
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List of ADHD studies using the Five-Factor Model (FFM)

Study	Result
Five factor model personality traits relate to adult attention-deficit/hyperactivity disorder but not to their distinct neurocognitive profiles (Van Dijk, et al., 2017)	People with ADHD showed significantly higher Neuroticism and lower Extraversion, Agreeableness, and Conscientiousness than a control group. Openness scores depended on the specific ADHD profile.
ADHD and personality: a meta-analytic review (Gomez & Corr, 2014)	Looked at ADHD inattention (IA) and hyperactivity/impulsiveness (HI) separately: <ul style="list-style-type: none"> ▪ IA and HI associated with low Conscientiousness and Agreeableness and high Neuroticism. ▪ Conscientiousness more strongly related to IA than HI. ▪ Agreeableness more strongly related to HI than IA.
Personality characteristics associated with persistent ADHD in late adolescence (Miller, Miller, Newcorn, & Halperin, 2008)	Childhood ADHD is associated with lower scores on Conscientiousness.
ADHD symptoms and personality: relationships with the five-factor model (Parker, Majeski, & Collin, 2004)	Neuroticism correlated positively with ADHD inattention, hyperactivity/impulsiveness, and combined (total) scores. Conscientiousness and (to a lesser extent) Agreeableness correlated negatively.

Autism spectrum disorder (ASD)

Robert Chester has suggested a link between I_TP type combinations and Asperger's syndrome (Chester, 2006), though the only type-based empirical study found when preparing this report suggests I and J. Comparison with FFM studies does suggest I, S, T, and P, with I and T the most certain.

List of ASD studies using type directly

Study	Result
Asperger's syndrome and psychological type (Chester, 2006)	Argues (based on characteristics, no empirical data) that many people diagnosed with Asperger's have I_TP preferences and that some I_TP preference people are mis- or over-diagnosed as having Asperger's.
Autism and learning styles: An assessment of children with high functioning autism and Asperger's syndrome using the Murphy-Meisgeier Type Indicator for Children-Revised (MMTIC-R) (Duke, 2005)	Children with ASD were more likely than a control group to have preferences for I and J, but (contrary to hypotheses) not significantly more likely to have ISTJ preferences overall.

List of ASD studies using the Five-Factor Model (FFM)

Study	Result
Meta-analysis of big five personality traits in autism spectrum disorder (Lodi-Smith, Rodgers, Cunningham, Lopata, & Thomeer, 2019)	ASD symptoms were negatively correlated (in descending order) with Extraversion, Emotional Stability, Agreeableness, Openness, and Conscientiousness. Compared with control groups, people with ASD were (in descending order of effect size) less Extraverted, Emotionally Stable, Agreeable, Open, and Conscientious.
Can the five-factor model of personality account for the variability of autism symptom expression? Multivariate approaches to behavioral phenotyping in adult autism spectrum disorder (Schwartzman, Wood, & Kapp, 2015)	Neuroticism correlated positively with autism symptom severity; Extraversion, Openness to experience, Agreeableness, and Conscientiousness correlated negatively.
Autism, personality, and human diversity: Defining neurodiversity in an iterative process using Aspie Quiz (Ekblad, 2013)	Scores on 'Aspie Quiz', an instrument with a .83 correlation with autism, correlated negatively with Extraversion, Agreeableness, and Conscientiousness.

Dyslexia

No studies directly linking psychological type and dyslexia were found. Studies using other personality frameworks (the FFM and the Eysenck Personality Questionnaire) found no personality differences in adult populations and a contradictory picture with children. It seems probable that, in adults at least, psychological type and dyslexia are likely to be unrelated.

List of dyslexia studies using the Five-Factor Model (FFM) and other frameworks

Study	Result
Personality, behavior characteristics, and life quality impact of children with dyslexia (Huang, et al., 2020)	Uses the EPQ. Dyslexic children were more introverted than non-dyslexic children.
Personality profiles of dyslexic children: a study with the Big Five Questionnaire. (Gagliano, et al., 2014)	Dyslexic children scored lower on Open-mindedness, Conscientiousness, and Agreeableness than non-dyslexic children.
Do students with dyslexia have a different personality profile as measured with the big five? (Verguts, Callens, & Brysbaert, 2013)	No significant personality differences between dyslexic and non-dyslexic higher education students.
Personality characteristics of adult dyslexics (Richardson & Stein, 1993)	No differences between dyslexic and non-dyslexic adults on the Eysenck Personality Questionnaire (EPQ) scales of extraversion, neuroticism, or psychoticism.

Obsessive-compulsive disorder (OCD)

People with obsessive-compulsive disorder are more likely to have a Judging than a Perceiving preference, and MBTI Judging seems to be a closer match for these behaviors than FFM Conscientiousness. The SJ combination in particular may match some OCD features. However, it should be remembered that the behaviors associated with obsessive-compulsive disorder are more extreme than those used to describe the J or SJ preference, and that OCD is more complex than and different from some form of 'extreme Judging'.

List of OCD studies using type directly

Study	Result
The dark side of the MBTI: psychological type and interpersonal derailers (Furnham & Crump, 2014)	Judging, and to some extent Sensing, correlate with the Diligent scale of the Hogan Development Survey (HDS).
Personality traits, types, and disorders: an examination of the relationship between three self-report measures (Furnham & Crump, 2005)	Judging, and to some extent Sensing, correlate with the Diligent scale of the Hogan Development Survey (HDS).
An empirical investigation of Jung's psychological types and personality disorder features (Coolidge, Segal, Hook, Yamazaki, & Ellett, 2001)	Introversion, Thinking, Judging, and to a lesser extent Sensing correlated with the Obsessive-Compulsive scale of the CATI assessment.
Differentiation of psychopathology by psychological type (Otis & Louks, 2001)	Individuals with ISTJ or INTJ preferences were more likely to show OCD symptoms. Those with INFP or INTP preferences were less likely.

List of OCD studies using the Five-Factor Model (FFM)

Study	Result
Obsessive, compulsive, and conscientious? The relationship between OCPD and personality traits (Mike, King, Oltmanns, & Jackson, 2018)	There is only a small relationship between Conscientiousness and a measure of OCD. Some of the sub-facets of Conscientiousness correlated positively with OCD (Order, Achievement Striving), others negatively (Self-Discipline). Neuroticism correlated positively, Agreeableness negatively.
Personality traits, types, and disorders: an examination of the relationship between three self-report measures (Furnham & Crump, 2005)	Conscientiousness correlates with the Diligent scale of the Hogan Development Survey (HDS).
Obsessive-compulsive disorder and the five-factor model of personality: distinction and overlap with major depressive disorder (Rector, Hood, Richter, & Bagby, 2002)	Patients with a diagnosis of OCD were lower on Extraversion and higher on Neuroticism and Conscientiousness.

Tourette's syndrome

There is very little research linking standard personality models with Tourette's syndrome. There is, however, some suggestion that people with Tourette's may appear to behave in a more introverted way. This may be linked to the condition at a deeper level, or it may simply be that people with Tourette's syndrome have been forced to control and limit their speech or social contacts.

List of Tourette's syndrome studies using the Five-Factor Model (FFM) and other frameworks

Study	Result
A controlled study of personality and affect in Tourette syndrome (Eddy, Rickards, Critchley, & Cavanna, 2013)	Individuals with Tourette's had lower FFM Extraversion and Emotional Stability compared to controls.
Analysis of personality dimension of the children with Gilles de la Tourette's syndrome (Hui & Ge, 1996)	Children with Tourette's syndrome showed a high degree of Introversion on the Eysenck Personality Questionnaire (EPQ).

Summary

While there are relationships between psychological type and some forms of neurodiversity, these are correlations, not causes or diagnoses. Knowledge of these relationships may nevertheless be useful to MBTI practitioners, if used in the context of the practical advice given in the previous section of this report, *Using the MBTI® assessment with neurodiverse people*.

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