

Factors and characteristics of interlibrary loan use and non-use

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Abstract

Purpose – The aim of this study is to investigate whether there are differences between users and non-users of ILDS and whether users of ILDS perceive certain factors as contributing to satisfactory ILDS outcomes.

Design/methodology/approach – The study employed survey research in the form of a specially-compiled web questionnaire which was distributed by e-mail to a sample of faculty and doctoral students at two Israeli research institutions.

Findings – One of the main findings was that an ILDS user is a senior, productive, humanities, faculty member – someone who frequently uses the library's services and resources, has a deep style of information-seeking. An additional finding was that many non-users of ILDS believed that all their research needs were met by the internet. The other main finding was that ILDS users who perceived the consulting of secondary information sources and receiving reference assistance prior to requesting ILDS as being beneficial, achieved satisfactory ILDS outcomes which exceeded their expectations and which were ultimately integrated into their research.

Practical implications – The findings contribute to librarians' understanding of users and non-users of ILDS and may enable them to identify and encourage potential ILDS users and find ways to promote satisfactory ILDS outcomes. Future research could study whether users of ILDS actually produce better quality research than non-users.

Originality/value – The research shows that ILDS users have a deep style of information-seeking and uncovers the reasons for non-use of ILDS. In addition, it confirms Stone's (1983) finding that secondary information sources promote patron satisfaction with ILDS outcomes.

Keywords Interlending, Library users, Information research, Customer satisfaction, Document delivery

Paper type Research paper

Introduction

Today's research climate is characterized by information-seeking via the internet, particularly during the early stages of research (Herring, 2001). This is due to the ease and speed of access to results compared to the complexity of obtaining items via library databases and print sources. However, although huge amounts of information are now accessible via the Internet and library databases, exposing researchers to more and more citations and abstracts, there are still many valuable items which are only obtainable via Interlibrary Loan and Document Supply (ILDS) or personal purchase.

High demand for book borrowing via ILDS in academia

Document supply, particularly in the sciences, has declined worldwide since the early 2000s, (Boukacem-Zeghmouri *et al.*, 2006; Echeverria and Barredo, 2005; Missingham and Moreno, 2005; Pfeleger, 2008; Sagnert, 2007) due to the

widespread access to documents via the internet, Big Deals, i.e. "online aggregation of journals that publishers offer [to libraries] as a one price, one size fits all package" (Peters, 2001) and open access to electronic journals. However book borrowing via ILDS is still in high demand in many academic libraries, particularly in the USA. Data from the 123 members of the Association of Research Libraries shows that there was an increase from 3 million borrowing requests and 5.5 million lending requests in 2001-02 (Kyrillidou and Young, 2003, p. 47) to 3.3 million borrowing requests and 5.6 million lending requests in 2004-05 (Kyrillidou and Young, 2006, p. 59) with 70 libraries requesting more than 20,000 items from other libraries in 2005-06 (ARL, 2007). In a recent ARL White Paper on interlibrary loan, Beaubien (2007) noted that among 3,700 American degree-granting institutions surveyed by the National Center for Education Statistics there was a 26 per cent increase in book borrowing between 1998-2004.

There are several possible reasons for the increase in book borrowing via ILDS in American academic libraries. The first is the continual growth in the numbers of books being published (Gantz *et al.*, 2008; Lyman and Varian, 2003) which has resulted in requests for information which no one

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library can meet entirely from its own collection. The second is the increased awareness of book discovery tools such as Amazon and Google Books (Beaubien, 2007), which expose readers to more and more books, but not necessarily to the full-text. The third is improved delivery options such as user-initiated ILDS requesting through programs such as Borrow Direct, which enable users to check the catalog of a participating library and request that they send a book to their home library, thereby simplifying and expediting the ILDS process (Chmelir, 2005; Nitecki and Renfro, 2004). The fourth is budgetary cuts for monographs, caused mainly by the high increases in serial subscriptions that have forced libraries to forego the acquisition of potentially little-used books and to refer patrons to ILDS. The fifth is the growth in research of new and integrated disciplines such as women's studies, criminology, gerontology and information systems (Frank *et al.*, 2001) which place demands on the library that can only be met via ILDS.

Increased book borrowing via ILDS has also occurred in other countries such as Denmark (Hansen, 2003), Sweden (Sagnert, 2007) and Australia (Missingham and Moreno, 2005) as well as in many Israeli libraries where the present study took place. For example, at the University of Haifa library, book borrowing via ILDS grew by over 25 per cent between 2000 and 2007. Thus it would seem that the worldwide increase in book borrowing via ILDS that began in the early 1990s does not show any signs of subsiding and that demand in academic libraries will probably continue to grow for at least the near future.

Previous research on ILDS

Since the 1970s many American, Australian and European studies have been conducted on ILDS issues such as: the effects of e-journals usage on demand for ILDS, the implementation of ILDS management systems, service quality and patron satisfaction, and the relationship between ILDS and collection development. Calvert (2000) and Egan (2005) predicted the demise of ILDS due to the almost ubiquitous access to electronic journals, while (Kriz *et al.*, 1998) and (Porat, 2001) demonstrated how ILDS services were improved due to automation. (Hernon *et al.*, 1999), (Nitecki, 1995) and (Perrault and Arseneau, 1995) measured patron satisfaction with ILDS service quality, (Anderson *et al.*, 2003), (Byrd *et al.*, 1982) and (Knivel *et al.*, 2006) studied the relationship between ILDS statistics and collection development. Only two studies highlighted the importance of patron satisfaction with ILDS outcomes as it relates to the use and non-use of ILDS. A study at a UK university explored the factors that contributed to the effective meeting of patron expectations (Stone, 1983); and a performance measurement study of the ILDS units at 97 North American research and college libraries outlined the need for further research on why potential users with high-performing units do not use ILDS, (Jackson, 1998). It would seem that no comprehensive research has been conducted on the differences between users and non-users and the reasons for non-use.

ILDS usage rates in academia

Although not all academic researchers actually use ILDS, most would profit greatly from using the service at some point in their career. Yet many potential users remain non-users. Studies have shown that usage statistics for faculty and doctoral students at American and Israeli academic institutions are relatively low. A recent study at Carnegie Mellon University (George *et al.*, 2006) found that only 58 per cent of doctoral students used ILDS, while Dickenson's (2006) Colorado Academic Library Impact Study found that only 62 per cent of faculty and only 23 per cent of undergraduates did so. Recent data from the University of Haifa in Israel show even lower usage levels with only 23 per cent of faculty and 27 per cent of doctoral students using the service in 2006 suggesting that many potential users are not availing themselves of the service.

Possible reasons for non-use of ILDS

The widespread use of electronic journals and access to information on the Internet since the late 1990s may partially explain why faculty and doctoral students in some disciplines do not use ILDS and why others use it infrequently. But it does not explain other factors connected to non-use. Although some non-users may receive articles from channels such as full-text databases, professional sites, colleagues and Internet forums and discussion groups, other non-users may be compromising the quality of their research by managing without essential sources.

Factors contributing to the use and non-use of ILDS

Traditionally, ILDS use has been attributed to four main factors: the size of the local library collection, the extent to which potential users perceive ILDS as inconvenient, whether funding is available and awareness of its existence. Studies have consistently shown that patrons use ILDS less in libraries with large collections (Henderson, 2000; Paustian, 1981; Porat and Shoham, 2004) as their needs are better met by the local collection. They have also shown that the perceived inconvenience of ILDS causes limited or non-use (Barr and Farmer, 1977; Houghton and Prosser, 1974; Stuart, 1977) and that the cost tends to deter use, particularly among doctoral students who may not have funding for ILDS (Kinnucan, 1993; Perrault and Arseneau, 1995). In addition, awareness of library services in general and ILDS in particular is related to its use (George *et al.*, 2006; Sridhar, 1994).

Differences between users and non-users of ILDS

The problem addressed in the current study is why some researchers do not use ILDS even though items that are relevant and useful to the research at hand are not immediately available in their library or free on the Internet. The main purpose of the study was to investigate whether there were differences in the style of information-seeking between users and non-users of ILDS which might explain why relatively few researchers use the service. In addition, its aim was to ascertain which factors users perceived as contributing to satisfactory outcomes, which exceeded their expectations. The study is significant in that it highlights the

role of ILDS in the information-seeking process and in the research cycle as a whole. In addition, it may assist librarians in accommodating the different styles of information-seeking and addressing perceptions and misperceptions about ILDS and providing services and resources that promote its effective use.

Theoretical framework

The theoretical framework of the study was based on two models: Heinström's (2002) Model of Information-Seeking Styles and Oliver and DeSarbo's (1988) Expectation Disconfirmation Theory of Satisfaction. Heinström's Model consists of: Fast Surfing, Broad Scanning, and Deep Diving and was used to test whether there was a connection between the style of information-seeking and the use of ILDS. Fast Surfers have difficulty judging relevance, do not invest time in seeking information, and invest little effort in information-seeking process. Broad Scanners perform wide and thorough information-seeking from many different sources. They locate information serendipitously and not just when seeking it, and they judge information critically. Deep Divers make much effort to find information, accept only the highest quality, and seek information deeply in terms of search strategy and information content.

Oliver and DeSarbo's theory holds that satisfaction or "expectancy disconfirmation" occurs when performances and/or outcomes, exceed expectation. First, researchers form expectations and these are then confirmed or not through performance comparisons. This theory was used to measure satisfaction with ILDS requests by defining the following four patron views as expectation criteria to measure satisfaction with the outcomes: a user's view that a request was more valuable than expected; a user's view that a request was more relevant and useful than expected; a user's intention to cite a request in their own publication; a user's view that a request contributed to the quality their own research, without which it would suffer.

Methodology

The first research question sought to identify differences between users and non-users of ILDS and addressed such issues as:

- frequency of library use;
- style of information-seeking;
- demographics; and
- academic profile, i.e. seniority, tenure/promotion status, productivity level, and academic discipline.

The second research question addressed the relationship between user satisfaction with ILDS and:

- the benefits of consulting secondary information sources, such as abstracts, prior to requesting ILDS;
- receiving reference librarian assistance during the process of information-seeking;
- choosing indicative and informative titles that outline the methodology and results of a research project; and
- achieving a timely delivery of items requested.

The primary instrument used in the research was a specially-compiled web questionnaire on styles of information-seeking and ILDS use. The questions on styles of information-seeking

were adapted from Heinström's Questionnaire about Information Behavior (2002) which was validated using factor analysis. The questionnaire was distributed by e-mail to a sample of faculty and doctoral students at two Israeli research institutions. A total 330 questionnaires were distributed at the University of Haifa, an institution specializing in humanities, social sciences and welfare studies, and 1,090 were distributed at the Technion, whose specialty is science, technology, engineering and medicine. In total, 1,420 questionnaires were distributed at these two large urban research institutions. A 37 per cent response rate (121 questionnaires) was achieved from the university and 18 per cent (192 questionnaires) from the Technion, resulting in a combined response rate of 22 per cent (313 questionnaires) which is an acceptable rate for web-based surveying (Kaplowitz *et al.*, 2004; Schonlau, 2002).

Findings

The main finding of the current study was that ILDS users tended to be senior, productive, humanities faculty members who frequently borrowed books from the library and who had a deep style of information-seeking. Non-users of ILDS tended to be less senior, less productive science faculty members who used the library's services and resources infrequently and who had a superficial style of information-seeking.

An additional finding was that the main reason for non-use is the preference among science and technology researchers to download documents, which are freely available via the internet, rendering ILDS and libraries redundant in their eyes. The quotes below show some of the comments received by respondents of the questionnaire on the reasons for non-use:

Nearly all the publications that I need are available to me in databases via the Technion or are freely available on the Internet. Even when I seek historical material I do not need other libraries because I find the material free on the internet.

I use ILDS as a last resort. Only if the item is very important to me and I can't get it from the Internet or via the University of Haifa library. Happily this happens infrequently, as I depend on new articles which can usually be found in electronic journals.

Taking into consideration the fact that most of the up-to-date articles are available on the internet, the time it takes to get an article via ILDS and the cost, ILDS is not a very attractive option.

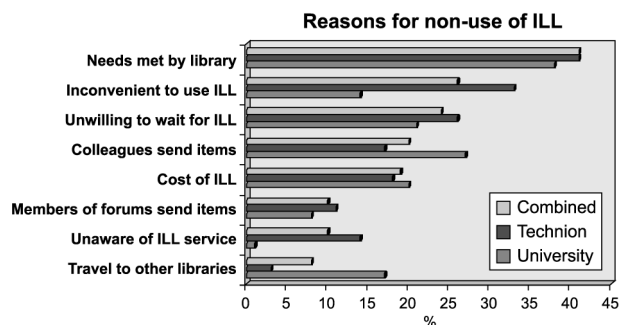
Because it is possible to obtain nearly everything on the Internet, I only used ILDS three times during the last eight years. Although the items helped me, they cost money.

All the above comments suggest that widespread access to electronic articles has caused a decline in the document supply aspect of ILDS. Table I shows additional reasons for non-use of ILDS and Figure 1 shows the responses to the questions on the questionnaire about non-use of ILDS.

The study also attempted to find out if there was a relationship between satisfaction with ILDS outcomes, which exceeded users' expectations and were integrated into their research, and the perceived benefit of the consultation of secondary information sources, choosing informative/indicative titles, receiving reference assistance, and achieving timely deliveries. The findings showed that there was no significant relationship between choosing informative/indicative titles or achieving timely deliveries and satisfaction with ILDS outcomes. However, there was a

Table 1 Main reasons for non-use of ILDS

Main reasons for non-use of ILDS	Quotation
Affiliation with other libraries	I have access to the libraries of a number of universities in Israel including the Open University, so ILDS is less relevant to me
Acquisition of books	I prefer to buy books on my research topic and not to borrow them as, in my opinion, that is a more professional approach and allows you to return to them, to peruse, to develop and to be developed from the books that are your property. The question about borrowing shows the temporary nature of the material
Personal/departmental subscriptions	As a member of an academic institution I have a subscription to a large number of periodicals
Clinical practice	The items I need are not research articles (but used for clinical practice), so I manage with the resources available in the library and on the internet

Figure 1 Reasons for non-use of ILDS

significant relationship between users' perceptions of the benefits of consulting secondary information sources, such as abstracts, table of contents, and citation indexes, and of receiving reference assistance, prior to requesting ILDS and satisfaction with the outcomes. The complete list of responses is shown in the Appendix.

Practical and theoretical implications of findings

The main practical implication of the findings was that an awareness of the profiles of users and non-users of ILDS may enable librarians to identify potential or under-users and encourage them to become regular users. In addition, an awareness of the contribution of the consultation of secondary information sources and reference assistance to ILDS outcomes may encourage librarians to verify and refer to

secondary sources prior to recommending ILDS and thereby increase patron satisfaction with the outcomes.

Future research

The current study demonstrates that there is a relationship between ILDS requesting and style of information-seeking and productivity. Further research is needed to understand whether researchers who use ILDS actually produce higher quality research than researchers who do not.

Conclusion

Despite pessimistic predictions about the future of ILDS due to the widespread use of electronic journals in academia, the current study shows that ILDS book borrowing is unlikely to disappear in the near future. Although document supply is declining and book-borrowing is virtually non-existent in the sciences, book borrowing continues to increase in the humanities, often for esoteric, non-English language items that may only be located with the professional knowledge and experience of ILDS librarians. The main contribution of the current study is its validation of ILDS as an essential service for the serious academic researcher.

References

- Anderson, K.J., Freeman, R.S., Hérubel, J.-P.V.M., Mykytivk, L.J., Mixon, J.M. and Ward, S.M., (2003), "Buy, don't borrow: bibliographers' analysis of academic library collection development through interlibrary loan requests", *Collection Management*, Vol. 27 No. 4, pp. 1-11.
- ARL (2007), "ARL statistics 2005-06", Association of Research Libraries, available at: www.arl.org/stats/annualsurveys/arlstats/arlstats06.shtml (accessed 10 August 2007).
- Barr, D. and Farmer, J. (1977), "Waiting for inter-library loans: a report of a study on the use made of the services of the BLLD with a particular reference to the effects of delay on users of a medical school library", *BLL Review*, Vol. 5 No. 1, pp. 8-12.
- Beaubien, A.K. (2007), "ARL white paper on interlibrary loan", Association of Research Libraries, available at: www.arl.org/bm~doc/ARL_white_paper_ILL_june07.pdf (accessed 17 July 2007).
- Boukacem-Zeghmouri, C.A., Bador, P. and Lafouge, T. (2006), "Analysis of the downward trend in document supply in pharmacology: a case study from INIST in France (part 1)", *Interlending & Document Supply*, Vol. 34 No. 4, pp. 177-85.
- Byrd, G.D., Thomas, D.A. and Hughes, K.E. (1982), "Collection development using interlibrary loan borrowing and acquisitions statistics", *Bulletin of the Medical Library Association*, Vol. 70 No. 1, pp. 1-9.
- Calvert, H.M. (2000), "The impact of electronic journals and aggregate databases on interlibrary loan: a case study at Ball State University libraries", *New Library World*, Vol. 101 No. 1, pp. 28-32.
- Chmelir, L. (2005), "Patron-initiated borrowing and traditional ILL: the cascade experience", *Interlending & Document Supply*, Vol. 33 No. 1, pp. 35-41.
- Dickenson, D. (2006), "How students and faculty use academic libraries differently", Colorado State Library,

- available at: www.lrs.org/documents/fastfacts/242_ALIS_2_KL.pdf (accessed 1 June 2008).
- Echeverria, M. and Barredo, P. (2005), "Online journals: their impact on document delivery", *Interlending & Document Supply*, Vol. 33 No. 3, pp. 145-9.
- Egan, N. (2005), "The impact of electronic full-text resources on interlibrary loan: a ten-year study at John Jay College of Criminal Justice", *Journal of Interlibrary Loan, Document Delivery & Electronic Reserve*, Vol. 15 No. 3, pp. 23-41.
- Frank, D.G., Raschke, G.K., Wood, J. and Yang, J. (2001), "Information consulting: the key to success in academic libraries", *The Journal of Academic Librarianship*, Vol. 27 No. 2, pp. 90-6.
- Gantz, J., Reinsel, D., Chute, C., Gantz, J.F., Chuta, C., Manfrediz, A., Minton, S., Reinsel, D., Schlichting, W. and Toncheva, A. (2008), "The diverse exploding digital universe: an updated forecast of worldwide information growth through 2011", available at: www.scribd.com/doc/2309354/The-Diverse-and-Exploding-Digital-Universe-Executive-Summary (accessed 22 April 2008).
- George, C., Bright, A., Hurlbert, T., Linke, E.C., St Clair, G. and Stein, G. (2006), "Scholarly use of information: graduate students' information seeking behaviour", *Information Research*, Vol. 11 No. 4, available at: <http://InformationR.net/ir/11-4/paper272.html>
- Hansen, L. (2003), "bibliotek. dk: immediate access to Danish libraries", *Interlending & Document Supply*, Vol. 31 No. 1, pp. 31-4.
- Heinström, J. (2002), *Fast Surfers, Broad Scanners and Deep Divers: Personality and Information-Seeking Behaviour*, Abo Akademi University Press, Abo, Finland.
- Henderson, A. (2000), "The library collection failure quotient: the ratio of interlibrary borrowing to collection size", *The Journal of Academic Librarianship*, Vol. 26 No. 3, pp. 159-70.
- Hernon, P., Nitecki, D.A. and Altman, E. (1999), "Service quality and customer satisfaction: an assessment and future directions", *The Journal of Academic Librarianship*, Vol. 25 No. 1, pp. 9-17.
- Herring, S.D. (2001), "Using the World Wide Web for research: are faculty satisfied?", *The Journal of Academic Librarianship*, Vol. 27 No. 3, pp. 213-19.
- Houghton, B. and Prosser, C. (1974), "A survey of the opinions of British Library lending division users in special libraries on the effects of non-immediate access to journals", *Aslib Proceedings*, Vol. 26 No. 9, pp. 354-66.
- Jackson, M.E. (1998), *Measuring the Performance of Interlibrary Loan Operations in North American Research and College Libraries*, Association of Research Libraries, Washington, DC.
- Kaplowitz, M.D., Hadlock, T.D. and Levine, R. (2004), "A comparison of web and mail survey response rates", *Public Opinion Quarterly*, Vol. 68 No. 1, pp. 94-101.
- Kinnucan, M.T. (1993), "Demand for document delivery and interlibrary loan in academic settings", *Library & Information Science Research*, Vol. 15 No. 4, pp. 355-74.
- Knievel, J.E., Wicht, H. and Connaway, L. (2006), "Use of circulation statistics and interlibrary loan data in collection management", *College & Research Libraries*, Vol. 67 No. 1, pp. 35-49.
- Kriz, H., Glover, J. and Ford, K.C. (1998), "ILLiad: customer-focused interlibrary loan automation", *Journal of Interlibrary Loan, Document Delivery & Information Supply*, Vol. 8 No. 8, pp. 30-47.
- Kyrillidou, M. and Young, M. (Eds) (2003), *ARL Statistics 2001-02*, Association of Research Libraries, Washington, DC.
- Kyrillidou, M. and Young, M. (Eds) (2006), *ARL Statistics 2004-05*, Association of Research Libraries, Washington, DC.
- Lyman, P. and Varian, H.R. (2003), "How much information?", available at: www.sims.berkeley.edu/research/projects/how-much-info-2003/ (accessed 1 March 2005).
- Missingham, R. and Moreno, M. (2005), "Resource sharing in Australia: evaluation of national initiatives and recent developments", *Interlending & Document Supply*, Vol. 33 No. 1, pp. 26-34.
- Nitecki, D.A. (1995), "An assessment of the applicability of SERVQUAL dimensions as customer-based criteria for evaluating quality of services in an academic library", *Dissertation Abstracts International*, Vol. 56 No. 8, p. 2918, (UMI No. 9539711).
- Nitecki, D.A. and Renfro, P. (2004), "Borrow Direct: a case study of patron-initiated interlibrary borrowing service", *The Journal of Academic Librarianship*, Vol. 30 No. 2, pp. 132-5.
- Oliver, R.L. and DeSarbo, W.S. (1988), "Response determinants in satisfaction judgments", *The Journal of Consumer Research*, Vol. 14 No. 4, pp. 495-507.
- Paustian, P.R. (1981), "Collection size and interlibrary loan in large academic libraries", *Library Research*, Vol. 3 No. 4, pp. 393-400.
- Perrault, A.H. and Arseneau, M. (1995), "User satisfaction and interlibrary loan service: a study at Louisiana State University", *RQ*, Vol. 35 No. 1, pp. 90-100.
- Peters, T.A. (2001), "What's the big deal?", *The Journal of Academic Librarianship*, Vol. 27 No. 4, pp. 302-4.
- Pfleger, M. (2008), "The British Library: the changing face of document supply", *Interlending & Document Supply*, Vol. 36 No. 3, pp. 132-4.
- Porat, L. (2001), "Automation of interlibrary loan services: effects on the patron and the library", *Meida veSafranut*, Vol. 26 No. 1, pp. 13-18.
- Porat, L. and Shoham, S. (2004), "Israeli college interlibrary loan practices: implications for Israeli universities", *Interlending & Document Supply*, Vol. 32 No. 4, pp. 219-26.
- Sagnert, B. (2007), "The Swedish LIBRIS system offers new web facilities for searching and ILL to librarians and to the general public", *Interlending & Document Supply*, Vol. 36 No. 1, pp. 37-42.
- Schonlau, M. (2002), *Conducting Research Surveys via E-Mail and the Web*, Rand Corporation, Santa Monica, CA.
- Sridhar, M.S. (1994), "Non-use and non-users of libraries", *Library Science with a Slant to Documentation and Information Studies*, Vol. 31 No. 3, pp. 115-28.
- Stone, S. (1983), *Inter-library Loans: A Study of Antecedents and Outcomes of Inter-library Loan Requests*, Crus, Sheffield.
- Stuart, M. (1977), "Some effects on library users of the delays in supplying publications", *Aslib Proceedings*, Vol. 29 No. 1, pp. 35-45.

Appendix

See the information-seeking styles and interlibrary loan use questionnaire in Figure A1.

Figure A1 Information-seeking styles and interlibrary loan use questionnaire (English translation)

<i>A. Please indicate the extent of your agreement with the following statements:</i>	strongly disagree		somewhat agree		strongly agree	Total
1. I often use Google and other free Internet sources for academic purposes	7	17	38	29	222	313
2. I sometimes choose a book or article based on its appearance	166	86	42	16	1	311
3. I frequently use library databases within the library premises	88	84	62	27	48	309
4. It is important to me to find documents that were researched thoroughly	6	25	67	73	135	306
5. I prefer articles that give an overview of my research topic	13	40	112	86	57	308
6. I frequently use library databases from my home or office	32	31	50	49	149	311
7. I choose documents that are written in a clear and plain manner	28	76	83	70	47	304
8. I frequently choose documents from well-established and well-known journals	10	23	57	93	123	306
9. I try to find documents written by authors who are respected in their fields	12	41	65	99	93	310
10. I seek documents based on their apparent scientific level	2	12	49	103	139	305
11. I prefer documents that were written in my mother-tongue	190	50	25	17	24	306
12. I find it easy to see how others could improve their research	21	87	129	40	24	301
13. Sometimes I simply do not have time to seek information	53	74	94	59	25	305
14. I often find it hard to differentiate between the most important issues raised in an article	55	127	72	42	11	307
15. Most of what I have read for my current research corresponds with my own opinions	18	69	148	50	10	295
16. I prefer to find only a few documents which exactly match the subject of my research	42	77	70	65	54	308
17. I prefer to find documents that bring new perspectives on my research topic	5	9	54	114	127	309
18. I am nearly always willing to wait for an item to arrive via interlibrary loans	86	81	74	36	29	306
19. I am nearly always willing to pay for an item to arrive via interlibrary loans	108	83	47	28	41	307
20. Sometimes I choose to manage without documents rather than spending a long time searching for them	57	58	96	67	30	308
21. I buy books for my research	123	59	49	33	45	309
22. I am happy to spend time on information-seeking for my research	17	43	96	76	77	309
23. I am willing to pay for information on the Internet	127	99	53	17	10	306
24. I only use material that is available immediately	39	94	85	68	23	309
25. In my opinion, a small number of well-chosen documents is enough for most research projects	65	114	71	46	11	307

(continued)

Figure A1

26. I regularly search for information related to my research	8	19	70	103	110	310
27. In my opinion, it is worth concentrating on the first few relevant pieces of information one finds in order to save time	109	116	52	18	9	304
28. In my opinion, it is essential to carry out a thorough literature review before starting a research project in a new field	2	15	36	62	197	312
29. Sometimes I come across information even though I am not consciously looking for it	3	14	53	123	118	311
30. I want to find information about all aspects of my research	3	9	51	105	139	307
31. If I do not get the desired results when searching in a database, I assume that nothing was written on my topic and stop searching	111	95	62	25	13	306
32. In my opinion, a document's title should include the intention of the research	21	47	81	78	78	305
33. In my opinion, a document's title should include the design of the research	86	137	48	25	9	305
34. In my opinion, a document's title should include the main results of the research	58	91	71	57	29	306
35. I prefer to receive all the items I need for my research at the same time and not one after another	16	74	81	80	50	301
36. In my opinion, reading an article's abstract before requesting ILDS will improve satisfaction	8	11	68	89	126	302
37. In my opinion, checking how many times an item has been cited before requesting ILDS will improve satisfaction	49	83	75	72	22	301
38. In my opinion, checking a journal's ranking before requesting ILDS will improve satisfaction	42	85	80	65	27	299
39. In my opinion, reading the table of contents of a book before requesting ILDS will improve satisfaction	9	16	80	99	97	301
40. In my opinion, reading a review of a book before requesting ILDS will improve satisfaction	26	58	96	78	43	301
41. In my opinion, verifying the institutional affiliation of an author before requesting ILDS will improve satisfaction	91	106	71	24	9	301
42. In my opinion, receiving reference assistance prior to requesting ILDS will improve the chances of receiving relevant and useful items	54	61	84	62	39	300
43. I frequently cite items that I receive via ILDS	133	87	44	19	11	294
44. Most of the items I recently received via ILL were relevant and useful to my research	87	56	72	28	29	272
45. I often find that the items I receive via ILDS are more valuable to my research than I expected	98	82	51	23	9	263
46. The quality of my research would suffer if I didn't receive items via ILDS	94	73	45	23	46	281

(continued)

Figure A1

<i>B. During the past year how many?</i>	none	1-2	3-4	5-10	10+	Total
47. articles did you publish	101	122	53	15	5	296
48. books did you publish	263	19	2	1	0	285
49. conference presentations did you give	85	133	58	17	2	295
50. articles did you peer-review	164	48	31	36	9	288

<i>C. During the past year how many?</i>	none	1-10	11-50	51-100	100+	Total
51. articles did you download or photocopy	1	13	134	101	50	299
52. books did you borrow from the library	38	147	82	26	8	301
53. ILDS requests did you make	175	113	12	1	0	301

<i>D. If you haven't used ILDS at all in the past year please indicate the extent of your agreement with the following statements</i>	strongly disagree		some-what agree		strongly agree	Total
54. I do not use ILDS because all my research needs are met by my institution's library	36	45	39	45	36	201
55. I do not use ILDS because I frequently travel to other libraries to get the publications I need	149	20	9	5	11	194
56. I do not use ILDS because my colleagues send me all the items I cannot obtain on my own	82	34	39	22	17	194
57. I do not use ILDS because members of the professional forums and discussion groups I belong to send me the items I cannot obtain on my own	123	32	19	12	7	193
58. I do not use ILDS because it is too expensive	95	32	29	18	18	192
59. If ILDS was free I would probably use the service	58	38	31	21	47	195
60. I am not willing to wait for an item to arrive via ILDS if it is not available immediately	56	59	32	24	23	194
61. I do not use ILDS because it is not convenient to order via ILDS	66	35	38	30	18	187
62. I do not use ILDS because I was not aware that there was an ILDS service in our library	121	32	16	8	10	187

63. Comments: _____

<i>E. What is your?</i>								Total
64. Year of birth	Over 40 years 44%	Under 40 years 46%						282
65. Gender	Male 158	Female 144						302
66. Mother-tongue	Hebrew 226	Arabic 19	English 19	Russian 28	Other 15			307
67. Year of first academic appointment	More than 10 years 36%	Less than 10 years 64%						166
68. Academic rank	PhD. Student 200	non-tenured faculty 51	tenured faculty seeking promotion 30	tenured faculty not seeking promotion 11				292
69. Main academic discipline	humanities 43	social sciences 65	law 3	medicine 24	sciences 114	technology 41	other 8	299

Thank you for your cooperation.

About the authors

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