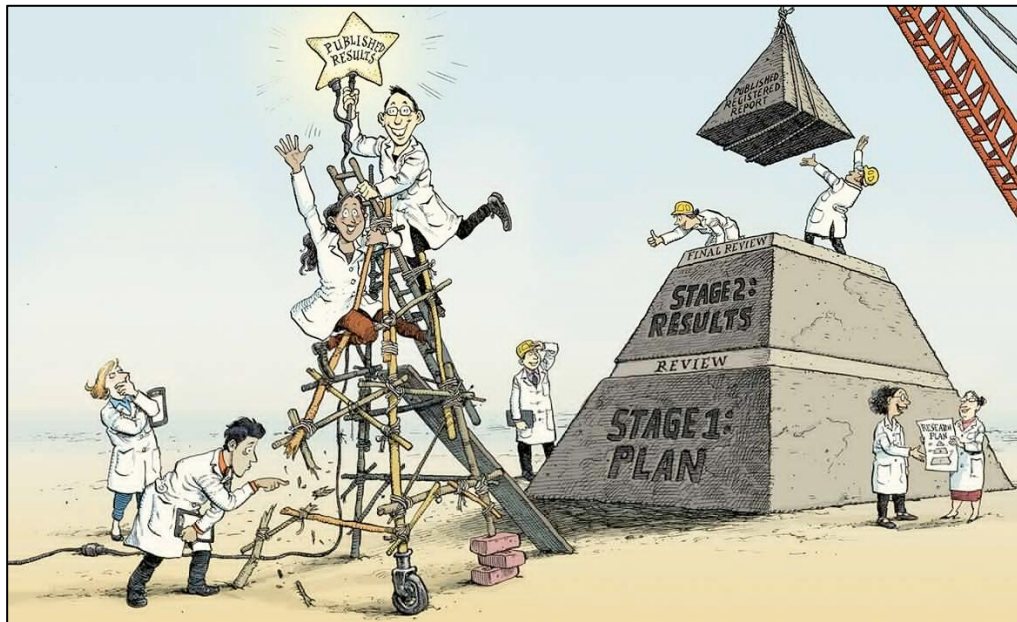


Registered Reports 2.0

Introducing the Peer Community in Registered Reports



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These slides

<https://osf.io/zyntc/>

Registered Reports



Stage 1
Peer Review 

Reviewers assess
Theory, rationale, rigour,
robustness of method

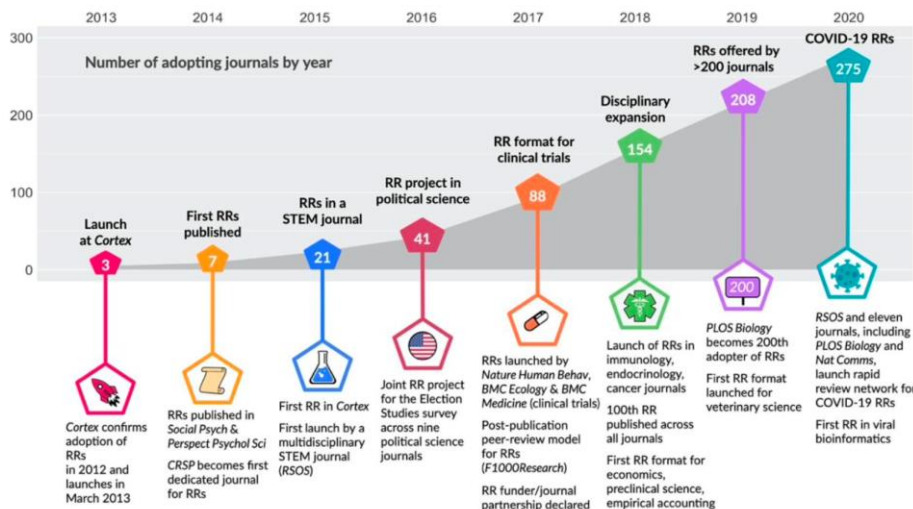
Stage 2
Peer Review 

Reviewers assess
Compliance with study protocol and whether
conclusions are based on the evidence



In-principle
acceptance

Currently adopted by >300 journals



Early impacts are promising

- Popular with ECRs: ~80% first authored by PhD students or post docs
- ~5-10 times more likely to **disconfirm** hypotheses (60% vs ~12% across fields; Allen & Mehler 2019; 56% vs 4% in psychology; Scheel et al. 2020)
- Higher computational reproducibility than regular articles (Obels et al. 2019)
- Rated higher in quality than regular articles (Soderberg et al., 2021)
- Cited same or more than regular articles (Hummer et al. 2019)

But they aren't perfect. 10 known limitations include:

1. Stage 1 review time
2. Needing to commit to a journal before results are known
3. Not well suited to programmatic research where one Stage 1 protocol could lead to multiple Stage 2 outputs (current model is one S1 → one S2)
4. Inconsistent editorial standards and levels of training/experience
5. Inconsistent transparency of accepted Stage 1 protocols (Hardwicke et al. 2018)
6. Inconsistent policies on open peer review
7. Inconsistent policies on open access and availability of Stage 2 articles
8. Unclear policies on applicability of RRs for analysis of existing data
9. Limited capability to work with funders on RR research grant models due to legal barriers that restrict cooperation between public funders and corporate publishers
10. Power resides with journals and (largely corporate) publishers to decide which RRs enter the peer-reviewed scientific record, not with authors and the broader scientific community



Free and transparent pre- and post-study
recommendations across research fields



Founders: Corina Logan, Emily Sena, Zoltan Dienes, Chris Chambers, Ben Pujol

Web: <https://rr.peercommunityin.org/>
Twitter: [@PCI_RegReports](https://twitter.com/PCI_RegReports)
Email: contact@rr.peercommunityin.org

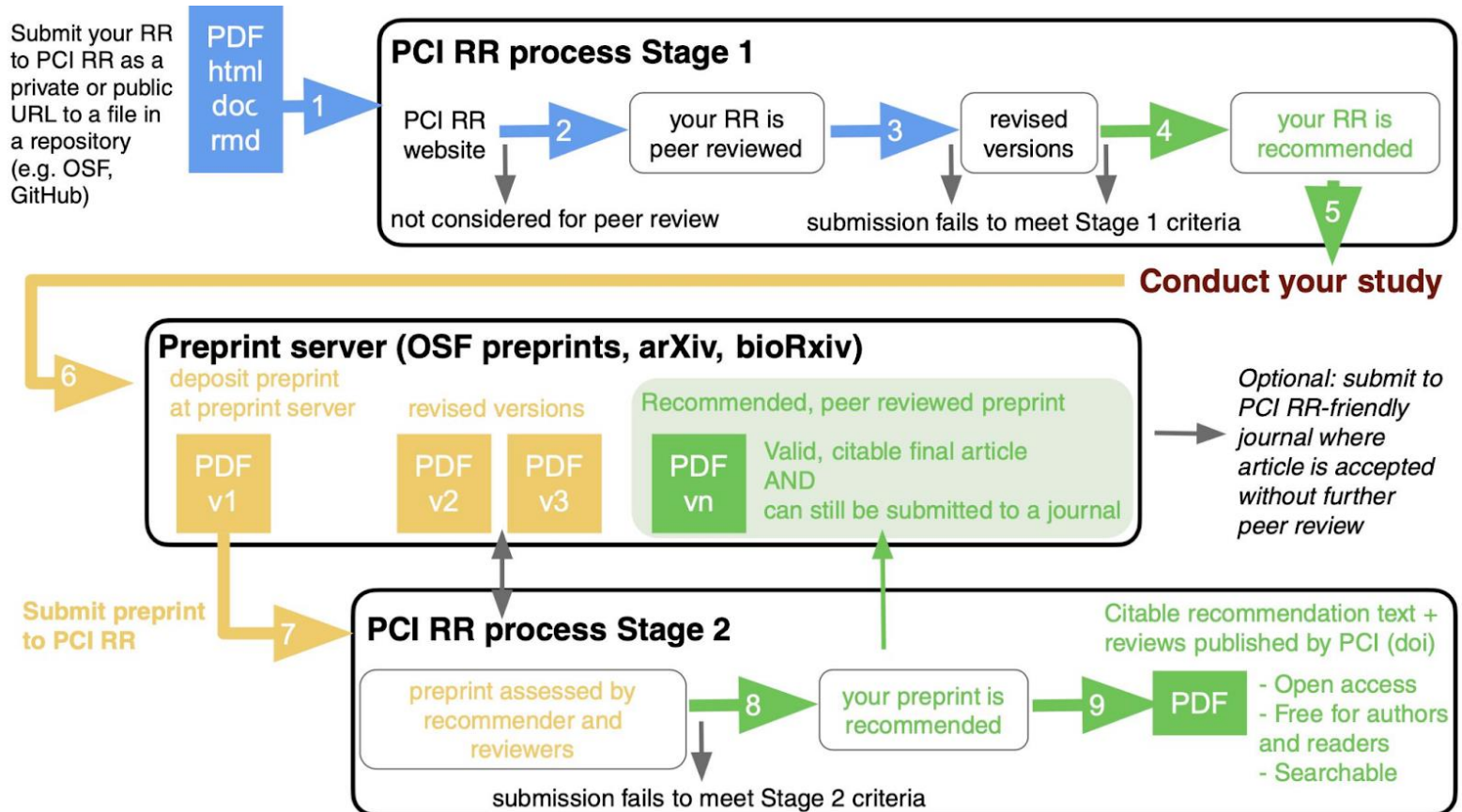
- [Peer Community in Registered Reports](https://rr.peercommunityin.org/) (PCI RR) is a free, non-commercial platform dedicated to reviewing and recommending Registered Reports *preprints* across STEM, medicine, the social sciences and humanities
- Once a submission is recommended by PCI RR following peer review, the revised manuscript is posted at the preprint server where the preprint is hosted, and the peer reviews and recommendation are published at the PCI RR website
- Authors then have the option to publish the preprint in a traditional journal, including a growing list of [PCI RR-friendly journals](#) that have committed to accepting PCI RR recommendations *without further peer review*



Peer Community In

Free and transparent pre- and post-study recommendations across research fields

How it works





Peer Community In

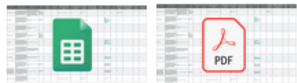
Registered Reports

Free and transparent pre- and post-study recommendations across research fields

List of PCI RR-friendly journals

There are currently **22** PCI RR-friendly journals. The current list can be viewed in spreadsheet and PDF format, and details of each journal's commitment and eligibility requirements are also listed below.

For open access journals, authors are strongly advised to check the journal website for latest information concerning article processing charges.



Journals interested in becoming PCI RR-friendly can learn more about the requirements [here](#) and can apply to join [here](#).

- [Addiction Research & Theory](#)
- [Advances in Cognitive Psychology](#)
- [BMJ Open Science](#)
- [Brain and Neuroscience Advances](#)
- [Cambridge Educational Research e-Journal](#)
- [Cortex](#)
- [Experimental Psychology](#)
- [F1000Research](#)
- [Infant and Child Development](#)
- [Journal for Reproducibility in Neuroscience](#)
- [Journal of Cognition](#)
- [Meta-Psychology](#)
- [NeuroImage: Reports](#)
- [PeerJ](#)
- [PeerJ Computer Science](#)
- [PeerJ Physical Chemistry](#)
- [PeerJ Organic Chemistry](#)
- [PeerJ Inorganic Chemistry](#)
- [PeerJ Analytical Chemistry](#)
- [PeerJ Materials Science](#)
- [Royal Society Open Science](#)
- [Swiss Psychology Open](#)

List of PCI RR-interested journals

Where authors seek to maximise the chances of their manuscript being picked up by a PCI RR-interested journal, we recommend they consult the journal's RR policy to determine what additional conditions may need to be met, over and above the PCI RR review criteria. For instance, some PCI RR-interested journals set a more stringent requirement on pre-planned evidence strength (including prospective statistical power or Bayes factors) while others may only consider RRs where data do not exist prior to in-principle acceptance (in line with [Level 6 of the PCI RR bias-control taxonomy](#)).

The list of PCI RR-interested outlets below includes a link to each journal's RR author guidelines.

- [Affective Science](#) [RR author guidelines TBC]
- [Biolinguistics](#) [RR author guidelines]
- [Collabra: Psychology](#) [RR author guidelines]
- [Nature Human Behaviour](#) [RR author guidelines]
- [PLOS Biology](#) [RR author guidelines]

PCI RR-friendly journals commit to accepting PCI RR recommendations without further peer review. Authors decide which journal gets to publish their Stage 2 RR

https://rr.peercommunityin.org/about/pci_rr_friendly_journals



Free and transparent pre- and post-study
recommendations across research fields

Other unique features

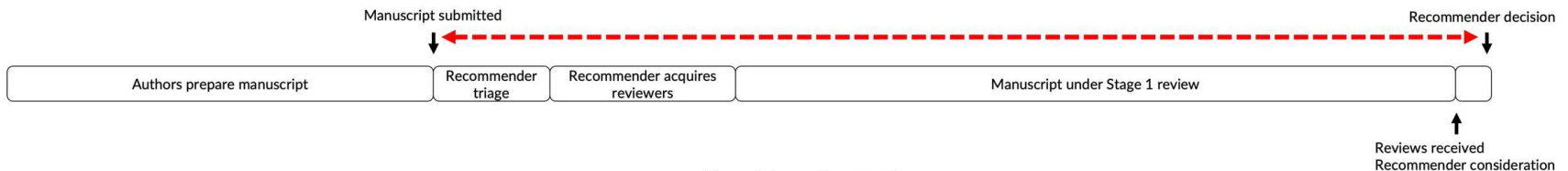
Programmatic RRs: One Stage 1 manuscript leading to multiple Stage 2 outputs

See: https://rr.peercommunityin.org/help/guide_for_authors#h_52492857233251613309610581

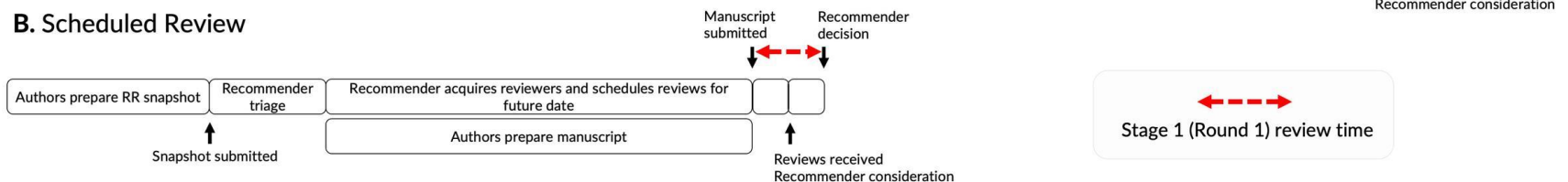
Scheduled Review: Following submission of a one-page Stage 1 “snapshot”, peer review is scheduled in advance so that the Stage 1 review time following full manuscript submission = days rather than weeks

See: https://rr.peercommunityin.org/help/guide_for_authors#h_61998243643551613309672490

A. Standard Review



B. Scheduled Review





Peer Community In

Free and transparent pre- and post-study
recommendations across research fields

Peer Community in Registered Reports: Stage 1 Snapshot

Briefly summarise the study protocol using this template (1 page max, A4). Please use Arial font size 10, single-spaced, with a 0.5 inch (1.27cm) margin. All italicised text should be deleted from the submitted template. All bold text, including the header above, must be included.

- 1. Provisional title.** Choose a title for the submission. If a full Stage 1 submission is invited, this can be updated.
- 2. Authors and affiliations.** List all submitting authors and affiliations. If a full Stage 1 submission is invited, this can be changed. For submissions involving a large group of authors, and where listing them all would use too much of the space allocation, it is acceptable to list only the corresponding author and their affiliation, and link to a google doc or other accessible file containing the full list of contributors.
- 3. Field and keywords.** State the general field of research and any specific keywords that identify the sub-field and the research topic.
- 4. Research question(s) and/or theory.** Briefly summarise the research question(s) that will be addressed, and where relevant, the theoretical basis of the proposal. For a Programmatic RR, anticipate which questions will produce which Stage 2 outputs.
- 5. Hypotheses (where applicable).** Where relevant, state any predictions of the study. These can be stated in less precise terms than is required for a full Stage 1 submission, for instance, by referring to specific concepts rather than variables or measurements. If a full Stage 1 submission is invited, this will be updated and refined.
- 6. Study design and methods.** Summarise in broad terms the study design, including (as applicable), key conditions and controls, data acquisition procedures, and variables.
- 7. Key analyses that will test the hypotheses and/or answer the research question(s).** Summarise in broad terms how the data will be analysed. A detailed analysis plan is not required, but the clearer the link between the research question, hypotheses (as applicable), and analysis plans, the more likely the submission is to pass triage.
- 8. Conclusions that will be drawn given different results.** Anticipate a range of possible/plausible results, what they would mean for theory or applications, and how they would answer the research question(s). For example, how would a particular hypothesis being supported vs. unsupported influence theory?
- 9. Key references.** These must be numbered and include DOI URLs. To save space, the reference list can be presented succinctly in a single body of text using the following style: 1. Surname et al. (Year), <https://doi.org/DOI>. 2. Surname et al. (Year), <https://doi.org/DOI>. etc.

RR 'Snapshot' used in
the Scheduled Review
track



Free and transparent pre- and post-study
recommendations across research fields

PCI RR recommenders (editors) take a
training and pass a test

PCI RR Recommender's Entrance Test

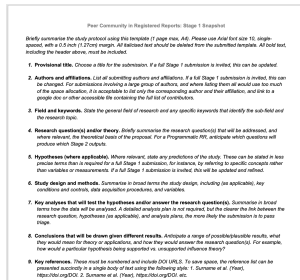
Welcome to the PCI RR Recommender's Entrance Test. This test is designed to assess basic knowledge of the RR format, the core policies of PCI RR, and best approaches for tackling challenging scenarios.

The test includes 66 questions over 5 sections. Please allow 2 hours to complete the test.

All information that prospective recommenders need to pass this test is contained in the guidance and the links at the top of each section. A pass grade is 63 out of 66 points (95% correct) and the test can be taken as many times as necessary.

Example: post doc or PhD students wanting to complete a series of independent RRs

1. Design RRs and complete Stage 1 Snapshot



2. Post Snapshot on the OSF, either publicly or under private embargo



3. Submit the snapshot URL to PCI RR via the “Scheduled Review” track



4. Select future date for review (e.g. 6 weeks head), and once passed the recommender triage process, set to work writing a full “programmatic RR”

5. While designing & writing the Stage 1 RR, consult the list of PCI RR-friendly journals to ensure that you meet any additional requirements for whatever target journals you have in mind (e.g. concerning evidence strength, bias control, etc)

6. Submit your full Stage 1 manuscript by the due date. Because review is planned in advance, reviews & an interim recommendation can be expected in about a week

7. If, likely following revision, you gain in-principle acceptance (IPA), PCI RR will tell you which journals are eligible outlets & will auto-endorse the IPA decision. You can also ask us for a provisional steer prior to IPA. PCI RR makes this decision.

8. With IPA in hand, you now have an approved programme of multiple RRs accepted in advance which you can eventually choose to publish in any eligible PCI RR-friendly journal (or you can submit anywhere else as you see fit). Each Stage 2 RR can go in a different journal.

9. Do research and publish each Stage 2 output as you progress without further peer review, in journal of your choice



Peer Community In

Free and transparent pre- and post-study recommendations across research fields

What are the benefits of PCI RR?	Regular non-RR article at a traditional journal	RR at a traditional journal	RR at PCI RR
Offers pre-study peer review	✗	✓	✓
Offers in-principle acceptance before results are known	✗	✓	✓
Offers programmatic RRs : one Stage 1 RR leading to multiple Stage 2 manuscripts	✗	✗	✓
Offers scheduled review to accelerate the Stage 1 review process	✗	✗	✓
Requires handling editor (or recommender) to have proven their knowledge of RRs by passing an entrance test, which serves as useful training of a rarely taught skill	✗	✗	✓
Peer review undertaken independently of any journal	✗	✗	✓
Author has the power to decide their destination journal (if any)	✗	Very rare	✓
No need for author to decide on destination journal until after Stage 2 acceptance by PCI RR	✗	Very rare	✓
Peer reviews for accepted manuscripts published online and free to read	✗	Very rare	✓
Free for authors and readers	Depends on journal	Very rare	✓

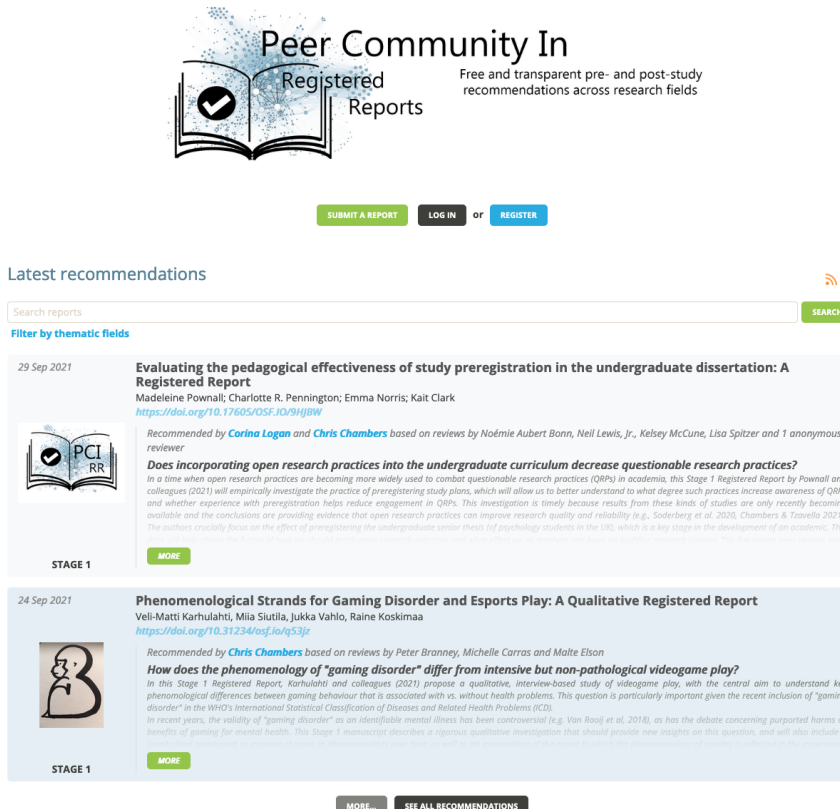
Further information about PCI RR

Guide for Authors https://rr.peercommunityin.org/help/guide_for_authors

General Information <https://rr.peercommunityin.org/about/about>

FAQs <https://rr.peercommunityin.org/help/faq>

Information for adopting journals https://rr.peercommunityin.org/about/become_journal_adopter



The screenshot shows the Peer Community In Registered Reports website. At the top, there is a logo featuring an open book with a checkmark, the text "Peer Community In Registered Reports", and the tagline "Free and transparent pre- and post-study recommendations across research fields". Below the logo are buttons for "SUBMIT A REPORT", "LOG IN", and "REGISTER". The main section is titled "Latest recommendations" and includes a search bar and a "Filter by thematic fields" dropdown. Two reports are listed:

- Evaluating the pedagogical effectiveness of study preregistration in the undergraduate dissertation: A Registered Report**
Madeleine Pownall; Charlotte R. Pennington; Emma Norris; Kait Clark
<https://doi.org/10.17605/OSF.IO/9HJ8W>
Recommended by Corina Logan and Chris Chambers based on reviews by Noémie Aubert Bonn, Neil Lewis, Jr., Kelsey McCune, Lisa Spitzer and 1 anonymous reviewer.
Does incorporating open research practices into the undergraduate curriculum decrease questionable research practices?
In a time when open research practices are becoming more widely used to combat questionable research practices (QRPs) in academia, this Stage 1 Registered Report by Pownall and colleagues (2021) will empirically investigate the practice of preregistering study plans, which will allow us to better understand to what degree such practices increase awareness of QRPs and whether experience with preregistration helps reduce engagement in QRPs. This investigation is timely because results from these kinds of studies are only recently becoming available and the conclusions are providing evidence that open research practices can improve research quality and reliability (e.g., Soderberg et al., 2020; Chambers & Tranel 2019). The authors crucially focus on the effect of preregistering the undergraduate senior thesis (of psychology students in the UK, which is a key stage in the development of an academic. This is chosen the focus of how we should teach open research practices and what effect we as teachers can have on further research reports. This first report stage contains good
- Phenomenological Strands for Gaming Disorder and Esports Play: A Qualitative Registered Report**
Veli-Matti Karhulahti, Miia Siuttila, Jukka Vahlo, Raine Koskimaa
<https://doi.org/10.31234/osf.io/q53jr>
Recommended by Chris Chambers based on reviews by Peter Branney, Michelle Carras and Malte Elson
How does the phenomenology of "gaming disorder" differ from intensive but non-pathological videogame play?
In this Stage 1 Registered Report, Karhulahti and colleagues (2021) propose a qualitative, interview-based study of videogame play, with the central aim to understand key phenomenological differences between gaming behaviour that is associated with vs. without health problems. This question is particularly important given the recent inclusion of "gaming disorder" in the WHO's International Statistical Classification of Diseases and Related Health Problems (ICD). In recent years, the validity of "gaming disorder" as an identifiable mental illness has been controversial (e.g. Van Rooij et al., 2018), as has the debate concerning purported harms or benefits of gaming for mental health. This Stage 1 manuscript describes a rigorous qualitative investigation that should provide new insights on this question, and will also include a commitment to openness through its preregistration and the fact that the manuscript of this report to which the phenomenology of gaming is referred in the introduction

At the bottom of the page are buttons for "MORE..." and "SEE ALL RECOMMENDATIONS".

First Stage 1 IPAs →

These slides: <https://osf.io/zyntc/>

For more info: chambersc1@cardiff.ac.uk