Neurodiversity: An Introduction

Truthsayers® has sought to ensure that the Neurotech® platform is inclusive by including accessibility features. Our initial focus in relation to this, was to improve accessibility specifically for those who are dyslexic.

We have been guided by the [British Dyslexia Association's Style Guide[1]](#), and informed by conversations with academics, neurodiversity specialists and individuals who are dyslexic, all of whom helped us understand dyslexia and the accessibility options that may be helpful. This knowledge has fed into the development of our NeurodiversityToolbar™ on the Neurotech® platform.

Dyslexia presents differently for different people. Visual stress is commonly associated with dyslexia (although it is a separate condition). A visual dyslexic may find that a buff-coloured overlay can improve readability, but this alone is ineffective as a fix for all dyslexics. Many other factors need to be considered so that the individual can choose what is most helpful for them – it might be increasing line spacing, selecting a specific typeface, using audio descriptions.

Dyslexia is commonly co-occurring with [Visual stress or Visual Processing difficulties[2]](#), of which there are many types (visual sequencing, visual-motor processing, long- or short-term visual memory, visual-spatial, visual closure, letter and symbol reversal, and more). Dyslexia affects the way the brain processes language; Visual stress and visual processing affect the ways the eyes receive information. It is a very complex area.

Working on the NeurodiversityToolbar™ our development team has taken into account multiple combinations and options. The toolbar offers the ability to choose from a pallet of colour backgrounds, different colour fonts, increased line spacing and use of the OpenDyslexia3 font. It is our belief that this NeurodiversityToolbar™ will significantly improve the accessibility of our platform for those who are neurodiverse; we know it will not be a fix for everyone, but it is our aim to get as close as possible. It will be an ongoing process of reviewing this, in response to feedback and research.

In addition to the NeurodiversityToolbar™ we already have audio features and a control to extend the response times within the Neurotech process itself.

What is Neurodiversity?

Dyslexia falls under the broader collective banner of neurodiversity, along with dyspraxia, dyscalculia, dysgraphia, Autistic Spectrum Disorders, ADHD, ADD, Tourette's, and a large number of other neurological variations. It is common for neurodiversity to present as co-occurring 'conditions' in an individual. Neurodiversity is a relatively new term within business communities (and even within schools actually).

Common terminology[3] (more are being used in different circles):

- Neurodiversity is an umbrella term for all neurological differences; the biological reality of infinite variation in human neurocognitive functioning and behaviour, akin to 'biodiversity' in the natural world.

- Neurodivergent is a term used to describe someone who has one or more neurological differences; having cognitive functioning different from what is seen as 'normal'.

- Neurodivergence is the state of being neurodivergent. It's worth noting that a common misuse of language is to talk of 'an individual's neurodiversity' – better would be 'an individual's neurodivergence'.

- Neurotypical is someone who presents with a typical neurology; given the biological fact that there is no such thing as a 'normal' brain, neurotypical is best thought of as 'not neurodivergent'.

Terminology is always tricky to get right – language is always changing. The focus, of course, always needs to be on the use of positive language that celebrates difference.

At the moment, neurodiversity falls under 'disability'. This is a double-edged sword. On the one hand, it means that employers have a responsibility to support neurodivergent people in the workplace, but the label of 'disability' carries with it many biases. There are many arguments to consider neurodiversity as a separate, under-represented area. It seems quite common that people who have dyslexia, for example, will not identify as having a disability, for many reasons personal to them – perhaps fear of discrimination, shame, not wanting a fuss, not wanting to be seen as different or marginalised.

The Challenges for Employers:

1) There are many neurodivergent people who may not mention this to their employers (before, during or after recruitment) for fear of bias against them (or for a multitude of other reasons)
2) Many neurodivergent people do not present visually as 'any different': the invisible disability
3) There are likely to be many people who do not yet realise they are neurodivergent – there are many examples of people who only discovered in later life that they were dyslexic, autistic, dyspraxic, had ADHD, etc.

The consequence of this, is that neurodiversity can go unrecognised and unsupported within organisations for many reasons. The fact is that every organisation and workplace will undoubtedly have neurodivergent employees. Dyslexia has been estimated to affect 10-15% of the population. 1:7 Individuals are neurodivergent.[4]

The Big Social Challenges:

1) Lack of understanding about disabilities that we cannot 'see'
2) Unconscious bias. This is seen clearly if we consider, for example, how many people will react negatively when they receive an email or a CV with spelling mistakes
3) Lack of governance around neurodiversity as separate to 'disability'

And this is the big one:

4) Lack of understanding, leading to a lack of appreciation of the enormous benefits of having a neurodiverse team.

Neurodiversity is being pushed up the agenda. Spreading awareness and education is key, so that leaders in every organisation begin to recognise the value that neurodiversity brings: different approaches, different ways of thinking, different speeds of working, different levels of detail, different intensities of focus, different perspectives, different life experiences.

The Next Steps for Truthsayers®

Our Dyslexia: Support at Work survey has been carefully designed to help us test the efficacy of the NeurodiversityToolbar™. Asking participants to take the survey twice, once with and once without the NeurodiversityToolbar™, we will be able to measure the differences in their responses and see which options on the NeurodiversityToolbar™ are most helpful.

Future Steps

There is clearly a need for leaders to understand more about neurodiversity and the benefits for their organisations. We have the capability to provide businesses with a Neurodiversity Assessment Tool to help leaders assess the unspoken needs that exist within their teams, to challenge their DE&I policies, to re-think recruitment strategies and accommodate neurodivergent needs. The challenges as described above are of such ubiquity that this tool, and the downstream professional services, could be extremely lucrative.

References:
[1]British Dyslexia Association: Showcasing the ND Workplace
[2] Visual Stress and Visual Processing Difficulties, Crossbow Education
[3]CIPD Neurodiversity at Work Guide (2018)
[4]The Value of Dyslexia: Dyslexic Capability and Organisations of the Future (report by EY in association with Made by Dyslexia)