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1. Target Article:

"Mental Health Conditions Between Neurodiversity and the Medical Model"

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2. Commentators:

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3. Commentary

The Neurodiversity Model and Medical Model: Competitors or Alternative Perspectives?

Recent years have seen a lot of debate between those who consider mental health conditions such as depression, anxiety, autism, ADHD, schizophrenia, and so forth, as pathologies that require medical treatment and those who take them to be mere variations of human neurodiversity that should be accepted and embraced. The former is often called the medical model of mental health conditions, while the latter is typically called the neurodiversity model. These two ways of representing mental health conditions not only offer very different views of their nature, but also of the social and ethical aspects of how people with these conditions should be treated in society. While it may first appear that there is not any easy resolution to be had, in her excellent target article Knopes (2024) uses her insights with individuals experiencing mental health conditions to illustrate that the binary distinction between neurodiversity models and the medical model of disability is flawed. The experiences of those with mental health conditions are complex, with each model capturing only parts of their lived reality.

Our goal in this commentary is to support and build on Knopes' approach, drawing on recent work in the philosophy of models and modelling, particularly that emphasising the importance of pluralism (Veit, 2019). The recognition here of the need for multiple models to capture

different aspects of a phenomenon supports Knopes' emphasis on the complexity and nuance of the self-understanding of those with mental health conditions.

The existence of multiple models - the neurodiversity model, the medical model, the social model - to describe mental health conditions may mistakenly suggest that only one of these models can be the correct one, or that all that is needed is the right kind of integration of them to arrive at a single final model. As many other scholars in this space have argued, the models can be complementary: at times they can overlap, while in other contexts conflicting. The narratives provided by the subjects interviewed by Knopes provide powerful evidence for a more nuanced picture. Here we will support this with more theoretical considerations coming from the philosophy of science literature on models.

Until fairly recently, it was common among scientists to think that conflicts between alternative models were temporary and would eventually result in the building or selection of a consensus model. This view assumed that the goal was to derive an ultimate model that would explain as much as possible, without the need for multiple more contextual or constrained models. However, this idea has been challenged by philosophers of science who emphasise the inherent tradeoffs between the desiderata for models based on the goals for which they are used - for example, precision (how closely a model resembles the target phenomenon) and generality (the range of phenomena it can be applied to) (Matthewson & Weisberg, 2009; Weisberg, 2013). Even for a single phenomenon, different models will illuminate different aspects and will thus be useful for different purposes (Massimi, 2018). One of us has previously argued for a more radical version of this pluralistic view, calling it strong model pluralism: "For almost any aspect *x* of phenomenon *y*, scientists require multiple models to achieve scientific goal *z*" (Veit, 2019, p. 96). This is because models do not work in isolation. Unlike scientific theories that are (typically) competitors to each other in providing different explanations for a phenomenon, models are often compatible - offering different perspectives on complex phenomena that would otherwise be too messy to make sense of.

In the context of the mental health conditions discussed in the target article, the "complex relationships between illness, impairment, and society" (Knopes 2024, p. 4) means that these are precisely the sorts of phenomena that are likely to require multiple models to describe them in full. In particular, we can consider the different goals for which the models may be employed. The neurodiversity model focuses on the goal of highlighting the positive aspects of the differences in functioning that may accompany the conditions, such as the increased

empathy, creativity, or thoughtfulness reported by interview subjects. This view looks to de-pathologise and celebrate differences as part of valuable human diversity; aiming to explore how to adapt society to create niches for these forms of neurodiversity in a way that mirrors the abundance of niches and value of biodiversity in ecology (Blume, 1998; Singer, 1998; Chapman, 2021). The fundamental goal is to recognise the value of neurodiversity and presumably to improve the self-image of those with mental health conditions.

By contrast, the goal of the medical model is aimed more at identifying the negative aspects of the impairments that may arise from the conditions and how best to treat them, using the tools of medicine and psychiatry: "Participants' stories revealed the power of the medical model to frame their experiences, and legitimize their mental health conditions as genuine medical problems with potential biomedical and psychotherapeutic solutions" (Knopes 2024, p. 13). This can then shape discussions around quality of life and how to improve it (alongside the social model that helps identify how to improve social and institutional accommodations). It can also serve to validate the experiences of people with mental health conditions, freeing them from any sense of blame or guilt for their condition.

It is clear that the different models thus capture very different aspects of the target phenomena, with very different goals in mind. To ask which model is the right or wrong one is to ask the wrong question. Instead we simply need to understand the context and purpose to which they are put to use, while recognizing that they will not offer a full picture of reality (nor should they aim to). Just as physical tools are not universal and each have specific purposes, so too do models (Veit, 2019). Certainly the interviews described by Knopes suggest that the different models are primarily applied in different contexts by those with mental health conditions.

Knopes' evidence from the peer providers shows that neurodiversity can be seen as both a biomedical deficit that can benefit from treatment as well as a valuable form of diversity. Though, as she notes, some caution must be used in interpreting or generalising these results as the individuals surveyed represent a group trained to reflect on and express their feelings about their condition - the models described may not be used in the same way by those in other groups. Notably, while Knopes only interviews verbal participants, there are also forms of neurodiversity, such as non-verbal people with autism, where these findings may not apply.

The acceptance of multiple models can thus better represent the diversity of experience between and within different conditions. The biomedical model is particularly prone to

neglecting the heterogeneity of autism (Chapman & Veit, 2021). Scepticism about self-report in both verbal and non-verbal autistics has led one of us to note elsewhere that model pluralism could be a useful antidote (see Chapman & Veit, 2020, p. 47). The research by Knope emphasises this point: different perspectives offered by neurodiverse people should not be given less epistemic credit than those without them, whether they are defending the medical model or not. To do so would be a form of epistemic injustice (Chapman & Carel, 2022). With the increasing recognition that the existence of multiple models is not only not a problem, but a necessary and useful feature of modelling practice, there should be a corresponding reduction in the epistemic injustice experienced by neurodiverse folks when reporting their own experiences.

When considering people with mental health conditions the neurodiversity model is often seen in opposition to the medical model, but we agree with Knopes that it need not be seen this way. Recognising the diversity of minds will also entail a recognition that there will be diversity in how mental health conditions are experienced, and in the goals of representing them. Accepting a plurality of models helps recognise these differences and allows application of the best models for different contexts.

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