



# Is it still worth writing a research paper in 2024?

Gregory M. Malham<sup>1,2,3,4,5</sup>, Ralph J. Mobbs<sup>6,7,8</sup>

<sup>1</sup>Department of Neurosciences, Epworth Richmond, Melbourne, VIC, Australia; <sup>2</sup>Spine Surgery Research Foundation, Richmond, VIC, Australia; <sup>3</sup>Department of Surgery, Faculty of Medicine, Dentistry and Health Science, University of Melbourne, Parkville, VIC, Australia; <sup>4</sup>Spine Surgery Research, Swinburne University of Technology, Melbourne, VIC, Australia; <sup>5</sup>School of Health and Biomedical Sciences, RMIT University, VIC, Australia; <sup>6</sup>Faculty of Medicine and Health, University of New South Wales, Randwick, NSW, Australia; <sup>7</sup>NeuroSpine Surgery Research Group, Sydney, NSW, Australia; <sup>8</sup>NeuroSpine Clinic, Prince of Wales Private Hospital, Randwick, NSW, Australia

*Correspondence to:* Gregory M. Malham, BSc, MB ChB, DMed, FRACS. Department of Neurosciences, Epworth Richmond, 89 Bridge Road, Melbourne, VIC 3121, Australia; Spine Surgery Research Foundation, Richmond, VIC, Australia; Department of Surgery, Faculty of Medicine, Dentistry and Health Science, University of Melbourne, Parkville, VIC, Australia; Spine Surgery Research, Swinburne University of Technology, Melbourne, VIC, Australia; School of Health and Biomedical Sciences, RMIT University, VIC, Australia. Email: greg@gregmalham.com.au.

**Keywords:** Research methodology; digital technology; social media; academic publishing

Submitted Aug 11, 2024. Accepted for publication Aug 20, 2024. Published online Sep 19, 2024.

doi: 10.21037/jss-2024-01

View this article at: <https://dx.doi.org/10.21037/jss-2024-01>

## Introduction

The landscape of academic research and professional practice has undergone significant changes in recent years, driven largely by advancements in digital technology and the growing influence of social media (1). The traditional model of disseminating knowledge through peer-reviewed journals is increasingly being questioned (2). Researchers and professionals are exploring alternative ways to share their findings, raising the question: Is writing a research paper still worth it in 2024?

We aimed to explore the benefits and drawbacks of writing research papers, providing a comprehensive analysis of whether this practice continues to hold value. By examining the benefits of teaching research methodology, statistical analysis, and writing skills (3,4), alongside the challenges posed by the immediacy of social media (1), delays in publication (4), repeated reviews, reviewer bias (2), and publication charges, this article aims to provide a balanced perspective on the relevance of writing research papers today.

## Benefits and challenges of writing research papers

### Part 1. Benefits of writing research papers

#### Teaching research methodology

One of the primary benefits of writing research papers is

the opportunity it provides to teach research methodology. Students learn to formulate research questions, design studies, collect and analyze data, and interpret results. This process is crucial for developing critical thinking and problem-solving skills, which are essential for academic and professional success (3,5). Teaching research methodology also enhances researchers' ability to disseminate and collaborate, particularly in global health contexts (5).

#### Statistical analysis skills

Writing research papers also enhances students' proficiency in statistical analysis. Understanding and applying statistical methods is fundamental for evaluating research findings and making informed decisions (4). This skill is increasingly valuable in various fields, including healthcare especially surgery, business, and social sciences, where data-driven decision-making is paramount (6).

#### Writing and communication skills

The process of writing a research paper hones students' writing and communication skills. Clear and concise writing is essential for effectively conveying complex ideas and research findings (1). These skills are not only vital for academic success but also for professional communication in any career. The impact of communicating scientific knowledge, especially in rapidly evolving fields such as artificial intelligence, underscores the need for clarity and

integrity in research publications (2).

### **Professional development for surgeons**

For surgeons, writing research papers offers additional benefits. The process of collating and analysing patient outcomes and surgical techniques provides data that is crucial for contesting legal claims and discussing disputes with third-party insurers. Engaging in research and teaching students and trainee surgeons keeps clinical practice fresh and up to date, fostering a culture of continuous learning and improvement (3). The benefits of writing research are further expanded by fostering interdisciplinary collaboration and learning from behavioural science approaches, particularly as evidenced during the COVID-19 pandemic (7). Surgeons must continuously assess outcomes, keeping their practice innovative and avoiding burnout through active engagement in research (6).

## ***Part 2. Challenges of writing research papers***

### **Immediacy of social media**

In today's fast-paced world, the immediacy and impact of social media and other digital platforms have transformed the way information is disseminated and consumed. Researchers and professionals often turn to these platforms to share their findings quickly, bypassing traditional publication routes (1). This shift can make the lengthy process of writing and publishing research papers seem less attractive, especially for those seeking rapid visibility and global engagement.

### **Delays in publication**

One of the most significant drawbacks of writing research papers is the delay in publication. The process from submission to publication can take several months, sometimes even a year or more (4). This delay can be frustrating for researchers who wish to share their findings promptly and can impact the relevance and timeliness of the research.

### **Repeated reviews and reviewer bias**

The peer review process, while essential for ensuring the quality and credibility of research, can be arduous and subject to bias. Manuscripts often go through multiple rounds of review, which can be time-consuming and demoralizing for authors (3). Additionally, reviewer bias can sometimes affect the acceptance or rejection of a paper, potentially stifling innovative research that does not align

with prevailing paradigms (7).

### **Publication charges**

The cost of publishing a research paper can be prohibitive, especially for researchers with limited funding. Many journals charge substantial fees for publication, which can be a barrier for early-career researchers and those from underfunded institutions (2). This financial burden can discourage researchers from pursuing traditional publication routes.

### **Balancing professional and personal life**

For surgeons and other professionals with demanding training and busy clinical practices, writing research papers takes up precious time that could be spent with family, friends, or engaging in social and sports activities. The demands of research can detract from personal well-being and work-life balance, raising questions about the sustainability of this practice (3).

### **Impact on private practice and academic careers**

The impact of writing and publishing journal papers on private practice success is diminishing compared to the visibility and outreach achieved through a well-constructed website or an active presence on social media platforms like LinkedIn, Facebook, and Instagram. While impact factors and H-index scores remain important in academic careers, the immediacy and globalisation of social media can provide high viewing profiles and immediate engagement, making traditional publication routes less appealing (1).

### **Ethical considerations**

Increased pressure to publish can lead to unethical practices such as plagiarism, data falsification, and undue haste in submission to meet career advancement criteria or funding deadlines. Ensuring ethical conduct remains paramount, and resources like the EQUATOR network and guidelines from the Committee on Publication Ethics can help uphold standards (2).

## **Literature review**

A comprehensive review of the literature reveals a significant body of work examining the benefits and challenges of writing research papers. Studies have highlighted the importance of scholarly writing for professional advancement and the dissemination of knowledge (5,7). However, numerous articles also discuss

**Table 1** Pros and cons of writing research papers

Pros	Cons
Development of logical and coherent thoughts (3,5)	Immediacy of social media bypasses traditional routes (1)
Enhances critical thinking and problem-solving skills (3)	Delays in publication (4)
Proficiency in statistical analysis (4)	Repeated reviews and reviewer bias (3)
Improves writing and communication skills (1)	Publication charges (2)
Professional development for surgeons (3)	Time-consuming, impacts work-life balance (3)
Contesting legal claims with data (3)	Diminishing impact on private practice success (1)
Keeps clinical practice fresh and up to date (3)	Ethical issues and misconduct pressures (2)
Career advancement and recognition (5)	Significant rejections due to poor writing
Contributes to the scholarly base (7)	Potential for scientific misconduct
Rigorous peer review ensures quality (4)	Financial burden of publication fees

the evolving nature of academic publishing, with many researchers advocating for new, more dynamic forms of scholarly communication (1,2). The number of articles addressing these issues has increased over the past decade, reflecting growing interest and concern within the academic community (5). Key references include discussions on the future of academic writing, the impact of social media on scholarly communication, and the ethical challenges in the publication process (*Table 1*).

## Conclusions

In conclusion, the practice of writing research papers in 2024 still holds considerable value, despite the challenges posed by the modern digital landscape. The benefits of writing research papers, including the development of research methodology, statistical analysis, and writing skills, remain crucial for academic and professional growth (1,3,4). For surgeons, the additional benefits of data analysis for legal and insurance purposes, and the enrichment of clinical practice through teaching and research, are significant (3,6).

However, the landscape of information dissemination is changing rapidly. The immediacy of social media, the lengthy delays in traditional publication processes, and the challenges of repeated reviews and reviewer bias necessitate a re-evaluation of traditional academic practices (1,2). Researchers and institutions must adapt to these changes, exploring new ways to share knowledge while maintaining the rigor and credibility of traditional research practices (5,6).

The increasing influence of digital platforms and social

media offers both opportunities and challenges. While these platforms can provide immediate visibility and engagement, they also require researchers to navigate new ethical and practical considerations. Ensuring the quality and integrity of research in this fast-paced environment is essential (2).

Ultimately, the decision to write and publish research papers should be informed by a balanced consideration of the benefits and challenges. For many researchers, the rewards of contributing to the scholarly community, advancing professional skills, and enhancing clinical practice will continue to outweigh the drawbacks (3,7). However, the academic community must remain vigilant, continuously adapting to the evolving landscape of knowledge dissemination to ensure that the practice of writing research papers remains relevant and valuable in the years to come (5).

The future of academic publishing may well involve a hybrid model that incorporates the strengths of traditional peer-reviewed journals with the immediacy and accessibility of digital platforms. This approach could provide a more dynamic and inclusive environment for sharing research findings, fostering innovation, and ensuring the continuous advancement of knowledge across all fields (7). Researchers, institutions, and funding bodies must work together to create supportive frameworks that encourage ethical practices, reduce publication delays, and make high-quality research accessible to a broader audience (2,6).

By embracing these changes and addressing the challenges head-on, the academic community can ensure that the practice of writing research papers continues to be a valuable and rewarding endeavour in 2024 and beyond.

## Acknowledgments

*Funding:* None.

## Footnote

*Provenance and Peer Review:* This article was commissioned by the editorial office, *Journal of Spine Surgery*. The article did not undergo external peer review.

*Conflicts of Interest:* Both authors have completed the ICMJE uniform disclosure form (available at <https://jss.amegroups.com/article/view/10.21037/jss-2024-01/coif>). R.J.M. serves as the Editor-in-Chief of *Journal of Spine Surgery*. G.M.M. serves as an unpaid editorial board member of *Journal of Spine Surgery*. Besides, R.J.M. reports royalties from Stryker, A-Spine, Australian Biotechnology, Medacta and Life HealthCare. G.M.M. reports consulting fees from Globus Medical, Australian Biotechnology and Life HealthCare. The authors have no other conflicts of interest to declare.

*Ethical Statement:* The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

*Open Access Statement:* This is an Open Access article distributed in accordance with the Creative Commons Attribution-NonCommercial-NoDerivs 4.0 International License (CC BY-NC-ND 4.0), which permits the non-commercial replication and distribution of the article with

the strict proviso that no changes or edits are made and the original work is properly cited (including links to both the formal publication through the relevant DOI and the license). See: <https://creativecommons.org/licenses/by-nc-nd/4.0/>.

## References

1. Blackburn S, Clinch M, de Wit M, et al. Series: Public engagement with research. Part 1: The fundamentals of public engagement with research. *Eur J Gen Pract* 2023;29:2232111.
2. Oduoye MO, Javed B, Gupta N, et al. Algorithmic bias and research integrity; the role of nonhuman authors in shaping scientific knowledge with respect to artificial intelligence: a perspective. *Int J Surg* 2023;109:2987-90.
3. Monteiro S, Keuhl A, Lee M, et al. ReThinking clinical reasoning: A paradigm shift. *J Eval Clin Pract* 2024;30:766-73.
4. Lawrence PR, Spratling R, Kelly M. Disseminating Methods in Nursing Research. *J Pediatr Health Care* 2024;38:747-50.
5. Nyangulu WJ. Global health collaborative research: beyond mandatory collaboration to mandatory authorship. *Glob Health Res Policy* 2023;8:48.
6. Bardram JE. Remote Assessment in healthcare-Technologies, methods, benefits, and challenges. *PLoS One* 2023;18:e0283945.
7. Ruggeri K, Stock F, Haslam SA, et al. A synthesis of evidence for policy from behavioural science during COVID-19. *Nature* 2024;625:134-47.

**Cite this article as:** Malham GM, Mobbs RJ. Is it still worth writing a research paper in 2024? *J Spine Surg* 2024;10(3):329-332. doi: 10.21037/jss-2024-01