

A Descriptive Analysis of How Psychology Journals Handle Post-Publication Critiques

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Abstract

Fostering critical discussion is essential to upholding the ethos of science as an unbiased, collaborative, and self-correcting endeavor. Journals can support this by offering options for post-publication critique, such as commentaries or letters, allowing peers to voice substantiated concerns of empirical articles. We provide a descriptive, cross-sectional analysis of post-publication critique policies and prevalence across samples of a) 100 prominent and b) 100 randomly-selected and psychology journals. We found that 38% of prominent and 23% of randomly-selected psychology journals offered explicit critique options. Length and time-to-submit limits were often not stated. Critique prevalence was rare with only a single event identified among two samples of 101 articles. Given the widespread recognition of the replication crisis in psychology, allowing avenues for criticisms to be voiced may help increase credibility within the field. To support transparency and self-correction, psychology journals should offer clearly stated post-publication critique options and encourage their use.

Main

Add 'Introduction' section

Results

Part 1: Post-Publication Critique Policies

For descriptive statistics on journal subdisciplines, post-publication critique acceptance, and COPE membership for both prominent and randomly-selected samples, see Supplementary Information ##. A full list of the journals included in this study, along with their post-publication critique options and restrictions, is provided in Supplementary Information ##.

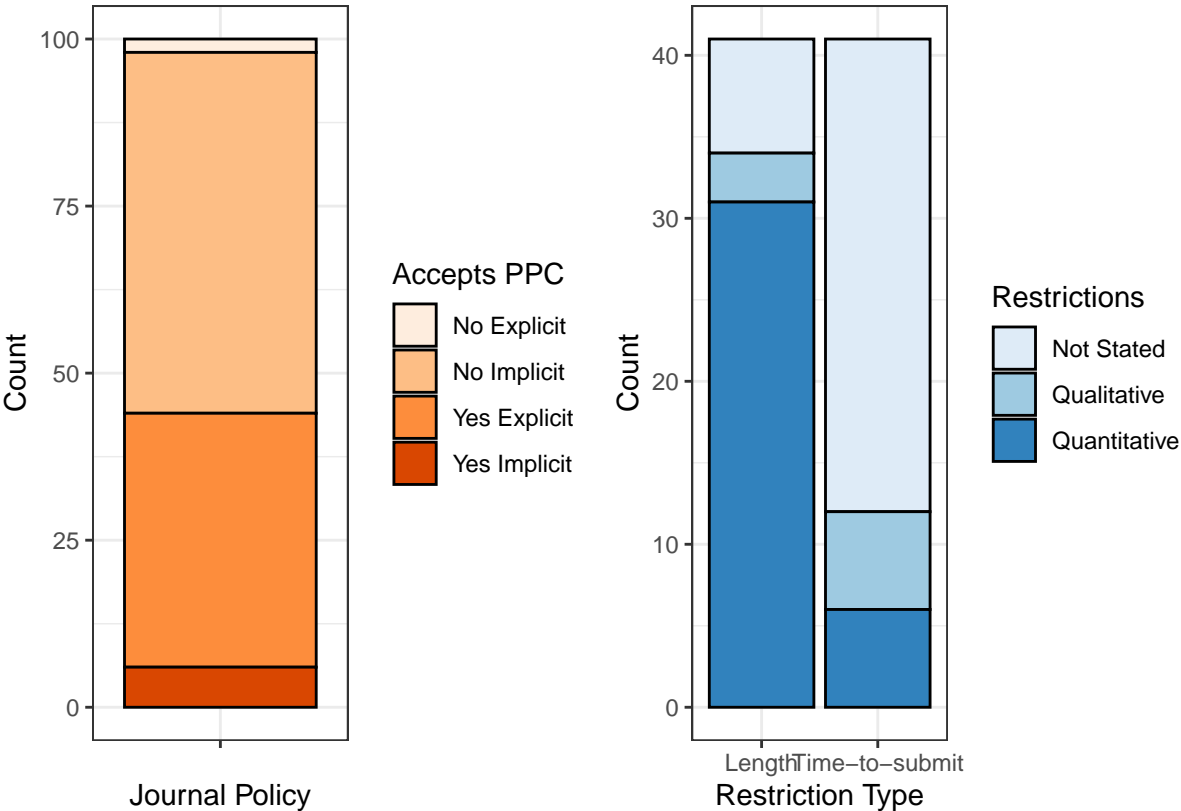
Prominent Psychology Journals

In our sample of 100 prominent journals, the median 2021 Journal Impact Factor was 6.92 (IQR = 3.09, range = 5.09 - 25.62). As this represents the entire population of interest for this section of the study, confidence intervals (CIs) are not included for this section of the study. Figure XX shows the observed journal policies and, of the explicitly offered critique options identified, how restrictions on length and time-to-submit were stated.

Table 1: Common post-publication critique types including median restrictions, peer review policies, and descriptions

Type	Length	Time-to-submit	References	Peer-review	DOI	Description
Letters	500	8	6	20%	Yes	Concise criticisms submitted shortly after target article published
Commentaries	1200	26	15	55%	Yes	More in-depth critical reviews
Web Comments	600	NA	8	0%	No	Flexible length with almost immediate visibility to readership

Post-Publication Critique Policy and Restriction Statements in Prominent Psychology Journals



Note. PPC = post-publication critique. Orange bar (left) indicates policy statements for each journal included in sample (n = 100). Blue bars (right) indicate how length and time-to-submit restrictions were stated in cases where journals had explicit post-publication critique policies in place (n = 41). Implicit acceptance denoted by archival examples of critiques despite absence of stated policy.

As shown in Figure XX, post-publication critique policies were explicitly stated by 38% of journals, and we inferred that they were implicitly accepted (as denoted by archival examples) in 6% of journals. 54% had no advertised post-publication critique policy, and 2% of journals explicitly stated that they did not accept critiques (*Clinical Psychology: Science and Practice* and *Psychological Bulletin*). 3% of journals accepted two types (commentaries and letters); *International Journal of Mental Health and Addiction*, *Journal of Environmental Psychology*, and *Psychological Science*.

Among the 41 explicitly stated post-publication critique options, restrictions on length were quantitatively stated (e.g., ‘1,000 words’) in 31(76%) cases, qualitatively stated (e.g. ‘brief’) in 3(7%) cases, and not stated in 7(17%) cases. Time-to-submit was quantitatively stated (e.g., ‘4 weeks’) in 6(15%) cases, qualitatively stated (e.g., ‘timely’) in 6(15%) cases, and not stated in 29(71%) cases. Number of references allowed was quantitatively stated (e.g., ‘max 20’) in 15(37%) cases and not stated in 26(63%). Whether critiques were sent for external peer-review was only stated in 16(39%) cases, in 13(32%) cases this was in the affirmative.

When stated quantitatively, length limits ranged from 400 - 8000 words, time-to-submit limits ranged from 4 - 52 weeks, reference limits ranged between 5 -20. Table XX shows descriptive statistics for stated quantitative restrictions, broken down by critique type.

Table XX

[Insert table of results]

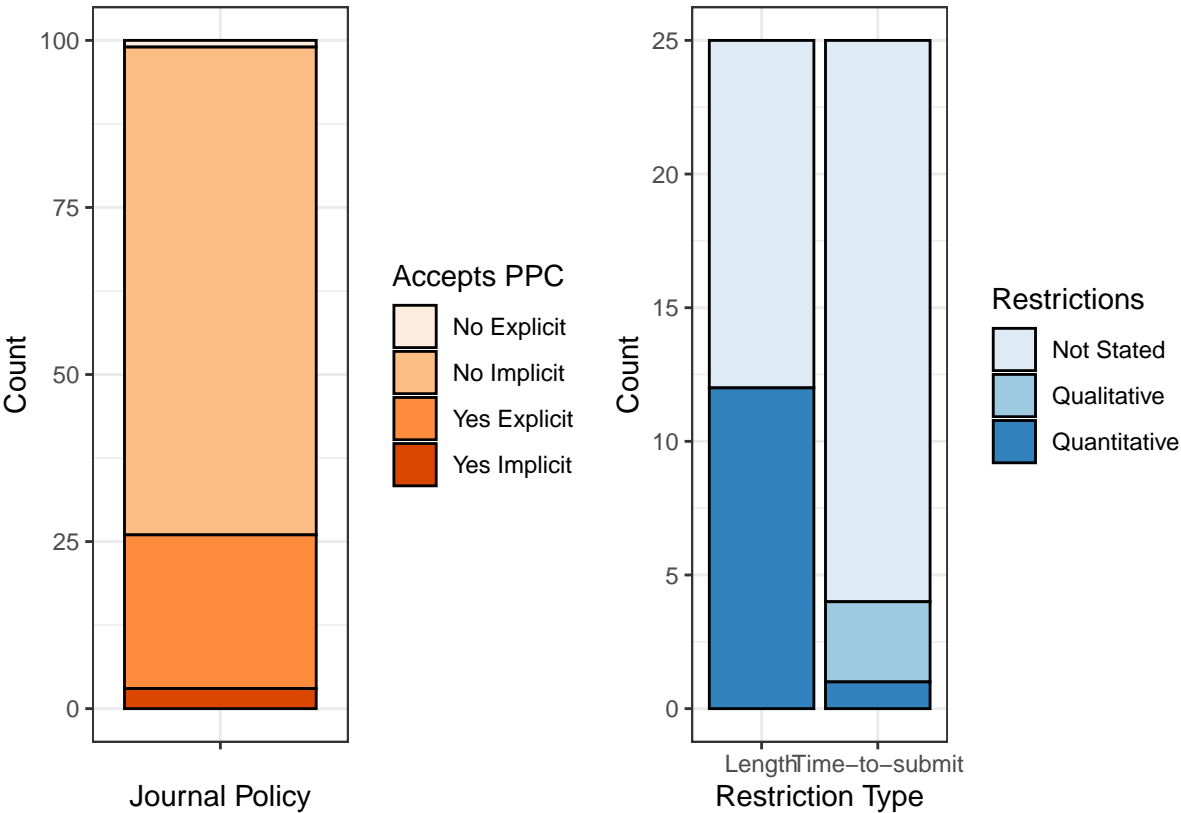
As expected, results in Table 1 show that commentaries were generally less restrictive on length with the median word limit being 2.5 times that of letters. The median number of references allowed was 1.5 times greater in commentaries compared to letters. Commentaries were also 3.3 times more likely to be sent for peer-review. Interestingly, time-to-submit was less restrictive for letters than commentaries, however, this was only reported in two and four cases (respectively) so limited inferences can be made from this.

Of the 44 journals that accepted post-publication critiques (including the six implicitly implied through archive examples), 38(86.4%) were COPE members and six (13.6%) were not. Of the 56 journals that had no critique policy, 46(82.1%) were COPE members, including both of those with explicit statements that they do not accept unsolicited critiques.

Randomly-selected Psychology Journals

Among our sample of 100 randomly-selected psychology journals, Journal Impact Factor data was unavailable for 25 journals. Median 2021 Journal Impact Factor was 2.47 (IQR = 1.98, range = 0.8 - 16.16). Figure XX shows the observed journal policies and, of the explicitly offered critique options identified, how restrictions on length and time-to-submit were stated.

Figure XX: Post-Publication Critique Policy and Restriction Statements in Randomly-selected Psychology Journals



Note. PPC = post-publication critique. Orange bar (left) indicates policy statements for each journal included in sample (n = 100). Blue bars (right) indicate how length and time-to-submit restrictions were stated in cases where journals had explicit post-publication critique policies in place (n = 25).

As shown in Figure XX, post-publication critique policies were explicitly stated by 23% of journals (95% CI [15.8%, 32.2%]), and we inferred that they were implicitly accepted (as denoted by archival examples) in 3% of journals (95% CI [1%, 8.5%]). 73% of journals (95% CI [63.6%, 80.7%]) had no advertised post-publication critique policy, and 1% of journals (95% CI [0.2%, 5.4%]) explicitly stated that they did not accept critiques (*Clinical Psychology: Science and Practice* and *Psychological Bulletin*, also included in sample for prominent journals). 2% of journals accepted two types (95% CI [0.6%, 7%]); *Cortex* offered commentaries and ‘verification reports’¹ and *Journal of Cognition and Culture* offered commentaries and letters.

Among the 25 cases of explicitly accepted post-publication critiques, restrictions on length were quantitatively stated in 12(48%) cases, and not stated in 13(52%) cases. Time-to-submit was quantitatively stated in 1(4%) case, and qualitatively stated in 3(12%), and not stated in 21(84%) cases. Number of references allowed was stated quantitatively in 4(16%) cases, and not stated in 21(84%) cases. Whether critiques were peer-reviewed was stated in 3(12%) cases, in 2(8%) cases this was in the affirmative.

When stated quantitatively, length limits ranged from 500 - 2650 words, time-to-submit limits were only stated by one journal (as 9 months), references ranged between 5 - 15. Table XX shows descriptive statistics for these restrictions, broken down by critique type.

Table XX

[Insert table of results]

As expected, Table XX shows that commentaries were overall less restrictive on length with the median word limit being double that of letters. Commentaries were also three times more likely to state quantitative length

restrictions than letters. Restrictions on time-to-submit, references, and whether critiques would be sent for peer-review were not stated for any policies on letters. Similarly, no details on restrictions or peer-review were stated for ‘verification reports’ (the one ‘other’ critique type included in this sample).

Of the 26 journals that accepted post-publication critiques (including the three implicitly implied through archive examples), 17(65.4%) were COPE members and nine (34.6%) were not. Of the 74 journals that had no critique policy, 48(64.9%) were COPE members, including the one with an explicit statement that they do not accept unsolicited critiques.

Part 2: Post-Publication Critique Prevalence

2a) Articles Published in Prominent Psychology Journals

Prevalence was defined in two ways: linked critiques (links to critiques appearing on same webpage as target article) and instances of critiques (articles that are themselves critiques). Only one linked post-publication critique event was found within our sample of 101 articles published in prominent psychology journals, yielding a prevalence estimate of 1% (95% CI [0.2%, 5.4%]). No instances of post-publication critiques were found (0%, 95% CI [0%, 3.7%]).

The single linked critique found appeared under the ‘Recommended articles’ sidebar of an article published in the Journal of Environmental Psychology webpage (for a depiction of how the article was linked, see Appendix F). This example was published as a letter² and addressed concerns over incorrect citation of the critiquing author’s previous work and methodology used in the target article³.

2b) Articles Published in Any Psychology Journal

No events of either linked or instances of post-publication critiques were identified in our random sample of 101 articles, resulting in a prevalence estimate of 0% (95% CI [0%, 3.7%]) for both classifications.

Discussion

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Methods

Add ‘Methods’ section

Data Availability

The data used for this paper are available from the project’s OSF repository (link: <https://osf.io/8k7m4/>)

Code Availability

The analysis code for all results reported in this paper are available from the project’s OSF repository (link: <https://osf.io/8k7m4/>)

References

1. Chambers, C. D. [Verification reports: A new article type at cortex](#). *Cortex* **129**, A1–A3 (2020).
2. Berto, R. [It is undeniable that nature has to be restorative to restore attention, otherwise the effect is unreliable](#). *Journal of Environmental Psychology* **71**, 101495 (2020).

3. Hicks, L. J., Smith, A. C., Ralph, B. C. W. & Smilek, D. [Restoration of sustained attention following virtual nature exposure: Undeniable or unreliable?](#) *Journal of Environmental Psychology* **71**, 101488 (2020).