



# Journal flipping to Open Access: The Perception of Spanish Journal Managers

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## Abstract

There is a growing interest in determining the factors that influence a journal's flipping to Open Access (OA). Using semi-structured interviews combined with bibliometric indicators, this paper uncovers the perception of Spanish managers related to OA and the decision to flip. The key research questions are twofold: How well do bibliometric measures reflect the changes in the status of the journal? How do journal managers perceive the flipping process? In order to answer these, twelve semi-structured interviews were conducted with journal managers of Spanish Journals. The findings suggest the great majority of managers are aware of the indicators, but only two considered they reflect their reality. The results indicate as the main motivations to flip to OA: being imposed by the host institution, economic reasons, and increase visibility and internationalization. An increase in the number of submissions, visibility, or internationalization since the transition is perceived as a benefit while the loss of interchanges with other institutions is seen as the major drawback. Although flipping to OA is perceived by the managers to have many advantages, it raises some challenges too, especially the need for funding, lack of resources capacity for technical support, and the creation of alliances.

**Keywords** Open access · OA flipping · Drivers for open access · Barriers for open access

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## Introduction

In recent years, Open Access (OA) has become a ‘hot topic’ and is gaining support in the international scientific community. The Budapest Open Access Initiative (2002) was a first step towards the free sharing of scientific knowledge and publications. It was followed by the Bethesda Statement on Open Access Publishing (2003), the Berlin Declaration (2003), or the Vienna Declaration on the European Open Science Cloud (2018), among others. These declarations have had an influence on the consolidation and development of Open Access as a desirable objective. Thus, OA has become a policy objective for a variety of actors (countries, funders of research, or institutions) associated with policy goals such as increasing speed, collaboration, and innovation in research [5]. Several studies analyzed the open access availability of scientific research. Other studies focused on the factors motivating authors to publish in OA journals. However, few studied the flipping motivations from the journal’s point of view. The purpose of this paper is to explore how OA is perceived by Spanish journal managers within a sample of twelve Spanish journals, in this way we can provide an overview of the OA reality in Spain.

## Literature Review: Motivations towards Publishing in OA

Several studies have analyzed the motivations to publish in OA journals at different levels. At the author level, in a survey comparing OA-authors and no-OA authors, Swan and Brown [27] found that the main motivations for publishing in OA, as opposed to publishing in subscription-based journals, were free access, faster publication times, and larger readerships. In a large-scale international survey of authors’ perceptions, Rowlands, Nicholas, and Huntingdon [21] found that reputation, impact factor, or speed of refereeing are essential in authors’ choosing OA. Warlick and Vaughan [30] interviewed the most prolific OA authors from two North-American Universities. The authors found that publication quality is the most important factor when choosing where to publish, while free access and visibility are the major incentives for publishing in OA. Based on surveys and interviews, Kim [12] investigated the factors that motivate or impede faculty participation in self-archiving practices, ranging from web pages to OA repositories. He identified seven factors (in descending order of importance): (a) altruism (the idea to provide OA benefits to users), (b) perceived self-archiving culture; (c) copyright concerns; (d) technical skills; (e) age; (f) perception of a non-harmful impact of self-archiving on tenure and promotion; and (g) concerns about additional time and effort. A longitudinal analysis by Xia [33] analyzed the changing pattern of scholars’ attitudes toward OA journal publishing from 1991 to 2018. This author observed an increase in the publication and awareness rates for OA journals despite the concern related to the prestige of the journal. In a similar study, Togia and Korobili [28] explored the attitudes and perceptions toward OA

presented in different studies and found differences across countries and disciplines. Free access which facilitates wider dissemination is a strong incentive, while the author-pays model, the quality of peer-review, and the impact of the journals are perceived as major concerns. Later, Nelson and Eggett [16] surveyed chemistry authors of OA papers to determine why they chose hybrid journals. Among the main reasons, funding mandates and receiving higher numbers of citations are highlighted. Furthermore, altruistic reasons were found to play an important role, such as providing scientific results to the wider public and to other researchers who might not have the financial means to obtain the articles otherwise. Rowley et al. [22] revealed a high level of uncertainty about future intentions in scholars' attitudes and behaviors toward publishing their research in OA journals, with small differences between disciplines'. In a recent study, Heaton, Burns, and Thoms [10] surveyed 250 authors at Utah State University about their motivation of publishing OA articles. In this study, the ability to pay publication charges, disciplinary colleagues' positive attitudes toward OA, and personal feelings such as altruism and desire to reach a wide audience were mentioned as main factors. Some studies explored differences between disciplines. Creaser et al. [6] found clear differences between scholars from different disciplinary backgrounds in their understanding of OA repositories and their motivations for depositing articles in them. For instance, researchers from life sciences consider free access of research the most positive aspect, while for researchers in medicine the most important aspect is peer review, and the least important rapid dissemination. Fowler [8] surveyed mathematicians and found a strong opposition against open access fees. Williams et al. [32] examined attitudes and opinions of agricultural researchers toward OA publishing and found a wide availability and good visibility as motivations/benefits, while lack of trust, money, and time were perceived as concerns or barriers. Mischo & Schlembach [14] surveyed members of the College of Engineering in Illinois and found concerns over the author-pays model and a reluctance to self-archive in the university institutional repository. Following up on a similar 2013 survey, a study published in 2021 tracked the changes in attitude among faculty towards OA publishing in Information Studies schools [17]. In agreement with recent research, this study revealed that engagement with OA has increased significantly between 2013 and 2018, but it observed a high level of uncertainty about future perceptions of OA. At the same time, the work outlined that some of the historical concerns of OA publishing are dissipating, such as those regarding the perception of quality, and underlined that even the willingness to pay for article processing charges (APC) has increased significantly.

While there are many studies that explore OA perceptions at the author level, few studies addressed the perception of journal *managers*. From the perspective of the senior managers, Wakeling et al. [31] examined the motivations for launching an OA mega journal (OAMJ). Two motivations were in line with OA: (a) supporting the OA movement, which can be seen as a societal benefit, and (b) the 'effect change' which is perceived as an opportunity for experimentation (e.g. open peer review) or a change at the systemic level (e.g. transform scholarly communication). In the Spanish context, Segado-Boj, Martín Quevedo and Prieto-Gutiérrez [24] conducted

15 interviews with managers of Spanish journals to study their perception towards open access, open peer review, and altmetrics. OA is perceived as a positive factor as managers highlighted many advantages (e.g., improving scientific dialogue, availability of the content, achieving higher visibility). However, this model also generated concerns: the difficulty of making the magazine profitable or the creation of an economic barrier for authors that could not afford the payment. Robinson and Scherlen [19] surveyed managers of dozens of journals in criminology and criminal justice. These authors found that the managers in chief were highly supportive of the OA principles, however, they had a more favorable view of traditional journals rather than of OA journals.

At the Spanish level, different studies analyze the coverage of open access journals indexed in Scopus and WoS at the country [29] and regional level [18]. Furthermore, the degree of compliance with open access policies (Article 37 of the Science Act) has also been explored [4], FECYT, [9]). The 2016 FECYT report concluded that 9% of the articles resulting from national-funded projects were archived in institutional repositories between 2011 and 2014. Borrego [4] analyzed projects from 2012–2013 and found 58% of articles resulting from those projects had at least one OA copy available 1 year after publication. A few studies analyzed the perceptions of OA authors in Spain. Hernández-Borges et al. [11] surveyed medical authors to determine their awareness and attitude towards OA publishing and the “authors pay” model. These authors were found to have a low level of awareness of this model as well as a low acceptance of journals charging author fees. Ruiz-Pérez & Delgado-López-Cózar [23] surveyed 554 researchers from different fields and concluded that 76% consider OA beneficial for their discipline. Serrano-Vicente, Melero, & Abadal [25] analyzed the awareness of open access among the academic staff of a Spanish university and found that many respondents supported OA. In addition, the decision to publish in OA is directly related to academic reward and professional recognition. However, to the best of our knowledge, no previous study has conducted an analysis at the editor level in the Spanish context.

The paper is structured in the following way: Sect. 2 presents the methods, Sect. 3 discusses the results, and Sect. 4 presents the conclusions.

## Methods

The use of qualitative interviews has the potential to detect issues not covered in the literature. Interviewing journals can provide answers to the following questions: How well do bibliometric measures reflect the changes in the status of the journal? How do journal managers perceive the flipping process?

Twelve semi-structured interviews (see interview guide at [2] were conducted with managers from Spanish journals collected in the first study by the current authors [1]. For more information the reader is referred to this article. This technique provides a flexible tool for small-scale research as questions can be adapted, allowing for unexpected answers whilst also clarifying the interviewee’s response [7]. It also allows for a deeper insight into a respondent’s views. The sampling procedure identified the participants through contact information with the journal websites. Out

of 24 journals identified in the first round, twelve responded positively to the request to participate, two declined and ten did not respond after sending two reminders. All the interviews were conducted online, digitally recorded, and transcribed for analysis. The length of the interviews ranged from 40 to 90 min. To facilitate further analysis in the process, the answers were coded subjected to a thematic analysis [3]. These codes represent themes which emerged by combining insights from existing literature with the data. A data matrix was created with variables identifying the questions and values identifying specific answers to a question. Secondary data analysis of bibliometric indicators of each journal from SCImago Journal Rank (SJR), a database with journal indicators based on data from Elsevier's Scopus, complemented the primary data, highlighting the importance of adopting a mixed-method approach. Adoption of these methods enabled the current authors to observe how open access is conceptualized and operationalized across different journals from different fields, and to discuss the motivations underpinning OA.

Regarding the structure of the interview, in its first section bibliometric indicators from the Scimago Journal Rank (SJR) of their journal were shown to the interviewee.

Figure 1 shows examples of the results presented at the interviews.

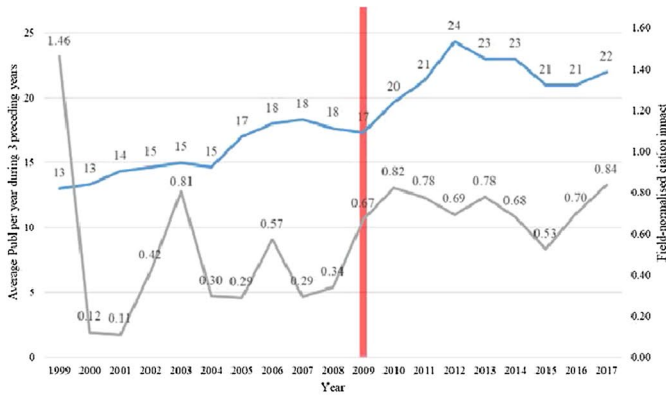
- Average publications per year. Data were available for each citing year during the time period 1999–2017 on the number of publications made during the three preceding years, as well as the field normalized impact factor.
- Top 5 publishing authors and top 5 citing countries (data relate to the citation year 2017 and publication years 2014–2016),
- Indicator of National Orientation (INO) [15]. This indicator is defined as the share of the papers from the country most frequently publishing in a journal, relative to the total number of papers published in the journal. For instance, if a journal has an INO value of 90 percent, this means that there is one country that accounts for 90 per cent of all papers published in that journal.

This part was integrated into the analysis to induce a more critical engagement with the interviewees, while limiting the bias of focusing on their storyline. In the second part of the interview, managers' perception of the flipping process and the benefits and drawbacks were explored, as well as other aspects such as funding and their perception of OA challenges, among others.

## The Sample

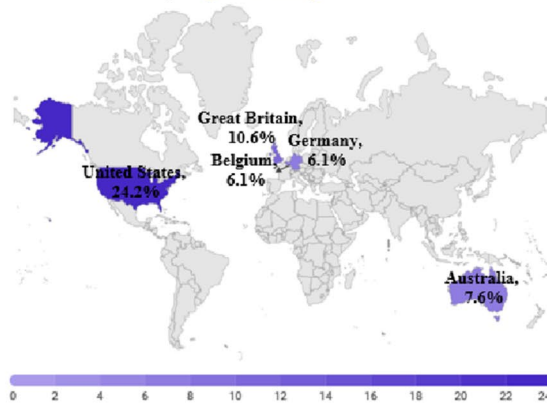
Table 1 lists the participants by subject category associated with the journal, the age of the journal, and the validated transition year. The sample represents different disciplines from philosophy to engineering. In total, 12 journals were interviewed, between June 2020 and October 2020.

The objectives of the interviews are (a) to gain a better understanding of the journal flipping process by journal managers' view, and (b) to determine the contextual factors that influence the (un) success of OA flipping journals.

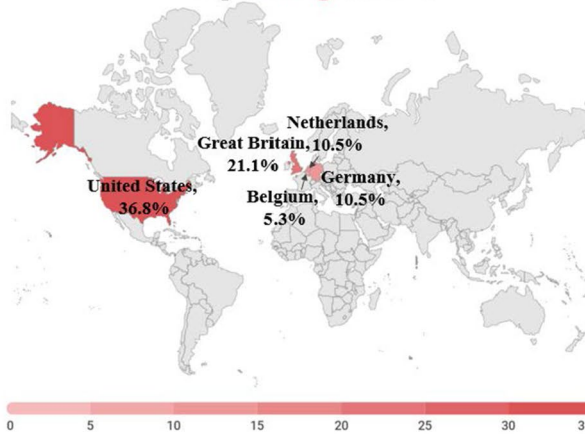


Evolution of the number of publications and their field-normalized citation impact

#### Top-5 publishing countries



#### Top-5 citing countries



#### Top 5-Publishing and citing authors

**Fig. 1** Examples of the input shown in the interviews (the column in red indicates the switching year)

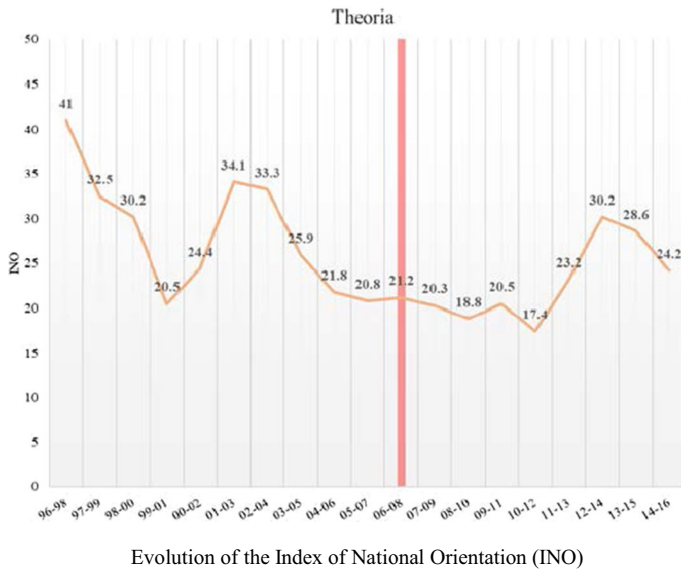


Fig. 1 (continued)

## Results and Discussion

### Awareness of Journal Bibliometric Indicators

Participants were asked if they were aware of bibliometric data of their journal and if this data adequately reflects its development. Half of the journal representatives (Participant 3, 5, 6, 7, 9, 10, 12) were familiar with bibliometric information while the indicator showing the countries citing a journal surprised them the most. Participant 3 mentioned being aware of the metrics but added that he does ‘not want to get obsessed with them’ as he realized his journal cannot have the same impact as other ‘bigger journals’ in their field. Participant 10 also noted that ‘another thing is the interpretation of these data because at that time there were also other changes taking place in the journal’ i.e. inclusion of their journal in the Brazilian literature database Scielo that led to an increase in their publications from 50 to 200 articles. In contrast, an editor of humanities journals stated that ‘they do not want to take the indicators into consideration’ (Participant 11).

As indicated by one interviewee, they usually check information on rankings (1), and not about other metrics related to their journal performance. This fact can have a negative effect on the journals, namely a lack of strategies to increase the performance of the journal (1). As pointed out by Participant 2, ‘you are listed or not’ (e.g. in Scimago Journal Rank (SJR) or Clarivate’s Journal Citation Reports (JCR)). This participant stated that his journal obtains a low position in rankings such as SJR mainly due to its interdisciplinary focus, which negatively affects the development of the journal (e.g. number of submissions). This fact was also

**Table 1** Participants characteristics

Journals	Branch of science (based on the LCC Subject Category)	Starting year and age of the journal	OA year validated
Participant 1	History (General) and history of Europe: History (General): Medieval history	1964 (53 years)	2006
Participant 2	Geography: Anthropology. Recreation: Anthropology: Ethnology. Social and cultural anthropology	1944 (73 years)	2006
Participant 3	Medicine: Surgery	1975 (42 years)	2006
Participant 4	Geography: Anthropology. Recreation: Geography (General)	1940 (77 years)	2006
Participant 5	Science: Geology	1966 (51 years)	2003
Participant 6	Technology: Home economics: Nutrition. Foods and food supply	1960 (57 years)	2006
Participant 7	Science: Botany	1879 (38 years)	2006
Participant 8	Technology: Electrical engineering. Electronics. Nuclear engineering: Materials of engineering and construction. Mechanics of materials	1949 (68 years)	2006
Participant 9	Science: Biology (General): Ecology	1945 (72 years)	2006
Participant 10	Technology: Home economics: Nutrition. Foods and food supply   Medicine: Internal medicine: Specialties of internal medicine: Nutritional diseases. Deficiency diseases	2012 (5 years)	2013
Participant 11	Language and Literature: Philology. Linguistics   Philosophy. Psychology. Religion: Judaism	1941 (76 years)	2006
Participant 12	Philosophy. Psychology. Religion: Philosophy (General)	1952 (65 years)	2009



mentioned by Participant 1, who also underlined the interdisciplinary character of the journal, and reported they did not know how the citations were distributed.

Despite the fact that many managers see the use of journal-level indicators as part of their editorial duty to try to improve the values of the indicators for their journals [13], the lack of indicators awareness was associated with a lack of time or staff for monitoring this information (Participants 1, 2, 3). In terms of how well bibliometric measures reflect the development of the journal, only two managers agreed they ‘reflect the reality’ (but some have concerns with only attributing this change to OA).

## DOAJ Database

As reported by previous studies, there are inconsistencies in the Directory of Open Access Journals (DOAJ) database: the actual year a journal flipped to Open Access content may differ from the year indicated in DOAJ. Moreover, there are inconsistencies in the way Article Processing Charges (APC) are defined [1, Robinson-Garcia, Costas, van Leeuwen, [20]). In our sample, only one journal submitted the information to DOAJ (Participant 7), while others reported that the information was uploaded by the organization (Participant 8, 9) and some were not even sure who submitted the information (Participant 1, 8, 10, 11), attributing this role to the host institution. The delay on the OA flipping year is related to the time between the submission and the final inclusion on the website (Participant 6, Participant 12) or to other reasons, such as a change of the journal name (Participant 2). Some interviewees remarked the year indicated on the DOAJ website could be related to the time when members of this database requested information from them (Participant 5). A few interviewees were not aware of the database (Participant 1, 8, 10), or had no knowledge about the exact year in which the journal switched to OA (Participant 4).

## OA Flipping Motivations and Decision

The reasons for switching to OA are diverse. For the majority of the interviewees, it was imposed by the same host institution (Participant 1, 2, 4, 5, 6, 8, 9, 11), the Spanish National Research Council (CSIC as per its Spanish acronym), a state agency for scientific research. This institution decided to make the transition, and developed a set of requirements, which all the journals have to comply with. As pointed out by Participant 1, this host institution has a hierarchical structure. Some participants pointed out that the objective of flipping was to increase visibility (Participant 3, 7, 12). This objective is also found in several previous studies (Nelson and Egget, 2017; [27], Segado-Boj, Martín Quevedo and Prieto-Gutiérrez, [27]. Other motivations noted were to increase the internationalization of the journal (Participant 1, 7, 9), or the attraction of new authors (Participant 3, 12) from other fields or from Spanish speaking countries such as Latin-American countries. Some other reasons noted were related to stagnation and management problems (e.g. slow peer-review process (Participant 6) or economic difficulties (Participant 9, 10). Participant 10 experienced economic difficulties

with a commercial publisher before flipping who charged subscribers with high costs and whose editorial policies he did not agree with, even though the financial problems continued after the transition as his journal does not charge APC. Participant 5 reported that they had no specific plan in their flipping to OA: they felt they were ‘born OA’ when they transformed the journal to an international journal in 2003.

In addition, the decision to switch to OA was taken to comply with other requirements: exchanges with other institutions would not be affected (as there is a separate budget from the Library for this activity), and journals would not switch entirely to a digital format but still keep a print version (Participant 10). This *nostalgic* reason was also indicated by other interviewees (1, 8, 9, 11). Managers of some journals that still have not fully transitioned to an electronic format also highlighted this *nostalgic* reason (1) and even noticed an initial resistance attributed to the ‘own inertia’ of the journal (1, 2). However, this aspect is more related to electronic as opposed to print journals, rather than to OA versus non-OA. One interviewee (6) also described the change in publication language in sentimental terms and decided to maintain the abstract in both languages, Spanish and English. Some other interviewees stated that the decision to flip was ‘imposed’. Participant 7 commented that the OA route is ‘the only option’, as well as the publication in the English language. This interviewee also mentioned the ‘power and influence’ of libraries in the transition as they play a central role. For Participant 11, OA was not his main priority, and confessed he was not really a promoter of the process; he considered it primordial that the different issues and papers be published during the year.

Another motivation put forward by some interviewees relates to the accountability towards society and reveals more altruistic reasons (Participant 5, 2). This motivation is based on an ethical notion that ‘science must be open’ and is in line with previous studies, both at the author and the journal level [24], Wakeling et al., [31]) Participant 2 stated that OA is a duty for a public institution, to make scientific information publicly available.

How the decision was taken is divided into two different approaches. In a top-down approach, the decision was mainly made by the host institution (no. 1, 2, 4, 5, 6, 7, 8, 9, 11). Participant 8 underlined that it was not well received by some journal managers, particularly those in the social sciences and humanities journals. This participant believed that the decision of the host institution was imposed by an even higher level, namely the European Legislation (Copenhagen Protocols, which establish that a public organization must have an open policy). Other interviewees stated that the decision to flip their journals was reached in a bottom-up approach. They discussed the issue with the Editorial Board and in a next step they informed the host institution about the editorial service of the university (Participant 10, 12). In some other cases, even when the host institution (CSIC) imposed the switch to OA, the editor had already made the decision previously and discussed it thereafter with the editorial Board (Participant 6, 9). Similarly, Participant 5 indicated that the switch was discussed bi-directionally within the Editorial Board and the host institution at the same time (Participant 5). Participant 3 made the decision internally and discussed it subsequently with the network that supports the journal, not only at the country level but globally. This is similar to Participant 10 who adopted

**Table 2** Benefits and drawbacks identified by the interviewees (participant number between brackets)

Benefits	Cons
Increase in visibility (1, 2, 3, 6, 7, 9, 10, 11)	Loss of interchanges between institutions (1, 2, 3, 8, 9)
Increase in the submissions and publications (1, 2, 3, 6, 9, 10)	Lack of resource capacity: increase of workload (1, 8, 10, 12) or lack of knowledge about the processes (e.g. request a DOI, obtain data in xml) (10)
Increase of the internationalization (2, 3, 9)	Competence with big publishers (4, 5, 10, 11)
Chance to publish in other languages (1, 2, 9)	Loss of national languages i.e. more papers on English-speaking languages (12) and loss of readers (2)
Better accessibility (1, 3)	No increase in the submissions (12)
Reductions of costs e.g. images in a paper (5, 9)	
Acceptance and happiness with the decision within the editorial board (7) or the authors (12)	
The prestige of the host institution and the journal (4)	
Increase of the citations/Journal Impact Factor (JIF) (6)	
An increase of the acceptance of peer review requests (as the journal is more widely recognized) (10)	
Adoption of a platform for the management of the journal (12) i.e. Open Journal System (OJS)	
Better quality of the papers (Participant 9)	
Having the capacity to take decisions about the management of the journal (10)	

an analogous approach and stated that the flip to OA was decided by the Editorial Board members rather than the host university.

### Benefits and Cons of the Transition and Barriers Identified

Table 2 summarizes the benefits and disadvantages related to the transition towards OA identified by the journal's interviewee ranked by descending order of frequency. The number of benefits outstands the number of cons, denoting a positive attitude towards the benefits perceived by the journals since the flipping. Within the main benefits, the increase in visibility is highlighted. This is in line with findings from several previous studies at the author level [30, 32] and at the journal level (Segado-Boj, Martín Quevedo, and Prieto-Gutiérrez, [24]. In contrast, many participants did not identify any drawbacks (no. 1, 2, 3, 5 or 6).

Finally, it is also important to note that some interviewees attributed the evolution of the journal not to OA, but rather to other factors. As an example, the inclusion of the journal into Journal Citation Reports (JCR) and the change of the journal's

publication language to English were highlighted as the main drivers of change (Participants 7, 8). This perception was also shared by participant 10, who pointed out that other changes took place in his journal at the same time (namely its entry into SCIELO, a large Brazilian literature database) and, therefore, concluded that it was not possible to draw a firm conclusion about the benefits directly related to OA. However, the decision to enter into Scielo was partly driven by OA. Another reason is the interdisciplinarity of the journal (1, 2). For Participant 5, the change was described in terms of the transition from paper-based to electronic publishing, not as a flip to OA itself.

If we consider the barriers and difficulties identified by the interviewees, some journals did not consider the change ‘traumatic’ because the host institution was in charge (Participant 1, 2). This perception was shared by the great majority of the managers of journals that belong to the CSIC host institution. The assistance was crucial for many of the interviewees. This mainly came from the host institution (Participant 1), an information technology manager from the university (Participant 12), external organizations for support (e.g., the Spanish Public Research Organization, OPI as per its Spanish acronym) (Participant 3), or companies that created the technical process such as the digitalization of the journal (Participant 8). Other participants asserted they had asked for technical support, which the host institution refused to deliver (Participant 2). Some mentioned that the transition was easy (6, 8), and that content was included in the Open Journal System<sup>1</sup> (OJS) (6). Participant 1 found using this platform complicated, an experience likely associated with the lack of personnel. A few journals experienced technical difficulties. For instance, creating a HTML/XML version was hard for them to learn (Participant 8), or the inclusion of the references in the notes due to the new digital format required extra work (Participant 11). However, as pointed by Participant 11, these difficulties should be attributed more to the digitalization process itself than to the switch to OA. For Participant 12 OJS was initially attractive and innovative but later, when other universities adopted this system, it became ‘one of many’ (Participant 12).

Finally, Participant 7 pointed toward the problem that the university ‘goes ahead slowly’ and that there is a resistance to change. In this regard, this interviewee noted a disconnection between the publications’ service and his own journal. As an example, some advancements (related to the PDF format in the layout area) were proposed to improve the management of the journal by the editorial members, not by the staff of the publications service. As a final consideration, Participant 3 mentioned that in some cases the Scielo database helped with the transition.

## Satisfaction

Regarding the level of satisfaction, many participants remarked that OA is positively valued by authors (1, 2, 5, 7, 11, 10), editorial members (1, 2, 6, 7, 11), readers (2, 7, 11) or reviewers (10). Some participants did not receive direct feedback but based

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<sup>1</sup> The Open Journal System is a free software for the management of peer-reviewed academic journals, created by the Public Knowledge Project.

their impression on the evolution of the number of submissions to their journals (3, 9). Participant 7 mentioned the users/readers value the accessibility to the website and possibility to download the content. Since the journal transitioned and is electronic, participants 5 and 9 do not charge authors for the color printing and noticed they are ‘happier’ with it. Participant 10 felt that flipping was satisfactory (as it was aligned with their philosophy of OA); however, the difficulties of managing the editorial process themselves caused a certain degree of dissatisfaction. By contrast, the interviewed editor of a humanities journal stated that the authors of their field ‘are not aware whether or not a journal is OA’ and the community ‘does not care about OA’ (11).

Some managers remarked they observed resistance to change and dissatisfaction towards the transition, especially in older members of the journal staff (Participant 1, 2). This was linked with novelty and *nostalgia* as they still preferred having the papers printed rather than in digital format (Participant 1, 8, 9, 11). Although the distinction between younger and older generations is subjective, this finding suggests that OA will become a common practice among scholars as time goes by.

### Dissemination and Open Access Citation Advantage (OACA)

The great majority of the journal’s interviewees agreed that the OA transition contributed to the dissemination of work in their journals (Participant 1, 2, 3, 5, 6, 9). Some underlined that this improved dissemination could also be partially attributed to the changing communication habits of researchers, such as the use of other venues like Research Gate and Academia.edu. The transition has also increased the visibility (1, 2, 3, 6, 7, 9, 10, 11), and some managers even claimed that journal papers are more read since they are OA (4) as it attracts students or other groups who did not have access previously. This increased access is monitored by the number of downloads (e.g. for instance, the journal of Participant 3 has received since the transition 4000–5000 downloads in one week) or via Google Analytics that allows to see the profile of the users (for instance, half of the downloads of the journal of participant 12 were made by users from Spain and half international).

Due to this increase of dissemination, some journals have noticed a different habit change between the authors. For instance, Participant 3 related to the medical field noted, ‘We have realized that now the English community wants to write in Spanish’. That is because, in her specialty, research is more pioneering in Latin-American than it is in English-speaking countries. They have even noticed that some English-speaking authors are translating the papers from English to Spanish. However, the use of a non-English publication language is seen a negative feature by managers of some journals. As pointed out by Participant 4, writing in Spanish is almost a duty (ethic principle) as a public institution, although it may negatively affect the impact factor. Other participants noted that not only the switch to OA, but also other factors affect the dissemination, namely a journal’s inclusion in the JCR or its use of English as publication language (Participant 8).

The evidence of an Open Access Citation Advantage (OACA) is a controversial topic. This is clearly illustrated in the current study as the interviewed journal

managers appear to have diverse opinions about this matter. Some managers believe that OA attracts more citations (Participant 1, 9, 10, 11) in general. By contrast, Participant 5 found that 5–6 years after the switch Journal Impact Factor (JIF) went down, and attributed this decrease to a growing competition with other OA journals. In this state of increasing supply of OA journals, it is difficult to stand out. Participant 5 argued that ‘while OA may attract more citations, we also need to struggle harder to excel in a market where there are more journals with greater infrastructures behind and larger capacities.’ Participant 11 stated: ‘We have not noticed any increase in the submission of papers, and we think that there are currently even less submissions than before. We believe this is because there are a lot of journals at this moment.’ Although, some others consider it difficult to determine if there is an OACA (Participant 3), Participant 10 felt that ‘being OA you are more likely to be cited (as more people are going to read to you), however, it does not imply higher quality of the papers’. Participant 5 attributed this increase in citations mostly to the publication of monographic journal issues. A few participants (2, 7) found it impossible to draw firm conclusions about the effect of OA upon citations. They have more output but they do not attribute this increase to the flip to OA.

Some interviewees stated that the higher visibility, the tools and indexing in Scielo have definitely improved the access to the papers and this could have helped increase the impact (Participant 3, 4, 6, 10). As pointed out by Participant 10, the entry into Scielo is also partly due to a journal’s OA status. Participant 6 denotes this as a ‘snowball effect’: ‘at the moment the papers are freely available, the journal becomes more well-known and authors want to publish more’ in it. A higher impact level is also perceived as a favorable for internationalization and attracting more authors (Participant 7).

Several participants underlined that there are so many other factors that affect the citations (e.g., 4, 8). Some of them attributed the increase of citations to the following other factors: an increase in the number of published papers over the years (Participant 2); the publication of monograph volumes (Participant 5); the impact factor of the journal (Participant 8); the use of social networks such as ResearchGate (11); and being a ‘good place’ for the authors due to the speed of the peer review process (Participant 12). In addition, it was pointed out that switching to OA by itself may improve the impact but does not improve the quality of the papers (Participant 10).

## Organization Benefits

There is a full agreement among the interviewees that the host institution benefits from the transition, as it gains an increased visibility or prestige. Participant 1 even believed that the impact of the host institution was mainly due to the OA status of its journals, especially in Social Sciences and Humanities (SSH). In addition, Participant 2 pointed out that thanks to OA and their journals, their host institution is recognized for its SSH research. For Participant 10, the journal is a ‘visibility channel’ for the institution and the discipline. According to Participant 6, it is important to create awareness, and their host institution has adopted a strategy for better dissemination and visibility. However, Participant 9

**Table 3** Changes associated with the flipping identified by the interviewees (participant number between brackets)

Changes (OA/electronic publishing)	Changes associated
OA	Favour new publication languages (e.g. increases in English language publication but also other languages) (Participant 1, 2, 9). Before the transition, they admitted articles in Spanish but after the change, only English was accepted (with the exception of the abstract in Spanish) (Participant 6)
OA	Focus of the journal (2, 6, 9): it changed to more research-oriented (9) or a reorientation of the focus (2)
OA	Changes on the websites: OA was especially highlighted (Participant 3, 8) or changed after the transition (Participant 7)
OA	Social media campaigns: The visibility (micro)campaign in social networks, despite being weak and discontinuous, was initiated after the flipping (Participant 6, 10)
OA/ Electronic publishing	An increase in the submissions (1, 2, 3, 6, 9, 10): However, it is not sure if it is unique because of OA or also as a consequence of the evaluation systems that are pressuring more researchers to publish (Participant 2)
OA	Increasing the number of research lines: there are more topics since the transition (Participant 6, 7). As focus by participant 6, since they are open they receive more manuscripts of more topics, and they have decided to broaden the research lines
Electronic publishing	Increasing publication speed. The review process has significantly been reduced (e.g. from 6 months to 2–3 months or from three months to 1.5) (6). This implies more paper rejections (10)
OA	Changes in the Editorial Board: New international members (Journal 7, 9) or even the number of members (10). As another change, it is mentioned the creation of new figures (e.g. associate Editors figures to strengthen the journal, Participant 7)

pointed out that their host institution prioritizes the publication of high-impact papers. For instance, the institutes that do not publish in journals of high impact are punished by reducing their number of job positions.

### Changes Associated

Regarding the changes to the journal since it flipped to OA, there are different views on whether these changes can be attributed to OA. Table 3 summarizes the changes attributed to the flipping process. The flip to OA involved changes in the editorial characteristics' (e.g. from mono- to multi publication language) or in the publication process (from print-only to electronic journals). The first column indicates whether the change is linked with OA, electronic publishing, or both. In contrast with findings from previous studies [27], increasing publication speed was not widely mentioned by the interviewed managers, and to the

extent that it was mentioned, it was attributed to electronic publishing rather than to OA.

## Funding

The majority of the journals identified in this study belong to the Spanish National Research Council. As a result, these journals receive some funding for their subsistence from the host institution (Participant 1, 2, 4, 5, 6, 7, 8, 9, 11) from the general budget. As indicated by some interviewees, this funding has decreased over time, especially since the recent economic crisis. According to Participant 2, this funding is 'deficient'. It gives the impression that the host institution, instead of reducing costs by going electronic, is 'losing money since they are open'. As the content is free, they have lost subscriptions and interchanges, so they do not receive the income they once had and are now even losing money. In addition, this tight budget is just for 'survival' but does not allow, for example, to pay reviewers. Since it is a public institution and the staff of the journal consists of civil servants, participant 6 felt that a part of the costs for maintaining the journal are covered by the salaries of the journal staff members. Other journals, such as that of Participant 3, are funded by advertising and external sponsors. Moreover, the society to which it belongs pays a secretary for the journal management. Participant 7, whose host institution is a university, indicated that two people dedicated to the journal receive a payment from the host institution that covers the technical production of the journal. However, this payment varies overtime. A second participant (2) appointed at a different Spanish university mentioned that the journal was initially subsidized by the regional government (with a budget of 6,000 euros/year) in order to pay a managing assistant to carry out the editorial process. The printing costs were covered by the host institution and when they transitioned to the OJS, they were able to reduce the production costs. Later, the University was awarded a Campus of Excellence award and some of the money received was used for the journal. Actually, the interviewee indicated that the publication costs of his journal amount to about 3000 euros/year.

Apart from receiving a budget from the host institution, none of the journals of the interviewed managers charge a publication fee to publishing authors. Such fees are often denoted as Article Processing Charges (APC). As pointed out by Participant 1, this has been discussed within the journal because gaining some money 'could benefit the journal procedure'. This particular journal has even considered including academic advertising (e.g. announcing conferences on the journal website) in order to have an additional income. It was also mentioned they are not paying the reviewers (Participant 1, 2), although Participant 1 believes that this should be done in order to reward their work.

Even if the printing costs are no longer needed, money is needed for many other tasks in the publication process, including the request of DOIs, being indexed in Scielo, creation and maintenance of a web page and an online submission system and maintenance of the OJS software. (10). As explained by Participant 10, there is an 'economic burden' as the journal does not charge for anything. His journal was published by a commercial publisher before but this was most expensive, and



**Table 4** Challenges identified by the interviewees (participant number between brackets)

<i>Challenges identified</i>
Lack of resources capacity or technical support (1, 2, 8, 10, 12)
The need for funding (1, 7, 10, 11)
Get institutional help or agreements to maintain OA without charging authors and readers (5, 6, 10)
Competence with the big publishers, especially when you are a 'small journal' (7, 10, 12)
'Appreciation of OA' and change of mind of researchers (3)
Maintain and value national publication languages (4)
Resistance to flip to OA, especially in Humanities (2)

the publisher included advertisements that the team was not comfortable with as it did not fit into the scope of the journal. In a later stage, the team itself assumed the role of publisher, but it still faces economic problems (e.g., it is receiving more manuscripts). As pointed by Segado-Boj, Martín Quevedo, and Prieto-Gutiérrez [24] the difficulty of making magazine journal profitable is one of the main concerns of the journal managers but, interestingly, this concern was, almost occasionally, mentioned by only a few respondents. Considering the fact that all journals receive a budget from the host institution, the cases presented in the current study do not allow for making generalizations about the actual costs of the entire publication process, which is a crucial aspect in the discussion about OA.

As pointed out by several journals, apart from the funding from the host institution, in the past exchange incomes with other institutions were very important (Participant 1, 2, 9). That is, exchange incomes are earned when a printed journal published by one institution is sent to other institutions subscribing to this journal. This was an important income for the journals to survive but also for the institutional library. With OA, these exchanges have been limited or do not longer exist. As a consequence, switching to OA have also lost subscriptions to the journal.

## Challenges and Future Perspectives

There is among the interviewed managers a consensus that reverse flipping makes no sense. Table 4 summarizes the main challenges towards OA in general and particularly in Spain identified by the interviewees. The need for funding for OA is a widely shared challenge (1, 7, 10 and 11). As summarized by participant 10, 'We are not asking for a million euros to be allocated, only a computer specialist for specific questions such as updating the OJS at a very small cost to them; this would greatly help small journals'. Another challenge identified is the need to get institutional support or agreements to maintain OA without charging authors and readers (Journal 5, 6, 10). In this regard, Participant 10 considered it key to create a strategic alliance of Spanish journals to share resources to strengthen OA journals. For participant 6 it is also a problem of future vision: the challenge is to have long-term goals while the objectives on OA are seen as 'short-term'. As a consequence, rational planning to reach those objectives should be done, which is lacking in the Spanish system. Other

participants noted challenges regarding the ‘appreciation of OA’ and the change in mindset of researchers (3). In other words, a cultural change is needed to ‘value’ the publication in itself, independently of the journal. Openness’ as a synonym of goodness has been disputed widely in the literature. As pointed out by Warlick and Vaughan [30], OA publications are considered to be less respected than established journals in their own fields of research. This is not only caused by OA but also by the Spanish publication language of the journals.

## Conclusions

Although some earlier studies analyzed the motivations behind journal flipping, limited research has been conducted on how this transition is perceived by journal managers. The current paper provides insights into the elements, benefits, and challenges of OA flipping from a journal editor or manager perspective. This research adds to the growing body of literature on Open Access, accentuating the complexity involved in incorporating OA in journals in the Spanish context. As regards the question how bibliometric measures reflect the changes in the status of the journal, findings suggest that the great majority of interviewed journal managers are aware of the indicators, but only two mentioned they reflect their reality since the transition. The results also show that the flipping process was largely perceived as beneficial. The number of benefits outstands the number of cons, denoting a positive attitude towards the journal’s performance since the flipping. Among the main benefits, the increase in visibility or number of submissions is highlighted, while the loss of interchanges and the resource capacity are seen as major drawbacks.

Despite journal managers’ familiarity with bibliometric data, our findings show that there is a lack of monitoring the information associated with the lack of time or resources. The main reason for the switch was found to be mainly a top-down approach imposed by the host institution. However, the underlying reasons were diverse: increase the visibility or internationalization of the journal.

The results also show that the flipping process was perceived as beneficial. The number of benefits outstands the number of disadvantages, denoting a positive attitude towards the perception of the benefits perceived for the journals since the flipping. Among the main benefits, the increase in visibility or submissions was highlighted, while the loss of interchanges and the resource capacity was seen as a drawback. Regarding the changes to the journal since its flipping to OA, different views and opinions were expressed on whether or not the changes are attributed to OA. This leads us to believe that managers of journals in Spain are not entirely conscious whether the changes are attributed exclusively to OA or to other factors (e.g. JCR, language).

This study has several limitations. First, this study is based on a small sample. As such, results cannot be generalized for the whole population.. Second, the great majority of journal managers who accepted to be interviewed belong to one and the same host institution and were subjected to the same set of requirements. This can affect the independence of the responses provided and can limit the ability of the findings to be generalized to other contexts. Third, the extent to which the

perceptions on OA flipping of managers of flipping journals differ from those of non-OA journals has not been addressed in the current study and could be examined in a follow-up study. In addition, this research has highlighted a number of issues that require further investigation. The related literature has shown that the positive attitude toward OA among journal managers is increasing. We envision further study in this area through surveys and interviews with more managers in various fields that can analyze both the short and long-term effects on the journal. Contributions from other countries would complement this study and increase its generalizability.

Besides giving us an overview of Spanish journal editor perceptions of open access, this study may be beneficial in other ways. The interviews gave recipients an opportunity to reflect upon major issues in academic publishing facing both authors and those working as journal managers. These findings may help OA managers better engage journals into the process in order to maximize the benefits and cope with the challenges. In addition, it can help realize the weaknesses in their previous efforts and indicate possible areas for future improvement in the Spanish context.

Moreover, this research has highlighted several issues that require further investigation in more depth. The related literature has shown that the positive attitude of OA among journal managers is increasing. We envision further study in this area through surveys and interviews with many more journal managers in various fields which can analyze the short and long-term effects on the journal. Contributions from other countries would complement this study and increase its generalizability.

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