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Letter to the Editor

Power and pragmatism in functional neurological disorder research

To the Editor

Saxena and Perez [1] suggest a 'complementary path' of conceptualizing all patients with functional neurological disorder (FND) as a single disorder, with any subdivision only at the level of individual differences. This is prudent and reflects the limitations of our current knowledge. There is evidence that patients with FND share clinical features, and evidence that they differ; there are reasons to think them the same, and reasons to think not. Above all, we are limited by our power in all this, and must be guided by pragmatics.

We wrote of differences and similarities we found [2], though by the logic of statistical inference, those similarities are really a failure to find differences, and depend ultimately on our statistical power. Taking Saxena and Perez' neuroimaging examples, which we agree are an appropriate level of investigation, for example, though they did not find differences between patients with seizures and patients with movement disorders, we expect that if they looked hard enough, they could. If learning to juggle leads to white matter microstructural differences detectable in 48 adults [3], developing a movement disorder or a seizure will surely lead to changes too – though the number of subjects needed may be higher, maybe much higher.

The question will then be what difference it makes, and that is a pragmatic question. There are advantages to a single, over-arching diagnosis, for example in the acquisition of large samples; and disadvantages, too, such as in the obscuring of potential therapeutic divergence. A small, detectable difference can be made to serve either cause, depending on how it is interpreted. We argued [4] that the appropriate level of interpretation is of mechanism or etiology. Saxena and Perez question whether clinical phenomenology (seizures or movement disorders) is the right level, and we agree that it is not, and we only use it as a way of identifying those underlying mechanistic and etiological differences. Accordingly, we agree that the 'individual differences', as they put it, such as in antecedent abuse history, or in our study, of injury history, are more likely to represent features of most clinical value. But that does not mean that 'FND' is necessarily the optimum level category for research. Saxena and Perez' arguments about overlap, and changing symptoms, while undeniable, could be made for a much larger group of conditions than just FND subtypes – chronic fatigue syndrome, depression, even epilepsy. It could be that the optimum is 'FND', but that is a pragmatic question worth asking. We would urge researchers to assess and report potential etiological differences such as childhood abuse and injury history in future studies to help us answer it.

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Declaration of Competing Interest

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