Librarians’ perceptions on the use of electronic resources at Catalan academic libraries: results of a focus group
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Abstract
Purpose - The aim of this paper is to expand on previous quantitative and qualitative research into the use of electronic information resources and its impact on the information behaviour of academics at Catalan universities.

Design/methodology/approach - A focus group was set up, comprising seven members of the staff of five Catalan academic libraries.

Findings - Participants confirmed the increase in the amount of journal reading among academics, due to the increase in the number of electronic journals available and the improvement in the tools for locating and accessing this information, especially off-campus access. Librarians were well aware of the importance of Internet search engines as the first information source for academics. They regretted having failed to provide users with a single interface to all information products. Academics’ perceptions of the usefulness of bibliographic management software have increased dramatically during the last few years, especially among PhD students. Finally, librarians stated that most of the complaints they receive from users were to do with platform breakdowns, difficulties in accessing resources off-campus, and discontinued resources.

Originality/value – While a large number of studies have measured the use of electronic journals and databases and have surveyed users, few studies have involved librarians in order to triangulate these results.

Keywords: academic libraries, databases, electronic resources, electronic journals, focus groups.

Article Type: Research paper

1 Introduction
During the last two decades, the amount of electronic information available in academic libraries and the diversity of tools to locate and access this information have increased tremendously. Both the increase in the amount of information available and the improvement in its accessibility have had a huge impact on academics’ information behaviour. In our view, it is important to investigate these changes both in order to redefine the collections and services provided by academic libraries and to improve the technological platforms that make these electronic contents available to users.

The transition from a scholarly communication model based on printed sources to another one based on electronic resources — mainly electronic journals and databases at the moment, but with the probable emergence of electronic books in the foreseeable future — has been studied in depth. Research based on statistics of the use and citations
of electronic resources and on user surveys has already evidenced an eager migration from print to electronic sources. Users show a high acceptance of electronic resources and an unwillingness to return to print-only versions. In general, electronic information resources have been rapidly adopted in academic spheres, though behaviour varies depending on the discipline (Tenopir, 2003).

Studies that have centred on how the adoption of electronic information resources has affected academics’ information behaviour show that faculty make fewer visits to the library and read more than in the print era across a broader number of journals. Most academics report using generic databases to locate information, while a few rely on smaller discipline-specific databases (Brennan et al., 2002).

Most users of electronic journals have been qualified by Nicholas et al. (2005, 2006) as “bouncers” or “checkers”, who either obtain what they want or leave after a brief visit. Similarly, reviewing the literature on the behaviour of electronic journals users, Rowlands (2007) concluded that although scientists read more and more primary journal materials from a wider range of sources, they spend less time reading per article and use fewer specialist secondary services. Electronic versions have rapidly displaced print journals, with convenience and digital visibility being critical factors in the new information landscape. However, there is a need for greater sensitivity to disciplinary variation, as it helps to explain some of the scholarly communication preferences of different user groups.

This paper aims to expand on previous research into the impact of electronic resources on the information behaviour of academics at the universities that are members of the Consortium of Academic Libraries of Catalonia (CBUC). The CBUC comprises the eight public Catalan universities and the National Library, though it allows other institutions to participate as users. In an initial study based on statistics of use of electronic journals licensed by the CBUC during the period 2000-2003 (Urbano et al., 2004), the results showed a huge increase in the number of journals available thanks to consortial licenses, a constant increase in the number of articles downloaded during that period, and a large use of journals to which the libraries had not previously subscribed. At the same time, the consumption of electronic information was found to be more dispersed than information on paper (Borrego et al., 2007a). A further quantitative survey of the academic staff at the universities belonging to the CBUC (Borrego et al., 2007b) showed a high level of familiarity with, and extensive use of, electronic journals among academics. This behaviour seemed to be closely related to age and discipline, with younger scholars and those working in sciences being the most active users.

These results were triangulated with additional qualitative data on the behaviour and opinions of academic staff about electronic journals. An open-ended qualitative e-mail survey was carried out and interviews were conducted with a sample of eleven academics. More specifically, the study addressed the issue of how the increase in the number of electronic journals available has modified academics’ information behaviour on four fronts: the amount of reading, the diversity of sources consulted, the ways of keeping up to date, and the personal management of scientific information (Ollé et al., 2009). The results show that the increase in the amount and accessibility of information available has led to an increase in the amount of journals and articles read. At the same time, the information-seeking behaviour of scholars is changing in the electronic environment: web browsing, TOC e-mail alerts and searching have become the most
popular options for keeping up to date. The preference for Internet search engines and the criticism of the complexity of other search interfaces evidence the preference of users for a single point of access to the electronic collection. Finally, the results highlighted the need to invest more effort in helping users to deal with the management of information, which was one of the main gaps detected.

The aim of this paper is to consider previous results from the point of view of a sample of librarians involved in the management of electronic resources at Catalan academic libraries. Academic librarians are in an excellent position to corroborate or qualify the information provided by scholars on how electronic information sources affect their information behaviour, and so we expected that their observations would provide further insights on the topic.

2 Methodology

In order to contrast the results from previous qualitative research with the views of a sample of librarians involved in the management of electronic resources, a focus group was set up with seven members of the staff of five Catalan academic libraries. The focus group is a qualitative research method used to explore the knowledge and opinions of a small set of individuals in regard to a particular topic. Participants are selected on the basis of common interests or activities and respond during one or two hours to open-ended questions asked by the moderator (Glitz, 1997). Seggern and Young (2003) discuss the major issues in planning a focus group and offer an annotated bibliography of focus group literature in library settings. More recently, Walden (2006) has reviewed focus group interviewing in the library literature between 1996 and 2005. Walden states that the focus group method can be successfully employed in a wide range of projects within librarianship although, in comparison to other social sciences, libraries have not fully exploited this approach to date.

One of the main advantages of the focus group is that sessions can be conducted relatively quickly, especially in comparison to other research methods such as surveys and interviews. This reduces the cost and the time needed to complete the project since, as Pickard (2007) points out, the method is able to gather information from different sources at the same time. However, the main problem lies in establishing whether participants really say what they think, or just say what they think the rest of the participants or the researchers want them to say.

The aim of the study was to triangulate previous results based on usage data and surveys of academics with the views of librarians in order to corroborate or modify previous conclusions. By triangulation we understand the use of multiple sources of data — usage data and academics and librarians’ statements — and multiple research methods — surveys, interviews and a focus group — in order to gain more insight into the topic. The use of mixed quantitative and qualitative methods aims to provide a deeper understanding of the phenomenon studied (Fidel, 2008).

A set of possible participants in the focus group was suggested by the CBUC staff, who are in close contact with the librarians involved in the management of electronic resources at each university. Twelve librarians from ten universities were initially invited to participate in the study, but due to difficulties in the arrangement of a suitable date for all of them the sample was finally reduced to seven people. Although they worked in different sections of the library, all of them were involved the management of
electronic information resources at their universities. They all had lengthy experience in the library environment.

Table 1. Focus group participants

| University                               | Librarians | Position                                      |
|------------------------------------------|------------|-----------------------------------------------|
| Autonomous University of Barcelona       | 2          | Projects unit                                 |
| Open University of Catalonia             | 1          | Collection and digital repositories management |
| Polytechnic University of Catalonia      | 1          | Head of the library                           |
| University of Barcelona                  | 2          | Projects management                           |
|                                          |            | Collection management                         |
| University of Lleida                     | 1          | Librarian                                     |

The focus group meeting was held in March 2009 on the premises of the Faculty of Library and Information Science at the University of Barcelona and lasted for two hours. The focus group discussion was structured following the four main topics targeted in previous studies: the amount of reading, the diversity of sources consulted, the ways of keeping up to date with current literature and the personal management of scientific information. User training emerged as an additional topic of great interest for librarians and was discussed in further detail. Finally, participants were asked about the main suggestions and complaints expressed by academics in previous surveys about library electronic resources. All librarians received a small gift to thank them for their time and for their willingness to participate.

3 Results

Amount and sources of reading

In general terms, the librarians participating in the focus group confirmed the increase in the amount of journal reading among academics already identified by previous research. The reasons librarians offered for this phenomenon were basically the ones provided by surveys of academics: first, the increase in the number of electronic journals available thanks to consortial licenses, and second, the improvement in the tools for locating and accessing this information. On this point, librarians found that the availability of a proxy server that allows academics to access electronic resources off-campus, especially from their homes, is extremely important in explaining the increase in article download figures. However, librarians also pointed out that the heavily used sources continue to be the same as in the print era. Meanwhile, some journals are sporadically or never used at all, although librarians consider that the amount of scattering of the literature used has increased. They stated that academics now read journals that they would not have asked for if the journals had not been brought into the collection thanks to consortial licenses.

Use of print journals is increasingly restricted to old volumes that are only available in paper form (while users increasingly request access to electronic backfiles) and to disciplines where the supply of electronic journals is still scarce or graphical information is critical, as in the case of architecture or design. Librarians also identified some pockets of lecturers who are reluctant to move into the electronic environment, mentioning academics in the humanities as an example.

Librarians certified the well-established phenomenon of the fall in library visits as a consequence of electronic access and showed their concern for the future of the library.
as a physical space. However, they stated that this phenomenon above all affects academics, while students continue to make use of the physical library facilities in order to study and work in groups. Although our research was centred on academics’ behaviour, at this point several librarians referred to the fact that the increasing use of virtual learning environments, where students find direct links to recommended reading sources, is reducing the levels of information literacy among students. As lecturers provide students with direct links to the materials they should read, their need for library skills lessens. Lecturers’ reading recommendations are clearly reflected in journal downloading figures which show isolated, sudden increases that seem to respond to these recommendations. Librarians were well aware of the critical importance of lecturers in recommending information sources, a role than cannot be supplanted by the library.

Previous research showed that the main use of electronic resources referred to subscribed journals and databases, while academics seem to pay little attention to open access digital repositories. However, librarians expected an increase in the use of these repositories as conference proceedings become widely available through them.

Ways to keep up to date with current literature

Google and Google Scholar were widely cited by surveyed academics in previous research as the main sources for locating scientific information (and indeed any other kind). Librarians participating in the focus group were well aware of the importance of these tools as a first information source, although they reported that academics later refer to other library tools, such as A to Z lists of journals which seem to be highly appreciated. According to librarians, users continue to find catalogues hard to use and often complain that, in their view, library tools seem to be designed to obstruct access to information instead of facilitating it. In fact, librarians themselves reported using Google for solving their own information needs. Although federated search engines and link resolvers are improving the accessibility to information by unifying search interfaces, librarians believe that they are unlikely to surpass the apparent ease of Google. Librarians considered they had failed to provide users with a single, easy, intuitive interface that allows access to all the library information products.

Previous research had shown that a number of academics are unaware that most of the electronic resources they consult are accessible thanks to institutional subscriptions. The transparency in electronic accessibility of information and the fact that the physical library has disappeared from the life of many scientists has led some of them to forget its importance in providing access to electronic resources. Librarians considered that the fact that a large amount of articles are found through Google, without the need for library tools, and are downloaded from home increase the feeling that access is for free.

When asked about the use of personal information services offered by publishers and libraries — such as e-mail alerts, RSS feeds and so on — the first impression of most librarians attending the focus group was that academics make intensive use of these features. However, not all librarians agreed with this view. Factual data provided by one of the participants on the number of profiles created in one of their subscribed platforms indicated little use of these services in relation to the general use of the product. In fact, these data were coincident with the results of surveys and interviews which indicated that academics do not use these services because they are bombarded with messages that they do not have the time to read, so they prefer to conduct searches when they
actually need information. Additionally, librarians mentioned receiving complaints from academics who set up profiles for personalizing products that were later discontinued, leading to a feeling of frustration.

**Management of scientific information**

Previous research had shown that academics have many problems in managing personal scientific information. They themselves describe their techniques as “primitive” or “rudimentary” and the vast majority fall into one of these three categories: those who continue to use the traditional method of folders (now electronic folders); those who use some kind of bibliographic management software; and those who use no information management system at all.

However, librarians stated that academics’ perceptions of the usefulness of RefWorks — the bibliographic management software consortially licensed by Catalan academic libraries — has increased tremendously during the last two or three years. Librarians point to the fact that training sessions for the product are always full to stress its growing acceptance among lecturers. As time goes by, academics are getting more familiar with its advanced features, such as sharing folders and documents with colleagues. According to librarians, the use of RefWorks is especially high among PhD students.

The management of scientific information is closely related to user training, a topic which was not initially included in the research but which appeared repeatedly throughout the focus group. Librarians’ experience seemed to indicate that, in order to be valuable and successful, training sessions should be product-specific and tailored to the necessities of small groups of users. Users ask for specialized training sessions on the tools they need and are unlikely to attend more general sessions. At most, some universities organize short sessions, around thirty minutes long, in order to give a general overview of the library products and attract assistants for more detailed, tailored sessions.

**Suggestions and complaints**

Previous surveys and interviews with academics finished by asking them for suggestions on how to improve access to scholarly electronic information and to express any complaints they may have had regarding access to this information. Most academics expressed their high opinion of the staff and services offered by their academic libraries, a view that is shared by librarians who believe that lecturers greatly value the current situation in which they have access to more information than at any time before.

However, librarians also stated that the overwhelming majority of messages received in library mailboxes refer to problems in access to electronic resources. According to previous research, most complaints by academics refer to the diversity and difficulty in dealing with search interfaces. Although librarians shared this perception, they stated that most of the complaints they receive are more specific and usually refer to platform breakdowns, difficulties in accessing resources off-campus, discontinued resources and so on. Librarians understand these complaints, since they themselves have difficulties in retrieving the articles they are asked for or are not aware of all the access issues related to electronic resources; this means that it is sometimes users who discover problems rather than librarians. Occasionally users make complaints because they have not read the products’ conditions of use and grow frustrated when access fails due, for instance,
to publishers’ embargoes. Again, the problem often lies in the fact that many users access subscribed resources through Google, rather than via library web pages.

4 Discussion and conclusions
The aim of this paper was to expand on previous quantitative and qualitative research on the use of electronic information resources in Catalan academic libraries. In order to do so, a qualitative focus group was set up comprising seven members of the staff of five Catalan academic libraries. Academic librarians are in an excellent position to validate or qualify scholars’ statements.

Although participants’ universities belong to a consortium, they have particular characteristics in terms of size and thematic specialization. However, all librarians participating in the focus group were in agreement on most of the questions debated, reaching a consensus in their conclusions.

In general terms, librarians agreed with most of the perceptions, opinions and concerns expressed by academic staff in previous surveys and interviews. They also offered additional insights on the topic. Librarians confirmed the upward trend in the amount of journal reading among academics due to the increase in the number of electronic journals available and the improvement in the tools to locate and access this information. Off-campus access was considered extremely important in accounting for increases in article download figures. The most heavily used sources continue to be the ones used in the print era, although the literature used has diversified. The use of print journals is becoming restricted to old volumes and disciplines in which the supply of electronic journals is still scarce, or in which graphical information is critical.

Librarians confirmed the well-established decline of library visits among academics, though not among students. Previous research had already indicated the decline of library visits. Librarians were able to corroborate this and to separate this phenomenon from the fact that students continue to visit the library for particular reasons, for example, in order to study or to work in a group. They also mentioned a decrease in students’ library skills, since virtual learning environments provide them with direct links to recommended reading sources.

Librarians were well aware of the importance of Google and Google Scholar as the first information source for academics, since they themselves are users of these tools. According to librarians, these catalogues remain hard to use; they regret that they have failed to provide users with a single, easy, intuitive interface to access all the available information products. At the same time, the transparency in electronic accessibility to information represented in off-campus access and the avoidance of the use of library tools, is leading academics to forget their importance in providing access to electronic resources. A number of lecturers seem to believe that access is free and are unaware of the existence of institutional subscriptions.

Although previous research had shown that academics have many problems in managing personal scientific information, librarians stated that the perceived usefulness and use of bibliographic management software by academics has increased dramatically during the last few years, especially among PhD students. At this point, focus group participants offered an unexpected result which allowed us to qualify previous conclusions regarding the lack of use of reference management software among
academics. According to the librarians, users ask for specialized, tailored training sessions on the tools they need and are unlikely to attend more general sessions.

Although librarians stated that most complaints by academics are about the diversity and difficulty in dealing with multiple search interfaces, they stated that most of the complaints they receive are more specific and usually refer to platform breakdowns, difficulties in accessing resources off-campus, discontinued resources and so on. Librarians understand these complaints, since even they may have problems in retrieving the articles they are asked for and find it difficult to keep up to date with all the access issues related to electronic resources.

The focus group method provides an interesting way to explore the knowledge and opinions of a small set of librarians regarding the effect of electronic information on academics’ information behaviour. What is more, the session could be conducted relatively quickly, especially in comparison to other research methods previously used by the authors such as surveys and interviews.

According to the literature on focus groups, the main limitation is the difficulty of determining whether participants really say what they think or say what they think the rest of the participants or the organizer wants them to say. This was not an obstacle in our case; the participants disagreed with the previous results presented to them (as in the case of the scarce use of reference management software) and also disagreed with each other (as in the case of one participant who did not subscribe to the majority view regarding the extensive use of personal information services).

In summary, this study has allowed us to triangulate previous research on the use of electronic information resources in Catalan academic libraries. The views of members of the staff of Catalan academic libraries have corroborated or made valuable additions to the perceptions and concerns expressed by academic staff and have provided further insights into the use of electronic information resources in Catalan academic libraries.

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