

Review of: "Infodynamics, a Review"

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Potential competing interests: No potential competing interests to declare.

Infodynamics, a Review

The topics of this paper are interesting. The structure and content must be revised, and results have to be better explained by the authors before being reconsidered for publication.

The abstract has to clarify the goal, methods of inquiry, results, and science policy implications.

Authors have to structure the paper better by inserting sections of:

- Introduction
- Study design
- Results and discussion
- Conclusion

Avoiding in the just-mentioned sections, a lot of subheadings that create fragmentation of the paper.

The introduction has to better clarify the research questions of this study and provide more theoretical background about these topics (See suggested readings that must be all read and used in the text).

The methods of this study are not clear. The section on Materials and methods has to indicate the methods of inquiry applied for this review, also in a perspective of comparative analyses of authors under study.

This study is:

- --A narrative review explains the existing knowledge on a topic based on all the published research available on the topic.
- --A systematic review searches for the answer to a particular question in the existing scientific literature on a topic.
- --A meta-analysis compares and combines the findings of previously published studies, usually to assess the effectiveness of an intervention or mode of treatment.

The working hypothesis is not clear (see suggested papers).

Results have to be better systematized with figures to be clear.

Discussion. Authors have to explain well the results and implications.

First, authors have to synthesize the main results in a simple table to be clear for readers and then show what this study adds compared to other studies.

The conclusion has not to be a summary, but authors have to focus on the manifold limitations of this study, info on prospects, and provide implications of science policy to see practical application in science and society.

Overall, then, the paper is interesting, but the structure is confused. The theoretical framework is weak, and some results create confusion... The structure of the paper has to be improved; study design, discussion, and presentation of results.

Suggested readings.

Dompere, K.K. 2018. Prelude to the theory of infodynamics: A reflection and critique of information theory. *Studies in Systems, Decision and Control*, 114, pp. 1–17

Coccia M., Roshani S. 2024. Evolutionary Phases in Emerging Technologies: Theoretical and Managerial Implications from Quantum Technologies, *IEEE Transactions on Engineering Management*, doi: 10.1109/TEM.2024.3385116

Currian, J. 2023. How an emergent cosmology of a nonlocally unified, meaningfully in-formed and holographically manifested Universe can underpin and frame the biological embodiment of quantum entanglement. *Progress in Biophysics and Molecular Biology*, 185, pp. 33–36

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Vopson, M.M. 2023. The second law of infodynamics and its implications for the simulated universe hypothesis. *AIP Advances*, 13(10), 105308

Coccia M. 2018. An introduction to the methods of inquiry in social sciences, *J. Adm. Soc. Sci.*, vol. 5, n. 2, pp. 116-126, <http://dx.doi.org/10.1453/jsas.v5i2.1651>

Vopson, M.M., Lepadatu, S. 2022. Second law of information dynamics. *AIP Advances*, 12(7), 075310

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Heyer, M. 2018. The constructal theory of information, Proceedings of the Romanian Academy Series A - Mathematics Physics Technical Sciences Information Science, 19, pp. 178–182

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