

Peer Review

Review of: "Statistically Significant Linear Regression Coefficients Solely Driven by Outliers in Finite-Sample Inference"

Jalmar Carrasco¹

1. Universidade Federal da Bahia, Brazil

Statistically Significant Linear Regression Coefficients Solely Driven by Outliers in Finite-Sample Inference

In this paper, the author investigates the impact of outliers on the statistical significance of coefficients in linear regression. While I have some concerns regarding the current version of the submission, I believe the topic may be of interest to Qeios readers. Below are my comments and suggestions:

The author mentions having conducted simulation studies to assess the impact of outliers in linear regression models. However, the manuscript does not report or discuss the results of these simulations. I strongly recommend including the outcomes of a comprehensive Monte Carlo simulation study to support the claims.

To help readers understand the influence of outliers on specific datasets, I suggest the development of an interactive tool—such as a Shiny application in R—that allows users to explore these effects dynamically.

Including an analysis of a real dataset would enhance the practical relevance and impact of the paper.

If the author agrees with these suggestions, I encourage resubmitting the revised manuscript for further review.

Declarations

Potential competing interests: No potential competing interests to declare.