NEWS

Community Newsletter: Tortured phrases; inherited variation; atypical speech and self-harm; autism prevalence

BY **MICHAEL FERGENSON**

30 APRIL 2023

Guillaume Cabanac, creator of the **Problematic Paper Screener**, has flagged several autism-related studies that contain **tortured phrases** — strange paraphrases of established terms — on PubPeer:

- **A survey on early prediction of autism spectrum disorder using supervised machine learning methods** (This paper was **retracted earlier this month** because of its tortured phrases.)
- **An improved early detection method of autism spectrum anarchy using Euclidean Method**
- **MOD-DHGN for autism segmentation**
- **Identification of autism in MR brain images using deep learning networks**
- **Basic education for autistic children using interactive video games**
- **EEG-based computer-aided diagnosis of autism spectrum disorder**
- **Smart virtual reality-based gaze?perceptive common communication system for children with autism spectrum disorder**
- **A machine learning approach to predict and classify the levels of autism spectrum disorder**
- **Automated chatbots for autism spectrum disorder using AI assistance**
- **EEG analysis for predicting early autism spectrum disorder traits**

Dorothy Bishop of the University of Oxford also commented on the last paper: “This paper makes very little sense and appears to be a **typical AI gobbledegook Sandwich**. The account of EEG methods is unlike anything I have ever seen before.”

In a Twitter **thread**, **Emilie Wigdor** of the Wellcome Sanger Institute described her team’s

new **preprint**, “Investigating the role of common cis-regulatory variants in modifying penetrance of putatively damaging, inherited variants in severe neurodevelopmental disorders,” posted 25 April on medRxiv.

> Our new pre-print “Investigating the role of cis-eQTLs in modifying the penetrance of putatively damaging, inherited variants in severe neurodevelopmental disorders” (NDDs) is up on medRxiv! Three interesting findings led to this study: (1/12)**https://t.co/geFTh2sJPt**
>
> — Emilie Wigdor (@EmilieWigdor) **April 26, 2023**

Kaitlin Samocha of Massachusetts General Hospital and **Jack Kosmicki** of Harvard University commented on Wigdor’s tweet.

> Great to see this work out by **@EmilieWigdor** digging into the question of if cis-eQTLs are modifying penetrance of rare, inherited variation in developmental disorders.
>
> Read the thread and preprint for more details! **https://t.co/b4raTdKIyx**
>
> — Kaitlin Samocha (@ksamocha) **April 26, 2023**

> Great paper by **@EmilieWigdor** and co. examining whether cis-eQTLs modify penetrance of rare, inherited variation in developmental disorders!
>
> In contrast to what others found in ASD and cancer, it doesn't appear to be the case here (although it may just be a power issue). **https://t.co/GUCE4XE4KD**
>
> — Jack Kosmicki (@jakphd) **April 27, 2023**

Yvonne Wren of the University of Bristol and **Clare Smith** of the Academy of Research and Improvement weighed in on “**The association between atypical speech development and**

adolescent self-harm," published 20 April in the *Journal of Speech, Language, and Hearing Research*.

> Children with persistent **#SSD** at age 8 are twice as likely to report self-harm with suicidal intent in adolescence.
> Findings from the ALSPAC study**@CO90s @CSDRNetwork @DrJanMcAllister @suelizstone https://t.co/bWNkx2UsIp**
>
> — Dr Yvonne Wren (@yvonnewren) **April 25, 2023**

> Great study highlighting relationship between communication & mental health. A clear case for investment in speech & language therapy & for targeting resources towards effective interventions for those that need it the most. **@HIOW_ICS @SolentNHSTrust @HCPortsmouth @solentacademy https://t.co/HVjm8INkAk**
>
> — Dr Clare Smith (@clarrysmith) **April 26, 2023**

Simon Baron-Cohen of the University of Cambridge tweeted a link to *Spectrum*'s article "**U.S. study charts changing prevalence of profound and non-profound autism**."

> The huge increase in autism diagnosis mainly comes from autism without learning (intellectual) disability. (Setting aside the terminology of 'profound' vs 'non-profound' autism which is not widely accepted) **https://t.co/kY9PdLl5fz** Newsletters via **@Spectrum**
>
> — Simon Baron-Cohen (@sbaroncohen) **April 22, 2023**

Candice Chi-Hang Cheung of the University of Potsdam and Salah Basheer of King's College London replied to Baron-Cohen's tweet.

> For those who are interested in the terminology 'profound' autism, **@AutismScienceFd** could provide the relevant information.
>
> See, for example: **https://t.co/QPxdbBoIzk#Autism #AutismAwareness #AutismAcceptance**
>
> — Dr. Candice Chi-Hang Cheung (@CandiceCheung12) **April 23, 2023**

> The lower levels of autism without intellectual disability in lower socioeconomic groups may be related partly to less recognition and scaffolding by the family. **https://t.co/3Woc0VK6ij**
>
> — Salah Basheer (@salahbasheer) **April 24, 2023**

That’s it for this week’s Community Newsletter! If you have any suggestions for interesting social posts you saw in the autism research sphere, feel free to send an email to **michael@spectrumnews.org**.

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