

# Not One but Many Models of Open-Access Publishing

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As members of the Scientific Advisory Board for [PsyArXiv](https://psyarxiv.com) (psyarxiv.com), we are responding to the invitation for feedback in the recent column by APS President Shinobu Kitayama entitled “[The Open-Access Model of Journal Publishing](#).” The piece provides an insightful introduction to open access (OA) from APS leadership, and we were particularly enthusiastic about the news that [Advances in Methods and Practices in Psychological Science](#) (AMPPS) will become a fully OA journal in 2021. Our response adds to Dr. Kitayama’s thoughts by addressing topics that warrant further explanation. These topics include the need to situate outlets like PsyArXiv in discussions about OA, as well as the broader need to distinguish between various types of OA publication models.

## What Is PsyArXiv?

PsyArXiv is an OA preprint repository for psychological research. Established in 2016, PsyArXiv serves the psychological science community, just as bioRxiv and arXiv serve the disciplines of biology, physics, mathematics, computer science, and related fields. Despite its short history, PsyArXiv has been widely embraced among psychological researchers. The service is already receiving an average of nearly 20 new manuscript submissions *per day*, download rates of more than 5,000 per day, and a 147% increase in pageviews from 2019 to 2020 to date. Works deposited in PsyArXiv enjoy high discoverability regardless of the ultimate journal outlet, although it is important to note that a substantial proportion of these works have not (yet) undergone peer review. Each preprint is given a unique digital object identifier (DOI), indexed by Google Scholar, and briefly evaluated for consistency with PsyArXiv’s terms of use by a volunteer member of our moderation team. The costs of providing these services have historically been supported by the [Center for Open Science](#) and, more recently, by the university library systems of our member institutions. We think our rapidly growing usage rates indicate clear demand for access to psychology research findings among consumers who lack institutional access, including members of the general public.

## How Does PsyArXiv Relate to the Open-Access Models Kitayama Mentions?

The OA movement has proliferated in numerous directions over the last two decades, and a color-naming system has evolved in an attempt to simplify this diversity. PsyArXiv is classified in this system as “green” OA because it is a repository for authors who seek to freely share their scholarly output with both consumers (readers) and producers of research (Samberg et al., 2018). The niches that Kitayama has described—serving “cutting-edge” and “nontraditional” research projects—are both examples of “gold” OA. These outlets are peer-reviewed journals that publish open articles and make use of article processing charges (APCs). This approach differs substantially from traditional publishing models where peer-reviewed articles are published without expense for the authors, but at substantial expense to libraries; further, articles are locked away behind a “paywall.” Many readers of the APS *Observer* are likely familiar with hybrid approaches as well (sometimes called “paid open access”). This model gives authorship teams the choice, after peer review, to pay APCs to add OA publishing to their accepted

paper, or they can choose to publish without expense by effectively signing away the licensing rights to their article. Many additional variations exist, each with its own color-name (see Barnes, 2020, and Samberg et al., 2018).

Though the traditional subscription-based publishing model is clearly under pressure, there is little consensus about the best long-term fix. Many of the largest consumers of research (i.e., university libraries) have recently sought to negotiate “transformative agreements” that seek to resolve the unsustainable financial burdens of bundled subscription agreements—the so-called “big deals” between libraries and publishers. The downstream consequences of this unresolved turmoil has caused confusion for scientists who seek to publish their findings in prestigious and widely-accessible outlets on a tight budget. Kitayama’s summary highlights the tension among these goals, but only within the context of gold OA models. In short, more prestigious outlets tend to be more expensive (though the correlation is not perfect), and there are good reasons to be concerned about this association.

### Can PsyArXiv Help to Address These Concerns?

We think it does. At the most fundamental level, PsyArXiv complements all forms of publishing by equitably providing psychological researchers with a free, simple, and immediate outlet that can be accessed by anyone with reliable Internet service. This gives early access to timely research findings, provides an alternative access option for works that are not published openly, increases discoverability (Norris et al., 2008; Lewis, 2018), and reduces the file-drawer problem (Franco et al., 2014). Beyond this, the PsyArXiv infrastructure allows for further innovation in psychology publishing that can build on the benefits of OA. These might include overlay journals, which have gained considerable attention in other scientific disciplines recently and provide peer-review and/or editorial curation of content posted on arXiv (for examples, see [Discrete Analysis](#) and [The Open Journal of Astrophysics](#)). Models like these offer the potential for niche journals to flourish in a manner that would not be viable within the traditional publishing ecosystem. In short, we hope that researchers, including submitters to APS journals, will take advantage of APS’s generous article-posting policies and make copies of their pre- and post-publication work available for the community at PsyArXiv, thereby helping the community capitalize on these many benefits.

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