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LETTER TO THE EDITOR

Creating truly radical change in autism research: A response to Frith and Mottron

Frith (2021) and Mottron (2021) recently called for a backward shift in autism research toward identifying cognitive deficit and "prototypes," to remedy more heterogeneous diagnostic criteria. Frith argues that our current conceptualizations of autism have shifted too far away from the idea of "disorder." Likewise, Mottron argues that autism has been "trivialized," diluted by the inclusion of the merely quirky. While there is much to critique in the suggestion that research into the mechanisms of autism should be prioritized over the identification (and associated support) of autistic people, here we focus on two key points: autism as a discrete variable, and cognitive deficits as a core feature of autism.

The initial introduction of autism as a diagnostic category in the 1940s was grounded in early 20th century conceptualizations of normality and productivity (Evans, 2014). These conceptualizations were reified in the stratification of autism into "classic" (or "Kanner's") autism, and Asperger Syndrome, which were later collapsed with acknowledgment that it provided little insight into the support needs of autistic people, and was stigmatizing (Woods et al., 2019). Mottron acknowledges that attempts to identify a singular genetic marker for autism has failed, as have attempts to divide autism with biomarkers, and it is now recognized these endeavors are unlikely to succeed. Frith acknowledges that theories of cognitive deficit are foiled by heterogeneity. The most parsimonious explanation here does not require a narrowing to prototype, but an acknowledgment of human error.

Multiple co-occurring diagnoses are common in both autistic adults and children, and attempts to distill "pure" autism have proved futile so far. "Autism" may currently represent a particular clustering of characteristics within the wider umbrella of developmental differences (Astle et al., 2021), or may reflect more broadly the psychiatric othering endemic in the 20th century. As we debate the nature of autism, autistic people continue to experience poorer mental and physical health outcomes, victimization, and stigma which is often grounded in cognitive deficit views of autistic people as mindblind and lacking empathy. Differences at the cognitive level fail to translate to real-world social skills (Sasson et al., 2020) whereas advances in theory about autistic social style (Milton, 2012) have been confirmed in robust and ecologically valid social research (Crompton et al., 2020). These findings suggest that it is indeed a better theory we need, and not simply smaller, more stratified groups of autistic people.

From birth, our cognition is shaped by our interaction with the outside world, just like our behavior. Perhaps it is time to acknowledge that separating humans into smaller categories based upon their perceived difference from normative expectations is unhelpful. While a desire to understand the link between brain, mind, and behavior is a basic impetus in Psychology, this cannot be separated from the social context (or "extraneous variables") that has underpinned our knowledge. A truly radical approach would be research that aims to understand autistic people, instead of the entity we call autism.

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[Correction added on 15 September 2021, after first online publication: The reference Morrison et al., 2019 has been replaced with Sasson et al., 2020 in both in-text citation and reference list.]

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