

Gleam Publishing



Reviewer Guidance - Evaluation checklist for Statistics, Mathematics and Computer Science

Replication		Present and sufficient or N/A
	<p>a) Is there any indication that each experiment, modeling and/or simulation was replicated multiple times, or was any reference made to the extent of variation from account to account?</p> <p>b) Are statistical methods and measures used? If so, it should be clear whether the tests are one-sided or two-sided, whether there are adjustments for multiple comparisons, whether medians or means are being shown, whether error bars are standard deviations (SD), standard error of mean (SEM) or confidence intervals.</p> <p>c) Are Analytics Methods used? If so, is there justification for the appropriateness of statistical tests and modeling used to assess significance? Do the data meet the assumptions of the tests? Is there an estimate of variation within each group of data, and is the variance similar between groups that are being compared?</p>	
Reproducibility		
Data availability	<p>a) Have the authors provided reasonable access to the data required for review, and described how they will make their data available at publication? If it is not, does the author's rationale for not making the data available seem reasonable?</p>	
Code availability	<p>a) Is the code available in a public repository (or if not yet available, is it clear how it will be made available upon publication)? Is the code in a form that can be used and understood by others, including being readable at a line-by-line level in terms of syntax and comments?</p> <p>b) Is there a clear, documented workflow (including data preparation/cleaning steps and analyses) to reproduce the results? Are all key results (figures and tables) supported by the documented workflow?</p> <p>c) Are the inputs to and outputs from the different components of the workflow adequately described? Are input values, function arguments, and parameter settings appropriately documented?</p> <p>d) Are system requirements for the workflow appropriately documented?</p>	

	<p>NOTE: Reproducibility reviewers may choose to, but are NOT required to, run the submitted code to verify that it reproduces the key results. Depending on whether you have chosen to undertake this step, please answer the relevant question below.</p> <p>e) Is there clear potential for reproducibility of the work? As best you can judge without having run the code, do you have any concerns that the code would not reproduce the key results?</p> <p>f) Based on having run the code, did the workflow allow you to reproduce the key results?</p>	
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