Revista Bioética
Print version ISSN 1983-8042 | On-line version ISSN 1983-8034

Rev. Bioét. vol.29 no.3 Brasília Jul./Sep. 2021

Ethics and authorship in Brazilian psychology journals

Caio Mendes de Freitas [1], *Alessandra Ghinato Mainieri* [1], *Cláudia Helena Cerqueira Mármora* [1]

1. Universidade Federal de Juiz de Fora, Juiz de Fora/MG, Brasil.

Abstract

Credit and responsibility for scientific authorship are issues discussed in Brazilian and international literature. In 1978, the International Committee of Medical Journal Editors was created, which established general rules for determining authorship in scientific publications. By discussing ethical aspects of scientific production, this article seeks to present these guidelines, as well as the percentage of national psychology journals that adopt them. From the Coordination for the Improvement of Higher Education Personnel system, Brazilian psychology publications with Qualis A1, A2, B1 and B2 scores were evaluated. The editorial policies of 292 journals were found to be in line with the committee's authorship criteria, suggesting that national psychology publications show quality and credibility for complying with rules of responsibility for authorship.

Keywords: Ethics. Authorship. Psychology.

Resumo

Ética e autoria nas revistas brasileiras de psicologia

O crédito e a responsabilidade pela autoria científica são assuntos discutidos na literatura nacional e internacional. Em 1978 foi criado o International Committee of Medical Journal Editors, que estabeleceu regras gerais para determinar a autoria em publicações científicas. Ao discutir aspectos éticos da produção científica, este artigo busca apresentar essas diretrizes, bem como o percentual de revistas nacionais de psicologia que as adotam. A partir do sistema da Coordenação de Aperfeiçoamento de Pessoal de Nível Superior, foram avaliadas publicações nacionais de psicologia com Qualis A1, A2, B1 e B2. Identificou-se que as políticas editoriais das 292 revistas encontradas, estão em consonância com os critérios de autoria do comitê, sugerindo que publicações nacionais de psicologia evidenciam qualidade e credibilidade por cumprirem regras de responsabilidade pela autoria.

Palavras-chave: Ética. Autoria. Psicologia.

Resumen

Ética y autoría en las revistas brasileñas de psicología

El crédito y la responsabilidad de la autoría científica son cuestiones discutidas en la literatura nacional e internacional. En 1978, se creó el International Committee of Medical Journal Editors, que estableció reglas generales para determinar la autoría en publicaciones científicas. Al discutir aspectos éticos de la producción científica, este artículo trata de presentar esas directrices, así como el porcentaje de revistas nacionales en el área de psicología que las adoptan. Con base en el sistema de la Coordinación de Perfeccionamiento de Personal de Nivel Superior, se evaluaron las publicaciones nacionales de psicología con Qualis A1, A2, B1 y B2. Se constató que las políticas editoriales de las 292 revistas encontradas se ajustan a los criterios de autoría del comité, lo que sugiere que las publicaciones nacionales en el campo de la psicología evidencian calidad y credibilidad por cumplir con las normas de responsabilidad por la autoría.

Palabras clave: Ética. Autoría. Psicología.

Research

The authors declare no conflict of interest.

Publishing has become, for some decades now, a necessity for the scientific community, as well as an important academic achievement for researchers, since the authorship of articles has academic, social and financial implications. Scientific production, for example, serves as a parameter for funding agencies to grant fund resources to research. In contrast, the *publish or perish* culture is a reality of academic productivism, which tends to over-emphasize the quantity of publications, sometimes to the detriment of their quality [1-3].

In Brazil, the Coordination for the Improvement of Higher Education Personnel (Capes) evaluates graduate programs and scientific journals by the Qualis Capes system, analyzing quality and classifying articles and research. Currently, this system indicates the need for publications that reach higher degrees of excellence, such as strata A and B, whose criteria also differ per area of knowledge, depending on graduate programs and technical boards, among other aspects. Given this context, this article discusses ethical aspects of authorship credits involved in scientific production, as well as to verify the proportion of national psychology journals that use the established criteria, validated, and internationally recognized by the scientific community.

Wrongful conduct in scientific research

Over the last 50 years the number of co-authors has expanded, especially in medical publications, a growth that can be explained by a number of factors, such as the increase in collaborators linked to the main researcher and the growing complexity of research in health sciences, which require interdisciplinary partnerships. Another factor is gift authorship, where the researcher does not adequately meet the credits as an author but is driven by pressure for funding and promotion, and the belief that including senior authors would increase the chance of publication [4,5].

Although journal editors strive to ensure authorship credit criteria are met, misconduct is frequent in research. An example of such misconduct is ghost authorship, that is, when one fails to indicate the name of someone who contributed substantially to the research or manuscript writing and, therefore, would meet the criteria. Such omission can damage the personal credibility of the researchers involved, since it infringes on established ethical precepts [4,6].

Another deviation from the scientific norm is plagiarism, a crucial problem that can often be detected before publication by means of software that identifies and reveals this misconduct. Plagiarism is defined as the reproduction of another researcher's work or previously published material without proper attribution of credits and involves falsifying or mixing data, which may be intentional or incidental. Self-plagiarism, in turn, is reusing one's own text, which gives the false impression that ideas and words are original, characterizing a violation of intellectual integrity [7,8].

Like plagiarism, fabrication and falsification are two other scientific misconducts described by the São Paulo Research Foundation (Fapesp) [9] in its Code of Good Scientific Practices, and, although having different definitions, they are quite similar [10]. Falsification involves presenting modified, inaccurate, or incomplete data or research results that interfere with the study's conclusions, while fabrication consists in asserting that certain information was obtained, when it really was not.

Scientific research misconduct became evident in the early 1980s, when John Darsee, a researcher at Harvard Medical School and Emory University, broke the trust of his co-authors and readers by falsifying data from several studies. In May 1981, Darsee admitted to fraud in one of his papers, but later investigations found that he had also submitted falsified data in other publications. Among these studies, many listed co-authors who voluntarily accepted credits, but who exempted themselves from fraud when it came to light [2,11].

Darsee's case shows that while many authors are willing to claim credit, few are likely to share the responsibilities inherent in the role of author or co-author [11]. Policies were thus developed to support authorship criteria, aiming to ensure ethical conduct in scientific manuscript preparation. Created in 1978 and with broad international recognition, the International Committee of Medical Journal Editors (ICMJE) [12] established standards for accrediting authors, guidelines that were adopted by the Committee on

Publication Ethics (COPE) [13], which prescribes for scientific editors a code of conduct whose criteria must be fully met:

1. Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work;
2. Drafting the work or revising it critically for important intellectual content;
3. Final approval of the version to be published;
4. Agreement to be 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 [14].

An author, therefore, is one who makes significant intellectual contributions to the published study [12], without which aspects such as funding, data collection, or general supervision of the research group do not justify authorship. Heading the workplace where the research will be carried out and participating in its procedures is, for example, something to be valued, but without proper intellectual contribution this is merely a technical function.

In this regard, several research projects depend on the collaboration of professionals who can help in its conduction by performing routine functions, such as doctors, nurses, laboratory technicians and secretaries, among others. But if their participation is limited to performing work routine, there is no merit that legitimizes authorship. Data collection, however relevant, extensive and time-consuming it may be, does not involve a specific intellectual contribution to the research and, therefore, does not substantiate authorship or co-authorship, and should be mentioned, as well as other aids, in the acknowledgments section [1]. In psychology, the American Psychological Association (APA), in section 8.12 of its ethical principles and code of conduct, presents the following guidelines for determining authorship:

(a) Psychologists take responsibility and credit, including authorship credit, only for work they have actually performed or to which they have substantially contributed.
(b) Principal authorship and other publication credits accurately reflect the relative scientific or professional contributions of the individuals involved, regardless of their relative status. Mere possession of an institutional position, such as department chair, does not justify authorship credit. Minor contributions to the research or to the writing for publications are acknowledged appropriately, such as in footnotes or in an introductory statement.
(c) Except under exceptional circumstances, a student is listed as principal author on any multiple-authored article that is substantially based on the student's doctoral dissertation. Faculty advisors discuss publication credit with students as early as feasible and throughout the research and publication process as appropriate [15].

In accordance with the ICMJE guidelines, APA [16] prescribes thus that authorship credit should reflect the intellectual contribution of anyone involved with the initial research project, data collection and analysis, manuscript drafting and final approval. Funding, advising or conducting contributory research without actually taking part in the publication does not characterize authorship. Moreover, the principal author is responsible for the publication and must ensure data accuracy and that all meritorious authors have been credited, besides approving the final version of the manuscript [16].

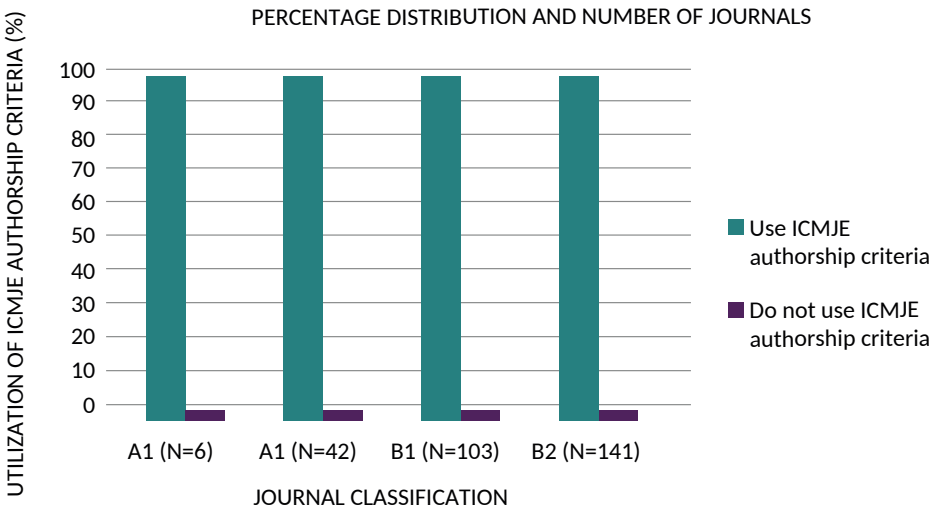
Method

This study was conducted in 2018 in the Qualis Periodicals of the Sucupira Platform with national psychology journals from the A1, A2, B1 and B2 strata, to verify the employment of the authorship criteria established by ICMJE. All psychology journals registered in the Sucupira Platform and classified in the mentioned strata had their editorial policies consulted, by means of the "authors' guidelines" and "section policies." Journals were considered to have adopted the ICMJE recommendations, even if not explicitly mentioned, provided that they conformed to the guidelines of Cope, APA, scientific bodies, and indexing sources that follow the ICMJE rules.

Results

All 292 journals evaluated met the ICMJE authorship criteria, with the following division by stratum: 6 (A1), 42 (A2), 103 (B1) and 141 (B2) (Figure 1).

Figure 1. Bar graph with percentage distribution and number of journals that do and do not use the ICMJE authorship criteria in their editorial policies



Discussion

Data suggest that the Brazilian national psychology literature is little susceptible to issues with authorship credit and responsibility, since all evaluated journals followed the ICMJE criteria. Adhering to the committee's recommendations makes national journals less vulnerable to ethical and methodological risk behaviors. As such, wrongful practices such as gift authorship, ghost authorship, authorship by contributions other than intellectual, plagiarism, self-plagiarism, fabrication and falsification, among other problems, would be less likely.

Authorship presupposes the ability to assume social, ethical, and professional responsibilities emerging from the content of the study. Transparency in conducting research is currently one of the main ethical requirements of scientific journals [17]. Editors can avoid inappropriate authorship by following ICMJE recommendations [12], requiring that individual contributions of all research participants be specified in a report [18].

Based on the ICMJE criteria, the Brazilian National Council for Scientific and Technological Development (CNPq) created its guidelines in 2011, recommending that authorship credit be granted only to those who made a significant contribution to the research, such as conducting experiments, participating in experimental planning, analyzing results or writing the manuscript. Authors of a scientific article must, therefore, be responsible for its veracity and suitability, and all research must maintain ethical standards when conducted, whether with animals or human beings [19].

The ICMJE guidelines are adopted by world-renowned scientific journals, such as: *The Lancet*, *Journal of the Medical Association*, *Nature*, *Journal of Medical Ethics*, *The New England Journal of Medicine*, *British Journal of Pharmacology*, *European Association for Chemical and Molecular Sciences*, *Annals of Internal Medicine*, among others [20-26]. According to an article published on the Elsevier website, the world's largest publisher of medical and scientific literature, the ICMJE authorship criteria are the most widely used, known as Vancouver rules [27]. The Austrian Agency for Research Integrity (OeAWI) [28] also endorses the ICMJE principles in its guidelines for good scientific practice.

Given that the ICMJE criteria are globally accepted and well-defined [29], other national scientific areas should adopt them in their editorial policies, to prevent misconduct and ensure greater transparency of results. Moral foundations and ethical principles such as reliability, objectivity, integrity, impartiality and openness precede scientific research, reason why researchers have the responsibility and commitment to publicize accurate and reliable data related to their study results [30,31].

Final considerations

Considering the ICMJE recommendations, we presented the criteria validated by the international scientific community to attribute credit and responsibility for scientific authorship, guidelines that were analyzed in the national psychology publications with the highest impact factor, allowing us to verify that all journals in the Qualis A1, A2, B1, and B2 strata are in line with the committee's criteria. Therefore, it is suggested that, if it is not yet a standard, other national journals should adopt the ICMJE standards, regardless of the area of scientific production, given its importance to prevent possible misconduct. The guiding principles discussed here comply with the goals of openness and transparency in publications, respecting all ethical and methodological aspects of scientific research.

References

1. Petroianu A. Distribuição da autoria em trabalhos científicos. ABCD Arq Bras Cir Dig [Internet]. 2012 [acesso 25 maio 2020];25(1):60-4. DOI: 10.1590/S0102-67202012000100014
2. Juyal D, Thawani V, Thaledi S, Prakash A. The fruits of authorship. Educ Health (Abingdon) [Internet]. 2014 [acesso 25 maio 2020];27(2):217-20. DOI: 10.4103/1357-6283.143777
3. Patrus R, Dantas DC, Shigaki HB. O produtivismo acadêmico e seus impactos na pós-graduação stricto sensu: uma ameaça à solidariedade entre pares? Cad EBAPE.BR [Internet]. 2015 [acesso 25 maio 2020];13(1):1-18. Disponível: https://bit.ly/3AtQqLE
4. Al-Herz W, Haider H, Al-Bahhar M, Sadeq A. Honorary authorship in biomedical journals: how common is it and why does it exist? J Med Ethics [Internet]. 2014 [acesso 25 maio 2020];40(5):346-8. DOI: 10.1136/medethics-2012-101311
5. Tilak G, Prasad V, Jena AB. Authorship inflation in medical publications. Inquiry [Internet]. 2015 [acesso 25 maio 2020];52:0046958015598311. DOI: 10.1177/0046958015598311
6. Dotson B, Slaughter RL. Prevalence of articles with honorary and ghost authors in three pharmacy journals. Am J Health Syst Pharm [Internet]. 2011 [acesso 25 maio 2020];68(18):1730-4. DOI: 10.2146/ajhp100583
7. Habal MB. Authorship in scholarly scientific publication. J Craniofac Surg [Internet]. 2013 [acesso 25 maio 2020];24(4):1059-60. DOI: 10.1097/SCS.0b013e31829ff956
8. Thurman RH, Chervenak FA, McCullough LB, Halwani S, Farine D. Self-plagiarism: a misnomer. Am J Obstet Gynecol [Internet]. 2016 [acesso 25 maio 2020];214(1):91-3. DOI: 10.1016/j.ajog.2015.09.004
9. Fundação de Amparo à Pesquisa do Estado de São Paulo. Código de boas práticas científicas [Internet]. São Paulo: Fapesp; 2014 [acesso 25 maio 2020]. Disponível: https://bit.ly/37JNDRO
10. Vilaça MM. Más condutas científicas: uma abordagem crítico-comparativa para in-formar uma reflexão sobre o tema. Rev Bras Educ [Internet]. 2015 [acesso 25 maio 2020];20(60):245-69. DOI: 10.1590/S1413-24782015206012
11. Clement TP. Authorship matrix: a rational approach to quantify individual contributions and responsibilities in multi-author scientific articles. Sci Eng Ethics [Internet]. 2014 [acesso 25 maio 2020];20(2):345-61. DOI: 10.1007/s11948-013-9454-3
12. International Committee of Medical Journal Editors. Recommendations for the conduct, reporting, editing, and publication of scholarly work in medical journals [Internet]. 2019 [acesso 25 maio 2020]. Disponível: https://bit.ly/3yvwlUq
13. Committee on Publication Ethics. Code of conduct and best practice guidelines for journal editors [Internet]. Eastleigh: Cope; 2015 [acesso 9 ago 2021]. Disponível: https://bit.ly/3fJZ4h6
14. International Committee of Medical Journal Editors. Op. cit. p. 2. Tradução livre.

15. American Psychological Association. Ethical principles of psychologists and code of conduct [Internet]. Washington: APA; 2010 [acesso 25 maio 2020]. p. 12. Disponível: https://bit.ly/3xzTyDR
16. American Psychological Association. Publication practices & responsible authorship [Internet]. 2008 [acesso 25 maio 2020]. Disponível: https://bit.ly/3ArFNZD
17. Tarkang EE, Kweku M, Zotor FB. Publication practices and responsible authorship: a review article. J Public Health Afr [Internet]. 2017 [acesso 25 maio 2020];8(1):723. DOI: 10.4081/jphia.2017.723
18. Donato H. Autoria na publicação científica. Rev Med Fís Reabil [Internet]. 2014 [acesso 25 maio 2020];25(1):8-10. Disponível: https://bit.ly/3jIwbmz
19. Conselho Nacional de Desenvolvimento Científico e Tecnológico. Relatório da Comissão de Integridade de Pesquisa do CNPq [Internet]. Brasília: CNPq; 2011 [acesso 25 maio 2020]. Disponível: https://bit.ly/2VHocy7
20. Lancet. Information for authors [Internet]. Amsterdam: Lancet; 2019 [acesso 25 maio 2020]. Disponível: https://bit.ly/37K1Het
21. Ioannidis JPA, Klavans R, Boyack KW. Thousands of scientists publish a paper every five days. Nature [Internet]. 2018 [acesso 25 maio 2020];561(7722):167-9. DOI: 10.1038/d41586-018-06185-8
22. Journal of Medical Ethics. Authors [Internet]. c2021 [acesso 9 ago 2021]. Disponível: https://bit.ly/3Cul6hs
23. New England Journal of Medicine. Editorial policies [Internet]. c2021 [acesso 9 ago 2021]. Disponível: https://bit.ly/3xx3o9d
24. Cohen AF. On authorship in the BJCP. Br J Clin Pharmacol [Internet]. 2017 [acesso 25 maio 2020];83(10):2127-30. DOI: 10.1111/bcp.13385
25. European Association for Chemical and Molecular Sciences. Ethical guidelines for publication in journals and reviews [Internet]. 2006 [acesso 25 maio 2020]. Disponível: https://bit.ly/3lZfLJ4
26. Annals of Internal Medicine. Information for authors [Internet]. c2021 [acesso 9 ago 2021]. Disponível: https://bit.ly/3s7OLZc
27. Mulligan A, Taylor M, Newsum L. The challenges around defining authorship: you have your say. Elsevier Connect [Internet]. 22 out 2014 [acesso 25 maio 2020]. Disponível: https://bit.ly/3jHVUv8
28. Austrian Agency for Research Integrity. OeAWI guidelines for good scientific practice [Internet]. c2021 [acesso 9 ago 2021]. Disponível: https://bit.ly/3yz4P8I
29. Chamon W. As letras pequenas no final da página. Arq Bras Oftalmol [Internet]. 2013 [acesso 25 maio 2020];76(3). DOI: 10.1590/S0004-27492013000300001
30. Silva JAT, Dobránszki J. How not to publish an open access journal: a case study. Asian Australas J Plant Sci Biotechnol [Internet]. 2013 [acesso 25 maio 2020];7(1 esp):102-10. Disponível: https://bit.ly/2VK1JQo
31. Stocks A, Simcoe D, Toroser D, DeTora L. Substantial contribution and accountability: best authorship practices for medical writers in biomedical publications. Curr Med Res Opin [Internet]. 2018 [acesso 25 maio 2020];34(6):1163-8. DOI: 10.1080/03007995.2018.1451832

Caio Mendes de Freitas – PhD student – caio.mendesf@outlook.com
0000-0001-9209-1138

Alessandra Ghinato Mainieri – PhD – lecagm73@gmail.com
0000-0002-4967-0203

Cláudia Helena Cerqueira Mármora – PhD – claudia.marmora@ufjf.edu.br
0000-0003-0457-3992

Correspondence
Cláudia Helena Cerqueira Mármora – Faculdade de Fisioterapia. Av. Eugênio do Nascimento, s/n CEP 36038-330. Juiz de Fora/MG, Brasil.

Participation of the authors
Caio Mendes de Freitas conceived the study, collected the data and wrote the article. Alessandra Ghinato Mainieri and Cláudia Helena Cerqueira Mármora advised the research and reviewed the final version of the article for publication.

Received: 10.14.2019
Revised: 8.3.2021
Approved: 8.4.2021