

City Research Online

City, University of London Institutional Repository

Citation: Potts, B. (2023). Comments on "Classification of children with attention deficit hyperactivity disorder and healthy subjects using Toro's Gyrification index". Journal of Medical Imaging and Radiation Sciences, 54(1), doi: 10.1016/j.jmir.2022.12.006

This is the accepted version of the paper.

This version of the publication may differ from the final published version.

Permanent repository link: https://openaccess.city.ac.uk/id/eprint/34642/

Link to published version: https://doi.org/10.1016/j.jmir.2022.12.006

Copyright: City Research Online aims to make research outputs of City, University of London available to a wider audience. Copyright and Moral Rights remain with the author(s) and/or copyright holders. URLs from City Research Online may be freely distributed and linked to.

Reuse: Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge. Provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way.

City Research Online: http://openaccess.city.ac.uk/ publications@city.ac.uk/

Dear Editor,

RE: Ediriarachchi WM, Senanayake G, Jayasinghe HEH, et al. Classification of Children with Attention Deficit Hyperactivity Disorder and Healthy Subjects using Toro's Gyrification Index. J Med Imaging Radiat Sci 2022;53(4):S1-S56.

I would like to share my thoughts on the recent abstract publication "Classification of Children with Attention Deficit Hyperactivity Disorder and Healthy Subjects using Toro's Gyrification Index" [1]. I am disappointed to see ADHD being pathologised. Whilst it would be neglectful of me not to acknowledge that there are disabling aspects to ADHD, it is antiquated, unnecessary and offensive to refer to it as "unhealthy". What is the purpose of portraying ADHD in contrast to "healthy brains"?

Although there are several differences, ADHD and autism are both permanent and intrinsic aspects of a person's experience [2]. As a result of the neurodiversity model and movement, there has been a multitude of research examining the language used to describe autism [3, 4, 5. 6, 7]. It is argued, and I would agree, that we should apply the same consideration to the preferences of people with ADHD [3, 4, 5]. As experts in our own experience, it is up to our community to define our terminology and how it is used [6]. Language suggesting neurodivergence is unhealthy, diseased or disordered is unhelpful. We must move away from the normal-abnormal paradigm and thus, rather than viewing neurodivergent people as deficient or faulty, focus on language that is inclusive and respectful. This can bring about a reduction in stigma [7], dehumanisation [8] and marginalisation [9].

In the wider picture, science investigating themes of neurodivergence should address the key questions that materialise from stakeholder inclusion [3, 5]. This does not mean the cessation of research that investigates the mechanisms and negative aspects – that is important – however, a focus should be drawn towards what matters to those under the microscope [5]. I believe that neurodevelopmental research must live in harmony with social models, disability-inclusive culture, and invite and facilitate co-production.

Until then, the dismantling of barriers starts with language and simple changes, such as movements from "co-morbidity" to "co-occurring" and "intervention" to "support", are suggested [10]. Research communication must not alienate the most important stakeholders in this work, the ADHD and wider neurodivergent community.

Ben Potts Birmingham City University Birmingham, UK

References

- [1] Ediriarachchi WM, Senanayake G, Jayasinghe HEH, Piyumali W. Classification of Children with Attention Deficit Hyperactivity Disorder and Healthy Subjects using Toro's Gyrification Index. Journal of Medical Imaging and Radiation Sciences. 2022 Dec 1;53(4):S5–6.
- [2] Sonuga-Barke E, Thapar A. The neurodiversity concept: is it helpful for clinicians and scientists? The Lancet Psychiatry. 2021 Jul;8(7):559–61.
- [3] Dwyer P. The Neurodiversity Approach(es): What Are They and What Do They Mean for Researchers? HDE. 2022;66(2):73–92.
- [4] Armstrong T. The Myth of the Normal Brain: Embracing Neurodiversity. AMA Journal of Ethics. 2015 Apr 1;17(4):348–52.
- [5] Barnhart AJ, Dierickx K. Cultures and cures: neurodiversity and brain organoids. BMC Medical Ethics. 2021 May 17;22(1):61.
- [6] Kapp SK, Gillespie-Lynch K, Sherman LE, Hutman T. Deficit, difference, or both? Autism and neurodiversity. Developmental Psychology. 2013;49:59–71.
- [7] Gillespie-Lynch K, Kapp SK, Brooks PJ, Pickens J, Schwartzman B. Whose Expertise Is It? Evidence for Autistic Adults as Critical Autism Experts. Frontiers in Psychology [Internet]. 2017 [cited 2022 Dec 6];8. Available from:

https://www.frontiersin.org/articles/10.3389/fpsyg.2017.00438

- [8] Cage E, Di Monaco J, Newell V. Understanding, attitudes and dehumanisation towards autistic people. Autism. 2019 Aug 1;23(6):1373–83.
- [9] Bottema-Beutel K, Kapp SK, Lester JN, Sasson NJ, Hand BN. Avoiding Ableist Language: Suggestions for Autism Researchers. Autism in Adulthood. 2021 Mar 1;3(1):18–29.
- [10] Monk R, Whitehouse AJO, Waddington H. The use of language in autism research. Trends in Neurosciences. 2022 Nov 1;45(11):791–3.