

Instructions for authors, subscriptions and further details:

<http://ijep.hipatiapress.com>

Psychology in Crisis

Luke Gabriel Stewart¹

1) Newcastle University. United Kingdom

Date of publication: February 24th, 2019

Edition period: February 2019-June 2019

To cite this article: Stewart, L.G. (2019). Psychology in Crisis. [Review of the book]. *International Journal of Educational Psychology*, 8(1), 105-107.
doi:10.17583/ijep.2019.4065

To link this review: <http://dx.doi.org/10.17583/ijep.2019.4065>

PLEASE SCROLL DOWN FOR ARTICLE

The terms and conditions of use are related to the Open Journal System and to [Creative Commons Attribution License](#) (CC-BY).

Review

Hughes, B. M. (2018). *Psychology in Crisis*. London: Macmillan International Higher Education.

Brian Hughes has many years of expertise in researching psychological stress and writes widely on psychological science and empirical research. His most recent book, *Psychology in Crisis*, provides students and researchers with a tool for scrutinizing psychological research methods and results, and the style of writing and length of the book makes it accessible and concise for lay readers. By examining various problems and crises in the field, Hughes aims to address the question of whether or not psychology is a reproducible science, concluding with recommendations for how the field can improve.

Chapters 1 and 2 address the characteristics of psychology that make it particularly vulnerable to false results, and places psychology in the context of the current ‘post-truth’ climate. Hughes explains the importance of the Open Science Collaboration’s (2015) unsuccessful attempt to replicate widely-cited psychological studies: the pinnacle of the replication crisis in the field. Hughes describes psychology as ‘theoretically sectarian’ (Hughes, 2018, p. 31), and how historical differences in theory have evolved into the six major paradigms of psychology: biological psychology, behaviourism, cognitive psychology, social psychology, psychoanalysis and humanistic psychology. Both theoretical conflicts and methodological conflicts are succinctly explained.

The following two chapters include various examples that highlight the difficulties of measuring abstract concepts in psychology, from Intelligence Quotient to life stress. Issues regarding reliability and validity are discussed; in particular, the conflation of different variables shows the reader how the discipline is particularly susceptible to producing

unreproducible findings and defining unclear concepts. A concise account of the benefits and traps of statistical testing, especially Null Hypothesis Significance Testing, assists Hughes with a robust commentary on psychologists' blatant manipulation of samples and data sets to gain significant p-values. Although potentially lacking some redeeming information—for example, more examples of appropriate use of statistics in psychology—the section sums up the statistical crisis in psychology thoroughly, and tackles the difficult questions that the field has often sidelined.

In chapter 5 Hughes describes the sampling crisis using various examples to demonstrate how WEIRD sampling (samples made up of participants that fit into the Western, Educated, Rich and Democratic grouping) has neglected important cultural differences and nuances in psychological phenomena. Hughes explains how the drawbacks to convenience sampling add to the predicaments in psychology, and uses examples of how unconvincing sampling has far-reaching implications beyond research replicability. The real-world implications of exaggeration in psychology (particularly in neuroscience) are addressed in chapter 6 with examples relating to inaccurate claims in brain-imaging studies, and the controversial 'Pacing, graded Activity and Cognitive behaviour therapy: a randomised Evaluation' trial on Chronic Fatigue Syndrome (White et al. 2011). Non-equivalent control groups, lack of blinding and adjustment of assessment criteria revealed that the effectiveness of the intervention for treating Chronic Fatigue Syndrome was exaggerated—perhaps one of the most striking examples of poor research in the book.

Hughes concludes the book explaining how the crises in psychology are maintained by the culture of the field, and that some political groups are benefitting from the crises. In the author's perspective, selective publishing, a substandard peer-review system and dishonest co-authorship amongst other things reinforce the problems in psychology. Hughes describes a 'crisis of incorrigibility' in psychology (p. 146), and highlights the need for more data-sharing, re-structuring the peer-review system and exercising due scepticism of findings where appropriate. In *Psychology in Crisis*, Hughes grapples with the most fundamental problems of the field, that are deep within a research culture that is in need of restructure. The author does not skirt around difficult questions and his critical assessment of research is

exemplar, making this book pertinent and long overdue reading for researchers, students and anyone interested in or associated with psychology's journey to recovery.

References

- Open Science Collaboration. (2015). Estimating the reproducibility of psychological science. *Science*, 349(6251), aac4716.
- White, P. D., Goldsmith, K. A., Johnson, A. L., Potts, L., Walwyn, R., DeCesare, J. C., ... & Bavinton, J. (2011). Comparison of adaptive pacing therapy, cognitive behaviour therapy, graded exercise therapy, and specialist medical care for chronic fatigue syndrome (PACE): a randomised trial. *The Lancet*, 377(9768), 823-836.

Luke Gabriel Stewart
Newcastle University
L.Stewart2@newcastle.ac.uk