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## Reassessing biopsychosocial psychiatry

Will Davies & Rebecca Roache

**ABSTRACT:** Psychiatry uncomfortably spans biological and psychosocial perspectives on mental illness, an idea central to Engel's biopsychosocial paradigm (BPS). The BPS paradigm was extremely ambitious, proposing new foundations for clinical practice as well as a non-reductive metaphysics for mental illness. Perhaps given this scope, the approach has failed to engender a clearly identifiable research programme. And yet the view remains influential. We reassess the relevance of the BPS paradigm for psychiatry, distinguishing a number of ways in which it could be (re)conceived.

Psychiatry uncomfortably spans biological and psychosocial perspectives on mental illness. As a branch of medicine, psychiatry is under pressure to conform to a biomedical model, on which genuine mental disorders are classified as diseases, to be characterised primarily in biological terms. Contemporary psychiatry also draws heavily on psychotherapeutic approaches, which focus on the psychosocial factors involved in mental disorder. Here concepts of abnormal or impaired belief, experience, and social structure take priority over concepts of neural dysfunction. This heterogeneity continues to generate much uncertainty concerning the conceptual foundations for psychiatry. What exactly is psychiatry a science of? Mind or brain? Individual or society? Dysfunction or deviance? These questions are as much philosophical as empirical.

Psychiatry evidently adopts many different levels of explanation, customarily divided into the categories of the biological, psychological, and social. The view of psychiatry as holistic dates back to Hippocrates, but today it is strongly associated with Engel's (3) *biopsychosocial* paradigm (BPS). The BPS paradigm was as broad as it was ambitious: Engel sought an all-encompassing framework for clinical practice, along with a non-reductive metaphysics for mental disorder. Given its intended scope, it is not surprising that this proposal failed to engender a clearly identifiable research programme. Engel did not provide details as to how biological, psychological, and social factors should be combined in diagnosing, describing, explaining, and treating mental illness (5, 9). And yet the conception of psychiatry as a biopsychosocial discipline remains influential. As Gabbard and Kay (4: p.1956) observe, 'almost all psychiatrists... endorse the notion that psychiatrists are distinct from all other mental health professionals in that their training and expertise allow them to be the ultimate integrators of the biological and psychosocial perspectives underlying diagnostic understanding and treatment.' The BPS paradigm is, in a sense, everywhere and yet nowhere.

There is significant need for a reassessment of the BPS paradigm. In what follows, we assume a minimal, vague, conception of 'BPS' as signifying any approach that a) spans multiple levels of explanation, and b) is opposed to bio-reductionism. Our aim is to distinguish a number of ways in which this minimal view could be refined, developed, and implemented, across different explanatory domains. Our concern, then, is not so much retrospective as prospective. How should we understand the legacy of Engel's BPS paradigm for psychiatry present and future? In what differing ways can we conceptualise the links between biological, psychological, and social factors in

explaining mental disorder? Can these conceptualisations help capture the elusive influence of the BPS paradigm in psychiatry? Answering these questions requires philosophical as well as empirical nous (2).

In preview, we distinguish four possible (re)conceptualisations of the BPS paradigm. The paradigm could be viewed as a guide to (i) which factors are relevant in identifying or classifying psychiatric disorders; (ii) the range of possible causes of such disorders; (iii) strategies for effective prevention and treatment; or (iv) the metaphysics of psychiatric disorder. Let us take a closer look at each of these conceptions in turn.

### Psychiatric Classification

The BPS paradigm can be conceived as an approach to the classification of mental disorders. Practitioners require diagnostic categories that facilitate shared, reliable standards for identifying mental disorders. The BPS paradigm has clearly been influential in the production of such classificatory systems. For example, psychosocial factors were explicitly referenced in the axial system of DSM-IV under Axis IV. DSM-V no longer adopts this axial system, but still reflects the perceived importance of social, cultural, and environmental factors in accurate diagnosis and classification. In the last few years the DSM has been challenged by the RDoC, which seeks a new taxonomy of mental disorder based on neurobiological measures. At least for now, however, the BPS-style approach to psychiatric classification remains orthodoxy.

It is important to distinguish two possible interpretations of this approach. On a *conceptual* interpretation, biopsychosocial factors determine the *content* or *meaning* of psychiatric categories. 'Major depression', for example, might be analysed as meaning 'the condition characterised by biological, psychological, and social factors X, Y, and Z'. On an *epistemic* interpretation, in contrast, biopsychosocial factors merely provide clinical signs or evidence for classifying a patient under a certain psychiatric category. This latter interpretation seems more appropriate in understanding the influence of the BPS paradigm on the DSM. Further philosophical development is needed, however, to clarify the commitments of the approach.

### Psychiatric Causation

A second conception of the BPS paradigm relates to the study of psychiatric causation. The last few decades has seen an explosion of research on the relationship between environmental 'stressors' or 'insults' and the development of mental illness. Epidemiological studies indicate that for most disorders, the risk of developing the condition is not determined by biological factors alone. There is complex interplay between causal factors at biological, psychological and social levels. To pick just one example, perceived parenting style is associated with risk of various psychopathologies in adulthood, including major depression and anxiety disorders. Gene-environment interactions and correlations present further intricacies, which are only just beginning to be understood.

In this context, the BPS paradigm can be developed via the claim that the causes of mental illness are spread over multiple explanatory levels. This sort of approach is discernible, for example, in Kendler's (6) description of the *dappled* nature of psychiatric causation, a term he borrows from Cartwright. Once again, however, this merely marks the beginning of a view; more philosophical focus is needed. What is the operative notion of causation here? How should we make sense of claims such as that socioeconomic inequality can be a cause of schizophrenia? What causal mechanisms are involved? These remain some of the most challenging conceptual questions currently facing psychiatry.

#### *Prevention and Treatment of Psychiatric Disorder*

The foregoing BPS-style view of causation may influence the ways in which clinicians intervene to *prevent* or *treat* these psychiatric disorder. Leff and colleagues (7, 8), for example, investigated the links between relapse rates of schizophrenics and their social environment. They found that '[r]elapse of schizophrenia is more likely if patients live with relatives who are excessively critical and/or over-involved. Such relatives are designated as high EE ["expressed emotion"]' (7: p. 121). This causal insight led Leff and colleagues to devise a programme of social interventions that significantly reduced relapse rates by reducing relatives' EE and/or reducing patients' social contact with high EE relatives. But the proposed BPS conception of prevention and treatment is not merely an extension of a 'dappled' view of causation: the approach raises distinctive and challenging questions regarding social policy and the ethics of healthcare interventions. What types of psychological or social intervention are permissible in the prevention of mental disorder? How should we adjudicate between pharmacological and psychosocial treatments? These philosophical issues demand closer scrutiny.

#### *Metaphysics of Psychiatric Disorder*

Our final conception of the BPS paradigm relates to the metaphysics of mental disorder. By way of background, the philosophical mind-body problem concerns the nature of the relationship between mental states – notably qualitative states of phenomenal consciousness – and states of the brain. Psychiatrists sometimes write as if the only two views of this relation are reductionism and dualism, and as if a denial of reductionism is tantamount to embracing dualism. Yet the current orthodoxy in philosophy of mind is neither reductionist nor dualist, but rather non-reductive and monist. Glossing over many important details, this position maintains that descriptions and explanations expressed in the language of psychology are irreducible to descriptions and explanations expressed in the language of biology, while insisting that mental states are nonetheless entirely physical in nature.

Viewed in this context, Engel's metaphysical aspirations for the BPS paradigm seem prescient, if insufficiently articulated. The paradigm was presented as an alternative to the 'reductionist biomedical model' (3), and thus naturally lends itself to integration with the anti-reductionist philosophical theories of mind that have prospered since the 1960s and 1970s. Most philosophers of mind today would think it uncontroversial that accounts of mental disorder must engage psychological-level concepts. Some 'vehicle externalists' even view the mind as partly constituted by processes within our natural and social environments (1). Although much further discussion is

needed, it is natural to see these theories as embodying BPS-style views of the nature of mental disorder.

Whilst highly theoretical, these metaphysical issues have major practical repercussions. For example, if some aspects of mental disorder are irreducibly psychosocial, then arguably our classificatory systems should reflect this. Insights from philosophy of mind therefore may inform the conflict between BPS-style systems and the RDoC, the latter clearly reflecting an ambitiously reductive view of mental disorder. More controversially, if vehicle externalism is true, then the psychiatric sciences will have to look outside the skin for a complete understanding of mental disorder. If my reasoning capacities are partly constituted by extrinsic processes, for example, then presumably these capacities may be impaired by changes in these processes. These suggestions are promissory and in need of significant development. They serve to illustrate, however, the continued relevance of the BPS paradigm to the foundations of psychiatry.

### Conclusion

We have distinguished a number of (re)conceptualisations of the BPS paradigm, each relevant to different areas of psychiatry. The term ‘biopsychosocial’, which has seemed so familiar to many, permits a variety of interpretations that are of significance to contemporary psychiatry. Though much maligned, the prospects for the BPS paradigm, given more careful articulation, are not as bleak as some have claimed (5, 9).

### References

- (1) Chalmers, D. and Clark, A. The extended mind. *Analysis*. 1998. **58(1)**: 7-19.
- (2) Davies, W., Roache, R. and Savulescu, J. Eds. *Rethinking Biopsychosocial Psychiatry*, forthcoming with Oxford University Press.
- (3) Engel, G. The need for a new medical model: a challenge for biomedicine. *Science*. 1977. **196(4286)**: 129–36.
- (4) Gabbard, G.O. and Kay, J. The fate of integrated treatment: whatever happened to the biopsychosocial psychiatrist? *American Journal of Psychiatry*. 2001. **158(12)**: 1956–63.
- (5) Ghaemi, S.N. The rise and fall of the biopsychosocial model. *British Journal of Psychiatry*. 2009. **195**:3–4.
- (6) Kendler, K. S. The dappled nature of causes of psychiatric illness: replacing the organic functional/hardware–software dichotomy with empirically based pluralism. *Molecular Psychiatry*. 2012. **17**: 377–388.
- (7) Leff, J., Kuipers, L., Berkowitz, R., Eberlein-Vries, R. and Sturgeon, D. A controlled trial of social intervention in the families of schizophrenic patients. *British Journal of Psychiatry*. 1982. **141**: 121–34.
- (8) Leff, J., Kuipers, L., Berkowitz, R. and Sturgeon, D. A controlled trial of social intervention in the families of schizophrenic patients: two year follow-up. *British Journal of Psychiatry*. 1985. **146**: 594–600.
- (9) McClaren, N. A critical review of the biopsychosocial model. *Australian & New Zealand Journal of Psychiatry*. 1998. **32**: 86–92.

