

Commentary

Epistemological Limits of Classical Psychosomatic Psychology

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Psychosomatic psychology has historically contributed to overcoming biomedical reductionism by emphasizing the role of psychological and relational factors in somatic illness. However, when examined through a rigorous epistemological lens, this tradition reveals a persistent structural vulnerability: the systematic proposition of arbitrary symbolic interpretations unsupported by empirical evidence. This situation represents both an epistemological weakness and a potential iatrogenic risk when applied in the clinical context.

This article argues that when plausible and arbitrary interpretations fail to pass the test of valid empirical evidence, psychosomatic models can quickly slide from scientific explanation to hermeneutic closure. Drawing on the principles of scientific epistemology, confirmation bias, and falsifiability, this analysis critically examines how the selective validation of confirmatory clinical narratives compromises explanatory robustness.

A more epistemologically coherent conceptual framework is proposed, in line with current developments in psychoneuroimmunology, systems biology, and microbiota research. This perspective does not deny the connection between psychological, physiological, and cellular aspects but rather proposes placing hypotheses within a testable context to reduce undue interpretations. Only within this epistemological framework can psychosomatic psychology be scientifically legitimized and assert its clinical utility.

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Psychosomatic psychology emerged as an important cultural movement to counter biomedical reductionism, which denied the fundamental role of psychological and relational factors in the etiology of somatic diseases. In this specific historical context, symbolic interpretations of symptoms played a central role, particularly in psychoanalytic and psychodynamic models^[1]. Although this tradition has

enhanced and promoted greater sensitivity to the role of psychology, even within medical contexts, it has also introduced a persistent epistemological vulnerability that remains inadequately addressed in the contemporary debate.

A central issue concerns the confirmation bias of empirical evidence. Classical psychosomatic models tend to overestimate cases in which a psychological interpretation between a symptom and a presumed symbolic content is confirmed, while cases in which this connection is not confirmed are underestimated, if not marginalized or denied. From an epistemological perspective, the absence of an expected relationship constitutes negative evidence and should be given equal theoretical weight to the formulated hypothesis^[2]. When results that do not confirm the hypothesis are systematically undervalued or denied, theoretical models risk being scientifically weak.

Confirmation bias is a widely documented phenomenon that describes the human cognitive tendency to seek, select, and prioritize information that confirms preexisting beliefs, while ignoring disconfirming data^[3].

In psychosomatic practice, this bias can manifest itself through selective attention to convincing clinical narratives that appear to validate symbolic hypotheses, while contradictory or ambiguous cases receive less analytical emphasis. Over time, this selective reinforcement can stabilize socially shared interpretive frameworks that are insufficiently constrained by empirical falsification.

Another critical issue concerns the problem of the non-falsifiability of the hypotheses proposed by the classical model of psychosomatics. In many psychosomatic narratives, the lack of an identifiable psychological meaning does not call the model into question but is reinterpreted by the practitioner as a phenomenon of repression, the activation of defensive processes, or the patient's lack of insight. While such constructs may have heuristic value, their arbitrary and decontextualized use effectively neutralizes the possibility of refuting the interpretation proposed by the practitioner. As Popper^[2] argued, theories that always implement a dynamic of accommodation to every possible outcome cease to function as scientific explanations. In this sense, some psychosomatic interpretations operate as hermeneutic systems rather than empirically testable models.

The epistemological cost of this approach is not merely theoretical but also clinical. When symbolic attribution is implicitly treated as necessary rather than probabilistic, clinicians may overinterpret meanings where they are not present, obscuring potential biological, environmental, or stochastic contributions to disease processes.

In the clinical context, it is dangerous to apply arbitrary interpretations of symptoms, such as considering myopia a disorder symbolizing a relational difficulty, or dermatitis an expression of the psychological need to "change one's skin" in terms of identity.

This interpretive framework, since the dynamics may or may not be consciously understood by the patient, presents the additional clinical risk of further misinterpretation by the professional, who may attribute any consciously expressed disconfirmation to a defense mechanism of repression or similar.

Modern research in psychoneuroimmunology, behavioral medicine, and systems biology increasingly demonstrates that many somatic conditions arise from multilevel interactions that do not reliably map onto stable psychological meanings^{[4][5]}.

To understand complex mind-body interactions, it is necessary to identify the specific causal mechanisms that characterize the dynamics through which the mind influences the body^{[6][5]} and vice versa^{[7][8]}, rather than arbitrary symbolic attributions that pose a potential iatrogenic risk to the patient.

The arbitrary attribution of psychological meanings to purely biological dynamics must always be subjected to empirical verification; otherwise, the risk is that of mistakenly associating mental meanings with biological dynamics and designing and implementing clinical pathways based on such erroneous logic.

Although classical psychosomatic psychology has historically opposed the biological reductionism of the biomedical model, which did not contemplate a causal relationship between psychosocial and biological phenomena, it presents the opposite epistemological problem of psychological reductionism, consisting of the erroneous and undue attribution of psychological meaning to any biological dynamic.

This "Category Error" can be defined as the incorrect attribution of properties belonging to one ontological (psychological) category to phenomena belonging to another (biological) category^{[9][10]}.

The psychological reductionism characterizing psychosomatics also consists of equating the collective and shared system of attribution of psychological meaning with the individual and subjective one, thus assuming that the system of attribution of meaning proposed by psychosomatics is more similar to a physical law than to a system of rules at least partly established subjectively.

From this perspective, classically understood psychosomatic psychology therefore also presents a form of reductionism with respect to the individual capacity to attribute subjective meanings that characterize the human species.

It is important to emphasize that the criticism advanced here in no way denies the relevance of psychological factors in somatic illness. Rather, it questions the epistemological elevation of arbitrary symbolic interpretation to a privileged explanatory status.

The contemporary biopsychosocial model of health, which envisions the complex interplay between biological, psychological, and sociocultural teleonomies, clearly emphasizes individual variability and context dependence, recognizing that psychological meaning depends on individual and situational factors^[11].

From a methodological perspective, this implies verifying the proposed interpretive hypotheses. Negative cases, null results, and inconsistent patterns must be systematically incorporated into theoretical development; otherwise, the proposed constructs will be scientifically unsound. Without empirical verification, psychosomatic psychology risks perpetuating a closed explanatory loop, which prioritizes narrative/communicative effectiveness over scientific legitimacy.

A further weakness of classical psychosomatic psychology is its explanatory framework, which struggles to encompass the complexity of the biopsychosocial organism understood as a holobiont, that is, the set of interactions between human cells and extra-human cells (microbiota) that makes human health and well-being possible.

The epigenetic and metabolic impact of the microbiota on human psychophysical fitness is now recognized as prominent and fundamental to understanding health and disease^[12], but classically understood psychosomatic psychology is particularly weak in integrating this new paradigm of the biopsychosocial holobiont due to the epistemological vulnerabilities described above.

Interestingly, despite the over fifty-five thousand scientific publications that include the word microbiota in the titles of publications available for consultation on the PubMed portal, only two publications contain both the terms "psychosomatics" and "microbiota" in the title^{[13][14]}.

Conclusions

In conclusion, the fundamental epistemological limitation of classically understood psychosomatic psychology lies in the systematic overvaluation of symbolic connections and the undervaluation of evidence where such connections do not emerge. Addressing this imbalance does not weaken psychosomatic inquiry; on the contrary, it strengthens its scientific credibility and clinical utility. By

embracing the principle of falsifiability and multilevel complexity, psychosomatic psychology can evolve into a more robust and empirically grounded discipline.

Implications for Clinical Education

This analysis offers important epistemological implications for contemporary clinical psychology and professional training:

- Psychological meaning should be treated as a probabilistic and testable hypothesis, not as a necessary explanatory premise.
- Clinical models must be explicitly structured to allow for falsification and empirical correction.
- Overinterpretation of symbolic narratives risks obscuring biological, contextual, and stochastic contributions to illness.
- Clinical psychology training should include explicit epistemological education on falsifiability and confirmation bias.
- The modern biopsychosocial holobiont model necessarily implies a multilevel integration of all aspects involved.

From an educational perspective, the results of this analysis highlight the need to strengthen epistemological literacy in clinical psychology curricula.

Future clinicians should be systematically trained to distinguish between heuristic interpretations and empirically testable hypotheses, particularly in the area of psychosomatic reasoning.

Integrating principles such as falsifiability and the scientific value of negative evidence can reduce the likelihood of overinterpretation, also improving actual clinical effectiveness.

The training proposed here is necessary to promote and improve the scientific rigor of psychosomatics, ensuring more effective and patient-centered clinical interventions.

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