Developmental Science

WILEY

Developmental Science

EDITORIAL

A Guide to Peer Review in Developmental Psychology

Leher Singh[1] | Heather Bortfeld[2] | Daniel S. Messinger[3] | Bruce Rawlings[4]

[1]Department of Psychology, University of Maryland, Baltimore County, Maryland, USA | [2]Departments of Psychological Sciences and Cognitive & Information Sciences, University of California, Merced, California, USA | [3]Departments of Psychology, Pediatrics, Electrical & Computer Engineering, and Music Engineering, University of Miami, Coral Gables, Florida, USA | [4]Department of Psychology, Durham University, Durham, UK

Correspondence: Leher Singh (lehers1@umbc.edu)

Received: 16 December 2025 | **Revised:** 16 December 2025 | **Accepted:** 31 December 2025

Peer review is one of the primary mechanisms for safeguarding the integrity, credibility, and advancement of knowledge in our field. By subjecting research to critical evaluation from disciplinary peers, it is meant to uphold standards of methodological rigor, originality, and theoretical contribution (Resnik and Elmore 2016) and to sustain trust in psychological science. Yet, despite its centrality, scholars rarely receive formal training in how to review, which can make the process feel arbitrary, subjective, or unfair. In developmental psychology, peer review practices today are often communicated informally via peer networks. This manuscript aims to provide a practical guide to promote greater consistency and transparency in peer review. It is not a policy statement from *Developmental Science*, but a resource for the field that offers orienting principles for conducting robust and equitable peer review.

1 | The Importance of Peer Review

For researchers, peer review is both a professional obligation and a cornerstone of scientific dissemination. As summarized in Figure 1, it is an integral component of the publication process. When done well, it not only evaluates the scientific merit of manuscripts but also serves as a form of guidance, helping authors, especially early-career scholars, improve their work and increase their chances of publication (Mayer et al. 2024). Peer review also gives reviewers a view "behind the curtain" of cutting-edge research, methods, and theoretical perspectives, broadening their scholarly horizons. At a time when peer reviews are increasingly hard to secure, supporting and expanding the reviewer pool is a critical priority. The goal of providing discipline-specific scaffolds, such as this guide, is to facilitate participation in peer review.

In many instances, scholars are informally educated on peer review techniques and do not receive formal training. The lack of formal preparation for peer review creates a paradox: it is one of the most important responsibilities in academic life, yet is typically learned and refined through "on the job" training and trial and error. Graduate training emphasizes research design, methodology, and publication, but rarely offers systematic guidance on how to evaluate others' work in ways that help bring it to publication. Defining what constitutes an effective review and how to apply such standards consistently is, therefore a priority for the discipline. In the next section, we outline the anatomy of a constructive peer review (summarized in Figure 2). Rather than advocating for every review to include all proposed elements, our goal is to provide a set of considerations that may help strengthen the rigor, constructiveness, and equity of peer review.

1.1 | Constructive

Peer review should be fundamentally helpful to authors, regardless of a manuscript's final decision. Its core purpose is to improve scholarship, not to discourage participation, punish risk-taking, or undermine authors' confidence or alter career trajectories. A constructive review offers clear, accurate, and actionable guidance that supports improvement of the work, regardless of whether it is ultimately accepted, revised, or rejected. Specific, balanced, and instructive feedback encourages authors to stay engaged and contribute to the discipline's long-term growth (Javed et al. 2024), whereas reviews that are dismissive, vague, or harsh can drive authors, especially early-career scholars and those from underrepresented backgrounds, away from scientific participation (Aly et al. 2023). Reviewers thus shape not only

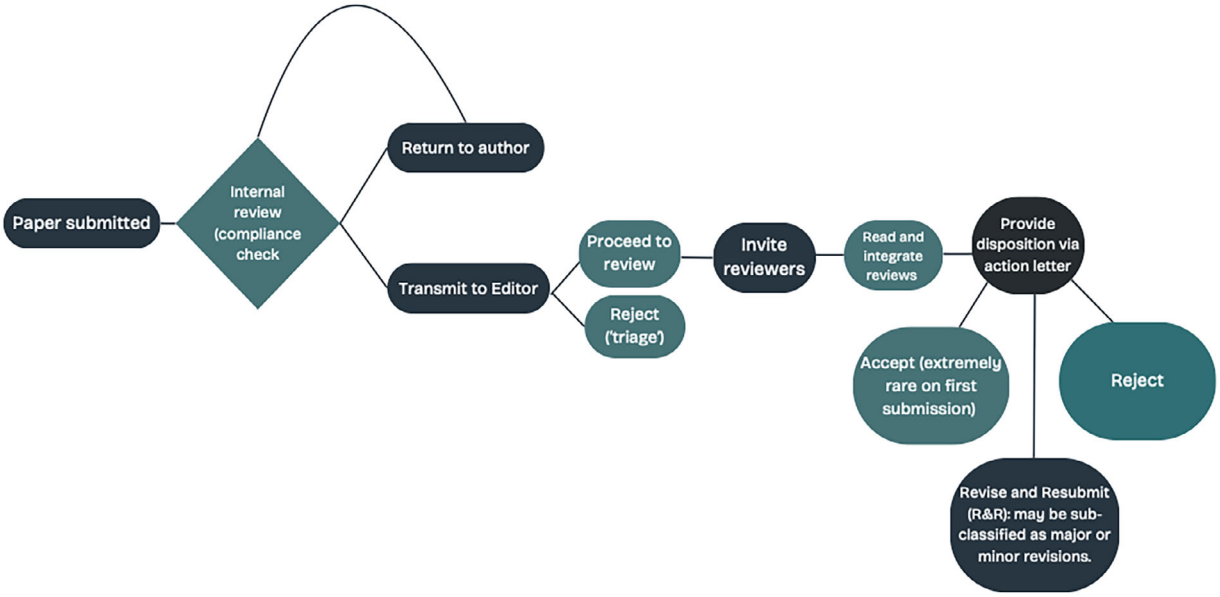

FIGURE 1 | An example of the lifecycle of a submitted manuscript.

individual papers but also engender a broader culture of mutual respect that strengthens academic discourse.

1.2 | Structure

A well-structured review begins optionally with a brief summary of the manuscript, followed by clearly labeled major and minor comments. The summary, if provided, can range from 2 to 3 sentences to 1 paragraph. The summary does not form part of the content of the review and primarily signals to the author that the reviewer has read and understood the paper. The substantive content of the review (major and minor comments) follows. Major comments should address the most consequential issues for the paper's contribution and credibility, such as the clarity of the research questions, methodological soundness, integration with relevant literature, and validity of the conclusions. Minor comments can then focus on more local concerns, including clarity of expression, small clarifications, typographical errors, and refinements to figures or tables.

Separating substantive concerns (e.g., problems with logic, analyses, or interpretation) from stylistic or formatting issues helps authors prioritize revisions and can be especially important for authors writing in a non-native language or dialect and/or early career scholars. Additionally, minor concerns can obscure major concerns: it may be challenging to identify major issues if stylistic issues, such as exposition, are unclear. In general, however, a clear structure, consisting optionally of a summary, and proceeding to major issues, then minor issues, provides a clear roadmap for revision and reduces confusion for authors.

1.3 | Internal Consistency

Internal consistency within a review is critical in enabling an author to craft an effective response. In many psychology journals, authors receive reviewers' comments, an editorial decision letter, and the final disposition of their manuscript, but not the specific recommendation (e.g., accept, minor/major revision, reject, reject and transfer) made by each individual reviewer. This can create confusion when the tone of the reviews appears positive, but the editorial decision is negative. To minimize this confusion, the substance and tone of a review should clearly align with the reviewer's overall recommendation. Doing so helps editors make coherent decisions and enables authors to interpret feedback, prioritize revisions, and judge whether resubmission (to the same or a different journal) is worthwhile, thereby promoting transparency and fairness. Consistency is equally important across rounds of review. When evaluating a revision, reviewers should explicitly build on their earlier comments and assess how effectively authors have addressed them. Introducing entirely new foundational criticisms at a later stage should be reserved for concerns that genuinely emerge from the revised manuscript and thus were not identified earlier. This approach reinforces trust in the process, respects authors' efforts, and keeps peer review oriented toward improvement.

1.4 | Specificity

Specificity in peer review is helpful to authors. Vague or generalized comments can leave authors uncertain about how to revise their manuscripts effectively. A reviewer who writes that "the discussion is unclear" or "the analysis needs improvement" without elaboration provides little guidance for meaningful revision. Conversely, when reviewers anchor their feedback in explicit references to sections, arguments, page and paragraph numbers, or methodological details, they enable authors to make targeted improvements. High-quality reviews balance critique with actionable suggestions, allowing authors to build on strengths and address weaknesses in concrete ways (Lovejoy et al. 2011). When ambiguity arises, proactive communication between authors and action editors can be invaluable. Action editors can (and should) clarify journal expectations, provide guidance on how to frame critiques as appropriate, and help reviewers

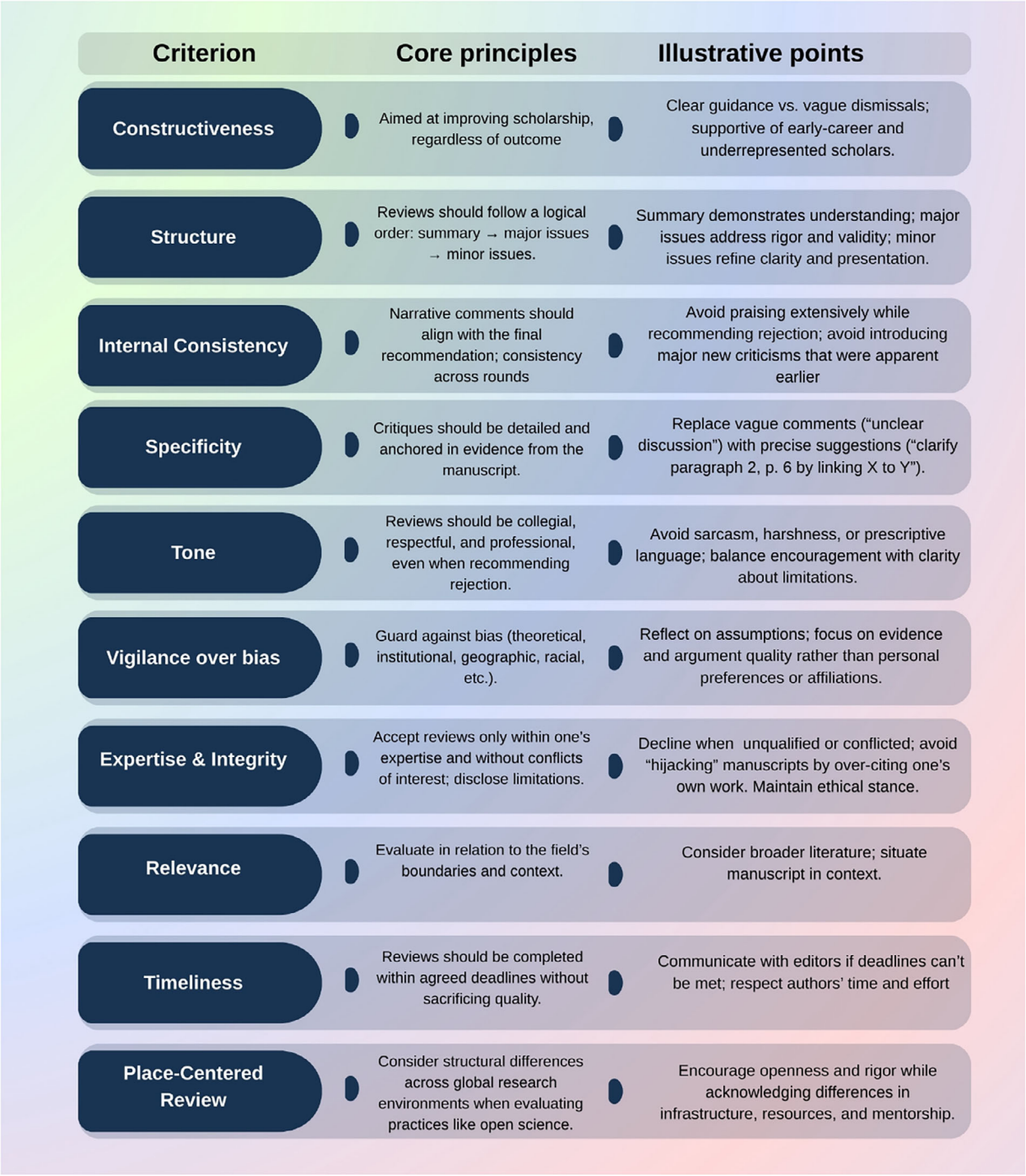

FIGURE 2 | Components of a positive peer review.

strike the right balance between rigor and constructiveness. By seeking clarification, reviewers and editors model a collaborative approach that strengthens the peer review process.

1.5 | Tone

Tone is central to effective peer review and strongly shapes how authors experience the process. While reviewers must be honest and rigorous, the way feedback is delivered determines whether it is received as constructive guidance or discouraging criticism (Chong and Lin 2023). Harsh, dismissive, or sarcastic language can undermine authors' confidence, stifle innovation, and even discourage early-career researchers and scholars from historically underrepresented groups from remaining in the field (Aly et al. 2023). Conversely, when the tone is collegial and encouraging, authors are more likely to see reviews as an opportunity for growth and development (Lovejoy et al. 2011). Grounding critiques in evidence from the manuscript and avoiding personal or judgmental language reinforces the reviewer's role as an impartial advisor rather than an arbiter of worth. Reviewers should also be mindful of the boundaries of their role. They

are tasked with evaluating and advising, not dictating outcomes or substituting their judgment for that of the editor. This issue is particularly salient considering disciplinary power dynamics, where established scholars may unintentionally adopt an overly authoritative stance that frames their preferences as non-negotiable. A measured, professional tone communicates respect for authors, acknowledges existing hierarchies, and reinforces the collaborative nature of peer review.

1.6 | Vigilance Over Bias

Bias in peer review can take many forms, from preferences for familiar theories and methods to more subtle influences of institutional affiliation, career stage, or homophily. Even well-intentioned reviewers may unconsciously favor work that aligns with their own agendas or discount manuscripts from less visible or lower-resourced settings; in extreme cases, they may even appropriate ideas that compete with their own and/or those that they feel are better conceptualized than their own. Vigilance against bias, therefore, requires reviewers to reflect on how their perspectives and positionalities shape their evaluations and to take deliberate steps to mitigate these influences. For example, Draper et al. (2023) highlight how biases in peer review disproportionately marginalize research on developmental psychology from the Majority World, where most of the world's children live, contributing to chronic under-representation. Biases linked to geography, race, and institutional power create an uneven playing field and distort the empirical record by excluding scholarship that reflects the diversity of children's experiences. Because such biases often operate subtly, conscious attention to bias on the part of the reviewers, along with editorial vigilance, is essential. Reviewers should also feel free to acknowledge when they are unfamiliar with a particular context, locale, or population; this transparency helps action editors weigh a review and determine whether additional expertise is needed. By examining both potential biases and the limits of one's expertise, the field can better guard against reinforcing inequities in representation and perspective.

1.7 | Expertise and Integrity

Conscientious reviewers are mindful of their own limits of time, expertise, and of potential conflicts of interest. Accepting a review is a professional responsibility and should only occur when the reviewer has sufficient expertise and capacity to provide thoughtful, thorough feedback. If a manuscript falls outside a reviewer's knowledge or competing obligations prevent adequate attention to the review, the most responsible course is to decline upon invitation so the editor can recruit someone better positioned to evaluate the work, or if faced with time constraints, to request an extended timeline prior to accepting the review. Conflicts of interest are equally crucial. These may involve personal relationships, direct competition, financial interests, or strong professional rivalries. "Hijacking" a manuscript by steering it toward tangents or insisting on extensive citation of one's own work beyond what is genuinely warranted is an undesirable and unprofessional practice (Shashok 2008). Reviewers should be transparent about any circumstance that might compromise, or appear to compromise, their impartiality and should decline when such conflicts arise.

1.8 | Relevance

Peer review requires reviewers to evaluate manuscripts against the boundaries of the field, not merely against the boundaries of their own knowledge. This distinction is crucial: a paper should not be judged negatively simply because it extends beyond the reviewer's immediate expertise. Instead, reviewers have an obligation to engage with the field, which may be more relevant in very rapidly evolving areas such as developmental neuroscience or the impact of AI on developmental processes. This does not mean mastering every adjacent domain nor does it require omniscience, but it does mean making a genuine effort to understand how the manuscript aligns with current debates, methodologies, and findings; if the paper is too far afield, the assignment should be relinquished early in the process.

1.9 | Timeliness

Timeliness is a critical but often underemphasized element of high-quality peer review. Although reviews are often slightly delayed, significantly delayed reviews can have implications for the authors. In particular, timing is crucial for early-career researchers who rely on timely publications for hiring, tenure, or grants. Prolonged timelines also disrupt editorial workflows, frustrate editors and contributors, and may deter authors from submitting to the journal in the future (Drozdz and Ladomery 2024). At the same time, timeliness must be balanced with quality: the goal is careful feedback delivered within the requested timeframe, not a rushed assessment. As a reviewer, it is important to attend to deadlines in invitations to review and to liaise with editors if a delay is anticipated. Once assigned a review, reviewers are encouraged to engage proactively with editors if they face unforeseen time constraints that cause unexpected delays. Open communication with editors about constraints allows for adjusted expectations or reassignment when necessary. In this way, timeliness supports mutual respect, maintains trust in the process, and preserves both the credibility and efficiency of peer review.

1.10 | Place-Centeredness

Place is an often overlooked but critical dimension of peer review. Reviewers bring not only disciplinary expertise but also assumptions shaped by their institutional and geographic contexts. Open science illustrates this clearly. Practices such as preregistration and use of open repositories are more readily adopted in well-resourced settings with reliable digital infrastructure, stable funding, and strong peer networks. They may be far less feasible for scholars working with limited internet access and institutional support for open science (Bezuidenhout and Chakauya 2018; Singh 2024). Reviewers should therefore avoid projecting their own priorities and resources onto authors, especially those from underrepresented or resource-constrained environments. Demanding strict adherence to context-dependent practices can inadvertently marginalize valuable scholarship. More broadly,

ASPECT OF REVIEW	WHAT REVIEWERS CAN DO WITH AI	WHAT REVIEWERS CANNOT DO WITH AI
Core Evaluation of Manuscript	Use your own expertise to assess the research question, design, methods, analyses, and conclusions.	Do not ask AI to "review the paper," generate the main critique, or judge the validity of the science.
Confidentiality	If permitted by the journal, only use AI tools that are explicitly approved, secure, and compliant with confidentiality requirements.	Paste identifiable manuscript text into public or non-approved AI tools.
Writing Style & Clarity of Review	Use AI sparingly to polish phrasing, check grammar, or improve clarity of a review you have already written yourself.	Do not use AI to draft entire review sections, arguments, or recommendations in place of your own writing.
Substantive Content of Review	Generate your own comments, questions, and suggestions based on a careful reading of the manuscript and relevant literature.	Do not rely on AI to identify "problems," summarize the paper, or propose revisions without your independent evaluation.
Journal Policy Compliance	Always read and follow the journal's specific AI policy before using any tools in the review process	Do not assume that AI use is acceptable or uniform across journals or publishers
Transparency With Editors	When required by journal policy, disclose any limited, policy-compliant use of AI (e.g., for language polishing).	Do not conceal substantive AI involvement or present AI-generated critiques as entirely your own.

FIGURE 3 | A summary of how to engage with AI in peer review.

as the field scales up its standards and expectations, calibrating expectations to opportunities and resources that are available at the site of a study is important. In this way, a review that is sensitive to the resource constraints of authors helps to diversify and expand the empirical landscape and to fold in research that is often under-represented and from relatively under-resourced environments. A place-centered approach encourages openness and methodological clarity while acknowledging structural differences across research settings. This is not about lowering standards, but about calibrating expectations so that peer review remains rigorous and more equitable across diverse global contexts and successfully incorporates the research that our field seeks to represent in the service of a more global science.

2 | AI and Peer Review

First and foremost, reviewers should always consult and adhere to the specific journal policy on AI use in peer review. Reviewers are ethically and professionally responsible for the content of their reviews. Reviewers should not rely on AI tools to conduct the substantive intellectual work of peer review. The core responsibilities of reviewing—evaluating the clarity and rigor of the research question, the appropriateness of the methods, the validity of the analyses, the strength of the evidence, and the contribution to the field—require the reviewer's own expertise and judgment. Delegating these tasks to AI (e.g., asking an LLM, such as ChatGPT, to "review this paper" or to generate the main critique) risks inaccuracies, unexamined biases, and present breaches of confidentiality all of which undermine the integrity and accountability of the review process. Critically, even submitting a manuscript to cloud-based AI may violate author confidentiality.

When allowed by journal guidelines, AI tools may be used in limited ways, for example, to polish wording, check grammar, or improve clarity of a review that the reviewer has independently authored. However, AI should not be used to generate substantive content, synthesize arguments, or formulate recommendations in a review. Any use of AI must preserve the confidentiality of the manuscript and should not substitute for the reviewer's own scholarly assessment. Figure 3 summarizes how reviewers can and cannot engage with AI in peer review at present, assuming compliance with journal policies.

3 | Conclusion

Peer review is a necessary system that reflects the values, practices, and priorities of the scholarly community that sustains it. Articulating in specific terms what makes for a good peer review is an important component of the process. In codifying community norms for developmental psychology, our goal is to create a transparent set of criteria for peer review. A robust system of peer review is rigorous but also collegial, constructive, and oriented towards encouraging scholarly growth and development.

References

Aly, M., E. Colunga, M. J. Crockett, et al. 2023. "Changing the Culture of Peer Review for a More Inclusive and Equitable Psychological Science." *Journal of Experimental Psychology General* 152, no. 12: 3546–3565. https://doi.org/10.1037/xge0001461.

Bezuidenhout, L., and E. Chakauya. 2018. "Hidden Concerns of Sharing Research Data by Low/Middle-Income Country Scientists." *Global Bioethics* 29, no. 1: 39–54. https://doi.org/10.1080/11287462.2018.1441780.

Cengher, M., and L. A. LeBlanc. 2024. "Reviewing Manuscripts for Behavior-Analytic Journals: A Primer." *Journal of Applied Behavior Analysis* 57, no. 1: 71–85. https://doi.org/10.1002/jaba.1034.

Chong, S. W., and T. Lin. 2023. "Feedback Practices in Journal Peer-Review: A Systematic Literature Review." *Assessment & Evaluation in Higher Education*, advance online publication, January 12. https://doi.org/10.1080/02602938.2022.2164757.

Draper, C. E., L. M. Barnett, C. J. Cook, et al. 2023. "Publishing Child Development Research From Around the World: An Unfair Playing Field Resulting in Most of the World's Child Population Under-represented in Research." *Infant and Child Development* 32, no. 6: e2375. https://doi.org/10.1002/icd.2375.

Drozdz, J. A., and M. R. Ladomery. 2024. "The Peer Review Process: Past, Present, and Future." *British Journal of Biomedical Science* 81: 12054. https://doi.org/10.3389/bjbs.2024.12054.

Javed, F., D. Michelogiannakis, and P. E. Rossouw. 2024. "Editorial Bullying: An Exploration of Acts Impacting Publication Ethics and Related Environment." *Frontiers in Research Metrics and Analytics* 9: 1345553. https://doi.org/10.3389/frma.2024.1345553.

Lovejoy, T. I., T. A. Revenson, and C. R. France. 2011. "Reviewing Manuscripts for Peer-Review Journals: A Primer for Novice and Seasoned Reviewers." *Annals of Behavioral Medicine* 42, no. 1: 1–13. https://doi.org/10.1007/s12160-011-9269-x.

Mayer, D., C. Eastin, B. Kane, S. Lee, J. Davis, and T. M. Chan. 2024. "The Importance of Peer Review Skills: Value and Necessity of Training Residents to Ensure Continued Scientific Excellence." *AEM Education and Training* 8, no. S1: S76–S79. https://doi.org/10.1002/aet2.10940.

Resnik, D. B., and S. A. Elmore. 2016. "Ensuring the Quality, Fairness, and Integrity of Journal Peer Review: A Possible Role of Editors." *Science and Engineering Ethics* 22, no. 1: 169–188. https://doi.org/10.1007/s11948-015-9625-5.

Shashok, K. 2008. "Content and Communication: How Can Peer Review Provide Helpful Feedback About the Writing?" *BMC Medical Research Methodology* 8, no. 1: 3. https://doi.org/10.1186/1471-2288-8-3.

Singh, L. 2024. "A Vision for a Diverse, Inclusive, Equitable, and Representative Developmental Science." *Developmental Science* 27, no. 6: e13548. https://doi.org/10.1111/desc.13548.