Transparency in Scientific Literature

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Ten questions to promote transparent reporting of methods and results

Q1. Were all sample sizes fully reported, including exact values for all subsets of data (e.g., each treatment group), and for all statistical analyses?

Q2. Are the methods reported in sufficient detail to allow another researcher to gather the same data and run the identical analyses?

Q3a. Are statistical results for each test reported in sufficient detail?

Q3b. Are results from all variables and from all models reported?

Q4. Were observers kept unaware of the experimental treatment imposed on the samples (e.g., organisms, plots) when recording observations or measurements so as to minimize unconscious bias?

Q5. Did the authors explain how sample size was decided (e.g., based on a priori power analysis or logistical constraints), or when an experiment with pre-set sample sizes was terminated?

Q6. Did the authors develop their analysis plan, including choices of variables, without looking at the data, for instance prior to gathering data or with a dummy data set?

Q7. How suitable do you find the research methods without considering the outcome?

Q8. Are the sample sizes large enough to justify the authors' conclusions?

Q9. What does the size of the estimated effect (e.g., slope, correlation coefficient, difference in means) suggest about its biological or practical importance, and what does uncertainty around that effect estimate suggest about the estimate's precision?

Q10. How unexpected would you judge these results to be in light of prior empirically derived understanding?