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Preprints as an alternative to conference proceedings: A hands-on experience at EDICIC Iberian Meeting 2019

Cristóbal Urbano ^(D), ^{1*} Sara Tafalla ^(D), ² Ángel Borrego ^(D), ¹ and Ernest Abadal ^(D)





C Urbano

S. Tafalla

¹Departament de Biblioteconomia, Documentació i Comunicació Audiovisual & Centre de Recerca en Informació. Comunicació i Cultura. Universitat de Barcelona, Barcelona, Spain

²Comité Organizador EDICIC 2019 Barcelona, Secretaria Técnica, Barcelona, Spain

ORCID:

- C. Urbano: 0000-0003-0935-6436
- S. Tafalla: 0000-0001-7674-8574
- Á. Borrego: 0000-0002-6462-3966
- E. Abadal: 0000-0002-9151-6437

*Corresponding author:

Cristóbal Urbano, Departament de Biblioteconomia, Documentació i Comunicació Audiovisual & Centre de Recerca en Informació, Comunicació i Cultura, Universitat de Barcelona, Barcelona, Spain. E-mail: urbano@ub.edu





Abstract

This article investigated a novel method of disseminating conference proceedings via preprint servers. The EDICIC 2019 conference encouraged presenters to upload their research onto preprint servers before the conference and did not produce a conference proceedings. The objective of this was to facilitate pre-conference dissemination of the research and use the conference for debate. Authors could then submit their articles to a journal. A survey of participating authors shows that they had little familiarity with preprints prior to the conference. Nevertheless, nearly threeguarters of authors deposited their preprints before the conference. Most respondents were in favour or pre-conference deposit and believed it would allow conferences to run more smoothly. However there was concern that Library and Information Science journals will not accept submissions that have been issued as preprints. Authors also expressed concerns about the lack of recognition for their research if conference proceedings are not published. They highlighted the effort required to pass a double evaluation by conference organizers and then by journal editors, emphasized that the culture of preprints and open science is not consolidated in the discipline yet, and noted that the aim of increasing interaction and debate in the conference was not fully reached.

Keywords: academic conferences, conference proceedings, library and information science, open science, preprints, scholarly communication, scholarly journals

INTRODUCTION

The publication of scholarly manuscripts may suffer from long delays between submission and publication due to peer review and copyediting. The delays slow down the dissemination of scholarship (Björk & Solomon, 2013). To mitigate this problem, preprint servers, which make manuscripts immediately available in open access, have proliferated since the 1990s. Open science and the intensification of research on Covid-19 have propelled the share of preprints (Fraser et al., 2020), although their acceptance varies amongst disciplines and the debate on their reliability is intense (Fleerackers et al., 2021).

Before the spread of preprint servers, scholarly conferences played a role in speeding up communication of ongoing research. Conferences allowed researchers to get feedback from their colleagues and so improve their work before submission to a journal. Researchers were also given credit for formal publication in proceedings. Leaving aside some disciplinary exceptions such as computer science or engineering, submitting a paper to a conference is now less appealing due to travel and registration costs, and the lack of recognition of proceedings compared to articles in peer-reviewed journals. Additionally, fewer proceedings are published because they are considered less interesting publications with limited reach amongst people outside the conference delegates. To add to the crisis of the classic conference publication model, there appears to be some frustration amongst conference delegates with the traditional formula of unidirectional plenary lectures with little interaction amongst delegates on the issues raised by the presentations.

To explore a possible connection between preprints and conferences, this article analyses the use of preprints in the ninth Iberian Conference of the Association for Teaching and Research in Information and Documentation in Latin America and the Caribbean (EDICIC 2019, https://fima.ub.edu/edicic2019/) held in Barcelona in July 2019. EDICIC is an association that brings together institutions and individuals involved in teaching and research in archival and library and information sciences (LIS) in Portugal, Spain and Latin America.

To boost interaction amongst delegates and encourage the publication of contributions in refereed journals, the conference organizers decided not to publish proceedings. Once submitted abstracts had been double-blind reviewed, authors of accepted papers were asked to upload the full text of their contribution to a preprint server of their choice. A catalogue of accepted papers with a link to the preprint, if available, was published online (https://fima. ub.edu/edicic2019/catalogo/). Many Latin American LIS journals do not explicitly state whether they accept submissions that have been previously disseminated as preprints. Consequently, conference organizers arranged with journal editors to provide a list of journals that agreed to consider for publication preprints delivered at the conference. A webinar was organized to give participants information on the orientation of the event and the nature of preprints (Seminario CRICC, 2019).

This model of using preprints broke with the mainstream tradition of conference proceedings. In the new model, submission to

Key points

- Preprints have a similar objective to conferences—to disseminate research without delay, and to allow for debate.
- Most conference presenters were unfamiliar with preprint servers, but willing to upload their articles prior to the conference as requested.
- Authors complained that preprints have very little value in research evaluation and Latin American library and information sciences journal editors are reluctant to consider preprints for publication as journal articles.
- Authors who had deposited their preprints to the conference in advance were more likely to submit their papers for publication as journal articles.
- The availability of preprints did not increase conference debates since it was felt that delegates did not read them in advance.

a journal was postponed to a later stage without a guarantee of publication, even if the paper had been accepted for presentation in the conference. The aim of this study was to assess the results of this experience from the perspective of conference authors. The research is underpinned by four research questions:

- 1. Did authors participating in EDICIC 2019 have any previous experience in the use of preprints?
- To what extent did conference authors engage in the communication model based on preprints proposed for EDICIC 2019?
- 3. To what extent did this model have an impact on conference sessions?
- 4. To what extent have conference papers been subsequently published as journal articles?

The results of the study should enrich the debate on the role of conference and conference proceedings in scholarly communication and the need to innovate in conference formats. The impact of the Covid-19 pandemic on the cancellation or digital transformation of conferences (Clarke, 2020) highlights the relevance of the research. The pandemic has precipitated the need for serious thinking on the leitmotif of face-to-face conferences and the role of conference proceedings in scholarly communication (Iglesias et al., 2021).

PREPRINTS AND THE DIGITAL TRANSFORMATION OF SCHOLARLY CONFERENCES

Preprints are scholarly documents that have not been peer reviewed and are shared in repositories for immediate

dissemination. Balaji and Dhanamjaya (2019) or Tennant et al. (2018) discussed the nuances of a term that recalls the print world. The most distinctive feature of preprints is that they refer to documents that have not been reviewed, as stated by PLOS (2021): 'A preprint is a version of a scientific manuscript posted on a public server prior to formal peer review'.

Intuitively, a preprint seems to be the opposite of a postprint, that is, the refereed and published version of a manuscript. However, Eysenbach (2000) points out that the term may be confusing, since 'preprint' suggests that the document will end up being formally published. This is not always the case, since some documents hosted in preprint servers are never submitted to a journal or accepted. To clarify the matter, Tennant et al. (2018) recommend using the terminology employed in the Sherpa Romeo User Guide (2020, p. 11):

- Submitted version (= author's original manuscript, preprint): the version that has been submitted to a journal for peer review,
- Accepted version (= post-print): the final author-created version that incorporates referee comments and is the version accepted for publication,
- Published version (= version of record): the publisher-created published version, that has been peer-reviewed and copy edited.

Manuscripts were circulated before scholarly journals emerged, as illustrated by the exchange of personal correspondence in early modern science. Also, many conferences prior to the Internet era disseminated mimeographed or photocopied manuscripts amongst participants before or during the event, and in some areas a kind of organized support to the exchange of preprints was tested, as in the case of the 'Information Exchange Groups' of the US National Institutes of Health between 1961 and 1966 (Confrey, 1966). Although manuscripts during the early days of the Internet were posted on authors' personal sites, the lack of functionalities related to their supervision, traceability, persistence and discoverability limit their validity as instruments for open science.

At present, the defining feature of preprints is their availability on a public server. The origin of the phenomenon is usually defined as the creation of arXiv.org in 1991 (Ginsparg, 2011). The rapid acceptance of the model encouraged its expansion into other disciplines, as in the case of the Social Sciences Research Network (SSRN) in 1994 (www.ssrn.com) and Research Papers in Economics (RePEc) in 1997 (www.repec.org). However, these repositories also host documents that are not necessarily preprints. More recently, fresh impetus has been brought by initiatives such as bioRxiv in 2013 (www.biorxiv.org), socArXiv in 2016 (https://osf.io/preprints/ socarxiv/) or medRxiv in 2019 (www.medrxiv.org) to name but a few. Rodríguez (2019) classifies preprint servers in five categories: nonjournal preprint servers (e.g., arXiv.org), journal preprint servers (e.g., Sage's Advance), mixed servers (e.g., GitHub and ResearchGate), subject repositories (e.g., E-LIS), and national and regional repositories (e.g., Chinese Preprint Server).

Preprint servers are not an alternative to journals, but an earlier step in the scholarly communication process. In fact, journals may be seen to have a role in the growth and improvement of preprints. First, they consider for publication manuscripts circulated as preprints and facilitate peer review and validation. Second, they link through persistent identifiers the preprint and the published version. Some preprint servers are also starting to consider this issue, and encourage the updating of manuscript versions (Neylon et al., 2017).

Most publishers' editorial policies deal with the submission of manuscripts previously available as preprints or resulting from conference proceedings when discussing multiple submission and prior publication. In general, publishers are willing to consider for publication this kind of material. For instance, as a response to Sheldon (2018) who warned that preprints could promote confusion and distortion, all the journals of the Microbiology Society jointly published an editorial (Fry et al., 2019) praising the role of preprints in enhancing scientific communication. Similarly, Nature journals (2021) 'encourage posting of preprints of primary research manuscripts' and Wiley (2021) 'believes journals should allow for the submission of manuscripts which have already been made available on such a [preprint] server'. In the case of conference proceedings, Nature (2021) consider this kind of work for publication provided there is 'substantial extension of results, methodology, analysis, conclusions and/or implications'. In a similar fashion. IEEE (2021) states that authors must disclose whether there are prior conference papers including information 'that very clearly states how the new submission differs from the previously published work(s)'.

Any transformation in the scholarly communication chain will depend on the engagement of different players, including authors, readers, publishers and reviewers. Given the differences between the natural sciences, social sciences and humanities, disciplinary studies should be carried out to understand the opinions and behaviour of the actors involved (Laporte, 2017). Sarabipour et al. (2019) focused on perceived opportunities and risks amongst early-career researchers. They found a growing appreciation for and adoption of preprints, although a minority of all articles in life sciences and medicine are preprinted. A report by ASAPbio (Funk et al., 2020) presents preliminary results from a survey of 546 individuals. They observed that perceived benefits and concerns around preprints change depending on whether researchers have already posted a preprint or not. Preprint authors are less likely to have concerns than those who have not published a preprint, although premature media coverage is the top concern for both groups. Chiarelli et al. (2019) interviewed a sample of key stakeholders in disciplines where the use of preprints is growing, such as biology, chemistry and psychology. Results showed that the preprints landscape is evolving fast, but disciplinary communities are at different stages in the process. All these studies point towards the need to investigate the effects of disciplinary cultures on the adoption of preprints.

In the past few years, terms such as unconferences (Budd et al., 2015), amplified conferences (Guy, 2011), flipped conferences (Thomson, 2014) or non-real time web conferences (Arnal et al., 2020) have been used to refer to formats that aim to increase the interaction amongst delegates in scientific meetings. These models seek to make the most of the value of gathering a group of people together or to trigger a similar effect in an online environment (Mulgan, 2015). The circulation of accepted papers as preprints before holding a conference may reduce the time devoted to presentations in the form of plenary lectures. Saved time can be devoted to more lively interaction amongst participants, so preprints might become a new component of future scholarly conferences. Sohn (2018) describes how emerging innovations are helping conferences to run more efficiently in such a way. As innovation and new ideas bloom when people get together, new tools such as preprints may not threaten face-toface conferences but just could add real value to gathering people in one place at the same time.

This study describes a hands-on experience on the convergence between preprints and conference proceedings, a topic hardly discussed in the literature. This gap is surprising since most of the strengths of preprints coincide with traditional reasons for organizing and attending conferences. The consideration of conference papers as a form of preliminary dissemination of research results is similar to the purpose of preprints, and public debates at conferences may be assimilated to the open peer review process that preprints are subject to.

Frequently, fully copyedited conference proceedings are not published, and organizers limit themselves to promoting a book of abstracts of the contributions. As an alternative to proceedings, they often reach agreements with journal editors to publish monographic issues on conferences or consider conference papers for publication as articles in regular issues. In both cases, the conversion of conference papers into journal articles is not automatic. Some studies have measured the degree of such conversion, especially in fields such as medicine where conferences are a preliminary phase in the communication of research results, finding rates of transformation around 40%, for example 43.24% (Chen et al., 2020), 43% (Javidan et al., 2019), or 37.3% (Scherer et al., 2018). Other studies measured the conversion of preprints into formal journal articles, and found higher conversion rates compared to conversion of conference papers to published articles: Lin et al. (2020) working with data on arXiv cases found a rate of 77%, and Anderson (2020) found that approximately 70% of bioRxiv preprints become journal articles. In both cases, the reported changes between the preprint and the formal paper were minimal, since the authors may be using the preprints platforms to establish priority rather than as a community-driven source of prepublication review. These results suggest a differentiated pattern amongst authors contributing to conferences and those who deposit preprints, despite the common ground between them.

METHODS

To gather information on the behaviour and opinions of the authors of papers regarding the conference model employed in EDICIC 2019, an online survey (https://doi.org/10.6084/m9. figshare.13564199.v1) was sent to the 102 corresponding authors of the 113 papers delivered at the conference. Since the purpose of the study was to improve our understanding of the preprint submission process and to gather opinions on the suppression of proceedings, the survey was not sent to poster authors, participants in the doctoral consortium or attendees. Sending the survey only to corresponding authors and not to co-authors limited the replies to one per paper. This avoided duplicates and inconsistencies amongst authors of the same contribution.

To facilitate replies, two identical versions of the questionnaire were prepared, one in Portuguese and one in Spanish. The link to the survey was sent in a personalized email message on 1 May 2020. After two reminders during that month, 66 replies were collected, which represents a response rate of 65%. Given the limited number of replies and the case study nature of the research, the results were analysed qualitatively to enlighten the debate on the future of scholarly conferences.

RESULTS

Profile of authors

A total of 225 paper proposals and 21 posters were submitted to the conference. Once reviewed, 113 papers by 292 authors and 58 posters by 155 authors were accepted; some authors participated in more than one paper, one poster or in both types. Some paper proposals were accepted as posters, hence more posters were accepted than submitted. The number of delegates at the conference was 372, including at least one author per contribution, members of the organizing committees, PhD students in the doctoral consortium and other attendees who had not contributed. The authors of the 113 accepted papers came mostly from Brazil (188 authors, 64%), Spain (58, 20%) and Portugal (38, 13%). The eight remaining authors came from Argentina, Canada, Italy, Netherlands and Puerto Rico.

Sixty-six corresponding authors replied to the questionnaire, 53 (80%) to the Portuguese version and 13 (20%) to the Spanish version. This distribution was similar to that of papers in each language. Forty-six respondents provided demographic information. Most of them (28 respondents, 61%) were academics, followed by PhD students (8, 17%, even though there was a doctoral consortium, some students delivered papers at the 'regular' conference) and practitioners (6, 13%). Four respondents (9%) ticked the 'others' option. Regarding their professional background, there was a balance between participants with fewer than five years of experience in their current position (13, 28%), those with five to fifteen years of experience (17, 37%) and those with over fifteen years of experience (16, 35%).

Previous experience in the use of preprints

The first three questions in the survey dealt with respondents' previous experience in the use of preprints (Fig. 1). The results show low familiarity with reading preprints and nearly no

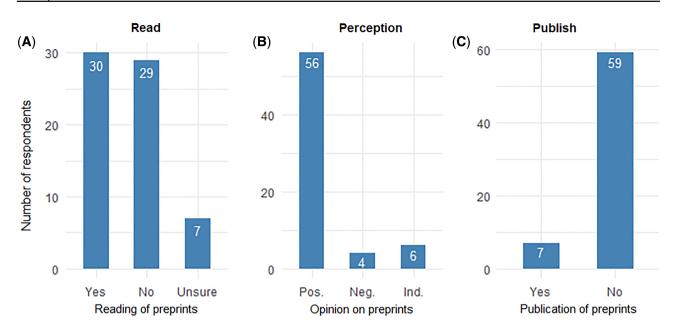


FIGURE 1 Previous experience in the use of preprints.

experience with publication. Just under half of respondents (30, 45%) had read preprints published by other authors whereas 29 participants (44%) had not. Seven respondents who stated they were unsure about whether they had ever read a preprint illustrate the lack of familiarity. Just seven respondents (11%) had published preprints in the past whereas the overwhelming majority had not (59, 89%). Despite this lack of familiarity, the perception of the reliability and quality of preprints circulating in LIS was largely positive (56, 85%), with just four respondents (6%) giving a negative opinion.

Seven respondents who stated they had previously published a preprint (Fig. 1C) were asked about their reasons for doing so. The most frequent reasons were promoting open access (five replies) and enhancing the visibility of research outputs (five replies). To a lesser extent, respondents indicated that they expected to obtain feedback from colleagues (two replies), to accelerate the dissemination of results and avoid publication lags (two replies) and to increase citations (two replies). Regarding their satisfaction in reaching these goals, five respondents moderately agreed with the statement that publishing preprints had fulfilled their expectations. One respondent strongly agreed and another one expressed indifference.

Despite the relatively low number of respondents who had published preprints, they had used a wide range of repositories: E-LIS (three respondents), OSF Preprints (two respondents), Zenodo (two respondents), institutional repositories (two respondents), arXiv.org (one respondent) and LISSA (one respondent).

Deposit of conference papers as preprints

According to the data submitted by corresponding authors to prepare the conference programme, 86 accepted papers (76%)

TABLE 1 Distribution of repositories amongst the preprints listed at the conference programme

Repository	Papers	%
E-LIS (http://eprints.rclis.org)	48	56%
LISSA (LIS Scholarship Archive) (https:// osf.io/preprints/lissa/)	15	17%
OSF Preprints (https://osf.io/preprints/)	11	13%
Author's institutional repository	5	6%
arXiv.org (https://arxiv.org)	2	2%
Dropbox (www.dropbox.com)	2	2%
Zenodo (https://zenodo.org)	2	2%
MDPI Preprints (www.preprints.org)	1	1%
Total Papers deposited as preprints	86	76%
Total Non-deposited papers	27	24%

Abbreviation: LIS, library and information sciences.

Note: Boldface indicates the total grant amount for those papers deposited as preprints and those Non-deposited.

were deposited in a preprint server before the conference. As shown in Table 1, E-LIS was the most popular choice for depositing the preprint.

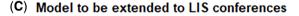
When survey respondents were asked whether they had deposited the preprint of their paper prior to the conference, 48 (73%) replied affirmatively. This share is similar to the actual data obtained from the conference programme for all contributions presented (Table 1). The remaining 18 respondents (27%) were asked about their reasons for not depositing the preprint. The most frequent reasons were lack of time (five replies) and lack of recognition of preprints in research assessment (five replies). To a lesser extent, participants stated fear of not being able to publish their results at a later stage in journals that require 'original' articles (three replies) and lack of clarity in the organizers' instructions (two replies). Although the option was available in the questionnaire, no respondent chose to justify their behaviour by arguing the need to protect intellectual property and avoid plagiarism.

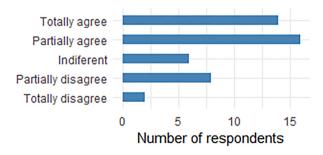
Survey participants were asked whether they had experienced any problems when they deposited their preprints. Six respondents replied that they had experienced 'many' difficulties whereas 21 had experienced 'some' difficulties. In an open-ended question, participants detailed these difficulties. Some of them were associated with being unaware of an adequate preprint server:

- Some platforms did not accept preprints in Portuguese. As a result, I had trouble in finding a suitable platform. I also had some minor problems with the submission.
- I had difficulties finding a suitable platform to publish the preprint.
- To find the most suitable server for the submission.
- Difficulties in finding a repository.
- I had to submit to two servers, since the first only accepted texts in English. It took a week longer than the conference deadline to get the preprint published.

In other cases, participants faced technical difficulties in dealing with the platforms:

- The preprint server is not 'friendly'.
- I was not able to make the preprint public. The link did not work.
 - Totally agree Partially agree Indiferent Partially disagree Totally disagree 0 5 10 15 20 25 Number of respondents





- Problems dealing with the server, procedures were slightly confusing.
- Difficulties due to lack of experience in the process.
- Ignorance of the procedures and software involved.
- The procedures were not clear.
- It was difficult to understand how the server works, the deadline was short and there were issues relating to copyright.
- Technical problems with the server (such as an invalid ID), that were not such a great deal.

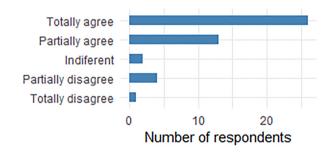
Perceptions on the use of preprints in EDICIC 2019

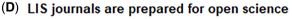
Some questions requested survey respondents to express their agreement or disagreement with the use of preprints in EDICIC 2019. One question was whether the conference had run more smoothly because the authors had published preprints of their papers in advance. Another was whether reducing the time slots assigned to authors to deliver their presentation could enable moderators to encourage more lively debate and interaction, provided the delegates had read the preprints.

Most respondents agreed with both statements (Fig. 2A,B). Thus, 47 participants (71%) agreed, either totally (23, 35%) or partially (24, 36%), with the idea that the conference ran smoothly because of the communication model employed. Similarly, 39 participants (85% of 46 replying to this question) agreed either totally (26, 57%) or partially (13, 28%) with the reduction of time slots for presenters to encourage debate with attendees.

Two additional questions asked respondents whether they would like to see this model extended to other LIS conferences

(B) Time limits facilitated debate





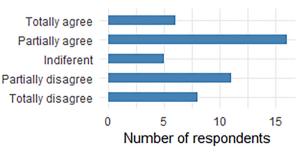


FIGURE 2 Perceptions on the use of preprints in EDICIC 2019. LIS, library and information sciences.

(A) Conference run more smoothly

and whether they believed LIS journals were prepared for a scholarly communication model aligned with the principles of open science (Fig. 2C,D). In relation to implementation of the model used in EDICIC in other LIS conferences, 30 respondents (65% of 46 replying to the question) agreed either totally (14, 30%) or partially (16, 35%). However, 10 respondents (22%) disagreed with this idea either partially (8, 17%) or totally (2, 5%). The alignment of LIS journals with the principles of open science was more controversial: 22 respondents (48% of 46 replying to this question) agreed with the statement, whereas 19 (41%) disagreed.

Publication of preprints as journal articles

Each corresponding author was allowed to submit up to two contributions to the conference. Seven of the 66 survey respondents had taken advantage of this opportunity, so the total number of submissions by respondents was 73 papers. At the time of data collection in May 2020, 10 months after the conference, 34 of these papers (47%) had been submitted to a journal. All papers had been submitted to Portuguese and Spanish LIS journals that had agreed to consider for publication contributions from the conference. One author published their contribution as a book chapter.

Authors who had deposited their preprints to the conference in advance were more likely to submit their papers for publication as journal articles. Figure 3A shows that 26 of the 48 authors (54%) who had deposited their preprint subsequently submitted it to a journal. Amongst the 18 authors who had not deposited their preprints, just five (28%) subsequently submitted their paper for publication as a journal article. At the time of survey data collection, 14 manuscripts had been accepted (nine were already published and five were being processed), whereas another one was pending minor changes. At the other end of the spectrum, receipt had been acknowledged for 14 manuscripts and five had been rejected, either straight away by the editor or based on the advice of reviewers.

Survey respondents were asked whether the submitted manuscript had been improved by the feedback obtained in the conference or the publication of the preprint. Unfortunately, just four participants answered this question, two of them positively, although they did not provide any further information on how the manuscript had been improved.

Open comments

A final open-ended question asked participants to provide any further comments. Sixteen participants took advantage of this opportunity to discuss several issues that may be summarized as follows:

- There are concerns about the lack of recognition of participating in EDICIC if conference proceedings are not published. Authors fear that preprints do not have the same level of recognition as proceedings published in reputed conference series:
 - a. I think that EDICIC is a very important conference but, if it uses this model, it does not value the papers. This is my opinion after submitting and presenting a contribution.
 - b. The EDICIC conference is highly respected amongst researchers. However, if proceedings are not published, there is a risk of losing participants. EDICIC is an expensive event for master's degree and PhD students. Therefore, it should offer a good publication output to authors.
 - c. Within the current research evaluation system, having proceedings published at the time of the conference or shortly afterwards give us more security towards research assessment.

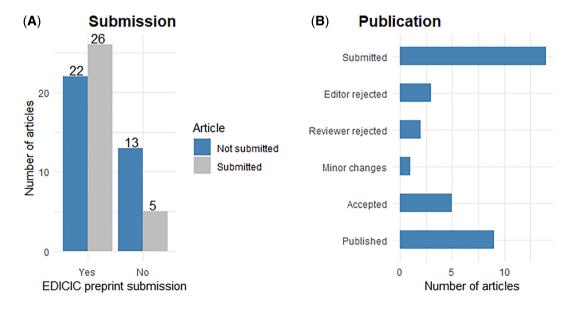


FIGURE 3 EDICIC 2019 conference authors who had submitted their presentations to journals for publication: (A) those who had posted them onto preprint platforms in advance of the conference, and (B) the publication status of those who had submitted to journals at the time of the survey.

- 2. Some respondents complained about the extra effort required to go through a double assessment: that of conference organizers and that of journal reviewers. Respondents pinpointed the risk of losing delegates if researchers considered it was easier to submit directly to a journal without attending conferences, based on a preprints model.
 - a. Preprints are not recognized in research evaluation and authors have to modify their paper to submit it to a journal. The work is double: first the conference and then the journal. A student spends more time and money in this process, so some students may prefer to submit directly to a journal to save time and expenses.
 - b. I felt like I had a double task [...]-(1) to submit to the conference; (2) to submit to the journal-and I felt I could not fail in either of them. We make a big investment, and the reward may not meet our expectations if conference proceedings are not published. The preprint is published but the article may not be-the author, therefore, does not feel rewarded, but 'punished'. A formula to guarantee the coexistence of preprints and proceedings should be envisioned.
- 3. The link between journals and the conference should be stronger. Some participants suggested that, if proceedings are to be eliminated, conference organizers should reach agreements with journal editors to facilitate the publication of papers as articles. Some respondents emphasized that the process of acknowledging receipt, manuscript review and article publication by journals needs to improve.
 - a. Difficulties relate to publishing delays and finding a journal that considers preprints. My suggestion is that EDICIC arrange with some journals to publish a monographic issue with the papers from the event. Publication is very important for researchers. If publication is limited to a preprint, EDICIC faces the risk of losing interest amongst researchers.
 - b. I finally submitted the paper, both to a preprint server and as an article to one of the journals considering papers from the conference. Since 8 June 2019, the date of submission, the article has been awaiting review (survey reply received in May 2020). Maybe there is a need for a closer link between the conference and the journal
 - c. My suggestion is that conference organizers arrange with editors of good journals to publish the papers.
 - d. Another issue is that the conference suggested some journals where the papers could be eventually published and this was not the case: my second paper has been under review for a year in Journal X, without any progress. This is very damaging since attending the conference is an investment for the researcher—in terms of money and time conducting the research—so it is expected that this effort will be rewarded with a publication.
- 4. The preprints model breaks a tradition that offered an overview of the state of the discipline in Latin America. Some respondents regretted that the suppression of proceedings prevents the perusal of all contributions in a single volume and the development of future studies on the evolution of EDICIC conferences.

- a. I agree with the idea of preprints, but I enjoyed finding all the papers in the proceedings.
- b. The use of preprints and the availability of papers before the event is very valuable. My only complaint is the lack of proceedings, I strongly disagree with this decision. Proceedings are frequently used as a research object for new studies (as in the case of one of my papers) and not having all the papers in a single volume is extremely detrimental to this kind of research
- 5. The culture of preprints and open science is not yet consolidated amongst some LIS journals. According to the experience of some respondents, some journal editors are reluctant to consider for publication manuscripts that have been deposited in a preprint server. This calls into question the innovative proposal tested in EDICIC 2019.
 - a. I think journal editors are not ready. In my case, I was asked to remove the preprint immediately [...] because they—wrongly considered that I was trying to publish an article that was already published (they found the preprint on the internet and made this assumption). I had to explain that this was not the case.
- 6. The conference failed to increase interaction and debate amongst delegates, which was the ultimate aim of the experience. However, in the closed questions, most respondents agreed with the idea of making the full text of the papers available before the event. They also remarked in open-ended comments on the lack of commitment of delegates to read the contributions in advance. They highlighted the lack of time during the sessions, limiting the depth of debate.
 - a. I like this topic. I believe in new digital scholarly communication channels. The fact that preprints come from academic institutions validates open access contents, but self-published electronic books are questioned. We need mechanisms to validate this kind of publication.
 - b. I think the preprint model worked better to make papers accessible in the long term rather than to facilitate previous reading. Debate arises during face-to-face presentation when it is possible to discuss the paper with the authors. I think face-to-face presentation has a value that is difficult to replace.
 - c. Debate with authors was enriching, especially thanks to prereading, but the time for presentation was short.
- 7. The development of the Covid-19 pandemic led to more general suggestions.
 - a. The coronavirus crisis will increase the difficulties of students to obtain funds, so the event has to provide returns in the form of publication. Reviews are excellent. Reviewers make ethical, constructive, respectful evaluations. If organizers believe that the preprint model is adequate, I suggest that they should allow online presentations by students so that they have less expenses.

DISCUSSION AND CONCLUSIONS

1. Few authors participating in EDICIC 2019 had previous experience in the use of preprints: just 11% had published preprints before their participation at the conference. The consolidation of preprints for faster dissemination of research implies important changes in scholarly communication that affect journals and conferences. The penetration of this type of document in LIS is weak, so the experience described in this article was a kind of initiation journey for most participants.

- 2. Conference authors had a pretty positive reaction to the communication model based on preprints proposed for EDICIC 2019: 76% of the contributions were deposited in a preprint server before the conference. The number of papers uploaded to preprint servers was high, despite being the first experience with this format for most participants. Because of that, it's interesting to observe some of the barriers that participants highlighted as limits to a wider use of preprints. First, there is a lack of knowledge amongst authors about how preprints work. Less than half the respondents had read preprints and even fewer had published them before the conference. The diversity of available platforms does not seem to contribute to the consolidation of preprints. The main obstacles for authors who aimed to deposit their preprints was the difficulty in identifying a suitable platform and, once located, in technical problems resulting from the need to become familiar with tools that, albeit similar, offer diverse facilities. The dominance of E-LIS as the most frequently used repository suggests that this is the most familiar to respondents, both as readers and authors. Latin America provides a large share of the contents in E-LIS, although these contents are mostly reports, postprints, slides and posters.
- 3. The new model of participation in EDICIC 2019 was not fully satisfactory. Although most survey respondents were in favour of the model implemented in EDICIC 2019, the results of the experience in terms of increasing interaction and debate amongst participants were limited. Beyond the publication of preprints, the success of the model requires participants to read the preprints before the conference so that more time can be devoted to debates with the speakers. Despite the attempts made by the organization, participants did not really engage in preconference reading of the preprints and the time span allocated to the debates was scarce. Both changes require a maturation process amongst conference participants that will not be immediate. Additionally, the economic sustainability of most conferences depends on registration fees by authors and increasing the time devoted to debate would require accepting fewer contributions or extending the duration of the event.
- 4. Ten months after the conference, only 21% of the survey respondents had their contribution accepted or published, out of 47% who had submitted a manuscript to a journal. This outcome is below the organizers' expectations based on the strengths of preprints as a vehicle to speed up the publishing process. The information provided by authors reveals the perception of a high degree of untrustworthiness amongst LIS journal editors towards preprints. The extended round of contacts with Latin

American LIS journal editors to include them in the conference website as considering preprints for publication showed that some of them are reluctant to do so and most fail to have a preprint policy. Some journal editors consider preprints as a previous version of a manuscript and reject preprints based on the imperative of only publishing original work. This behaviour confounds authors who are afraid of not being able to publish their work if it is deposited as a preprint. In the case of EDICIC 2019, some authors had to remind journal editors of their commitment to consider preprints delivered at the conference. Despite the larger share of papers submitted to journals amongst the authors who had deposited their preprint previously to the conference, the low number of manuscripts submitted to journals calls into question the success of the proposal made at EDICIC 2019 to transform enhanced contributions into journal articles. Actually, amongst the participants' open answers to the survey, the notion that the submission of a preprint is an unwelcome additional step appears recurrently.

5. Conference proceedings published in a traditional format are still attractive to a large share of the EDICIC participants, especially compared to the dissemination of their contributions in the form of preprints. Preprints have not reached the level of recognition of conference proceedings yet for the target of participants at EDI-CIC conferences. Although proceedings have little value in research assessment, the value of preprints is even less. The suppression of proceedings combined with travel and registration expenses may be a serious problem for the survival of conferences. If proceedings are not published, many researchers may be tempted to ignore conferences in favour of submitting directly to a journal. In sum, researchers' behaviour is conditioned by criteria applied in research evaluation. It will be difficult to obtain authors' commitment to the publication of preprints and, in general, to open science targets such as open access, data sharing or open peer review, if involvement in these tasks is not reflected in the criteria applied by research assessment bodies.

AUTHORS CONTRIBUTIONS

Cristóbal Urbano: Conceptualization, Methodology, Formal analysis, Writing - Original Draft, Writing - Review & Editing. Sara Tafalla: Investigation, Data Curation, Formal analysis, Writing -Review & Editing. Ángel Borrego: Methodology, Formal analysis, Validation, Visualization, Writing - Original Draft, Writing Review & Editing. Ernest Abadal: Formal analysis, Validation, Writing - Review & Editing.

Survey and consent

The survey form including the clause to record informed consent can be downloaded from Figshare: https://figshare.com/ articles/dataset/FormularioEncuestaEDICIC2019_pdf/13564199.

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