Review of: "A New Index for Measuring the Difference Between Two Probability Distributions"

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Potential competing interests: No potential competing interests to declare.

The paper introduced a new index for measuring the difference between two probability distributions, named the distribution discrepancy index (DDI). The proposed distribution discrepancy index was derived based on the concepts of informity, cross-informity, and informity divergence in the recently proposed informity theory. The proposed distribution discrepancy index ranges between 0 and 1, which makes its interpretation simple and meaningful. Two examples are presented to demonstrate the application of the proposed distribution discrepancy index.

The paper is useful in statistical theory and practice in view of the following

1. The work is mathematically correct and useful for measuring the divergence of two probability distributions.
2. The work will be useful in practical situations by developing estimators of the measure. Nonparametric estimation approaches can be employed in such contexts.
3. There is a lot of scope for expansion of this work, including the multivariate case.