

Editorial 2018

Journal of Cognitive Psychology (JCP) commences 2018 with a comprehensive change in its editorial team, both in terms of its Associate Editors and the members of its Editorial Board. I am pleased to announce that an enthusiastic group of eight exceptional researchers have agreed to join me to serve as Associate Editors, committing their time and expertise to *JCP*'s continuing success. This team of Associate Editors includes: Tilmann Betsch (University of Erfurt, Germany), Monica Bucciarelli (University of Turin, Italy), Jamie I. D. Campbell (University of Saskatchewan, Canada), Ruth Filik (University of Nottingham, UK), Esther Fujiwara (University of Alberta, Canada), John E. Marsh (University of Gävle, Sweden), Michael Pilling (Oxford Brookes University, UK) and Susan M. Sherman (Keele University, UK). Our complementary areas of interest and expertise allow us to cover the vast majority of topics within contemporary cognitive psychology. In selecting the best manuscripts for publication, the Associate Editors will be ably assisted by a first-rate Editorial Board that is comprised of 42 newly appointed members.

Overall, *JCP*'s new editorial team demonstrates great diversity with respect to discipline expertise and geographical location, as well as an equal gender balance, which is all too often missing from editorial teams to the detriment of our discipline. The diversity of *JCP*'s editorial team maintains the journal's established tradition of striving to reflect the diversity of the authors who we are keen to see publishing their work in the journal's pages. My hope is that the new editorial team will bring fresh impetus to *JCP* to facilitate the publication of some of the most original and important cognition research that is currently taking place in the field internationally.

From 2018 *JCP* will no longer be affiliated with the European Society for Cognitive Psychology (ESCoP). For more than 20 years the collaboration between *JCP*'s publisher, Taylor & Francis, and ESCoP has helped establish *JCP*'s reputation in the field of cognitive psychology. After much discussion and negotiation, ESCoP's executive committee decided to establish their own new open access journal aligning with one of the Society's main ambitions. To ensure that ESCoP's obligations were fulfilled, the outgoing *JCP* Editor-in-Chief, Rob Hartsuiker, kindly stayed on with his team of Associates Editors until the 31st March 2017 in order to deal with papers submitted before that date until they had been given a final editorial decision.

Between April and December 2017 a new editorial team needed to be established for *JCP*, with an inevitable backlog arising in the processing of incoming manuscripts. If you are reading this editorial as a submitting author who encountered delays in the handling of your manuscript during 2017, then I can but apologise for these delays and thank you for your considerable forbearance. It is, indeed, a testament to the commitment of authors to publish in *JCP* that only a handful of manuscripts were withdrawn during this time. The majority of authors demonstrated great patience in waiting for their manuscripts to be considered by the incoming Associate Editors, who were appointed from August 2017 onwards. The Associate Editors had their work cut out in managing an accumulation of around 80 manuscripts as well as additional incoming submissions, whilst also maintaining the high quality standards of *JCP*. Needless to say, I am greatly indebted to each of my Associate Editors for their dedicated work in processing this daunting backlog of articles and for ensuring the continuity of full issues of *JCP* over the coming months. As for ESCoP's new journal (*Journal of Cognition - JoC*), I wish the Editor-in-Chief, Candice Morey, every success with the exciting launch of a new cognition journal, which I am confident will rapidly establish itself as an excellent open access publication outlet. This new journal couldn't be in safer hands with Candice at the helm. Given the wealth of cognitive psychological research that is now taking place internationally there is clearly more than enough excellent work out there to allow both *JCP* and *JoC* to thrive, whilst each respective journal aligns with differing publication models.

I would like to take this opportunity to thank Rob Hartsuiker for his dedicated work for *JCP* during his tenure as Editor-in-Chief. I also welcomed Rob's generosity in finding the time to speak with me in 2017 regarding the handover of responsibilities. During an extended conversation over lunch in September 2017 Rob was kind enough to share with me many top tips for handling the various aspects of the Editor-in-Chief role. It was clear that he was speaking with the voice of experience in conveying a great deal of wisdom and insight. Likewise, I am very grateful to the previous *JCP* Associate Editors for their outstanding work for the journal and for continuing throughout 2017 to process revisions of manuscripts that they had originally handled when first submitted.

In my role as the new Editor-in-Chief for *JCP* I aim to provide considerable continuity to a journal that has already established itself over nearly 30 years as a leading publication outlet for excellent, international research across all areas of cognitive psychology. By providing such

continuity, I intend to maintain *JCP*'s key focus on publishing sound, theory-driven studies that advance our understanding of cognitive mechanisms and processes. Within this spirit it has been especially pleasing in recent years to see *JCP* publishing more research drawing upon neuroimaging methodologies, including electrophysiological and hemodynamic imaging techniques. Research on the neural bases of cognitive functioning continues to grow in importance, having a major role to play in providing unique insights that can both extend and constrain cognitive theorising. I remain fully committed to welcoming further coverage of excellent cognitive neuroscience research in the pages of *JCP* and I strongly encourage the submission of manuscripts that adopt a neuroscience approach in examining cognitive functioning. Having a new editorial team that includes leading researchers whose work integrates both behavioural and neuroscience techniques will, I trust, provide reassurance to authors that *JCP* is well placed to consider articles that encompass the neural bases of human cognition.

In terms of the development and enhancement of *JCP*, it is again very much a case of continuing to perfect and consolidate the excellent initiatives they were started by the previous editorial team. Key amongst these was *JCP*'s decision to tackle head on a variety of concerns regarding the standards of research and publication practices in psychological science (see Hartsuiker & Morey, 2017, for further discussion of these concerns and *JCP*'s approach to tackling them). Perhaps central to these concerns was a preponderance of underpowered studies in the literature (e.g., Aguinis, Beaty, Boik, & Pierce, 2005; Bakker, Van Dijk, & Wichters, 2012) as well as the publication of research that was based on "questionable research practices" (see Simmons, Nelson, & Simonsohn, 2011), including so-called p-hacking, which occurs when a researcher collects or selects data or statistical analyses until non-significant results become significant (see Simonsohn, Nelson, & Simmons, 2014). These proclivities amongst researchers, when coupled with a publication bias to accept articles reporting significant effects (e.g., Francis, 2012; Ferguson & Brannick, 2012; Kühberger, Fritz, & Scherndl, 2014) and researchers' unwillingness or inability to share data (e.g., Vanpaemel, Vermorgen, Deriemaeker, & Storms, 2015), created a perfect storm for psychological science and seemed cumulatively to be fuelling a replication crisis that had become all too readily apparent, as reflected in low rates of replication success (e.g., Open Science Collaboration, 2015). It is to the credit of *JCP*'s previous editorial team that they responded proactively and positively to these various concerns with the state of psychological science by taking two, important courses of action.

First, *JCP* adopted a set of methodological guidelines that were initially introduced by journals published by the Psychonomic Society (see <http://www.psychonomic.org/?page=journals>), which directly draw attention to issues such as the importance of appropriate statistical test power, the dangers of running multiple null hypothesis significance tests and cherry-picking test outcomes, and “harking” (i.e., hypothesis testing after the results are known). The Psychonomic Society’s guidelines further encourage researchers to provide rich and encompassing descriptions of their data and to apply statistical methods that best describe and convey the properties of their data. This latter advice means that researchers should not feel constrained to use traditional null hypothesis significance testing, but are free to apply other appropriate methods for making statistical inferences about their data, including Bayesian techniques (e.g., see Dienes, 2014, 2016; Wagenmakers, 2007).

Second, *JCP* introduced an Open Science policy for the journal, becoming a signatory of *The Transparency and Openness Promotion (TOP) Guidelines* (see <https://cos.io/our-services/top-guidelines/>). The TOP Guidelines for journals represent an important initiative devoted to promoting transparency and openness in science, one vital element of which is that authors make their data available to editors and reviewers during the review process and to the public after their paper is accepted. In other words, data should be openly available by default, unless very good arguments can be proffered for why this expectation cannot be fulfilled, as described by the Peer Reviewers’ Openness Initiative (see Morey et al., 2016). This open data policy has been piloted by *JCP* since January 2017. From January 2018 *JCP* will fully embrace this policy for all submitted manuscripts.

JCP’s commitment to open data also aligns with the new data sharing policies being spearheaded in 2018 across all Taylor & Francis journals. These policies range from a “Basic Data Sharing Policy”, which encourages all authors to make the data underlying their published articles publicly available, to a mandatory requirement for all authors to make data fully open with re-use rights. The new *JCP* editorial team is fully committed to supporting this initiative, not least because of the importance for our discipline of showing leadership in advancing the open science agenda, with the many benefits that this can provide.

In relation to other practical issues, from 2018 onwards *JCP* will continue to publish both brief articles and full articles. Brief articles were introduced as a way to enable the relatively fast

dissemination of novel, theoretically important findings, whilst not exceeding 4000 words. Importantly, brief articles are not meant to encourage the piecemeal publication of research findings, but are rather a means to allow authors to report methodologically sound research that has clear theoretical implications and that warrants more rapid communication to the scientific community. In addition to brief articles, *JCP* continues to publish full articles in the form of empirical papers that report substantive empirical work as well as theoretical papers that review the literature and advance cognitive psychological theory. I would like to emphasise my own particular enthusiasm for multi-experiment papers that report studies with high statistical test power and excellent methodological and analytical rigour. Publishing an article in *JCP* that reports a series of high-quality experiments that validate and extend important findings with theoretical impact is a clear way to make an exceptional contribution to the scientific literature. These are also the kinds of articles that catalyse valuable follow-on research by the cognitive psychology community. The submission of such papers to *JCP* is very welcome; they are good for authors in all respects (including citation counts), they are good for the progress of scientific understanding and they are a real boost for *JCP* in terms of important metrics such as impact factors.

JCP will additionally continue its long-standing tradition of publishing occasional special issues (around one per year) that focus on a timely theme and that contribute to defining a strong research agenda for the future. There is no longer a yearly call that invites authors to submit proposals for special issues. Instead, it is now simply a case of developing a proposal that I will consider in consultation with the *JCP* Associate Editors. A special issue needs to address a single topic of contemporary interest and importance, ideally presenting empirical papers representing contrasting theoretical and methodological perspectives. The inclusion of a theory-driven literature review is often a great way to commence a special issue and is a welcome addition, but such a review is not essential. One of the Associate Editors who is an expert in the special issue's topic will assist the guest editor(s) in supervising the editorial process. All papers will follow the journal's standard manuscript reviewing procedures.

To conclude, I very much look forward to the exciting job of editing *JCP* with the generous assistance of my Associate Editors and Editorial Board. We are all committed to sustaining *JCP*'s reputation for publishing high-quality papers in the broad field of cognitive psychology. We encourage all of our colleagues to submit their best research to *JCP* over the coming years

so that the journal can continue to thrive as an excellent publication outlet for the advancement of our discipline.

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References

- Aguinis, H., Beaty, J. C., Boik, R. J., & Pierce, C.A. (2005). Effect size and power in assessing moderating effects of categorical variables using multiple regression: A 30-year review. *Journal of Applied Psychology*, 90, 94–107. DOI: <http://dx.doi.org/10.1037/0021-9010.90.1.94>
- Bakker, M., van Dijk, A., & Wicherts, J. M. (2012). The rules of the game called psychological science. *Perspectives on Psychological Science*, 7, 543–554. DOI: <https://doi.org/10.1177/1745691612459060>
- Dienes, Z. (2014). Using Bayes to get the most out of non-significant results. *Frontiers in Psychology*, 5, 781, 1–17. DOI: <https://doi.org/10.3389/fpsyg.2014.00781>
- Dienes, Z. (2016). How Bayes factors change scientific practice. *Journal of Mathematical Psychology*, 72, 78–89. DOI: <https://doi.org/10.1016/j.jmp.2015.10.003>
- Francis, G. (2012). Too good to be true: Publication bias in two prominent studies from experimental psychology. *Psychonomic Bulletin & Review*, 19, 151–156. DOI: <https://doi.org/10.3758/s13423-012-0227-9>
- Ferguson, C. J., & Brannick, M. T. (2012). Publication bias in psychological science: Prevalence, methods for identifying and controlling, and implications for the use of meta-analyses. *Psychological Methods* 17, 120–128. DOI: <http://dx.doi.org/10.1037/a0024445>
- Hartsuiker, R. J., & Morey, C. C. (2017). Introducing the Journal of Cognition. *Journal of Cognition*, 1: 1, 1–3. DOI: <https://doi.org/10.5334/joc.1>
- Kühberger, A., Fritz, A., & Scherndl, T. (2014) Publication bias in psychology: A diagnosis based on the correlation between effect size and sample size. *PLoS ONE*, 9: e105825, 1-8. DOI: <https://doi.org/10.1371/journal.pone.0105825>
- Morey, R. D., Chambers, C. D., Etchells, P. J., Harris, C. R., Hoekstra, R., Lakens, D., Lewandowsky, S., Morey, C. C., Newman, D. P., Schönbrodt, F. D., Vanpaemel, W., Wagenmakers, E. J., & Zwaan, R. A. (2016). The Peer Reviewers' Openness Initiative:

- Incentivizing open research practices through peer review. *Royal Society Open Science*, 3: 150547, 1-7. DOI: <https://doi.org/10.1098/rsos.150547>
- Open Science Collaboration. (2015). Estimating the reproducibility of psychological science. *Science*, 349: aac4716, 1-8. DOI: <https://doi.org/10.1126/science.aac4716>
- Simmons, J., Nelson, L. D., & Simonsohn, U. (2011). False-positive psychology: Undisclosed flexibility in data collection and analysis allows presenting anything as significant. *Psychological Science*, 22, 1359–1366. DOI: <https://doi.org/10.1177/0956797611417632>
- Simonsohn, U., Nelson, L. D., & Simmons, J. P. (2014). P-curve: A key to the file-drawer. *Journal of Experimental Psychology: General*, 143, 534–547. DOI: <http://dx.doi.org/10.1037/a0033242>
- TOP guidelines. <https://cos.io/our-services/top-guidelines/>
- Vanpaemel, W., Vermorgen, M., Deriemaeker, L., & Storms, G. (2015). Are we wasting a good crisis? The availability of psychological research data after the storm. *Collabra*, 1: 3, 1–5. DOI: <https://doi.org/10.1525/collabra.13>
- Wagenmakers, E. J. (2007). A practical solution to the pervasive problems of p values. *Psychonomic Bulletin & Review*, 14, 779–804. DOI: <https://doi.org/10.3758/BF03194105>