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LETTER TO THE EDITOR

Severity should be distinguished from prototypicality

Waizbard-Bartov et al. (2023) argue that the current DSM 5 criteria quantifying the severity of autism are too selective and restrictive. They argue that severity resulting from the two core areas should be conceptually merged to that resulting from intellectual deficiency, language impairment, and comorbidity. From there, they justify the concept of profound autism, which includes "high severity of core symptoms, co-occurring intellectual disability, little or no language, and requiring extensive long-term care" (Waizbard-Bartov et al., 2023, p. 6).

However, the "profound autism" category is as heterogeneous as the spectrum itself and is therefore as scientifically difficult to process. It confuses several notions and could itself have a detrimental effect on diagnosis and mechanistic research in autism. First, "profoundness" varies with time. The severity of core symptoms, as is stated by the authors, changes over the course of development. These changes can be drastic, especially in the language domain (Gagnon et al., 2021). The unpredictability of the adaptive outcome of prototypical phenotypes (at least for non-syndromic autism) is well established. An adaptive outcome of non-syndromic autism should be distinguished from that of autism with an identified neuro-genetic comorbidity, although their "profoundness" may be similar during the preschool years.

Second, the detrimental effects of core symptoms and those of specifiers are based on two distinct mechanisms, even if they can potentiate each other. Defining a state of profound autism both by its symptomatic burden, measured by summary scores combined with intellectual disability and the absence of language, and the needs resulting from their combination confuses the criteria that allow the recognition of autism as a specific condition and its adaptive effects. These can overlap, but can also be dissociated: for example, a very high score in repetitive behaviors at preschool age does not predict worse later adaptation or less language acquisition.

Finally, extreme values of the specifiers—and not only that of severity—characterize subgroups that are minimally mutually informative, such as between autistics with an initial language delay and those without or between identified neurogenetic comorbidity and familial type autism. They act as a confounding variable in the identification of individuals (Havdahl et al., 2016) and blur diagnostic boundaries (Defresne & Mottron, 2022).

Instead of creating a severity index combining intellectual, language and core symptoms level with the level of support needed, we propose to dissociate prototypicality (how "autistic" the person is) from the level of adaptation (functional impact of core and associated symptoms). In its current state of development, the concept of prototypicality does not result in a categorical diagnosis but allows grading of its certainty. It can be rendered objective by differentially weighting the signs according to their contribution to a certain judgment of autism. The concept of prototypicality refers to how close, or representative, the person is of the center of the autism category. In this framework, severity refers to the adaptive impact of presented signs independently of their relationship with the "prototypicality" of the diagnosis, as was the case for axis 5 of the DSM-IV multiaxial diagnosis.

Hence, the relationship between severity and prototypicality ranges from overlap to orthogonality. A person very "prototypical" of autism—with very high scores on core symptoms of autism for example—might be less severe and hence require less support and care than another who shows less autism symptoms. Conceptually attaching severity to what constitutes the very essence of autism is not the remedy to prevent the current drift towards invisible autism, whereas the concept of prototypicality can have this effect (Mottron, 2021). "Profoundness" and its effects is a trans-diagnostic notion that must be studied and supported for its own sake, and services should be obtained based on severity (defined as the adaptive impact of symptoms), independently of diagnosis.

DATA AVAILABILITY STATEMENT

Data sharing not applicable to this article as no datasets were generated or analysed during the current study.

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