# Practitioners and academics as authors and readers: the case of LIS journals

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## Abstract

**Purpose** – The aim of this paper is to explore the relationship between practitioners and academics in scholarly communication in library and information science (LIS) journals.

**Design/methodology/approach** – The research is based on a reader survey, a citation analysis and an editor survey. The reader survey identifies both differences in journal rankings between practitioners and academics and the contribution of practitioners to LIS journals. The editor survey provides the proportions of practitioners and academics for the journals. The citation analysis shows the disparities in information exchange between the journals mainly preferred by practitioners and those more favoured by academics. Furthermore, it is possible to explore if practitioner journals differ from academic journals in the citation indicators and in other data collected in the editor survey.

**Findings** – It is found that: practitioners play an active role both as readers and as authors of articles in LIS journals; there is only a low level of information exchange between practitioner and academic journals; the placement of advertisements, the size of the editorial board, requirements concerning an extensive bibliography, the number and the half-life of the references show a clear distinction between practitioner and academic journals. Interestingly, the impact factor did not turn out to be a good indicator to differentiate a practitioner from an academic journal.

**Research limitations/implications** – This research is only exploratory because it is based on separate studies previously conducted. Further research is also needed to explore the relationship between practitioners and academics more deeply.

**Originality/value** – The value of this paper lies in bringing together the findings from complementary studies (reader survey, editor survey and citation analysis) and identifying hypotheses for future research, especially with regards to the roles of and interactions between LIS practitioners and academics in scholarly communication.

**Keywords** Knowledge transfer, Communication, Serials, Research work, Information science

**Paper type** Research paper

## Introduction

There have been numerous journal studies on various aspects of scholarly communication. However, only a few of these studies explore the relation between academics and practitioners. One explanation might be the assumption that

practitioners do not generally write articles (Line, 1978; Scanlan, 1988, p. 65; Staudt *et al.*, 2003, p. 75), which might hold true in many disciplines. Our contribution aims at sheding more light on the role of library and information science (LIS) practitioners in scholarly communication. In particular, we want to explore the relationship between practitioners and academics in ten German-languages and 40 international LIS journals. For this purpose, we base our analysis on a reader survey, an editor survey and a citation analysis. Thus, the value of our paper lies in bringing together the findings from three complementary studies and identifying hypotheses for future research especially with regards to the roles of and interactions between LIS practitioners and academics in scholarly communication.

Our paper is structured as follows: it begins with a comprehensive review of literature. Afterwards, we present the methodology and the research questions. The following three sections introduce those parts of the reader survey, the editor survey and the citation analysis which provide an insight into the relation between practitioners and academics. In each of these three sections we refer to the research questions formulated before. After summarizing the major outcomes of our analysis, we conclude with some remarks concerning the theory-practice gap in LIS.

## Review of literature

There are several journal studies in LIS which address the researcher-practitioner relationship more or less directly. Usually, they focus on the journal users. In most of them the *readers*, the *contributors* who were assumed to be also the readers, or *experts were surveyed*. In a few studies, the *contents of the journal articles* or *interlending and document delivery data* were analysed in order to investigate differences in the journal use.

One of the most recent *user surveys* was conducted in the library sector in Great Britain and Ireland. In the conclusions McNicol (2004) points out the need for improvement of the diffusion of information between researchers and practitioners. Furthermore, it would be worthwhile to share research more often within the practitioner community because it appeared that "research is only used by those libraries directly involved in it" (p. 125). As the survey by Powell *et al.* (2002) reports, the involvement of practitioners in research could be better in the USA and in Canada, at least with regards to the participation in scholarly communication. Nearly, 90 per cent of the responding LIS practitioners read at least one research journal regularly, almost 62 per cent read research-based articles continuously, and half of them apply research results to their professional environment. It must be noted, however, that the definition of a research journal was not very strict in this study. For instance, Information Outlook was assigned to this category.

A special kind of user surveys are journal studies in which periodicals are ranked on the basis of subjective judgements of presumed experts (Nisonger, 1999, p. 1007). One of the most well-known studies of this category was conducted by Kohl and Davis (1985), who surveyed the opinions of LIS education program deans and directors of the Association of Research Libraries (ARL) on LIS journals. (Because of the considered populations, the relationship between practitioners and academics is only addressed indirectly.) Later on the study was replicated by Blake (1996) and Nisonger and Davis (2005). In contrast to the previous findings, the two more recent surveys reveal that the deans and the library directors hold quite different views on the most prestigious LIS journals. Blake concludes his article with the question of how the demands of research

can be satisfied within graduate education without becoming isolated from the library/information science professionals. A former survey by Blake (1991) which examined LIS faculty and district level school library media coordinators in the USA made similar findings. As in the other studies, the two groups differed significantly in their ratings. For instance, the practitioner group ranked only one scholarly journal highly. Tjoumas (1991) who asked public library managers in the USA to rank professional periodical titles for importance in his survey draws similar conclusions. Accordingly, many journals covering essential research are either not read or not known by public library directors.

Besides, surveying readers or experts, the *contents of the articles* can serve as an artefact in order to investigate the major orientation of a journal (academic or practitioner journal). Harter and Hooten (1992) used this method analysing nine volumes of the *Journal of the American Society for Information Science* over a time period of nearly 20 years. Among other characteristics they also recorded the institutional affiliation of the first author (LIS school, library or information centre, . . .) and the subject of the paper (theoretical, applied, . . .). The results show, over time, a decrease of articles classified as applied and an increase of authors from academic departments at universities. The authors conclude that "information science is developing as a discipline and moving away from its practice-oriented roots" (p. 583). Cano (1999) applied this method when he reviewed 17 years of two major LIS journals in Spain. For the categorization of the articles he used an LIS classification scheme originally developed by Järvelin and Vakkari, which includes the following variables: thematic characteristics, type of research and research methodologies. By means of this scheme the author demonstrates that the Spanish LIS community has either a professional or a research orientation, each of which relates to a particular journal. Another example for the use of document analysis is the study by Dorner (2001) which reveals that Australasian LIS journals contain mainly professional papers. One major difference with respect to scholarly papers is that the latter tend to be more than 50 per cent longer. Dorner concludes that his findings make good sense because the predominant publishers of the investigated journals are professional LIS associations.

*Interlending data* are a further data source in order to investigate the practitioner-academic relation. A study of this kind was conducted by Montanelli and Mak (1988), who examined interlending data of library practitioners. The analysis of the requested articles supported the assumption that librarians use the library literature mainly to obtain practical and technical assistance (p. 779). However, these topics were only marginally covered by the journals. The authors conclude that ". . . it becomes clear that the match between what is written and what is read could be better" (p. 781). This implies that practitioner and academic audances have different expectations and requirements towards journal literature. Schlögl and Gorraiz examined this issue by means of document delivery data from Subito. Since Subito distinguishes, among other user groups, between university and college staff (user group 1) and commercial customers (user group 2) (Subito, 2006), such an analysis is possible only by approximation (because university and college staff covers not only academics but also practitioners). As the most recent analyses show, commercial customers usually order articles from more practice-oriented journals which were published in more recent volumes (Schlögl and Gorraiz, 2004, 2006). Also a study by Day and Peters (1994, p. 16), who surveyed the contributers to ten different journals, confirmed that the respondents

to less academic journals rated practical applications highest, whereas "areas of contribution to the body of knowledge and rigour of research methodology" were most important for respondents to more academic journals.

## Research questions and methodology

As the literature review has shown, different methodological approaches have been used up to now. Yet, there was no analysis which was based on several studies. In this current research, we investigate the relation between practitioners and academics in LIS scholarly communication from three perspectives: a reader survey, a citation analysis and an editor survey. The project originated in a co-operation between the University of Applied Sciences Cologne and the University of Graz in spring 2002. In this project we analysed 40 international and the ten most relevant German-language LIS journals by means of a *citation analysis* (time span: 1997-2000) (Stock, 2004) and a *reader survey* in German-speaking countries (Schlögl, 2004) and compared their outcomes (Gracia Colonia, 2002; Schlögl and Stock, 2004). Concerning the international periodicals, we considered only journals from the journal citation reports (JCR), subject category "information science & library science", which deal with core aspects of LIS. As a consequence, journals like for instance *MIS Quarterly* or *Telecommunications Policy* were not taken into account. The references of the German-language LIS periodicals were counted manually (all in all 10,520 references in 1,494 articles in the period 1997-2000). The reader survey investigated the reading and publication characteristics of information professionals (practitioners and academics) in German-speaking countries. In essence, the respondents were asked which of the 50 journals they use, and how intensively. In spring 2003, these two studies were complemented by an *editor survey* (Schlögl and Petschnig, 2005) the aim of which was to collect various editorial data about the journals.

In this paper, we incorporate aspects of the three studies focussing especially on the relation between practitioners and academics in LIS journal communication. The underlying research questions are:

*RQ1.* Do practitioners play an important role in LIS professional communication, both as readers and as authors of journal articles (*RQ1*)? Because of the fact that librarians especially act as gatekeepers to codified information, we would assume at least a certain degree of active involvement.

*RQ2.* If this holds true: do LIS practitioners read and publish primarily in practitioner journals, and do scientists mainly in academic periodicals, i.e. is there little knowledge exchange between practitioners and academics (research question 2)?

*RQ3.* If the answer to *RQ2* turns out to be yes: in which aspects do practitioner journals differ from academic journals (*RQ3*)?

Approaching the research questions from three different perspectives (Figure 1) enables us to thoroughly examine this topic, but also has limitations. We are aware that our research is only exploratory because we outline the research questions after having finished the three journal studies. Though the studies are related to each other in that they cover the same journal sample, they were originally designed as separate analyses. This can be seen because the terminology is not always consistent. For instance, in several cases the term used is "academic", in others, "scientists" or "scholars".

As a consequence, our analysis only generates hypotheses (which can be tested in future studies). One further limitation concerns the different investigation periods of the studies. The citation analysis considered the journal indicators of the period 1997-2000, the reader survey was conducted in spring 2002 and the editor survey one year later. Since the editor survey was the last of the three studies and since not all editors returned the questionnaire, the number of the considered journals dropped from originally 50-42.

In the following, we work out only those details of the three studies which provide an insight into the relationship between practitioners and academics. First we present the most relevant aspects of the reader survey. The self-categorisation of the readers enables us both to identify different journal rankings between practitioners and academics and to determine the contribution of practitioners to LIS journals. The editor survey provides us with the proportions of practitioners and academics for the journals according to the editors' estimates. Furthermore, we collected additional data about the journals (e.g. review method, editorial board characteristics) which make it possible to explore if journals mainly preferred by practitioners differ from those more favoured by academics. In the citation analysis, we continue this investigation with regards to the citation indicators. Mapping the information exchange among the journals enables us moreover to analyse the extent to which practitioner and academic journals cite each other.

## Reader survey
The reader survey investigated the use of LIS periodicals by information professionals in German-language countries. Among other questions, the survey participants were asked which journal they read, how regularly, and in which journal they published an article in the past ten years.

The 50 journals under consideration[1] were given in a list, which could be extended by mentioning additional journals. Besides, the journal use data, demographic data for the respondents (e.g. practitioner or academic/scientist, membership in LIS organisations, ...) were collected. The questionnaire was attached to emails that were distributed in mailing lists of librarian, documentalist, and academic LIS associations in Austria and Germany in spring 2002[2]. In addition, LIS scholars whose e-mail addresses were determined from web sites of LIS schools and information science departments were contacted directly.

Out of the 257 analysed questionnaires, most were from German information professionals (221 questionnaires), nearly all of the remaining questionnaires (32) originated from Austrians. Since approximately 1,800 persons are subscribed to these mailing lists, the "response" rate (circa 15 per cent) was relatively high for such a kind of survey. As the results reveal, the proportion of the respondents who consider themselves
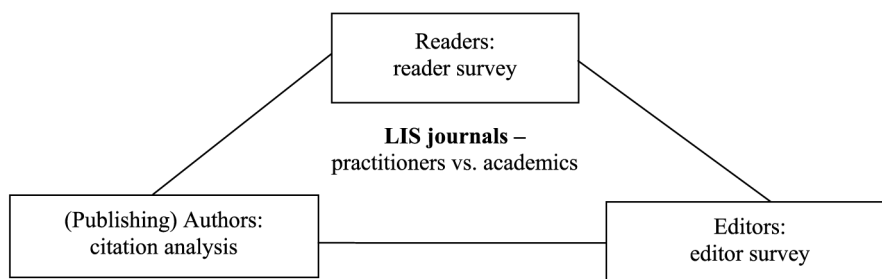


Figure 1.
Scientometric journal
analyses – perspectives

as practitioners was surprisingly high (88 per cent), only 9 per cent were academics or scholars. According to membership in LIS organisations, 66 per cent were members of a library association followed by 11 per cent members of a documentalist association. As can be seen in Table I, the demographic data are reflected in large part in the results concerning reading frequency. The six most frequently read journals (both practitioners and all respondents) deal mainly with librarianship: *Bibliotheksdienst, Buch und Bibliothek (BUB), ABI-Technik, Zeitschrift fuer Bibliothekswesen und Bibliographie (ZfBB), Bibliothek – Forschung und Praxis* and *BIT Online*. It is also startling that Libri as the most-read English language periodical is placed only 10th (both practitioners and all respondents).

A high share (42 per cent) of the respondents has published at least one article. Since the proportion of the academics/scholars was only 9 per cent, this means that, in absolute numbers, most of the publications are from practitioners. This is also confirmed by the publication frequency ranking of the journals (Table II). This all shows the dominance of practitioners in LIS professional communication in German-speaking countries both as readers and authors (*RQ1*).

As is furthermore revealed by Tables I and II, practitioners and academics/scholars have different priorities in their journal rankings (*RQ2*). Practitioners read and publish in mainly library journals often edited by professional associations (for instance Bibliotheksdienst, *BUB*, *ZfBB*, ProLibris). Membership in these associations usually

| Rank | Journal | Mentions |
|---|---|---|
| *Ranking of practitioners ($n_1 = 228$)* | | |
| 1 | *Bibliotheksdienst* | 178 |
| 2 | *Buch und Bibliothek (BuB)* | 160 |
| 3 | *ABI-Technik* | 142 |
| 4 | *Z fuer Bibliothekswesen und Bibliographie (ZfBB)* | 119 |
| 5 | *Bibliothek. Forschung und Praxis* | 99 |
| 6 | *BIT Online* | 92 |
| 7 | *NfD. Information – Wissenschaft und Praxis* | 70 |
| 8 | *ProLibris* [a] | 55 |
| 9 | *Password* | 36 |
| 10 | *Libri* [a] | 22 |
| *Ranking of academics/scholars ($n_2 = 22$)* | | |
| 1 | *NfD. Information – Wissenschaft und Praxis* | 16 |
| 2 | *Password* | 14 |
| 3 | *ABI-Technik* | 12 |
| 3 | *Bibliothek. Forschung und Praxis* | 12 |
| 5 | *Bibliotheksdienst* | 11 |
| 5 | *BIT Online* | 11 |
| 5 | *Buch und Bibliothek (BuB)* | 11 |
| 8 | *Intl J. of Information Management* [a] | 10 |
| 8 | *JASIS&T* [a] | 10 |
| 10 | *ASLIB Proceedings* [a] | 9 |
| 10 | *Intl. Symposium fuer Informations-wissenschaft (ISI) – Proceedings* [a] | 9 |
| 10 | *J. of Information Science* [a] | 9 |
| 10 | *Online* [a] | 9 |
| 10 | *ZfBB* | 9 |

**Note:** [a]Journal not included in the other top-5 ranking

**Table I.**
Reading frequency of LIS journals by LIS professionals in German-speaking countries: practitioners vs academics/scholars (top-10 rankings)

| Rank | Journal | Mentions |
|---|---|---|
| *Ranking of practitioners ($n_1 = 87$)* | | |
| 1 | *Buch und Bibliothek (BuB)* | 34 |
| 2 | *Bibliotheksdienst* | 33 |
| 3 | *Z fuer Bibliothekswesen und Bibliographie (ZfBB)* [a] | 17 |
| 4 | *BIT Online* [a] | 11 |
| 4 | *Prolibris* [a] | 11 |
| *Ranking of academics/scholars ($n_2 = 20$)* | | |
| 1 | *NfD. Information – Wissenschaft und Praxis* [a] | 10 |
| 2 | *Bibliothek. Forschung und Praxis* [a] | 6 |
| 3 | *Bibliotheksdienst* | 5 |
| 3 | *Buch und Bibliothek (BuB)* | 5 |
| 3 | *Intl. Symposium fuer Informations-wissenschaft (ISI) – Proceedings* [a] | 5 |

**Note:** [a]Journal not included in the other top-5 ranking

**Table II.**
Publication frequency in LIS journals by LIS professionals in German-speaking countries: practitioners vs academics/scholars (top-5 rankings)

implies a free journal subscription. The situation might be similar for Australasian LIS journals, which are also predominantly published by professional associations and which, as a consequence, report mainly about professional practice (Dorner, 2001). In contrast, academics have a wider and a more international focus (*RQ3*). This can be seen especially in Table I, which reveals that the journals read by the academics cover the broad range of LIS topics (librarianship, documentation, information management) and include also several English-language titles. Though the perception studies used a partly different methodological approach, most of them draw similar conclusions (Blake, 1996; Tjoumas, 1991; Nisonger and Davis, 2005). It must be pointed out, however, that the proportion of LIS academics/scholars who participated in the reader survey was relatively small, which is at least partly due to the low academic tradition of the field in German-speaking countries. Therefore, it is difficult to draw reliable conclusions with regards to the insularity of practitioner and research journals, respectively. In the opinion of the authors of this paper, who feel associated to the German-language information science community, there has not been a strong exchange between the two groups in the past.

### Editor survey
The editor survey covered the same journal sample as the two other studies. Since one journal had ceased (Internet World), one journal changed its name in the investigation period of the citation analysis (and thus appeared there twice), and the editors of six journals (*Journal of Government Information*, *LIS*, *Library Quarterly*, *Library Trends*, *Online Information Review*, *Proceedings of the ASIS/T Annual Meeting*) did not return the questionnaire, only 42 journals could be analysed.

In order to distinguish practitioner journals from academic journals, we rely on the editors' estimates concerning the target groups:

- proportion of practitioners/scientists among all authors (authors per cent practitioners/scientists); and
- proportion of practitioners/scientists among all readers (readers per cent practitioners/scientists).

*Research question 1*
Since practitioners and scientists are two disjoint categories, the percentage of the practitioners complements that of the scientists (which is shown in Table III) to 100 per cent for each journal. On this basis, a journal can be considered primarily an academic journal if the majority of its authors/readers are academics, otherwise it is predominantly a practitioner journal. As can be seen in Table III, the majority of those journals, from which data were available, have a smaller proportion of scientists, i.e. a greater proportion of practitioners among both authors and readers[3]. This holds especially true for the German-language LIS periodicals. It follows that practitioners play an outstanding role in LIS journal communication. There might not be many disciplines where practitioners contribute so much to the knowledge base.

*Research question 2*
As is also exhibited in Table III, a journal is usually preferred by a clear majority of either practitioners or academics. In Tables IV and V the "practitioner journals" and the "academic journals" are listed separately. There remain only a few journals (e.g. *Nfd. Information – Wissenschaft und Praxis*) with a balanced proportion of both practitioners and scientists. This implies that practitioners and scientists prefer to "reside" mainly in their own community in LIS journal communication.

*Research question 3*
Since practitioners and academics prefer different journals according to the editors' estimates, it is worthwhile to identify the underlying journal characteristics. In order to do this, we analysed if journals which are mainly used by practitioners differ from that preferred by academics in the following indicators (last six columns in Table III):

(1) Inclusion of advertisements in a journal (ads): yes (1), no (0).

(2) Number of editorial board members (ed.-board size): > 30 (6), 26-30 (5), 21-25 (4), 16-20 (3), 11-15 (2), < 10 (1).

(3) Review process concerning the selection of submitted papers:

- review method (method): bind peer review (4), peer review (3), review by bodies of journal (2), other (1);
- importance of an extensive list of references (extensive bibliography): compulsory (3), desired (2), not necessary (1);
- percentage of papers that are rejected on average (rejection rate): 0-100 per cent; and
- mean proportion of articles that have to be revised by the authors before final acceptance (revision rate): 0 – 100 per cent.

Since we listed the journals in Table III by the share of scientists among the authors (which resulted in three groups: predominantly academic journals, primarily practitioner journals, journals for which no data were available), different characteristics between academic and practitioner journals can be roughly identified by comparing the corresponding journal indicators. In order to describe the strength of an association between variables (indicators), we computed also correlation measures. According to the scale type (ratio, ordinal or nominal) of the considered variables (indicators), we calculated either Pearson's $r$, Kendal-$\tau$ or $\eta$. The latter describes the

| Journal | Target group | | Article selection | | | | | |
| | Authors | Readers | General journal characteristics | | | | | |
| | Percentage of scientists | Percentage of scientists | Ads | Ed. board size | Method | Ext. bibl. | Rej.-rate (per cent) | Rev.-rate (per cent) |
|---|---|---|---|---|---|---|---|---|
| *Information Processing & Management* | 100 | 100 | No (0) | 26-30 (5) | 3 | 3 | 50 | 90 |
| *Information Technology and Libraries* | 100 | n.d. | No (0) | 11-15 (2) | 2 | n.d. | n.d. | n.d. |
| *Information Society* | 97 | 90 | No (0) | 26-30 (5) | 3 | n.d. | 60 | 95 |
| *Intl. Symposium f. Inf. Wiss. (ISI) – Proceedings* | 90 | 90 | No (0) | >30 (6) | 4 | 3 | 30 | 10 |
| *J. of Information Science* | 90 | n.d. | No (0) | 21-25 (4) | 3 | 2 | 30 | 60 |
| *J. of Librarianship and Information Science* | 90 | 80 | No (0) | <10 (1) | 3 | 2 | 20 | 90 |
| *Scientometrics* | 90 | n.d. | No (0) | >30 (6) | 3 | 3 | 50 | 50 |
| *Canadian Journal of Information Science* | 85 | 60 | No (0) | 16-20 (3) | 4 | 3 | 40 | 100 |
| *J. of Education for Library and Inf. Sc. (JELIS)* | 85 | n.d. | Yes (1) | <10 (1) | 4 | 2 | 35 | 83 |
| *Annual Review of Information Science (ARIS)* | 80 | n.d. | No (0) | 11-15 (2) | 3 | 3 | n.d. | 100 |
| *J. of Documentation* | 80 | n.d. | No (0) | 16-20 (3) | 4 | 3 | 40 | 60 |
| *J. ASIS&T* | 80 | 65 | Yes (1) | >30 (6) | 4 | 3 | 45 | 95 |
| *Knowledge Organisation* | 75 | 75 | No (0) | >30 (6) | 4 | 3 | 20 | 100 |
| *Libri* | 75 | n.d. | No (0) | 21-25 (4) | 2 | 3 | 33 | 50 |
| *Electronic Library* | 70 | n.d. | No (0) | 11-15 (2) | 3 | 2 | 10 | 80 |
| *Library & Inf. Sc. Research* | 60 | n.d. | No (0) | 21-25 (4) | 4 | 3 | 60 | 90 |
| *Reference & User Services Quarterly (RQ)* | 60 | 20 | Yes (1) | <10 (1) | 4 | 3 | 25 | 75 |
| *NfD. Information – Wissenschaft und Praxis* | 50 | 40 | Yes (1) | <10 (1) | 2 | 2 | 15 | 40 |
| *Program* | 48 | 20 | No (0) | 16-20 (3) | 3 | 3 | 40 | 100 |
| *Government Information Quarterly* | 40 | n.d. | Yes (1) | 11-15 (2) | 3 | 2 | 60 | 75 |
| *Library J.* | 30 | 10 | Yes (1) | <10 (1) | 2 | 1 | 80 | 95 |
| *Econtent (Database)* | 25 | 25 | Yes (1) | <10 (1) | 1 | n.d. | n.d. | n.d. |
| *Library Hi Tech* | 25 | 25 | No (0) | 16-20 (3) | 4 | 2 | 50 | 90 |
| *Password* | 25 | 20 | yes(1) | <10 (1) | 2 | 1 | n.d. | n.d. |
| *ABI-Technik* | 20 | 10 | Yes(1) | <10 (1) | 3 | 2 | 20 | 50 |
| *Bibliothek. Forschung und Praxis* | 20 | n.d. | No (0) | <10 (1) | 3 | 2 | 20 | 60 |
| *BIT Online* | 20 | 20 | Yes (1) | <10 (1) | 2 | 2 | 20 | 10 |
| *Buch und Bibliothek (BuB)* | 20 | 20 | Yes (1) | <10 (1) | 2 | 2 | 10 | 10 |
| *College and Research Libraries* | 20 | 10 | Yes (1) | 11-15 (2) | 4 | 3 | 66 | 20 |

*(continued)*

**Table III.**
LIS journals (selected indicators of the editor survey) ranked by proportion of scientists among the authors

| Journal | Target group Authors Percentage of scientists | Readers Percentage of scientists | Ads | Ed. board size | Method | Ext. bibl. | Rej.-rate (per cent) | Rev.-rate (per cent) |
|---|---|---|---|---|---|---|---|---|
| *Library Resources & Technical Services* | 20 | n.d. | Yes (1) | 11-15 (2) | 4 | 2 | 20 | 90 |
| *ProLibris* | 20 | n.d. | n.d. | <10 (1) | 2 | 1 | 25 | 15 |
| *Z f Bibliothekswesen und Bibliographie (ZfBB)* | 20 | 5 | Yes (1) | 11-15 (2) | 3 | 2 | 25 | 30 |
| *ASLIB Proc.* | 10 | n.d. | No (0) | 11-15 (2) | 3 | 2 | 10 | 80 |
| *Bibliotheksdienst* | 10 | 10 | Yes (1) | <10 (1) | 2 | n.d. | n.d. | 10 |
| *Interlending & Document Supply* | 10 | n.d. | No (0) | <10 (1) | 3 | 2 | n.d. | 100 |
| *Library Collections Acquisitions & Tech. Serv.* | 5 | 5 | Yes (1) | 21-25 (4) | 4 | 2 | 15 | 75 |
| *J. of Scholarly Publishing* | 0 | 0 | Yes (1) | <10 (1) | 2 | 2 | 25 | 25 |
| *Online* | 0 | n.d. | Yes (1) | <10 (1) | 1 | 1 | 60 | 20 |
| *Intl. J. of Information Management* | n.d. | n.d. | No (0) | 16-20 (3) | 3 | n.d. | 65 | n.d. |
| *J. of Academic Librarianship* | n.d. | n.d. | Yes (1) | 11-15 (2) | 4 | 2 | n.d. | n.d. |
| *J. of Information Ethics* | n.d. | n.d. | Yes (1) | <10 (1) | 2 | 1 | 30 | 10 |
| *Social Science Information* | n.d. | n.d. | Yes (1) | 21-25 (4) | 4 | 3 | 75 | 90 |
| Number of responses | 38 | 22 | 41 | 42 | 42 | 37 | 35 | 37 |

**Table III.**

| Journal | Authors | Readers |
|---|---|---|
| | Percentage of practitioners | |
| *Journal of Scholarly Publishing* | 100 | 100 |
| *Online* | 100 | n.d. |
| *Library Collections, Acquisitions, and Technical Services* | 95 | 95 |
| *ASLIB Proceedings* | 90 | n.d. |
| *Bibliotheksdienst* | 90 | 90 |
| *Interlending & Document Supply* | 90 | n.d. |
| *ABI-Technik* | 80 | 90 |
| *Bibliothek. Forschung und Praxis* | 80 | n.d. |
| *BIT Online* | 80 | 80 |
| *Buch und Bibliothek* (*BuB*) | 80 | 80 |
| *College and Research Libraries* | 80 | 90 |
| *Library Resources & Technical Services* | 80 | n.d. |
| *ProLibris* | 80 | n.d. |
| *Z f Bibliothekswesen und Bibliographie* (*ZfBB*) | 80 | 95 |
| *Econtent* | 75 | 75 |
| *Library Hi Tech* | 75 | 75 |
| *Password* | 75 | 80 |

**Source:** Schlögl and Petschnig (2005)

**Table IV.**
Journals with a minimum proportion of three quarters of practitioners among the authors

| Journal | Authors | Readers |
|---|---|---|
| | Percentage of scientists | |
| *Information Processing & Management* | 100 | 100 |
| *Information Technology and Libraries* | 100 | n.d. |
| *The Information Society* | 97 | 90 |
| *Intl. Symposium fuer Informationswissenschaft* (*ISI*) – *Proceedings* | 90 | 90 |
| *Journal of Information Science* | 90 | n.d. |
| *Journal of Librarianship and Information Science* | 90 | 80 |
| *Scientometrics* | 90 | n.d. |
| *Canadian Journal of Information and Library Science* | 85 | 60 |
| *Journal of Education for Library and Information Science* (*JELIS*) | 85 | n.d. |
| *Annual Review of Information Science* (*ARIS*) | 80 | n.d. |
| *Journal of Documentation* | 80 | n.d. |
| *JASIS&T* | 80 | 65 |
| *Knowledge Organisation* | 75 | 75 |
| *Libri* | 75 | n.d. |

**Source:** Schlögl and Petschnig (2005)

**Table V.**
Journals with a minimum proportion of three quarters of scientists among the authors

association between a nominal (e.g. inclusion of advertisements in a journal: yes or no) and an interval-ratio (e.g. percentage of scientists among the authors) variable and ranges between 0 and 1. Eta square, also called the correlation ratio, is defined as the ratio of the explained variance (variance among the categories) to the total variance. The higher the variance among the categories and the lower the variance within the categories, the higher the values of $\eta$ square (and the better the prediction of the dependent interval-ratio variable) (Benninghaus, 1991, p. 344 ff.). Since $\eta$ is free of the assumption of linearity and since the nominal variables of the editor survey can

also be interpreted as being ordinal (for instance importance of an extensive bibliography: "compulsory" is better than "desired" which is again better than "not necessary"), we computed also the rank correlation (Kendal-$\tau$). Contrary to $\eta$, Kendal-$\tau$ shows also the direction (range of values between $-1$ and $+1$).

As already mentioned, it is the aim of this contribution to generate hypotheses. Though we are aware that it exceeds the explanation power of correlation, we implied causation when interpreting the relations between two variables in the following Table VI.

As can be seen in Table VI, the relations between journals with a high proportion of scientists among the authors/readers and the expectations concerning the coverage of the bibliography, the size of the editorial board and the non-inclusion of advertisements are moderate to high. This means that a research-oriented journal (as to its authors/readers) usually does not place advertisements, requires articles with an extensive bibliography, and has a larger editorial board. Though we considered the proportion of scientists among both readers and authors in the correlations, it depends on the context which of these two variables is more appropriate when using a particular correlation. Since the motivation behind *placing advertisements* is to promote information products and services, it is more adequate to focus on the readers of a journal. As our data show, there is a high correlation between these two variables ($\eta = 0.74$, Kendal-$\tau = -0.79$). Journals which place advertisements in our sample usually have a high proportion of practitioners.

Since the other indicators refer to the submission of manuscripts, it is more valid to relate them to authorship. As the correlations ($\eta = 0.62$, Kendal-$\tau = 0.42$) reveal, the *size of the editorial board* is a good indicator to distinguish academic journals from practitioner journals. This applies especially to journals with large editorial boards (more than 25 members). Among them are periodicals like *Information Processing & Management, Information Society, Scientometrics, Journal of the American Society for Information Science and Technology (JASIS&T), Knowledge Organisation,* and *Intl. Symposium fuer Informationswissenschaft (ISI)* – proceedings. On the other hand, journals edited by professional LIS associations (e.g. Bibliotheks-dienst) usually have a small editorial board).

The requirements concerning an extensive bibliography are also well suited to differentiate research journals from practitioner journals ($\eta = 0.64$, Kendal-$\tau = 0.5$). Journals requesting an extensive list of references from submitted manuscripts normally have a high proportion of scientists (among their authors). However, as with all the other relations, there are also other influencing factors. For instance, review journals

| | Authors | Readers |
|---|---|---|
| | Percentage of scientists | |
| Importance of extensive bibliography | $\eta = 0.64$, K-$\tau = 0.5$ ($n = 34$) | $\eta = 0.54$, K-$\tau = 0.24$ ($n = 19$) |
| Editorial board size | $\eta = 0.62$, K-$\tau = 0.42$ ($n = 38$) | $\eta = 0.86$, K-$\tau = 0.18$ ($n = 22$) |
| Inclusion of advertisements in a journal | $\eta = 0.58$, K-$\tau = -0.63$ ($n = 37$) | $\eta = 0.74$, K-$\tau = -0.79$ ($n = 22$) |
| Review method | $\eta = 0.38$, K-$\tau = 0.22$ ($n = 38$) | $\eta = 0.45$, K-$\tau = 0.18$ ($n = 22$) |
| Rejection rate | $r = 0.17$ ($n = 32$) | $r = 0.12$ ($n = 19$) |
| Revision rate | $r = 0.41$ ($n = 35$) | $r = 0.41$ ($n = 20$) |

Table VI.
Correlations (Pearson's $r$ or $\eta$ and Kendal-$\tau$) between the proportion of scientists among the authors/readers and other indicators of the editor survey

(e.g. ARIS) contain articles with extensive bibliographies according to the self-conception of these journals, whereas conference proceedings (e.g. ISI – Proceedings) usually have large editorial boards.

It is somewhat surprising that the correlations with the review method used for article selection ($\eta = 0.38$, Kendal-$\tau = 0.22$), the rejection rate (Pearson's $r = 0.17$) and the revision rate (Pearson's $r = 0.41$) are relatively low. As journals like *Library Collections Acquisitions & Technical Services* and *College & Research Libraries* prove, journals attracting primarily practitioners need not abandon higher quality standards concerning *article selection* (blind peer review). Nevertheless, it is obvious that the more demanding the quality standards for article selection are, the higher is the proportion of scientists.

The fact that there is hardly any relation between the proportion of publishing academics and the *rejection rate* ($r = 0.17$) may be explained by the fact that the refusal of manuscripts depends not only on the adherence to scientific standards but also on the match with the topics covered by the journal. This could be one possible explanation for the high-rejection rates of *College & Research Libraries* (rejection rate = 66 per cent) and *Online* (rejection rate = 60 per cent). On the other hand, scholarly journals in a narrow subfield (e.g. knowledge organisation: rejection rate = 20 per cent) may innately have a small target group and are therefore not in the position to have much choice. The same might hold true with regards to the international orientation of a journal. For instance, there are relatively many LIS journals in German-speaking countries. In order to have sufficient articles for publication in a journal issue, the criteria for article acceptance may sometimes be less demanding (Schlögl and Stock, 2006). This would also explain why the mean rejection rate of the German LIS journals (21 per cent) is half of that of the international ones (41 per cent).

There is a slightly higher relation between the percentage of scientists among the authors and the *revision rate* ($r = 0.41$). However, as the examples of *Interlending & Document Supply* (revision rate = 100 per cent) and *Library Journal* (revision rate = 95 per cent) show, a high proportion of publishing practitioners does not automatically mean that most of the articles need no revision before publication. As with the rejection rate, the publication language of a journal has probably even a stronger influence. Whereas three out of four of the accepted articles must be revised on average before being published in the international journals, the corresponding ratio is only one to four in the German LIS periodicals.

From the above-mentioned it can be concluded that the placing of advertisements, the size of the editorial board, and requirements concerning an extensive bibliography are well suited to distinguish academic journals from practitioner journals. This confirms previous findings that different types of journal users have different expectations from a journal (Day and Peters, 1994; Rousseau, 2002, p. 419f.). The indicators concerning article selection (review method, rejection rate and revision rate) do not enable such a clear distinction. However, this might also be due to our journal sample. This concerns especially the international journals, which must already satisfy several criteria before being included in the JCR (Garfield, 1990; Testa, 2006).

### Citation analysis

In this section, we relate the outcomes of the citation analysis to the editors' estimates concerning the target groups. Combining these two data sets enables us to examine the

extent of knowledge exchange (*RQ2*) and possible differences between practitioner and academic journals in the classical bibliometric indicators (*RQ3*).

*Research question 2*

The extent of information exchange between practitioner and academic journals can be analysed by means of the references among the LIS periodicals. For this purpose, we added the percentage of publishing academics to each journal in our "sociograph" of the LIS journals. Figure 2 shows the journal map for those international LIS journals which exceeded previously defined threshold values (Schlögl and Stock, 2004, p. 1159 f.). As can be seen, there is a high level of information flow among information science journals (*Annual Review of Information Science* (*ARIS*), *Information Processing and Management*, *JASIS&T*, *Journal of Documentation*, *Journal of Information Science, and Scientometrics*). These journals have a proportion of at least 80 per cent of academics among their authors. A second journal cluster contains library journals. The high degree of citations among these journals might be due to the topic (librarianship) they deal with. These journals usually have more practitioners among their authors. (Unfortunately, we have no data for *Library Trends*, *Library Quarterly* and *Journal of Academic Librarianship*.) *Database* (in the meantime renamed to *EContent*) and *Online*, two practitioner journals devoted to online/information industry, are only loosely connected with the two journal clusters.

The German LIS journals (which are not shown in Figure 2) include only one primarily research-oriented periodical (*ISI – Proceedings* with 90 per cent academics among its authors). Yet there is no other German LIS journal which references to it more often (Schlögl and Stock, 2004, p. 1160).
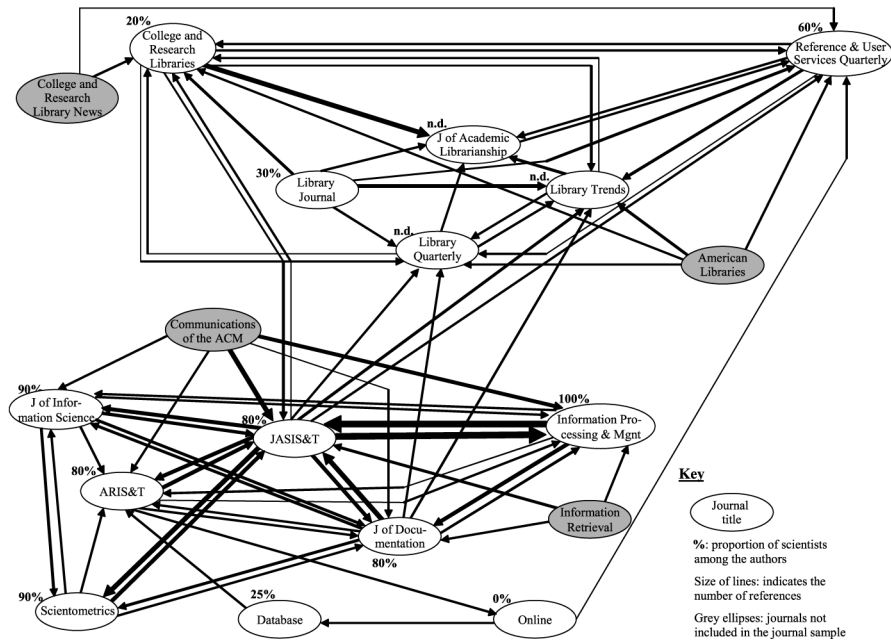


**Figure 2.**
Sociograph of international LIS journals

From the above, it follows that there are various factors which affect the level of information exchange among periodicals. For instance, another finding of our project was that German-language journals hardly reference to international literature and vice versa. As Figure 2 shows however, journals with a high proportion of publishing academics cite each other much more often than they reference to practitioner journals. This implies that there is a low degree of knowledge exchange between academic and practitioner journals (in LIS).

*Research question 3*
Table VII shows the proportion of scientists among the authors and readers, and the mean values for impact factor, citing half-life, number of references per article and journal self-reference rate. We assume that academic journals have higher values for the impact factor (Scanlan, 1988), the citing-half life and the number of references per article. However, we expect no difference concerning the journal self-reference rate because this indicator relates primarily to the size and isolation of a journal (Garfield, 1974), which may hold true for both practitioner and academic journals. Since the citation indicators refer to authorship, we relate them to the proportion of scientists among the authors when interpreting the correlations[4].

Since the *impact factor is* often used as a synonym for the quality of a scholarly journal, it is quite surprising that there is only a very weak correlation (Pearson's $r = 0.28$) with the proportion of scientists among the authors (Table VIII). When analysing this relation in more detail, it becomes obvious that other factors also influence the impact factor values. For instance, the publication language allows a good distinction. Journals, which do not publish in English, hardly have any chance to get a high impact (Garfield and Stock, 2002, p. 25). In our journal sample the mean impact factor of the German-language LIS periodicals (regional impact factor[5] $= 0.25$) is slightly less than half of that of the international journals (impact factor $= 0.47$). Also geography might have a strong effect. This could explain why the *Canadian Journal of Information Science* and *Libri* (the editorial work of which is mainly done in Denmark) have only low-impact factors (0.18 and 0.21, respectively). Furthermore, the type of a periodical may heavily affect the impact factor values. A journal which publishes only review articles, as in the case of *Annual Review of Information Science & Technology* (impact factor $= 1.23$), usually receives more citations than a journal that publishes mainly original research articles. On the other end of the continuum are proceedings, in our sample *ISI* – Proceedings (impact factor $= 0.01$) and Proceedings of the ASIS&T Annual Meeting (impact factor $= 0$), which attain essentially no impact. Finally, it may be that journals with a high proportion of practitioners (e.g. *College & Research Libraries* and *ZfBB*) have a relatively high-impact factor (0.94 and 0.44, respectively).

The moderately positive associations with the *number of references per article* (Pearsons' $r = 0.61$) and the *citing half-life* (Pearson's $r = 0.53$) suggest that these two indicators are better suited to distinguish academic from practitioner journals. The top-10 ranking by the mean number of references per article includes only academic journals (with a high proportion of scientists). Among them there are highly regarded academic journals like *Library & Information Science Research* (36.8 references per article), *Information Processing & Management* (32.6 references per article), *Journal of Documentation* (32.6 references per article) and *JASIS&T* (32 references per article). There is hardly any practitioner journal with a high number of references per article.

| Journal | Authors | Readers | Impact factor (rank) | Citing half-life (rank) | References per article (rank) | Journal self-references (per cent) (rank) |
| --- | --- | --- | --- | --- | --- | --- |
| | Percentage of scientists | | | | | |
| Information Processing & Management | 100 | 100 | 0.61 (**7**) | 6.65 (38) | 33.11 (**3**) | 4.14 (22) |
| Information Technology and Libraries | 100 | n.d. | 0.29 (27) | 3.25 (15) | 10.81 (30) | 2.34 (36) |
| Information Society | 97 | 90 | 0.41 (14) | 5.95 (35) | 29.84 (**8**) | 1.44 (43) |
| Intl. Symposium f. Inf. wiss. (ISI) – Proc. [a] | 90 | 90 | 0.01 (47) | 3.90 (21) | 10.84 (29) | 0.60 (46) |
| J of Information Science | 90 | n.d. | 0.55 (**8**) | 5.58 (31) | 20.18 (15) | 3.04 (28) |
| J of Librarianship and Information Science | 90 | 80 | 0.23 (34) | 4.48 (25) | 22.37 (11) | 1.73 (40) |
| Scientometrics | 90 | n.d. | 0.75 (**6**) | 7.53 (43) | 17.63 (20) | 17.81 (**4**) |
| Canadian J of Information Science | 85 | 60 | 0.18 (39) | 7.20 (42) | 29.86 (**7**) | 2.87 (30) |
| J. of Education for Library and Inf. Sc. (JELIS) | 85 | n.d. | 0.02 (46) | 8.10 (47) | 15.67 (23) | 7.29 (14) |
| Annual Review of Information Science (ARIS) | 80 | n.d. | 1.23 (**3**) | 5.15 (29) | n.d. | n.d. |
| J of Documentation | 80 | n.d. | 1.52 (**1**) | 5.10 (28) | 32.59 (**4**) | 6.49 (15) |
| J ASIS&T | 80 | 65 | 1.29 (**2**) | 7.75 (46) | 31.99 (**5**) | 9.33 (**10**) |
| Knowledge Organisation | 75 | 75 | 0.37 (17) | 7.63 (44) | 20.11 (16) | 3.02 (29) |
| Libri | 75 | n.d. | 0.21 (36) | 6.00 (36) | 21.22 (13) | 1.86 (39) |
| Electronic Library | 70 | n.d. | 0.21 (35) | 2.60 (11) | 8.92 (36) | 2.80 (31) |
| Library & Information Science Research | 60 | n.d. | 0.44 (11) | 6.68 (39) | 36.77 (**2**) | 2.80 (31) |
| Reference & User Services Quarterly (RQ) | 60 | 20 | 0.36 (18) | 4.18 (24) | 13.28 (28) | 7.79 (12) |
| NfD Information – Wissenschaft und Praxis [a] | 50 | 40 | 0.20 (37) | 2.35 (**7**) | 9.87 (32) | 5.26 (18) |
| Program | 48 | 20 | 0.40 (15) | 3.38 (16) | 9.34 (34) | 8.15 (11) |
| Government Inf. Quarterly | 40 | n.d. | 0.36 (19) | 3.78 (20) | 16.63 (21) | 4.76 (20) |
| Library J. | 30 | 10 | 0.29 (29) | 0.60 (**1**) | 1.58 (46) | 21.70 (**2**) |
| Econtent (Database) | 25 | 25 | 0.29 (28) | 1.50 (**3**) | 1.27 (48) | 20.32 (**3**) |
| Library Hi Tech | 25 | 25 | 0.17 (40) | 3.50 (18) | 5.92 (41) | 5.01 (19) |
| Password [a] | 25 | 20 | 0.03 (44) | 2.90 (14) | 2.24 (45) | 2.73 (33) |
| ABI-Technik [a] | 20 | 10 | 0.34 (20) | 2.50 (**8**) | 10.20 (31) | 3.41 (27) |
| Bibliothek. Forschung und Praxis [a] | 20 | n.d. | 0.39 (13) | 5.18 (30) | 16.50 (22) | 1.20 (44) |
| BIT Online [a] | 20 | 20 | 0.04 (45) | 2.53 (**10**) | 14.39 (26) | 0.00 (48) |
| Buch und Bibliothek (BuB) [a] | 20 | 20 | 0.31 (25) | 2.28 (**6**) | 4.09 (44) | 22.77 (**1**) |
| College and Research Libraries | 20 | 10 | 0.94 (**5**) | 5.93 (34) | 18.37 (18) | 12.42 (**7**) |

*(continued)*

**Table VII.**
LIS journals (target groups and citation indicators) ranked by proportion of scientists among the authors

| Journal | Authors | Readers | Impact factor (rank) | Citing half-life (rank) | References per article (rank) | Journal self-references (per cent) (rank) |
|---|---|---|---|---|---|---|
| | | Percentage of scientists | | | | |
| Library Resources & Technical Services | 20 | n.d. | 0.32 (24) | 6.73 (40) | 21.78 (12) | 3.46 (26) |
| ProLibris [a] | 20 | n.d. | 0.28 (34) | 2.73 (12) | 4.16 (43) | 9.47 (**9**) |
| Z fuer Bibliothekswesen und Bibliographie [a] | 20 | 5 | 0.44 (11) | 0.93 (**2**) | 8.93 (35) | 7.77 (13) |
| ASLIB Proc. | 10 | n.d. | 0.31 (26) | 4.50 (26) | 15.37 (24) | 2.01 (38) |
| Bibliotheksdienst [a] | 10 | 10 | 0.35 (21) | 2.50 (**8**) | 5.27 (42) | 12.69 (**6**) |
| Interlending & Document Supply | 10 | n.d. | 0.32 (23) | 1.90 (**5**) | 13.30 (27) | 5.66 (16) |
| Library Collections, Acquisitions & Tech. Services | 5 | 5 | 0.07 (43) | 4.05 (22) | 8.64 (37) | 0.18 (47) |
| J. of Scholarly Publishing | 0 | 0 | 0.18 (38) | 6.33 (37) | 8.35 (38) | 2.58 (34) |
| Online | 0 | n.d. | 0.33 (22) | 1.63 (**4**) | 1.37 (47) | 17.65 (**5**) |
| Intl J. of Information Management | n.d. | n.d. | 0.45 (**10**) | 5.83 (33) | 28.53 (**9**) | 2.05 (37) |
| J. of Academic Librarianship | n.d. | n.d. | 0.38 (16) | 5.08 (27) | 18.08 (19) | 3.90 (25) |
| J. of Information Ethics | n.d. | n.d. | 0.14 (42) | 6.83 (41) | 15.02 (25) | 1.66 (41) |
| Social Science Information | n.d. | n.d. | 0.24 (33) | >10.00 (48) | 31.14 (**6**) | 5.40 (17) |
| Internet World | – | – | 0.57 (n.d.) | n.d. | n.d. | n.d. |
| J. of Government Information | – | – | 0.29 (29) | 4.15 (23) | 20.74 (14) | 3.92 (24) |
| Library Acquisitions | – | – | 0.15 (41) | 3.40 (17) | 7.68 (39) | 4.20 (21) |
| Library and Information Science | – | – | 2.17 (n.d.) | n.d. | 9.50 (33) | 10.53 (**8**) |
| Library Quarterly | – | – | 1.05 (**4**) | 7.68 (45) | 42.94 (**1**) | 4.08 (23) |
| Library Trends | – | – | 0.52 (**9**) | 5.68 (32) | 28.52 (**10**) | 1.62 (42) |
| Online Inf Review (Online & CD-ROM Review) | – | – | 0.24 (32) | 2.73 (12) | 7.03 (40) | 2.39 (35) |
| Proc. of the ASIS/T Ann Meeting | – | – | 0.00 (48) | 3.75 (19) | 18.41 (17) | 0.76 (45) |

**Notes:** [a]Manual calculation of citation indicators (otherwise: data from JCR 1997-2000); –: journal not considered in the editor survey; n.d.: no data or not enough data for ranking; bold: top 10 ranking

**Table VII.**

This confirms Derek de Solla Price's argument that the number of references per article is a good indicator for the scholarliness of a journal (Kim, 1991, p. 25). By contrast, the top-10 ranking by the citing half-life covers only journals the authors of which are predominantly practitioners (80 per cent on average). Many of them (for instance *BUB*: half-life = 2.3) are edited by professional LIS associations. These results are plausible because practitioners are mainly interested in receiving quick up-to-date information. Articles with long lists of references are usually not demanded, practitioners may even have not the time to perform an extensive literature review in many cases. The latter is, however, an essential requirement for scholarly articles and journals (see previous section) where it is expected to tie up with previous research and to relate the contribution to the present scholarly discussion. Research articles should also add new theories to the knowledge base of the discipline or replace existing ones. Since a good scientific theory tries to explain or to predict as many single facts as possible and is more or less an abstraction of single real-world phenomena as a consequence, research articles and academic journals usually do not age so quickly. This is also confirmed by our data. All journals in which the half-life of the references exceeds seven years (*Canadian Journal of Information Science*: 7.2 years, *Scientometrics*: 7.5 years, *Knowledge Organisation*: 7.6 years, *JASIS&T*: 7.8 years, *Journal of Education for Library and Information Science* (*JELIS*): 8.1 years) have a proportion of scientists among the authors of at least 75 per cent.

The association between the proportion of scientists and the *journal self-reference rate* is slightly negative (Pearson's $r = -0.24$) for our journal sample. This would suggest that there is a tendency that a practitioner journal references more often to articles published in it. As the example of *Scientometrics* which is one of the few journals in this subdiscipline shows, research journals may also have a high journal self-reference rate (17.8 per cent). This holds also true for practitioner journals dealing with rather specific topics (e.g. *Econtent*: 20.3 per cent, *Online*: 17.7 per cent) and for journals edited by professional LIS associations serving as a forum for the exchange of ideas among their members (e.g. *BUB*: 22.8 per cent). This supports Kim's assumption that highly specialized journals in subfields or practitioner-oriented journals with low-referencing patterns have higher self-citation rates (Kim, 1991, p. 26).

## The gap between LIS academics and practitioners

Basing the analysis on the outcomes of a reader survey, a citation analysis and an editor survey, it was the main aim of our paper to generate hypotheses describing the relationship between practitioners and academics in LIS journal communication. They can be summarized as follows:

(1) Practitioners play an active role both as readers and as authors of articles in LIS journals.

| | Impact factor | References per article | Citing half-life | Journal self reference rate |
|---|---|---|---|---|
| Authors percentage of scientists ($n = 38$) | $r = 0.28$ | 0.61 | 0.53 | $-0.24$ |
| Readers percentage of scientists ($n = 22$) | $r = 0.15$ | 0.74 | 0.57 | $-0.36$ |

**Table VIII.**
Correlations (Pearson's r) between the proportion of scientists among the authors/readers and the citation indicators

(2) Practitioners and academics have different criteria concerning the preference of LIS journals. In our research, we found out that:

- placement of advertisements;
- size of the editorial board;
- number of references per article;
- requirement concerning an extensive bibliography; and
- half-life of the references.
  enable a good distinction between practitioner and academic journals. Interestingly, the impact factor hardly seems to be a good indicator for the scholarliness of an LIS journal. Also rejection rate and revision rate did not clearly distinguish practitioner journals from academic journals. However, this may partially be due to our journal sample, because periodicals to be included in the Social Sciences Citation Index, as was the case with the international LIS journals, must satisfy several quality standards (Testa, 2006).

(3) There is only a low level of information exchange between practitioners and academics. Each of the two groups uses mainly its particular communication channels, i.e. practitioners (as authors) write primarily for practitioners, academics (as authors) write mainly for academics. As a consequence, there is a gap between the communities of LIS academics and LIS practitioners.

Because it goes beyond the scope of this article, we only want to add some short remarks on the following two questions:

(1) Why does this gap between academics and practitioners exist?

(2) And how could it be closed or, at least, be reduced?

Some authors assume that this gap originates from an activity gap between researchers and practitioners according to which only a few practitioners conduct research (Powell *et al.*, 2002; Haddow and Klobas, 2004). However, such a generally formulated proposition does not hold true from the view of practically working librarians and information specialists doing research ("practitioner-researchers", Watson-Boone, 2000; for an example from New Zealand see Finnie *et al.*, 2000). According to Swigger (1985) and Haddow and Klobas (2004, p. 32), the number of publishing practitioners is not low in absolute figures but only if you relate it to the total number of LIS practitioners.

The research-practice gap is a well-known phenomenon in LIS (Ali, 1986; Clayton, 1992; Goodall, 1998; Lyman *et al.*, 1982; McNaul, 1972; Turner, 2002): Practitioners do not use scientific results adequately; academics do not consider "real-life" problems in their research (McNicol and Nankivell, 2001, pp. 67-9). Nonetheless, it is undisputable that there also arise benefits from the research results of academics for information professionals in their practical work (McClure, 1989; Montanelli and Stenstrom, 1986) and in their continuing professional development (Abu Bakar, 2005). And there can also be benefits from the everyday problems and solutions by the practitioners for LIS academics. However, there is still a strong need to intermediate the more theoretical research of the academics and the more applied research and applications of the practitioners (Haddow and Klobas, 2004, p. 37).

There are many endeavours to reduce the theory-practice gap especially in the social sciences. Examples can be found, for instance, in the literature of management (Baldridge *et al.*, 2004), educational research (Kezar, 2000; Rose, 2002), social work (Williams and Hopps, 1987, 1988), leisure research (Jordan and Roland, 1999), clinical medicine (Rolfe, 1998; Le May *et al.*, 1998) and even at multi-disciplinary levels (Dervin and Reinhard, 2006). A broadly discussed approach to close the academics-practitioners gap is evidence-based practice, which proved to be successful in medicine and which was introduced to LIS in the USA by Eldredge (1997, 2000) and in UK by Booth (Booth, 2002, 2003; Booth and Brice, 2003; Booth and Eldredge, 2003) round about the millennium. *Evidence-based librarianship* or even better "evidence-based information practice" (Booth, 2003, p. 7) is:

> [...] an approach to information science that promotes the collection, interpretation and integration of valid, important and applicable user-reported, librarian observed, and research-derived evidence. The best available evidence, moderated by user needs and preferences, is applied to improve the quality of professional judgments (Booth, 2003, p. 6).

There are many research results which could have an impact on decisions in practice. The question arises which of them a practitioner should use? Owing to their everyday duties, practitioners are not able to check and to understand all the studies which are possibly relevant. So "good evidence" or "evidence for good quality" is needed. According to Booth (2003, p. 12), there is a hierarchy of effectiveness of research applied to practice with systematic reviews at the top, followed by well designed trials. But there are still open questions like the one posed by Clyde (2005, p. 2): "How can a busy practitioner distinguish between quality research evidence and evidence that might be unhelpful or even false?". So evidence-based librarianship leads to the right direction for closing the gap between the academics and the practitioners in LIS, but there are still many problems to solve on this way.

### Notes

1. In the original survey the journal list consisted of 51 periodicals. Since one Austrian library journal (VOeB Mitteilungen) was considered only in the reader survey, it is not included in Tables I and II.

2. The mailing lists of the following LIS organizations were used: Austrian Librians Association (VOeB), German Library Association (DBV), German Society for Information Science and Practice (DGI), Higher Education Association for Information Science (HI).

3. The proportion of practitioners is by nature higher with regards to the readers for most journals. We computed a high correlation between the proportion of practitioners among the authors and that among the readers (Pearson's $r = 0.94$).

4. For reasons of completeness, we calculated also the correlations with the proportion of scientists among the readers.

5. Since eight of the ten German-language LIS journals were not covered by the JCR in the investigation period, we calculated a so-called regional impact factor adjusting the formula introduced by Sen *et al.* (1989). Accordingly we computed the number of citations by adding the self-references of the particular journal to the citations received both in the SSCI and from the other German-language LIS periodicals (Schlögl and Stock, 2004, p. 1157).

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