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**Opinion Articles**

**Parsimony: A Forgotten Principle in Clinical Psychology and Classics**

*Liam Alexander MacKenzie Myles<sup>1\*</sup>, Patrick Guy Browne Johnson<sup>2</sup>*

<sup>1</sup> Department of Experimental Psychology, University of Oxford, Oxford, Oxfordshire, UK

<sup>2</sup> Faculty of Classics, University of Oxford, Oxfordshire, UK

E-mail corresponding author: [liam.a.myles@outlook.com](mailto:liam.a.myles@outlook.com)



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According to a recent global meta-analysis, approximately 50% of people experience mental health difficulties (Nochaiwong et al., 2021). Psychologists have long been interested in conceptualising the basis of psychological difficulties, with theories dating back to the inception of the field (James, 1892). Developments in theories of mental health difficulties have had corresponding implications for clinical practice (Di Giuseppe & Conversano, 2022; Caputo et al., 2022; Juchich & Di Giacomo, 2022; Wertheimer & Puente, 2020), with a multitude of interventions and therapeutic approaches available in health services (Barchetta et al., 2021; Carrozzino et al., 2019; Conversano & Di Giuseppe, 2021; Dallos & Draper, 2015; Frosh, 2003; Gilbert, 2014; Johnstone & Dallos, 2007; Martino et al., 2021; Merlo, 2019; Sergi et al., 2023; Settineri, 2021; Settineri & Femminò, 2019; Vita et al., 2020; Westbrook et al., 2011).

Modern theories of mental health difficulties typically capture a multitude of facets that may contribute to the manifestation of distress. For example, cognitive-behavioural theory posits that people possess beliefs, which are developed on the basis of biological and experiential predispositions (Westbrook et al., 2011). These beliefs are posited to generate a series of assumptions about the way the world works, which subsequently influence one's thoughts, emotions, behaviours and physical sensation. A fundamental strength of such theories is their comprehensiveness, as clinicians can readily account for a variety of causal factors contributing

to distress within a single model. However, this comprehensiveness contrasts one of the fundamental goals of scientific theories – parsimony.

### **1. The Principle of Parsimony**

Parsimony refers to the principle that scientists should adopt the simplest explanation for a phenomenon, unless there is reasonable evidence that a more complex explanation is required. This principle serves to prevent unnecessary complexity within theories. Indeed, preventing complexity is desirable, as theories of psychology must be plausible within an evolutionary context. In other words, as the proposed psychological mechanisms become more complex, the plausibility of their evolution diminishes. Moreover, highly complex theories often generate several explanations for phenomena, many of which are conflicting. For example, cognitive-behavioural theory can account for low mood as the consequence of an incalculably large number of thoughts. Failing to generate falsifiable predictions is problematic, as many psychological researchers operate under the Popperian philosophy that a theory cannot be proven, and instead only falsified (Popper, 2014).

Importantly, these reflections are not intended as a critique of the validity of clinical theories, such as cognitive-behavioural theory. Difficulty studying a theory scientifically is not, in and of itself, a limitation. Nevertheless, the authors advocate a shift towards modelling clinical psychological theories in a more parsimonious, falsifiable manner.

### **2. Parsimony in Psychology**

Indeed, some research has attempted to do this (Merlo et al., 2022a, 2022b; Myles, 2021a, 2021b). As one example from the author's own research, seminal theories argued that low mood stemmed from disempowerment (Alloy & Abramson, 1982). Operationalising this in a parsimonious and falsifiable manner, it has been argued that perceived control represents the extent to which one perceives outcomes to be contingent upon their actions (Alloy & Abramson, 1979). Subsequent research has found evidence that attenuations in the perceived contingency between one's actions and outcomes is associated with elevations in depressive symptomology (Myles et al., 2020, 2021; Myles & Merlo, 2022). These theories have clinical implications for bolstering empowerment and thus one's mood (Myles & Merlo, 2022); however, discussion of these implications is beyond the scope of this paper.

### **3. A Perspective from Classics**

In contrast to the universality of mental distress, classical studies and its accompanying ancient languages are accessible to a limited proportion of people. Within the UK, only '68 state-maintained schools entered students for Latin A level (2% of all state-maintained schools)' in

2019 (Holmes-Henderson & Hunt, 2021). Through access and opportunity issues alongside curriculum politics (Hunt, 2018), the ‘Classics’ (itself a status-loaded term: who are these works the ‘Classics’ for? [cf. ‘The Postclassicism collective’, 2020]) is a subject that has been an instrument for social exclusion and ultimately in varied, mainstream decline over many years (Hall & Stead, 2020). Yet, despite this lack of widespread active engagement, Classical literature and its contemporary historical periods (5th Century BC Athens or Rome under the Caesars) are held as foundational and fascinating within modern, western society (Silk et al., 2013; Gracia et al., 2003). Cinematic and literary interactions with Homer’s *Iliad* have been in high demand during the 21<sup>st</sup> century with recent offerings such as the *Silence of the Girls*, *Circe* and *Chytemnestra* capturing the popular market (cf. Dué, 2010; Hedreen, 2009). The genre of Greek tragedy still maintains an active presence within UK and US theatre, inspiring countless adaptations and drawing audiences (Macintosh & McConnell, 2020). Yet within scholarship, and particularly in the case of literary approaches, the sense of economy and efficacy has often been absent. Perhaps this is because the concept of ‘parsimony’ is totally alien to the discipline.

Although the term ‘parsimony’ derives from the Latin language, the direction of scholarship in Classics leans towards the multiple and variegated as opposed to a limited complexity. Although this issue can be seen to have a presence in wider academia, classics and its foundational role in the semantics of study may be seen as a good place to start (Grafton, 1979; Stray & Güthenke, 2018). One could argue that the timeline of Classics’ theoretical evolution is longer than that of psychology and therefore there is valid evidence that more complex explanations are to be naturally expected. Where medical research is ultimately intended to interact with non-specialists for the treatment of a widely-varied, general audience, Classics do not (along with many other arts & humanities subjects). Perhaps Classics’ isolation (and current[?] movement away) from non-specialists has meant that parsimony – maybe better stated as a concern for efficient explanation or an ability to be understood – has dwindled. Over its academic history, Classics has developed and/or employed many different frameworks to interpret texts and artwork (Vlassopoulos, 2010; Holmes, 2012). These include close-reading, philology, political and theological hermeneutics, and reception studies amongst others, many of which have crossovers with other subjects: the psychoanalytic turn, the sensory turn, the anthropocenic turn, ecological readings, and materiality. Although, there has recently been a push back against the ‘hermeneutics of suspicion’ (the reading of texts to uncover hidden meanings and motives; itself a formidable term [Prout, 2020]), these have come in the forms of structures such as the ‘surficial turn’ which mirror the cryptic mechanisms of theoretical frameworks that precede these.

However, the authors do not believe that all these techniques only work towards negative ends (exclusion, non-cooperation within fields, protection of knowledge/status etc.). Art – whether

literary, material or performative – presents an infinite capacity for differing interpretations. The audience brings their life experience, knowledge, personality and values to their interactions with art and, as each person is unique, so is their interpretation of art (Livingston, 2005; Carroll, 2009). Indeed, it is tricky to conceive of interpretations of Classical sources as falsifiable. Perhaps, with psychology and the sciences in general, there is a fixation over the idea of an ultimate truth (Langer, 1953). This concern is visible in ‘definitive’ works and societies like the APA; in other words, they assume that, if patients are suffering from similar symptoms, surely there is an ‘indivisible’ root cause at the centre of this experience of distress. However, psychology is already engaged in the debate of interpretation and classification and the pitfalls that accompany these (Scull, 2021; Frances, 2013; Uher & Rutter, 2012; Myles 2021a, 2021b; Pinquart et al., 2016; Von Sydow et al., 2010; Johnstone & Dallos, 2006). Yet for Classics, maybe it is in the explaining of views and ideas that a greater clarity should be sought. Interpretations of classical sources – similar to the unique nature of psychological difficulties in any given individual – are complex, however, the language in which they are explained need not be indecipherable.

#### **4. Concluding Comments**

To conclude, it is evident that modern theories of mental health difficulties capture a multitude of facets that may contribute to the manifestation of distress. However, the comprehensiveness of these theories often, though not always, comes at the cost of parsimony, a fundamental goal of scientific theories. Likewise with Classics, the ever-growing scope of theoretical frameworks enables a great potential for deeper and differing interpretations of classical sources. However, the concept of parsimony could be put to good use for the development of more efficient, clearer explanations. Such a practice, although sometimes unrealisable, could benefit experts and non-specialists alike.

#### **Conflict of Interest Statement**

The authors declare that the research was conducted in the absence of any potential conflict of interest.

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