Comunicar, n. 48 v. XXIV, 2016 | Media Education Research Journal | ISSN: 1134-3478; e-ISSN: 1988-3293
www.comunicarjournal.com

Antifraud Editorial Policy in Spanish and Latin American Scientific Publication: JCR Social Sciences Edition

La política editorial antifraude de las revistas científicas españolas e iberoamericanas del JCR en Ciencias Sociales

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ABSTRACT

The process of publishing scientific papers should be based on universal principles of professional conduct: credibility, truth and authenticity. In academia, the inclusion of policies on ethical standards in journal instructions to authors could prevent misconduct and fraud in scientific publication. Due to the lack of attention to research ethics in the Social Sciences, in particular in Spain and Latin America, this research aims to analyze the scientific misconduct policy of the Spanish and Latin American journals in the JCR-Social Sciences Edition (2014). To achieve our goal, 104 selected journal instructions to authors were examined in relation to the following ethical principles: (1) the rights of people involved in the research; (2) the welfare of animals used in research; (3) conflicts of interest; and (4) publication issues. Our results suggest that publication issues such as unpublished research and the ban on simultaneous submission are the most frequently cited ethical issues. In spite of the efforts made by policy-making bodies to establish misconduct guidelines, very few journals adhere to ICMJE and COPE recommendations. Given the ethical heterogeneity evinced by our study, and by previous studies, it seems that the development of a uniform code of ethics in the field of Social Sciences may be required.

RESUMEN

El proceso de publicación de un artículo debe basarse en la credibilidad, la verdad y la autenticidad. La inclusión de normas éticas en la política editorial científica se concibe como una medida preventiva y disuasoria de conductas inapropiadas. Dada la escasez de estudios sobre ética y publicación científica en Ciencias Sociales y, en particular, en España e Iberoamérica, esta investigación analiza la política editorial antifraude de las revistas españolas y latinoamericanas indexadas en el JCR en Ciencias Sociales (2014). Para cumplir nuestro objetivo, se utilizaron como muestra objeto de estudio 104 revistas y en las instrucciones a autores se examinaron una serie de principios de actuación ética: 1) Derechos de las personas que participan en la investigación; 2) Protección del bienestar de los animales objeto de experimentación; 3) Conflicto de interés; 4) Envío y publicación de manuscritos. Nuestros resultados apuntan que el carácter inédito de la investigación, así como la prohibición del envío simultáneo de los trabajos a otras revistas son los temas que aparecen con más frecuencia. Pese al intento de sociedades de edición científica como ICMJE y COPE por estandarizar los asuntos que afectan al fraude en la ciencia, su incidencia es exigua en las publicaciones objeto de estudio. Dada la dispersión normativa analizada, se retoma la necesidad detectada por otros autores de desarrollar un código ético uniforme para las disciplinas de Ciencias Sociales.

KEYWORDS | PALABRAS CLAVE

Ethics, scientific publication, instructions to authors, editorial policy, scientific fraud, Social Sciences, Spain, Latin America.
Ética, publicación científica, instrucciones a autores, política editorial, fraude científico, Ciencias Sociales, España, Iberoamérica.

Received: 2015-11-03 | Reviewed: 2015-12-15 | Accepted: 2016-02-22 | Preprint: 2016-05-15 | Published: 2016-07-01
DOI http://dx.doi.org/10.3916/C48-2016-02 | Pages: 19-27

1. Introduction

In the cycle of scientific research activity, the publication of results obtained marks the final step in the research process and may be described as an ethical duty (Baiget & Torres-Salinas, 2013). In this regard, as Avanzas, Bayes-Genis, Pérez, Sanchis and Heras (2011) have noted, the process by which a journal article is published ought to be framed in terms of credibility, truth and authenticity.

Publication in scientific journals contributes to the prestige and reputation of the paper's authors (Delgado, & Ruiz, 2009; Delgado, Torres-Salinas, & Roldán, 2007) and is a crucial factor in university promotion (Baiget & Torres-Salinas, 2013; Delgado & Ruiz, 2009). Scientific publications comprise the key indicator in the assessment of the research activity undertaken by university faculties (Campanario 2003, Giménez, 2015). As a result, the measurement of academic productivity in terms of the numbers of papers published (Beisiegel, 2010) and professional competition to ensure publication in the most highly-rated journals have prompted, in part, the emergence of such improper practices as plagiarism and the manipulation of data, among others (Delgado & Ruiz, 2009).

The need for transparency in both research development and public dissemination calls for the establishment of guidelines designed to orient authors as regards publication requirements (Tavares, 2011). Moreover, the detailed instructions issued to authors comprise an indicator of the information quality of the journal as a means of scientific communication (Delgado, Ruiz-Pérez, & Jiménez-Contreras, 2006) and play a key role in the promotion of scientific integrity (Pitak-Arnnop, & al., 2010).

The inclusion of ethical guidelines in the editorial policy of scientific publications as a measure to prevent or deter malpractice is especially noteworthy in this regard (Delgado & al., 2007; Bosch, Hernández, Pericas, Doti & Marušić, 2012). To this end, a number of scientific publishing associations in the field of biomedicine, such as the International Committee of Medical Journal Editors (ICMJE), the Committee on Publication Ethics (COPE), the Council of Science Editors (CSE) and the World Association of Medical Editors (WAME), have drafted guidelines of good practice to guarantee respect for a set of ethical standards in the publication process.

At the same time, as regards studies of ethics and scientific publication, two lines of inquiry may be discerned in relation to the analysis of editorial policy from the perspective of the promotion of ethical standards. The first line of inquiry focuses on the analysis of the perception and actions taken by editors as regards editorial policy designed to deal with scientific fraud.

The pioneering study by Brackbill and Hellegers (1980) noted an overwhelming consensus (77.3%) among the 138 editors of medical journals to refuse publication to papers containing ethical violations. Nevertheless, most of the journals (73.3%) did not envisage criteria of ethical action for authors (informed consent) or reviewers (58.7% of the journals did not require reviewers to factor ethical concerns into their assessment of submissions).

A more wide-ranging analysis of editorial policy regarding fraudulent practice in a multidisciplinary sample of 399 scientific journals (physics, engineering, biomedicine and the social sciences) disclosed that fewer than half of the publishers involved (47.7%) had established a formal policy designed to prevent such fraud; 28.9% had formulated protocols of actions to deal with malpractice; and only a very small proportion of the publications (15.7%) offered a definition of fraud as part of their editorial policy. Moreover, the correlation between impact as a variable and whether or not the journal has an anti-fraud editorial policy has proven to be significant (Resnik, Peddada & Brunson, 2009). In a subsequent study, Resnik, Patrone and Peddada (2010) broadened the scope of the sample analysed so as to check their preliminary results: only 41.4% of the 350 journals sampled had set out an anti-fraud editorial policy. Similarly, other studies such as Angelski, Fernández, Weijer and Gao (2012) show that a relatively low percentage of medical journal publishers (38%) include ethics as a concern in their instructions to reviewers.

With regard to the most worrying and prevalent ethical issues, a study of 231 journal publishers in the fields of medicine and the social sciences has shown that redundant publication is the most common and unsettling concern in this regard, albeit with low percentage scores (Wager, Fiack, Graf, Robinson, & Rowlands, 2009).

Little research has been carried out in Spain on the ethics of scientific publication, or on such editorial ethics in the field of the social sciences. No such research has been carried out in Latin America. A pioneering project in this regard, therefore, is Fonseca, Tur and Gutiérrez (2014), which focuses on the perception among 81 publishers of Spanish journals in the fields of psychology, education and communication in relation to a selection of cases of ethical malpractice. They conclude that inordinate self-citation, coercive citation, citation exchange and undeserved authorship

are the most common forms of improper practice. As regards the existence and visibility of ethical standards, 6.5% of publishers acknowledge that they have no such code; 78.9%, that they are implicit in their publishing rules and regulations; and 14.6%, that their ethical norms are set out explicitly in a specific section drafted for that purpose.

A second approach has prompted other researchers to explore anti-fraud editorial policy by analysing the instructions issued to scholars from scientific journals. The sample addressed by Atlas (2003) comprises 124 high-impact JCR (Science edition) journals, and the study shows that issues relating to manuscript submission (such as authorship and fragmented publication, among others) are raised in 87.2% of the instructions to authors analysed. However, other concerns relating to the rights of research participants or the welfare of laboratory animals, for instance, are articulated in only 48.8% and 32%, respectively.

In the field of biomedicine, Pitak-Arnnop & al. (2010) disclosed that only 8.3% of the 48 journals included in their study addressed all of the ethical requirements envisaged here. Furthermore, there is a significant correlation between journal impact as a factor and only two ethical principles: the protection of laboratory animals used for experimental purposes and data protection in the case of clinical trials.

Similarly, Bosch & al. (2012) studied the 399 highest-impact JCR journals in biomedicine, and their results show that only 35.1% offer an explicit definition of scientific fraud and that fewer than half (44.9%) have established protocols of action in relation to editorial malpractice. Significant differences were discerned as regards the correlation between journal impact as a factor and improper publishing practices. To a greater extent, therefore, the higher the impact, the more likely the journal is to identify such fraudulent practices as data fabrication and image manipulation. The correlation between adherence to the editorial and ethical standards of a scientific association and the implementation of policies and protocols of action in response to ethical concerns is likewise positive.

Given the impact of research on public healthcare, most such ethical norms have been formulated and/or arose in the field of biomedicine, and thus most of the research into scientific ethics and publication also relates to that discipline (Bosch & al., 2012; Fonseca & al., 2014).

Therefore, in light of the lack of research into scientific ethics and publication in the field of the social sciences –especially in Spain and Latin America– the overall purpose of this paper is to explore the antifraud editorial policies framed by the Spanish and Latin American journals indexed in the JCR-Social Sciences (2014 edition). The specific focus in this study is to trace whether or not there is a significant correlation between impact as a factor and the ethical principles envisaged.

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2. Materials and methods

This is a transverse descriptive study of a preliminary sample of 48 Spanish scientific journals and 59 Latin American journals in the field of the social sciences indexed in the Journal Citation Reports (JCR) Web of Science.

The Journal Citation Reports (JCR) Social Sciences database (2014 edition) comprises 3,154 titles across 57 disciplines. The Spanish and Latin American publications were identified by means of the «search by country» (Country/Territory) option. Spanish publications account for 1.5%, and Latin American publications for 1.9%, of the journals indexed in the JCR-Social Sciences (2014).

Of the initial sample of 48 Spanish journals, 46 (95.8%) include ethical criteria in their instructions to

authors; of the Latin American journals, 58 (98.1%) encompass such requirements (table 1). Thus, both the Revista de Historia Industrial and the Vial-Vigo International Journal of Applied Linguistics are excluded from the sample of Spanish journals; and the Chilean journal Estudios de Economía from the Latin American sample.

In August, September and October 2015, the instructions to authors were consulted on the websites for the 104 journals selected or via such resources as SciELO. Journal membership of ICMJE and COPE was confirmed via the associations' websites, www.icmje.org and www.publicationethics.org.

Table 1. Spanish and Latin American in JCR-Social Sciences (2014): study sample

Country of publication	No. journals
Spain	46
Argentina	5
Brazil	18
Chile	13
Colombia	5
Mexico	15
Venezuela	2

The codification protocol was developed on the basis of the studies produced by Atlas (2003), Bosch & al. (2012), the ICMJE recommendations (2014), and the international standards for authors set out by COPE (2011). In line with the framework outlined by Bosch & al. (2012), the following information was recorded for each journal: subject category, impact factor for 2014 and editor.

Journal adherence to ethical recommendations issued by international and/or national organizations (scientific publication and other professional associations) was also explored. The authorship of antifraud editorial policies was likewise analysed. At the same time, as a preliminary approach to the analysis of ethical standards, whether or not the terms improper conduct and/or scientific fraud were defined was also taken into consideration.

Based on Atlas (2003) and the ICMJE (2014) and COPE (2011) standards, the instructions to authors in the 104 journals that comprise the sample were read in terms of the inclusion of principles of ethical action in relation to four broad issues:

1) In relation to the rights of people participating in the research project, the following matters are addressed, amongst others: whether or not subject anonymity or confidentiality ought to be safeguarded, if participation was based on informed consent, if the ethical principles relating to medical research involving human subjects (Declaration of Helsinki) have been complied with, and if approval has been granted by the relevant ethics committee.

2) With regard to the protection of the welfare of animals used for the purposes of experimentation, the instructions were read to see if authors are required to fulfil ethical standards to ensure such protection of wellbeing, such as approval by the relevant ethics committee or fulfilment of established legislation on the matter.

3) Financial, work-related, personnel, research and/or moral conflicts of interest; note was taken also of whether or not authors are required to disclose the source(s) of funding for their research, which may bias the impartiality of research results.

4) Issues relating to the submission and publication of papers. The requirement that the research be original and unpublished (that is, excluding duplicate or redundant publication): to ensure that a paper that overlaps in substantial terms with a previous publication is not to be published without a clear and visible reference to the earlier paper (ICMJE, 2014). Fragmented publication ('salami slicing'): «the artificial fragmentation of the research into minimum publishable units» (Baiget & Torres-Salinas, 2013: 58). The fabrication and falsification of data: artificial fabrication of information produced without following the methodology set out in the manuscript; and falsification of the data obtained so as to ensure that the working hypotheses of the paper are confirmed (Baiget, 2010).

• Authorship requirements: only individuals who have contributed in a substantial way to the production of the manuscript ought to be listed as authors of the paper (Camargo, 2012; COPE, 2011; ICMJE, 2014). Undeserved and honorary authorship is addressed here: researchers who are included among the authors of the paper because of their reputation, influence or seniority (Camargo, 2012; COPE, 2010; Fonseca & al., 2014; Tur, Fonseca, & San-Miguel, 2013), or due to obsequiousness, a sense of obligation or fear of other members of the research group (Camargo, 2012). Other forms of undeserved authorship include guest authorship: authors who are invited to take some credit for the publication; and so-called 'gifted' authorship, authors who are included as a form of payment in kind or to return a personal favour (COPE, 2011). The phenomenon of ghost authorship is also explored: the exclusion from the list of authors of individuals whose work render them deserving of such inclusion (Avanzas & al., 2011; Camargo, 2012; COPE, 2011; Fonseca & al., 2014).

• Professional cooperation: Whether or not the researchers are required to share methods and data

that would enable other scientists to replicate the study is explored (Bebau & Davis, 1996).

An exploratory analysis of different variables has been carried out, and the parametric assumptions for the quantitative variable «impact factor» (IF) have been established; the descriptive statistics of central tendency and deviation have also been calculated.

The Mann-Whitney U test was selected to examine the link between IF and the ethical principles envisaged by the journals because of the degree of variable measurement it enables. The null hypothesis was rejected with a probability of $p<0.05$ and a statistical confidence level = 95.5. SPSS 22 was used to carry out the various statistical calculations.

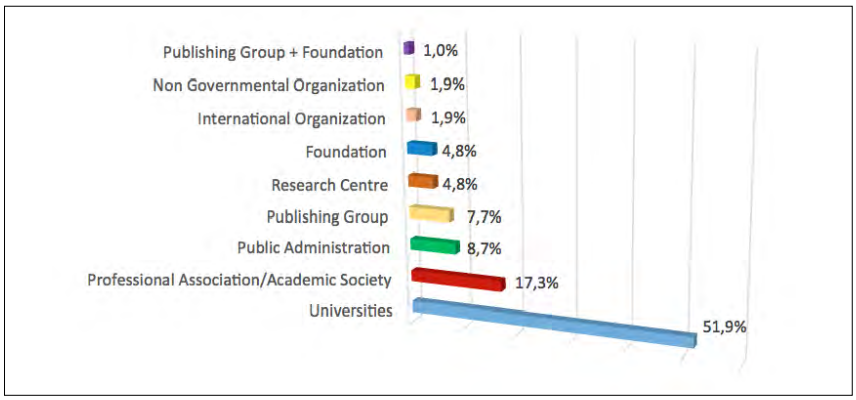
3. Analysis and results

As regards subject area (table 2), in general, the three most common categories of journals included in the sample are Economics (9.5%), Linguistics (7.8%) and Public, Environmental and Occupational Health (7.8%). However, if all the journals relating to different areas of psychology are grouped together, they comprise a higher proportion of the total (13.9%). Thus, psychology is the most prevalent category in the Spanish and Latin American indexed in the JCR-Social Sciences (2014 edition) and selected for the purposes of this study.

In relation to the adherence of the 104 journals to ethical criteria defined by international bodies, 78 (75%) of the instructions to authors make no reference to any standard-setting organisation in this regard. A multiple response frequency analysis shows that of the other 26 journals (25%) –see table 3– 16 (47.1%) state that they meet the requirements established by the ICMJE, although only 4 of them have a presence on www.icmje.org. 12 journals (35.5%) assert their fulfilment of the COPE standards, and 4 have taken out formal membership at publicationethics.org. Nevertheless, although The European Journal of Psychology Applied to Legal Context (Spain) is part of the Elsevier group (COPE member), no mention is made of this fact in the instructions to authors. Such is the case also of the Latin American Economic Review (Mexico). To a lesser extent, publications opt to meet the ethical (not stylistic) demands of the American Psychological Association (APA), the Farmington Agreement (a protocol regulating the editorial process endorsed by a group of specialist journals with regard to the use of

Table 2. Spanish and Latin American journals by subject area: Study sample (n=104)

Subject area	Responses		Percentage of cases
	No.	Percentage	
Anthropology	5	4.3%	4.8%
Business	4	3.4%	3.8%
Business and Finance	1	.9%	1.0%
Communication	1	.9%	1.0%
Demography	1	.9%	1.0%
Economics	11	9.5%	10.6%
Education and Educational Research	8	6.9%	7.7%
Ethics	1	.9%	1.0%
Geography	3	2.6%	2.9%
History	5	4.3%	4.8%
History and Philosophy of Science	1	.9%	1.0%
History of Social Sciences	1	.9%	1.0%
Information Science and Library Science	5	4.3%	4.8%
International Relations	1	.9%	1.0%
Law	3	2.6%	2.9%
Linguistics	9	7.8%	8.7%
Management	3	2.6%	2.9%
Nursing	3	2.6%	2.9%
Political Science	6	5.2%	5.8%
Psychiatry	4	3.4%	3.8%
Psychology, applied	1	.9%	1.0%
Psychology, clinical	5	4.3%	4.8%
Psychology, educational	1	.9%	1.0%
Psychology, experimental	1	.9%	1.0%
Psychology, multidisciplinary	8	6.9%	7.7%
Public Administration	2	1.7%	1.9%
Public, Environmental and Occupational Health	9	7.8%	8.7%
Social Sciences, biomedical	1	.9%	1.0%
Social Sciences, interdisciplinary	6	5.2%	5.8%
Sociology	4	3.4%	3.8%
Substance Abuse	1	.9%	1.0%
Urban Studies	1	.9%	1.0%
Total	116	100.0%	111.5%



Graphic 1. Publishers of Spanish and Latin American journals included in study sample (n=104), by type.

psychoactive substances) and the indications of the Council of Science Editors (CSE). Journals in the field of biomedicine prove most likely to meet international standards. 20 of the 26 publications that follow such recommendations are related to the subject areas of psychiatry, psychology, nursing and public health.

Only four journals (3.5%) reference initiatives in this area at a national level. In the Spanish sub-sample, two journals refer to the Code of Best Practices issued by the CSIC (the Spanish National Research Council). In the Latin American context, two journals cite their adherence to the basic directives on ethics in scientific communication established by the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq)[1] in Brazil; and one of them also acknowledges the Code of Best Practices defined by the Fundação de Amparo à Pesquisa do Estado in Sao Paulo[2].

As regards the authorship of antifraud editorial policies (Graphic 2), a very significant proportion (75 journals, 70.8%) were drafted by the journal itself; and 24 journals (22.6%) have implemented the recommendations made by international or national academic or scientific publication bodies.

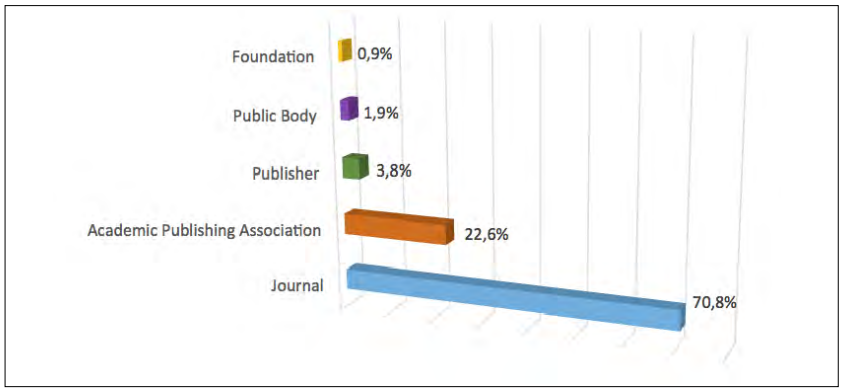
As regards explicit reference to or definition of the term improper conduct and/or scientific fraud, 91 journals (87.5%) make no such reference and 102 (98.1%) do not define what might be understood as fraud in the context of science. Only the «Gaceta Sanitaria» journal offers a definition of fraud, which encompasses deliberate action, bad faith and an intent to deceive the readers. In all the other publications, the definition of malpractice is implied by the list of improper actions outlined.

28 (26.9%) of the 104 journals addressed here include rules relating to the protection of human subjects involved in the research process among the principles of ethical action articulated in the instructions to authors. 23 of the 28 journals relate to the fields of psychiatry, psychology, nursing and public health. In more specific terms, 15 of the 28 journals (53.6%) require the authors to prove that participants have given informed consent; 14 (50%), an acknowledgement that the relevant ethics committee has granted its approval; and 9 journals (32.1%) refer explicitly to the Declaration of Helsinki. 25% (7 publications) require the authors to respect the anonymity and confidentiality of research participants, and 17.9% (5 instances) insist that research involving human subjects meet all established ethical and professional standards. In broader terms, 10.7% (3 journals) demand that research be carried out in line with international agreements and legislation as regards human experimentation. Finally, 7.1% (2 journals) require authors to provide proof of consent in the case of studies that involve the use of chemical products or equipment that may pose a risk to personal health and safety.

The protection of animal welfare is acknowledged in 10 (9.6%) of the 104 publications in this study sample. 8 of the 10 publications belong to the fields of psychiatry, psychology and public health. Of these 10 publications, 30% (3 journals) require that research involving animals be carried out in line with ethical criteria and established professional codes in this regard. 20% (2 journals) require proof of consent in the case of studies involving animals that entail the use of chemical products or equipment that may pose a risk to health and safety; and the same number (2 journals: 20%), that the research be in line with the criteria established by a research association or body. Finally, one journal (10%) insists that the experimentation be in

Table 3. Adherence to international standards in journals included in study sample (n= 26)

International standards	Responses		Percentage of cases
	No.	Percentage	
ICMJE	16	47.1%	61.5%
COPE	12	35.3%	42.3%
CSE	1	2.9%	3.8%
Farmington Agreement	1	2.9%	3.8%
APA	4	11.8%	15.4%
Total	34	100.0%	126.9%



Graphic 2. Authorship of antifraud policies (n=104).

accord with the rules of a national animal welfare regulatory authority; and another (10%) requires in more general terms that the research follows the procedures stipulated by the relevant authorities.

In relation to conflicts of interest, 26 (25%) of the 104 instructions explored cite the need to acknowledge any real or potential conflict. Of these 26 instances, 16 publications (61.5%) refer to conflicts of interest on financial grounds, followed by conflicts based on personal or other forms of interest (10 journals: 38.5%), and commercial or working relationships in 8 cases (30.8%). 6 journals (23.1%) require the authors to disclose the source of their funding so as to avoid any possible conflict of interest. Finally, moral or ideological concerns are referenced as possible sources of conflicts of interest in two instances (7.7%).

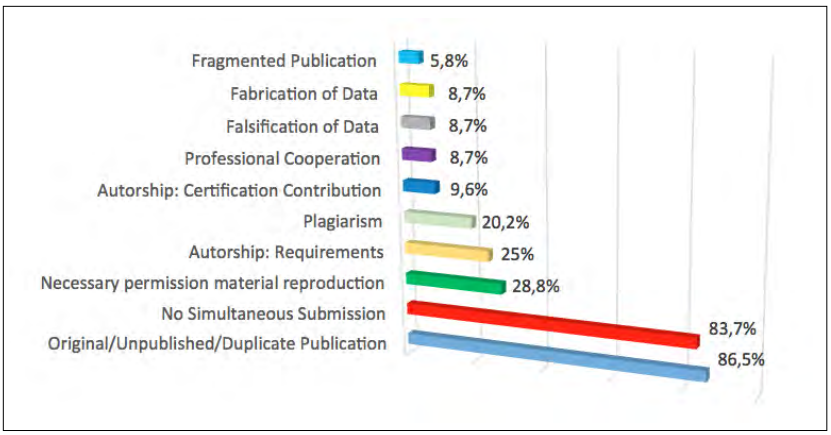
With regard to the submission and publication of papers, Graphic 3 shows that the most common ethical criterion is that the manuscript be previously unpublished (86.5%). Second, in 83.7% of cases, authors are required to ensure that the paper to be reviewed has not been submitted simultaneously to other journals. Thirdly, 28.8% of the publications require the author(s) to show that they have necessary permissions to reproduce material that may be subject to copyright. And finally, 25% of the journals set out the requirements that authors must meet so as to be listed as such. References to the other ethical policies addressed in this study are incidental.

Thus, it may be concluded that there is a significant correlation between a given journal's impact factor (IF) and a number of the ethical principles addressed here: 1) the protection of the rights of research participants (U=358; p=0.000; IC=95.5); 2) the protection of animal welfare (U=195.5; p=0.002; IC=95.5); 3) conflict of interest (U=533.5; p=0.000; IC=95.5); 4) permissions required (U=650.5; p=0.001; IC=95.5); 5) authorship requirements (U=472; p=0.000; IC=95.5); 6) authorship contributions (U=228; p=0.008; IC=5.5); and 7) fragmented publication (U=149; p=0.043; IC=95.5). All of the analyses disclose that such ethical policies are more prevalent in journals with higher IF values, and that this correlation is statistically significant. No other significant differences are discerned in relation to the other ethical policies (p>0.05).

4. Discussion and conclusions

Given the significance of transparency and integrity in the editorial process for scientific credibility, this study aimed to offer an overview of the situation by exploring the ethical norms formulated in Spanish and Latin American journals indexed in the JCR-Social Sciences (2014 edition).

Despite the best efforts of scientific publishing associations such as ICMJE and COPE to standardise the issues that have a bearing on scientific fraud, their



Graphic 3. Submission and publication of papers: ethical policies (n=104).

effect on the publications included in this study sample would appear to be minimal. Although journals relating to biomedicine prove most likely to take such approaches on board, only one quarter of the publications addressed here follow the ethical recommendations made by the standard-setting body in their field. Hence the situation is one of wide normative variety, wherein a plurality of independent actors (journals) set out the instructions to be followed by authors. As both Bosch & al. (2012) and Resnik & al. (2009) have already shown, a very small percentage of journals offer an explicit definition of improper conduct and/or scientific fraud. In the sample explored here, only one Spanish journal «Gaceta Sanitaria» provided such a formulation.

The results obtained here suggest that the most common issues arising in relation to the submission and publication of papers in Spanish and Latin American journals are that the research be previously unpublished and that the paper not be simultaneously submitted to a number of journals.

On the other hand, although concerns regarding authorship are referred to by Spanish publishers from a number of related scientific fields as most frequently leading to cases of improper practice (Fonseca & al., 2014), only one quarter of the journals in the study sample (Spanish and Latin American) reference the matter.

Similarly, while data fabrication and falsification, along with plagiarism (and self-plagiarism), comprise the typical instances of fraudulent scientific practice (Bosch & al., 2012; Resnik & al., 2010), only a small number of the publications explored in this study address these phenomena.

At the same time, as Atlas (2003) averred, matters relating to the protection of people and the welfare of animals involved in research evince a similarly low profile. While it is true that animal experimentation is a feature of other fields of knowledge, the selection of human subjects to participate in social research is a common practice in the social sciences and merits further protection. In the same way, conflicts of interest are a key variable factor that may bias the objectivity of scientific results but only 20% of the journals analysed here address the issue.

In line with previous research (Bosch & al., 2012; Pitak-Arnnop & al., 2010), this study confirms the significant correlation between journal impact factor (IF) and a number of ethical principles: in general, the higher the IF, the more likely the publication is to insist on certain ethical criteria.

Despite the relatively low prevalence of the ethical principles under discussion here, the editorial policy implemented by Comunicar in Spain is worth highlighting in this regard: this journal has drafted a specific code of ethics that articulates a range of different norms for editors, reviewers and authors. Similarly, the journals published by the CSIC (the Spanish National Research Council) also use a Code of Best Practices for all stakeholders in the editorial process; and the Elsevier group has laid down public protocols for action in response to cases of malpractice.

A particularly noteworthy development in the Spanish context was the decision by the journal «Gaceta Sanitaria» to establish the role of Advocate, to deal with claims arising from any lack of impartiality in the editorial process and, amongst other issues, instances of ethical malpractice (García & Borrell, 2012).

Finally, the pressing need identified by Bosch & al. (2012) and Fonseca & al. (2014) remains: to set out a code of ethics for the field of social sciences that outlines standard procedures for editors, authors and reviewers. Indeed, the normative variety discerned in the sample addressed here suggests that there is also a real need to clarify the terminological confusion surrounding the term «original publication». In some cases, its meaning may connote a capacity for 'creativity' among the authors of a paper; in other cases, it is a synonym for «unpublished». Given the lack of a clear definition in this regard, only cases that evince a plausible understanding that the paper is unpublished have been taken into consideration for the purposes of this study. However, in the Latin American context, the journal «Salud Colectiva» (Argentina) provides a model of concision and precision in the distinction it draws between «original publication» and «unpublished publication». Later studies ought to analyse actual compliance with antifraud editorial policies, as well as the responses of reviewers and editors to the discovery of scientific malpractice.

Notes

[1] The basic norms of ethics in scientific communication from the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) in Brasil (www.cnpq.br/web/guest/diretrizes).

[2] The Code of Best Scientific Practices from the Fundação de Amparo à Pesquisa do Estado de São Paulo (www.fapesp.br/boaspraticas).

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