The Art of Rebuttal: How to Respond to Constructive and Coercive Comments from Editors and Reviewers

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Stanford MEDICINE
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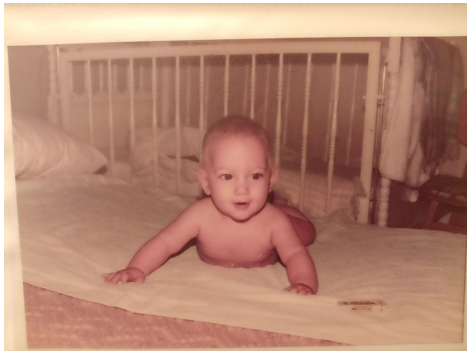
https://med.stanford.edu/sporr

Personal Background



Born: Split, Croatia in 1983

7th Century

Split - 250,000
Croatia – 4,000,000

Tourism – 20% of GDP
Median pay – 1,000 $ per month

Yugoslavia – communist country – War of Independence 1991 – 1995 – Capitalism – Universal health care

PhD in Medical Ethics
Thesis: **Integrity of biomedical publications**

University of Zagreb - MD

King's College London, UK
MA in Arts and Literature

University of Split - PhD
School of Medicine

Postdoc 2.5 years:
AMC Amsterdam, NL

CROATIAN MEDICAL JOURNAL

- 54 Scholarly Publications
- 18 (Inter)National Project Collaborations
- 9 Years of Teaching Experience (>1,200 teaching hours)
- 53 Conference Attended
- Peer Reviewed 61 Manuscripts for 35 Different Journals

Cited by		VIEW ALL
	All	Since 2020
Citations	1247	997
h-index	22	19
i10-index	29	26

Stanford University, SPORR – Since 2020

Peer Review Metrics

84	2	1.5:1
Verified Peer Reviews	Verified Peer Reviews (Last 12 Months)	Peer Review to Publication Ratio
Median: 4	Median: 0	Median: 0.3:1
97th percentile	82nd percentile	

Rejected to Review:

17 in 2025

Editor in Chief (2019-2025)

IF 7.2.

ESCI
Ethics 2/105
History and
Philosophy of Science 1/105

135 Submissions

48 (36%) rejected before peer review
18 (13%) rejected after peer review
50 (37%) accepted for publication (after external peer review)
14 (10%) authors withdrew after receiving my comments
3 (2%) authors withdrew after receiving external comments
2 (1%) authors withdrew while their manuscript were being externally reviewed

https://researchintegrityjournal.biomedcentral.com/

"this is the most thorough review I have had for a manuscript in over 40 years, but it was also one of the most valuable challenges I have had in the review stage. I believe your suggestions have made the manuscript much stronger"

Scholarly Journals

1665. Journal des Sçavans (Paris)
1665. Philosophical Transactions (London)
1869. Nature (formal peer review 1967)
1890. Science
1920. The Southwestern Political Science Quarterly - SSQ
1994. World Wide Web
1997. PubMed (PubMed Central 2000)
2003. PLOS
2016. Research Integrity and Peer Review

Today ~70,000 Active Journals
~7 million articles

Bibliographic databases:
Web of Science – 22,171
Scopus – 36,377
MEDLINE (PubMet) – 5,200
Dimensions.AI - 107,000 (includes inactive)
Open Alex – 209,811 (includes inactive)
DOAJ - 21,457 (active)

Indonesia, more than 14,000

Rank	Journal Title	Impact Factor	Publications per Year
1	CA: A Cancer Journal for Clinicians	521.6	28
2	Nature Reviews Drug Discovery	122.8	37
3	The Lancet	98.4	239.5
4	New England Journal of Medicine	96.3	324
5	BMJ - British Medical Journal	93.7	174
15	JAMA - Journal of the American Medical Association	63.5	206
	Scientific Reports	3.8	22605.5
	Plos One	2.9	15813.5

IF - ratio between the number of citations received in X year for publications in that journal that were published in the 2 **preceding** years

1975

$$\mathrm{IF}_y = \frac{\mathrm{Citations}_y}{\mathrm{Publications}_{y-1} + \mathrm{Publications}_{y-2}}.$$

From 2025 Citations to Retracted articles will not be counted

For example, *Nature* had an impact factor of 41.577 in 2017:[9]

$$\mathrm{IF}_{2017} = \frac{\mathrm{Citations}_{2017}}{\mathrm{Publications}_{2016} + \mathrm{Publications}_{2015}} = \frac{74090}{880 + 902} = 41.577.$$

Penicillin

THE BRITISH JOURNAL
OF
EXPERIMENTAL
PATHOLOGY
VOLUME TEN
1929

On the antibacterial action of cultures of a penicillium, with special reference to their use in the isolation of B. influenzae.

ALEXANDER FLEMING

Needle-free Vaccination

nature

Explore content ~ About the journal ~ Publish with us ~ Subscribe

nature > articles > article

Article | Published: 11 December 2024

Discovery and engineering of the antibody response to a prominent skin commensal

Djenet Bousbaine, Katherine D. Bauman, Y. Erin Chen, Pranav V. Lalgudi, Tam T. D. Nguyen, Joyce M. Swenson, Victor K. Yu, Eunice Tsang, Sean Conlan, David B. Li, Amina Jbara, Aishan Zhao, Arash Naziripour, Alessandra Veinbachs, Yu E. Lee, Jennie L. Phung, Alex Dimas, Sunit Jain, Xiandong Meng, Thi Phuong Thao Pham, Martin I. McLaughlin, Layla J. Barkal, Inta Gribonika, Koen K. A. Van Rompay, Heidi H. Kong, Julia A. Segre, Yasmine Belkaid, Christopher O. Barnes & Michael A. Fischbach ✉ — Show fewer authors

Nature **638**, 1054–1064 (2025) | Cite this article

21k Accesses | **7** Citations | **481** Altmetric | Metrics

Abstract

The ubiquitous skin colonist *Staphylococcus epidermidis* elicits a $CD8^+$ T cell response pre-emptively, in the absence of an infection[1]. However, the scope and purpose of this anticommensal immune programme are not well defined, limiting our ability to harness it therapeutically. Here, we show that this colonist also induces a potent, durable and specific antibody response that is conserved in humans and non-human primates. A series of *S. epidermidis* cell-wall mutants revealed that the cell surface protein Aap is a predominant target. By colonizing mice with a strain of *S. epidermidis* in which the parallel β-helix domain of Aap is replaced by tetanus toxin fragment C, we elicit a potent neutralizing antibody response that protects mice against a lethal challenge. A similar strain of *S. epidermidis* expressing an Aap-SpyCatcher chimera can be conjugated with recombinant immunogens; the resulting labelled commensal elicits high antibody titres under conditions of physiologic colonization, including a robust IgA response in the nasal and pulmonary mucosa. Thus, immunity to a common skin colonist involves a coordinated T and B cell response, the latter of which can be redirected against pathogens as a new form of topical vaccination.

Article / Manuscript / Paper

IMRaD structure

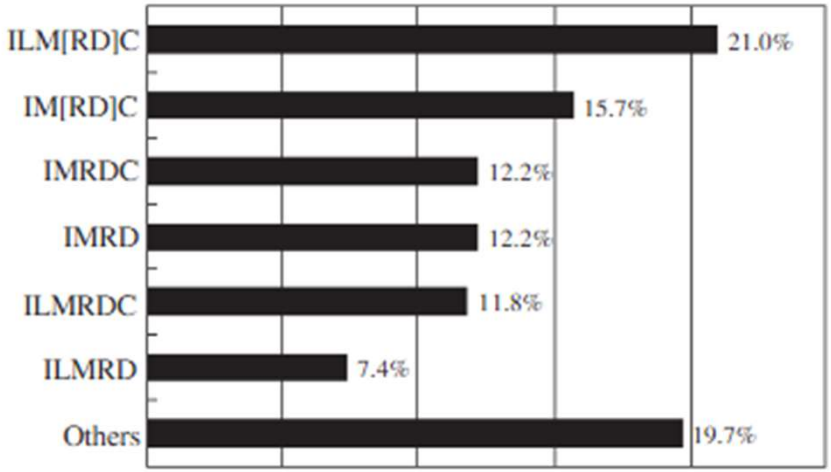
Introduction

Methods

Results

and

Discussion



433 recent empirical RAs from high-impact English-language journals in 39 disciplines in the fields of engineering, applied sciences, social sciences and the humanities.

2011 https://doi.org/10.1016/j.esp.2011.10.002

History of (Journal) Standardization Practices

1906 – Manual of Style: Being a Compilation of the Typographical Rules in Force at the University of Chicago Press, to Which Are Appended Specimens of Types in Use

1929 - APA - Instructions in regard to preparation of manuscript

1962 - AMA Style Guide

1978 - ICMJE Uniform Requirements for Medical Journals

1999 – COPE – Committee on Publication Ethics

equator network

Enhancing the QUAlity and Transparency Of health Research

Website translation help

Home | About us | Library | Toolkits | Courses & events | News | Blog | Contact

Your one-stop-shop for writing and publishing high-impact health research

find reporting guidelines | improve your writing | join our courses | run your own training course | enhance your peer review | implement guidelines

Library for health research reporting

The Library contains a comprehensive searchable database of reporting guidelines and also links to other resources relevant to research reporting.

- Search for reporting guidelines
- Not sure which reporting guideline to use?
- Reporting guidelines under development
- Visit the library for more resources

Reporting guidelines for main study types

Randomised trials	CONSORT	Extensions
Observational studies	STROBE	Extensions
Systematic reviews	PRISMA	Extensions
Study protocols	SPIRIT	PRISMA-P
Diagnostic/prognostic studies	STARD	TRIPOD
Case reports	CARE	Extensions
Clinical practice guidelines	AGREE	RIGHT
Qualitative research	SRQR	COREQ
Animal pre-clinical studies	ARRIVE	
Quality improvement studies	SQUIRE	Extensions
Economic evaluations	CHEERS	Extensions

See all 665 reporting guidelines

From Submission to Review

Checks:

Scope

Desk rejection

Plagiarism software

Language software

Reporting guidelines

STAT check

Semi-automated checks

AI checks

Different approaches:

Review all submitted research – methodologically sound

Editors pick

Springer Nature Donates AI tool that detects cases of AI-generated nonsense text

SN announces testing new tool to check 14 aspects ; AI tool to check related references

veriXiv - 20 integrity checks

What is Peer Review?

Peer review is a **quality control** mechanism in scholarly research.

Most commonly usage refers to a process in which after a paper has been submitted to a journal - an editor of that journal invites independent (external) experts – to evaluate that work and provide advice on how the paper could be improved before it is published and shared with the world.

Peer – "*one that is of equal standing with another*" – MW dictionary

Reviewers produce written reviews - "review reports" – and based on them an editor decides to accept, revise, or reject a paper

Peer Review Today

In most journals (80-90%) voluntary – unpaid work – "sense of duty"

Finance, Economy, ResearchHub – paid – 50$ to 150$

Overall acceptance rate is 22% - 40%

Md **2** (IQR 2 to 3) reviewers per article – **7** invited (4 to 12) – acc. **9** days (3 to 19)

Reviewers spend on average 3 to 8 hours for review

Review reports have a Md of 350-400 words

Source data – Peer Workbench and Review

How to Record Review Activity

Publons – Clarivate / Web of Science - reviews@webofscience.com

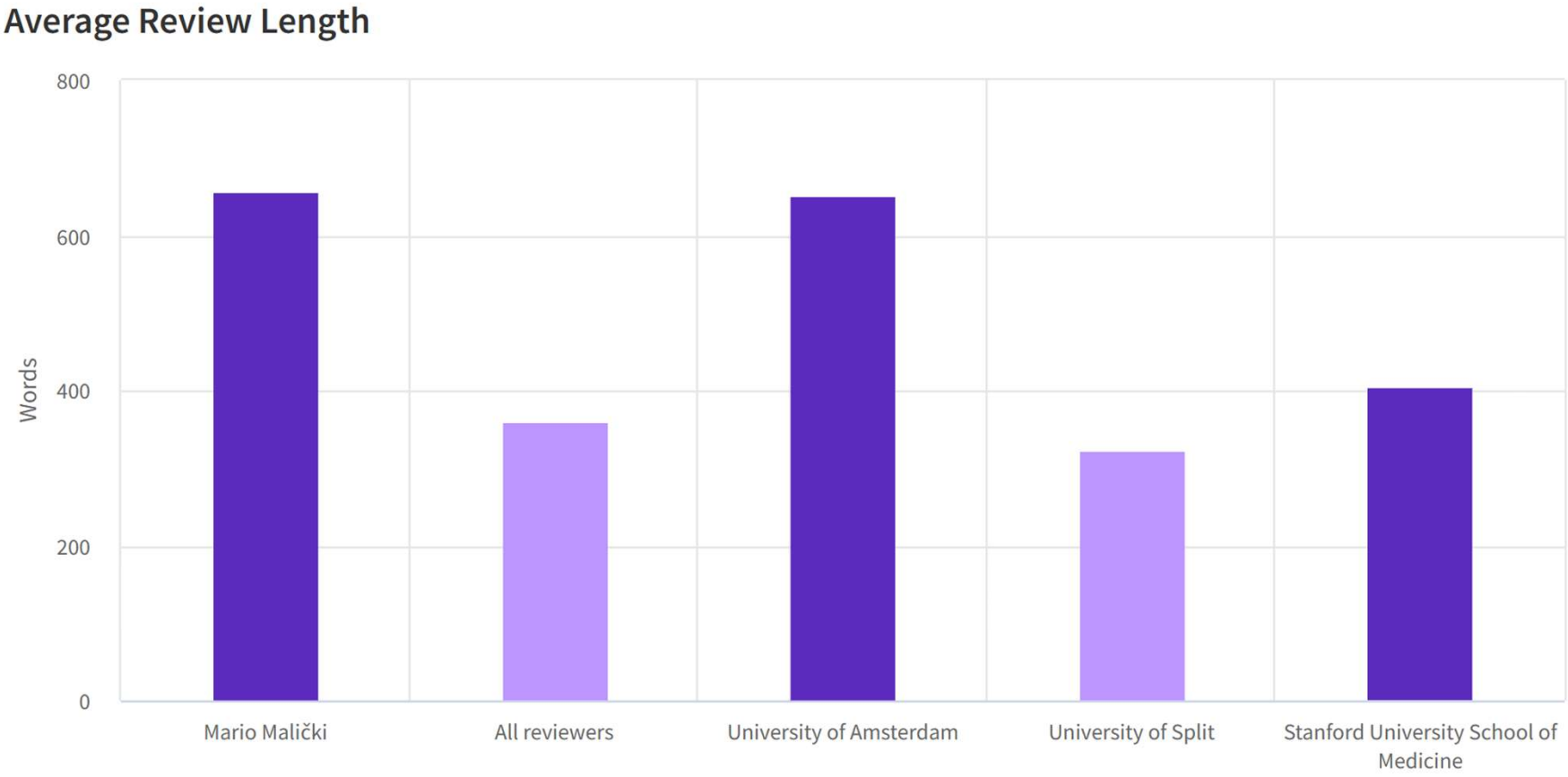
ORCID iD

ReviewerCredits

Publishers (e.g. SN, Elsevier)

https://www.crossref.org/documentation/research-nexus/peer-reviews/

Review Credits – Publons \ WoS



Publish Your Reviews initiative 2022

- ASAP bio Ludo Waltman (Ledien University)

- This initiative calls on researchers to publish their reviews, in particular for articles they review for journals and that are available as preprints.

- Researchers are invited to sign a pledge to express their support for the *Publish Your Reviews* initiative.

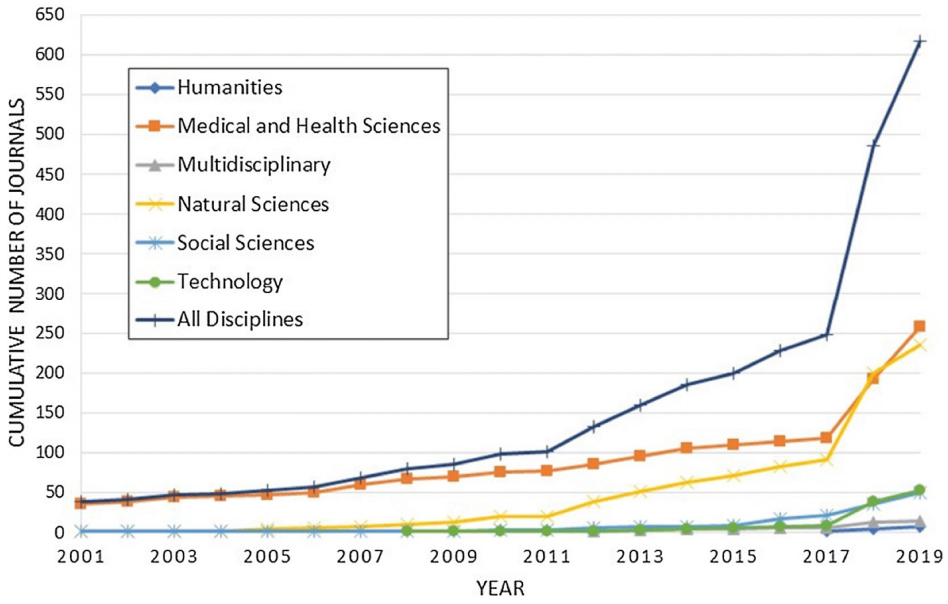
Types of Peer Review

2020 New taxonomy STM

All identities visible (open*)
Single anonymized (*blind*)
Double anonymized
Triple anonymized

*open vs transparent

38 publishers and 617 OPR journals as of December 2019 – <1%



Source data

Meta-Research on Peer Review

- Scholarship on peer review is an emerging field
- Peer Review Conference (1989) - Peer Review Week (2015)
- 18 – systematic reviews - https://ease.org.uk/communities/peer-review-committee/peer-review-toolkit/What-is-peer-review/ + 3 grant s.r.
- 2002 - "*Peer Review is largely untested and* ***its effects are uncertain*** "
- Inter-rater agreement is abysmal

Problems with Peer Review

Inability to detect:

FFP, or questionable research practices

(significant) methodological deficiencies of papers

spin in results interpretation and generalizability

incorrect use of references

lack of reporting of items needed to reanalyse or replicate studies

lack of items needed to assess studies' risk of bias or quality

Inter-rater agreement is **abysmal**, absolute agreement **51%**

Scepticism toward innovative research

Gender and country bias

Long delays it imposes between study submission and publication

No CERTIFIED TRAINING PROGRAMS

Defining who is the PEER

Some authors do revision out of fear of rejection not as they agree with them

Generalizability ???????

all of those fallacies are based on too few studies and on individual cases !!!!

(no. of retractions is <0.01 % of published literature)

"In lack of better alternatives peer review is still the best we have"

Peer review is the most robust method known for assessing quality and has the advantage that it is in the hands of the research community.

https://t.co/3cr5sb3gfs

Retraction: Fake Peer Review - 9,566 (15%)

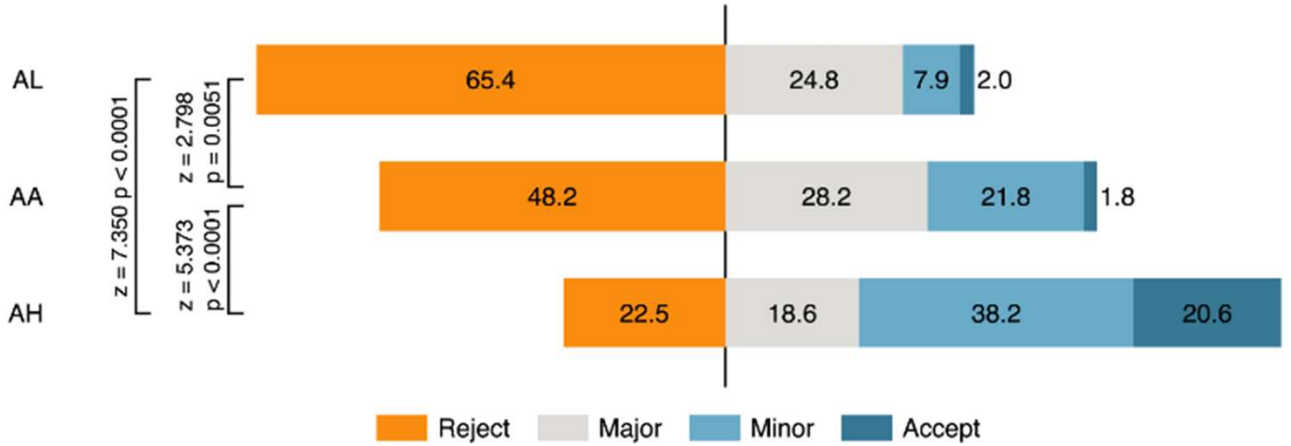
Concerns about Peer Review – 10,231 (16%)

Nobel and novice: Author prominence affects peer review - 2022

Table S1. Invitations

	Anonymized			
	AL	AA	AH	(AL, AA, AH)
Invitations sent	739	576	696	2011
Responses received	585	455	551	1591
Invitations accepted	163	161	165	489
Acceptance rate	27.86%	35.38%	29.95%	30.74%

Fig. 1.



Recommendation percentages by condition. In conditions AL and AH, the invitation email was anonymized, but the respective corresponding author's name appeared on the manuscript, while in AA, both the invitation and the paper were anonymized. The tests are pairwise, two-sided Mann–Whitney U tests.

What did Reviewers Comment on?

Structure or Length	367 (69)
Theory and the Theoretical Model	277 (52)
Contribution	244 (46)
Literature Review (including old references)	243 (46)
Experimental Model (including methods and analyses)	233 (44)
Objective / Topic of Research	166 (31)
Tables or Figures	147 (28)
Language Editing (including typos)	137 (26)
Formatting (including keywords, Journal of Economic Literature codes, references)	135 (25)
Conclusion / Discussion / Interpretations	120 (22)

Implications	97 (18)
Writing Style	87 (16)
Abstract	77 (14)
Unsupported or False Claims	71 (13)
Data	66 (12)
Results	37 (7)
Journal Fit	26 (5)
Limitations	23 (4)
Title	20 (4)
(Self) Plagiarism	18 (3)
Reproducibility or Replication	8 (1)

Structured Peer Review

In August piloted 2022 in 220 Elsevier journals

- 196 (92%) answered all questions
- 15 (7%) of reviewers directed to attachments or answered the question and then directed to more details in the attachments
- 81 (38%) directed (or answered and directed to more details) to either the *Comments-to-Author* section or to their answers to other questions (mostly for single question on limitations or strengths.

Introduction
1. Is the background and literature section up to date and appropriate for the topic?
2. Are the primary (and secondary) objectives clearly stated at the end of the introduction?
Methods
3. **Are the study methods (including theory/applicability/modeling) reported in sufficient detail to allow for their replicability or reproducibility?**
4. Are statistical analyses, controls, sampling mechanism, and statistical reporting (e.g., P-values, CIs, effect sizes) appropriate and well described?
Results
5. Is the results presentation, including the number of tables and figures, appropriate to best present the study findings?
6. Are additional sub-analyses or statistical measures needed (e.g., reporting of CIs, effect sizes, sensitivity analyses)?
Discussion
7. Is the interpretation of results and study conclusions supported by the data and the study design?
8. Have the authors clearly emphasized the limitations of their study/theory/methods/argument?

Traditional reports contained a Md of 4 (IQR 3 to 5) topics covered by the structured questions.

Absolute agreement regarding final recommendations (exact match of recommendation choice) was 41%, which was higher than what those journals had in the period from 2019 to 2021 (31% agreement, $P = 0.0275$).

Peer Review Workbench (2857 journals) - 26% - absolute agreement

Are the objectives and the rationale of the study clearly stated?

Is the study reported in sufficient detail to allow for its replicability and/or reproducibility?

Are statistical analyses and statistical reporting appropriate and well described?

Could the manuscript benefit from adding, improving, or removing tables or figures?

Are the interpretation of results and study conclusions supported by the data?

Have the authors clearly emphasized the strengths of their study?

Have the authors clearly stated the limitations of their study?

Does the manuscript structure, flow or writing need improving?

Example Peer Review

Abstract

1. Alternatively, there was no significant difference when comparing the number of words in their peer reviews (p>.05).– Please change to– We found no stat. differences in the number of words between the groups (please list exact P value)

Introduction

2. Consider adding information on the cost of peer review https://doi.org/10.1186/s41073-021-00118-2

Discussion

3. You stated: “For instance, this could provide editors with information about researchers that have experience handling more bandwidth of peer reviews, a continual problem for editors.”– In light of your study– what kind of recommendation can you give to editors in your discussion.

https://researchintegrityjournal.biomedcentral.com/articles/10.1186/s41073-022-00121-1/peer-review

Manuscripts' Changes Tracker: Living Review and Series of Meta-Analyses

- 67 studies published from 1978 till the end of 2024
- 33 (49%) analysed changes between preprint and journal versions
- 26 (39%) between submitted and published versions
- 10 (15%) between rejected versions and those later published in other journals
- The median number of analysed version-pairs was 109 (IQR 48 to 388)
- 41 (61%) studies looked only at health research
- 6 (9%) at life sciences, 6 (9%) at social sciences, and 4 (6%) at physical sciences, while 10 (15%) analysed multiple disciplines

- https://mmalicki.shinyapps.io/Shiny/

Manuscript Aspect	Summary Percentage
Title	24% (95% CI 14 to 36)
Authorship	21% (95% CI 17 to 25)
Abstract Conclusions	6% (95% CI 1 to 16)
Sample Size	10% (95% CI 6 to 15)
Sample Size Calculation	7% (95% CI 3 to 12)
Numerical Results	31% (95% CI 26 to 37)
Statistical Significance	7% (95% CI 3 to 12)
Study Conclusions	2% (95% CI 1 to 4)
Limitations	19% (95% CI 7 to 35)
Conflict of Interest Declaration	26% (95% CI 17 to 36)
Funding Declaration	18% (95% CI 9 to 28)

Journal Work

- **Reproducibility in *Management Science* - *https://doi.org/10.1287/mnsc.2023.03556***

- ***Since June 2019 -*** all code and data must be provided; editor review all replication packages for completeness before an article goes into production

700 reviewers – 500 articles

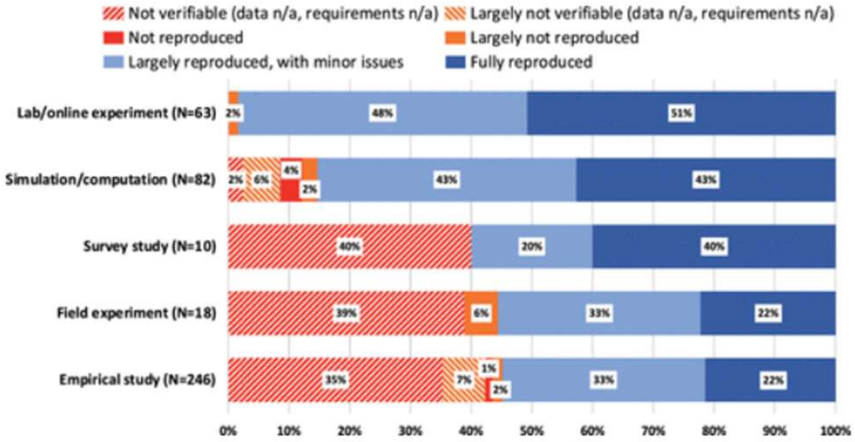


Figure 4. (Color online) Overall Reproducibility Assessments by Article Type/Method

Journal of Archaeological Science (JAS)

Reproducibility Specialist to verify the computational reproducibility of submitted manuscripts.

If the manuscript results are successfully reproduced, the authors will be invited to add wording like the following to an optional “Reproducible Results” section of their manuscript (located after the Data Availability Statement): “The JAS Reproducibility Specialist (Ben Marwick) downloaded all materials and reproduced the results in all figures and tables.”

JAS Reproducibility Prize

https://www.tandfonline.com/doi/full/10.1080/00934690.2024.2391623

How to Write a Review Report

- Focus on suggesting improvements

- In this line, you stated…however, due to X, I would recommend you do this…..

EASE Peer Review Toolkit

1. Be grateful to your reviewers
2. Give space and time to your emotions
3. Respond to all suggestions
4. Make your comments clear and easy to follow
5. Dare to disagree
6. Strengthen your manuscript

Rebuttal letter, manuscript with track changes, and the clean version of your manuscript

https://researchintegrityjournal.biomedcentral.com/articles/10.1186/s41073-022-00121-1/peer-review

1. Be grateful to your reviewers

Recommendation:

Include the formatting standard you will apply.

Create a template for your reviews and rebuttal letters.

Thank you and the reviewers for your comments and kind words for our study. We present below a point-by-point response for all review suggestions. Sentences in **red** are those that have been added to the manuscript during the revision. (We also indicate in **blue** those we removed).

Comment:

Reply:

Comment	Reply
1.	

Chat GPT Please create a template for scholarly peer review rebuttal

Dear [Editor/Reviewer's Name],

Thank you for considering our manuscript, [Manuscript Title], for publication in [Journal Name]. We appreciate your careful review of our work and your constructive feedback.

We have carefully considered your comments and critiques, and we would like to address them in this rebuttal. We have addressed each of your concerns and made revisions to the manuscript accordingly. Please find our responses below:

[Insert Reviewer's Comment #1] Response: [Insert response to Reviewer's Comment #1]

[Insert Reviewer's Comment #2] Response: [Insert response to Reviewer's Comment #2]

[Insert Reviewer's Comment #3] Response: [Insert response to Reviewer's Comment #3]

We hope that our revisions have addressed your concerns and improved the manuscript. We believe that our study makes a significant contribution to the field and has the potential to advance knowledge in the area.

Thank you again for your time and consideration. We look forward to hearing back from you soon.

Sincerely,

[Your Name] and Co-Authors

2. Give space and time to your emotions

The research itself has no theoretical or applied merit that can change any practice. Essentially, you restated and summarised the conclusions of the other papers.

I cannot imagine that there is still researcher doing such a simple work and submit it to [anonymized] journal…. It seems that the authors know nothing about the state-of-the-art works in denoising.

This paper more looks like a masters thesis and its most of the materials can be found in any preliminary statistics text book…Moreover, it is very irritating to find all the ACF, PACF and CCF plots in the paper, which show the immaturity of the authors.

3. Respond to all suggestions

Review 1 Comment

Reply:

Review 2 Comment

Reply:

Review 3 Comment

Reply:

Thank you for the revised version, but for the effort I invested in the initial review, I expected a point-by-point response to the raised comments. Without it, I will not waste my time again.

4. Make your comments clear and easy to follow

"The reviewer or editor shouldn't have to peruse the manuscript to find a change you made. So, instead of "We've made the change. See page 5, line 24 of the revised paper", write "We've changed [original text] to [edited text] (page 5, line 24)."

5. Dare to disagree and defend where you feel it is really important.

We respectfully disagree with the reviewer that a systematic review is not warranted unless it is meant to resolve disagreements. Good systematic reviews are a form of a unbiased, methodologically rigorous research synthesis and are preferred over narrative reviews (see Chalmers, Hedges and Cooper: Brief History of Research Synthesis, and Munn et al. What kind of systematic review should I conduct?).

5. Dare to disagree and defend where you feel it is really important.

Dear XXXX,

I fully support your decision as editors, but am quite troubled by the fact that you seem to have based your decision on the comments of reviewer 1 which was wrong in his assessment, so please allow me to provide a rebutall for his strongest (incorrect) statements and ask that you reconsider your decision and consider inviting another reviewer.

6. Strengthen your manuscript

The reviewers of your paper will likely be one of your first readers (especially if you did not share your work as a preprint). **They may come from different expertise or backgrounds.** This provides a good opportunity to clarify and strengthen the paper for a broad readership. Also take into account that studies show that manuscript reviewers of today are the co-authors of tomorrow (link).

Dear Mario, I've been through your comments and those from the reviewer. There's definitely a lot of helpful comments in there that have already improved the paper. However, there are several other comments that I would prefer not to address. Hence I think it's best to withdraw the paper and I will try another journal.

Practice

Editor’s comments

Reduce the length of the background section in the abstract

Reply:

Editor’s comments

PRISMA for abstracts requires reporting of methods for assessing risk of bias and on the resulting limitations identified.

Reply:

Editor’s comments

If space permits please add details of your sub-analysis and procedures to the Design section of the abstract.

Scenario 1 – You found space

Scenario 2 - You were not able to find space

Reply:

Editor’s comments

1. Please change your title to x……y

Scenario 1. You agree with changing the title

Scenario 2. You don’t agree with changing the title

Reply:

Editor’s comments

1. Please change your title to x……y

Scenario 1. You agree with changing the title

Scenario 2. You don’t agree with changing the title

Reply:

Reviewer’s comments

I cannot imagine that there is still researcher doing such a simple work and submit it to [anonymized] journal.

Reply:

Reviewer's comments

Please cite the following papers in the discussion: 1 to 3.

Scenario 1 – You agree with the additions

Scenario 2 – You do not want to add the reviewers papers as citations

Reply:

Reviewer's comments

Please cite the following papers in the discussion: 1 to 3.

Scenario 1 – You agree with the additions

Scenario 2 – You do not want cite the papers

Reply:

Reviewer's comments

Authors need to share the data of their study

Scenario 1 – You can share data in dryad

Scenario 2 – You do not want to share data, and the journal does not require it

Reply:

Let's Discuss Peer Review

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@Mario_Malicki

Stanford MEDICINE

Stanford Program on Research Rigor & Reproducibility (SPORR)
https://med.stanford.edu/sporr