

NEWS

Community Newsletter: NICE errors, CUL3 and autism, equitable academic evaluations

BY CHELSEY B. COOMBS

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Hello, and welcome to the Community Newsletter! I'm your host, **Chelsey B. Coombs**, *Spectrum*'s engagement editor.

A lot of online chatter in the autism research community this week swirled around a letter published in *The Lancet*, titled "**Erroneous NICE guidance on autism screening.**"

The researchers who wrote the letter had discovered that the United Kingdom's National Institute for Health and Care Excellence (NICE) offered incorrect recommendations for use of the 10-item Autism Spectrum Quotient (AQ10), a measure commonly used to screen for autism in adults. NICE had set the cutoff for a referral to an autism diagnostic specialist at a score of 7 or higher, when in fact it should be 6 or higher.

"The insufficiently sensitive implementation of this screening tool will be contributing to missed referrals, diagnoses, and opportunities for intervention," the researchers wrote.

Educational psychologist **Ismail Mamaniat** commented, "The difference one point can make for diagnosis."

The difference one point can make for diagnosis **#Autism #psychology**
<https://t.co/f6LMNcQz4L>

— Ish ? (@ismailmamaniat) **March 25, 2021**

James Kirkbride, reader in epidemiology at University College London in the U.K., tweeted, “This is a good example of the impact & implications of changing threshold values on clinical & public mental health.”

Of concern - for our **@MentalhealthMSc** epi students, this is a good example of the impact & implications of changing threshold values on clinical & public mental health

Erroneous NICE guidance on autism screening <https://t.co/SXCzej5zSH>

— James B. Kirkbride (@Dr_JB_Kirkbride) **March 26, 2021**

Paul Whiteley, director of Education and Services for People with Autism (ESPA) Research in the U.K., wrote that although the commentary made headlines about missed autism diagnoses, there is “not yet any evidence for this. Diagnosis is different from screening.”

Erroneous NICE guidance on autism screening <https://t.co/o17oRioBaL> The article making headlines. Some have interpreted this as 'missed autism diagnoses'. Not yet any evidence for this. Diagnosis is different from screening.

— Paul Whiteley ???? (@PaulWhiteleyPhD) **March 22, 2021**

Lucy Livingston, lecturer in psychology at Cardiff University in Wales, replied to Whiteley, saying, “If GP's are using the wrong cut-off + poor clinical opinion, people may not get referred onto specialist diagnostic services. Worth investigating if it has had an impact on missed diagnoses.”

I think the main point is that we know GP knowledge of autism is low. And if GP's are using the wrong cut-off + poor clinical opinion, people may not get referred onto specialist diagnostic services. Worth investigating if it has had an impact on missed diagnoses

— Lucy Anne Livingston (@Lucy_Livingston) **March 22, 2021**

Our next featured tweet this week comes from **Jonathan Sebat**, professor of psychiatry and cellular and molecular medicine at the University of California, San Diego. Sebat and his colleagues published a new study in *Molecular Psychiatry* called “**Autism-linked Cullin3 germline haploinsufficiency impacts cytoskeletal dynamics and cortical neurogenesis through RhoA signaling.**”

“Another piece of a very big puzzle falls into place,” Sebat wrote.

Another piece of a very big puzzle falls into place. Autism-linked E3 ligase adapter protein Cullin3 impacts cytoskeletal dynamics and cortical neurogenesis through RhoA signaling
<https://t.co/dAhRyyh5Od>

— Jonathan Sebat (@sebatlab) **March 17, 2021**

The researchers wanted to find out how mutations in the gene CUL3, which are associated with autism and developmental delay, affect brain development. Mice missing one copy of the gene showed social and cognitive issues, decreased cortical volume and differences in other brain regions during early postnatal development. “Key drivers” of these changes, the team says, are neurogenesis and cytoskeletal defects.

Tom Nowakowski, assistant professor of anatomy at the University of California, San Francisco, said it was a “very interesting story!”

Congrats! Very interesting story!

— Nowakowski_Lab (@LabNowakowski) **March 17, 2021**

Alex Shcheglovitov, assistant professor of neurobiology at the University of Utah in Salt Lake City, wrote, “Yet another ASD-associated gene Cul3 disrupts cortical neurogenesis.”

Interesting! Yet another ASD-associated gene Cul3 disrupts cortical neurogenesis.

<https://t.co/9N3mgQAUaO>

— Alex Shcheglovitov (@AlexShcheglovit) **March 17, 2021**

Diogo Lovato, a researcher at the biotechnology startup TISMOO in São Paulo, Brazil, commented, “That is the kind of work I really appreciate as we still need to clarify hundreds of molecular mechanisms and no ‘big data’ will solve it all. We need more bench workers!”

Nice job, congratulations to Lilia and you all. That is the kind of work I really appreciate as we still need to clarify hundreds of molecular mechanisms and no "big data" will solve it all. We need more bench workers! Cheers!

— Diogo Lovato ?????????????? (@venturalovato) **March 17, 2021**

Our final tweet is from **Lucina Uddin**, associate professor of psychology at the University of Miami in Florida, highlighting her new commentary in *Nature Neuroscience* with **Andres De Los Reyes**, professor of psychology at the University of Maryland at College Park, called “**Revising evaluation metrics for graduate admissions and faculty advancement to dismantle privilege.**”

This is it: if we're truly committed to embracing diversity, we must reimagine evaluation criteria in academia to eliminate practices that perpetuate inequities. Those with decision-making power can dismantle systems of privilege @JCCAP_Editor @NatureNeuro <https://t.co/vk8tnPKhgi>

— Lucina Uddin (@LucinaUddin) **March 30, 2021**

Uddin and De Los Reyes came up with the idea for the commentary after a conversation about diversity, equity and inclusion in academia at a 2020 professional development conference.

At #jccapforum2020, @LucinaUddin and I had a conversation surrounding #DEI in

implement, but necessary!

— Lucina Uddin (@LucinaUddin) **March 31, 2021**

“I think we are severely messing with any remaining GRE to positive ‘Professor rank’ correlations,” Fair said.

I did not do well on GRE either...I think we are severely messing with any remaining GRE to positive ‘Professor rank’ correlations...negative corr might be trending ????

— Damien Fair (@DrDamienFair) **March 31, 2021**

Touching on another theme of the piece, **Bitá Moghaddam**, chair of the behavioral neuroscience department at Oregon Health & Science University, wrote, “I remain concerned about admissions & faculty hiring committees putting major emphasis on “fit” and identifying “mismatch” as weakness.”

Excellent piece!

I remain concern about admissions & faculty hiring committees putting major emphasis on “fit” and identifying “mismatch” as weakness. This results in recruiting folks that the existing faculty are “comfortable” with and/or serve their personal research interest <https://t.co/lgT1eq9F4c>

— Bitá Moghaddam ????? ????? (@bita137) **March 31, 2021**

Anaïs Stenson, research associate at Wayne State University in Detroit, Michigan, wrote that graduate and postdoctoral funding is also key for retention of people from underrepresented groups.

Thank you for this critical piece ????? Another overlooked point re:retention is funding at the grad student/postdoc levels: current models more or less assume that trainees have a financial backstop (i.e. family). The racial wealth gap impacts who can afford to pursue academia.

— Anais Stenson PhD (@AnaisStensonPhD) **March 31, 2021**

As an example of how this approach could be put into practice, **Michael Breakspear**, professor of systems neuroscience at the University of Newcastle in Australia, cites a program that his university put into place to enroll, train and mentor Indigenous doctors.

Super important Lucina!

I am really proud of the University of Newcastle's program of enrolling, training + mentoring Indigenous doctors - nearly 1/4 of all trained in Australia

This program reflects years of thoughtful engagement <https://t.co/Mu5URNzCQV>

— Michael Breakspear (@DrBreaky) **March 30, 2021**

That's it for this week's edition of *Spectrum's* Community Newsletter. If you have any suggestions for interesting social posts you saw in the autism research sphere this week, feel free to send an email to me at chelsey@spectrumnews.org. See you next week!