Putting peer review to the test

A response to Caputo

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Abstract: In a recent essay in *Families in Society*, Caputo replies to my call for a more robust system of peer review. In this brief response, I outline points of agreement and disagreement between the two of us. Ultimately, I find that our overarching goal, if perhaps implicitly, is the same: We both want to see a better system of peer review in the discipline of social work. I close with some considerations about the testing of peer review within social work journals, which I hope will help pave the way toward a more fruitful, rigorous, and transparent programme of research and knowledge governance.

Key words: Peer review, meta-science, social work research, social work scholarship, scholarly publishing

In a recent essay, Caputo (2021) replies to my call (Dunleavy, 2021) for a more robust system of peer review. In this brief letter, I outline points of agreement and disagreement between the two of us. Ultimately, I find that our overarching goal, if perhaps implicitly, is the same: We both want to see a better system of peer review in the discipline of social work. I close with some considerations about the testing of peer review within social work journals, which I hope will help pave the way toward a more fruitful, rigorous, and transparent programme of research and knowledge governance.

Points of Agreement

I would like to start by thanking Caputo for his vigorous response. It is always stimulating to have a colleague engage with, let alone critique one's work. Though my original essay was not a direct response to his earlier paper (Caputo, 2019) – it was certainly inspired by it.

Caputo (2021) makes several valid insights about my essay (Dunleavy, 2021), which I would like to acknowledge here – while also clarifying some notable misunderstandings. First, like Caputo (pp. 3-4), I agree that journals would be best served by drawing on qualified and well-trained reviewers – a point I also stress in my original essay (Dunleavy, 2021): “We might even consider how to improve the quality of reviews altogether (including the training of budding scholars), so that the field would be positioned to fully take advantage of the new models of peer review discussed here.” (p. 8). Better training of scholars about the nature, purpose, and act of peer reviewing should be a priority of both academic institutions and journals.

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I am also sympathetic to what I gather is Caputo’s skepticism (pp. 2-3) toward any given study on the reliability of peer review. Peer review is a topic which has not received much systematic attention by the scholarly community – and when it has been studied, it has not always been done rigorously. This is exemplified, in part, by the Peters and Cesci study (1982) and the critical commentary published alongside of it. I make clear in my original essay that these sorts of studies are in many ways, but proxies for understanding the actual reliability of peer review and are thus not to be taken as the final word on the topic.¹ With that said there are certainly quite valid reasons and evidence to presume that peer review is performing suboptimally, if not being altogether unreliable (see Dunleavy, 2021, p. 4).

Finally, I will simply state that I wholeheartedly agree with Caputo (2021, pp. 4-5) that more research is needed on the topic of peer review – and that peer review in social work should be put to rigorous testing. I explore this point further in the closing section of this response.

Points of Disagreement

Caputo (2021) makes several claims which I disagree with or find erroneous. Here I focus on three specific instances. First, on “bad science” and peer review, Caputo states,

“Regarding “bad science,” it happens. In traditional peer review, “bad science” eventually gets caught, though perhaps in a less timely fashion that many including me would like. A case in point is Study 326 [sic], the industry-sponsored clinical trial cited by Dunleavy (2021), with 7 years separating publication (Keller et al., 2001) from its outing (Jureidini et al., 2008) and whose current editor—responding to my email inquiry—corroborated the traditional peer-review process the journal uses (Edwards, 2021). (p. 5, emphasis added)

Not only does this particular case (i.e., Study 329) exemplify the limitations of peer review, it demonstrates the failure of the current publishing ecosystem (Jureidini & McHenry, 2011) to identify and correct poorly conducted research and bad research practices more generally. Attempts to correct the scientific literature (in this case at the *Journal of the American Academy of Child & Adolescent Psychiatry*) – and subsequent attempts to access, re-analyze, and publish results using the original data from Study 329 (see Healy et al., 2020 for an overview) were met with hesitancy and intense resistance at nearly every step of the way. Study 329 is but one example of how “bad science” can get through traditional peer review and how difficult it is to comment on, correct, retract, and even (attempt to) replicate research findings (see generally Meyerowitz-Katz & Heathers, 2021; Ioannidis, 2012). That “bad science”, which at best is a waste of resources and at worst harms and pollutes our knowledge-base, just “happens” is, frankly, quite disturbing – and assurances that all such work “eventually gets caught” (p. 5) should be met with skepticism. It should be a priority of researchers, scholars, and larger stakeholders (e.g., journals, academic institutions) to build a robust system of critical feedback, so as to prevent and minimize harms caused by the proliferation and validation of such work. How this might materialize is discussed throughout Dunleavy, 2021.

Second, concerns the reliability of traditional peer review. Caputo (2021) seems to indicate that unreliability between peer reviewers may be a “strength” of the traditional peer review process (p. 3). This seems at odds with an earlier essay by Caputo (2019), where he indicates that peer review serves a “vital” gatekeeping function. If reviewers cannot reliably assess the quality of a manuscript, then traditional peer review cannot be said to perform the core gatekeeping function of “epistemic sorting”, whereby reviewers (and editors) select exceptional work for publication, while rejecting (or gatekeeping) poorly conducted or “shoddy” work (see Heesen & Bright, 2020, especially pp. 648-650). Therefore, it is dubious to call unreliability a strength.

On the topic of open peer review (i.e., in this context openness of reviewer reports) Caputo (2021) worries that reviewers, and particularly journal editors, would be vulnerable to retribution or other harms by authors. He states,

¹Studies of peer review in social work are even rarer. The interested reader might consult Kirk and Franke (1997) as a starting point.

“Furthermore, open accessibility to reviews and editor rationale for final decisions compromises the requisite anonymity that ensures free expression of opinions and recommendations...journal editors would be particularly vulnerable, unnecessarily so in my view, undermining the dependability of the peer-review process.” (p. 4).

Setting aside the claim that traditional peer review is dependable (I point I am obviously skeptical of), and the fact that reviewer/editorial reports can be made transparent in a variety of ways (which could help prevent inappropriate behavior by authors or others), it is not clear to me why editors should be shielded from taking accountability for the decisions (both good or bad) that they make. Transparency in peer review and editorial decision-making helps minimize inappropriate behavior by all parties involved - and brings it to light where it exists. If editors are at risk for blowback, based on how they judge a manuscript in public, then surely they are at just as much, if not more risk, in a system that is hidden and opaque.

In Silence/Words Away

Still further, Caputo (2021) notes that, “Dunleavy is silent regarding my case for senior faculty to take on more review responsibilities...about the changing circumstances or context in which peer review occurs...” (p. 2, emphasis added) and “...[the] exponential increase in demand for quality control...” (pp. 3-4). Such discussion will certainly require a more formal and substantive venue.² Nevertheless, I can provide some quick reactions. First, I maintain that peer review (and changes to the peer review system) should be performed by stakeholders of all stripes – regardless of rank or background. I make this point clear in Dunleavy (2021, p. 8). This is not to say that all such persons will, necessarily, make valuable contributions, so much as to point out that early career researchers (ECRs)³ – and yes, even students and practitioners – can and often do make valuable contributions and improvements to the evaluation of social work scholarship and further that these skills should be nurtured, meaningfully rewarded, and refined through mentorship (where appropriate). Indeed, ECRs are often (though not always) at the center of innovative methodological and scholarly practices and drivers of shifting scientific norms (see Merga & Mason, 2020; Nicholas et al., 2020; as well as numerous references contained throughout Dunleavy, 2021). The flip side of also to say that seniority of a reviewer is no guarantee of quality – whatever value senior faculty may be said to have more generally. Until we have a system of peer review that is more transparent and open (e.g., publication of reviewer reports) we will not be able to make the type of broad generalizations that Caputo seems to employ nor be able to rigorously assess the quality of reviewers and journal-level reviewing practices.

Second, while I am largely “silent” (in Dunleavy, 2021) about contextual factors in scholarly publishing (e.g., increasing numbers of submissions, a “publish or perish” culture, lack of qualified reviewers, the rise of predatory publishing, etc.) – I am by no means ignorant of them (see Dunleavy, 2019; 2020a, 2020b; Dunleavy & Hendricks, 2020; Teixeira da Silva et al., 2021). Rather, the point I was trying to convey in my original essay was that the deficiencies of traditional peer review are present regardless of these broader trends and shifts. However, to be sure, all these things can be said to exacerbate the problems of unreliability and the proliferation of “bad science”.

Concluding Thoughts

Peer review deserves greater scrutiny and research. In my estimation, it is not a lack of resources or skill that impedes our ability to assess it. Rather, it is a lack of meaningful interest among the scholarly community, a lack of transparency on the part of journals and associated stakeholders, and a lack of incentive to engage in this type of work. This is troubling, given that peer review is still oft considered the “gold standard” of knowledge governance (e.g., Enslin & Hedge, 2018) in many scholarly communities.

If we are to rigorously appraise traditional peer review and assess the merits of its alternatives, we will need the buy-in of the broader scholarly community - including journal editors, reviewers, and authors. A first step

²Perhaps this could be arranged as a workshop or roundtable at an upcoming academic or professional social work conference or in some other recorded medium.

³Contra Caputo (2019)?

towards this would be to permit access to reviewer reports and editorial comments and other journal-level data and meta-data for review and analysis.

I hope that this discussion between Caputo and myself has helped bring to light why this is essential.

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