



Journal of Documentation

Readers' interest criteria in fiction book search in library catalogs Anna Mikkonen Pertti Vakkari

Article information:

To cite this document:

Anna Mikkonen Pertti Vakkari, (2016), "Readers' interest criteria in fiction book search in library catalogs", Journal of Documentation, Vol. 72 Iss 4 pp. 696 - 715

Permanent link to this document:

http://dx.doi.org/10.1108/JDOC-11-2015-0142

Downloaded on: 09 November 2016, At: 20:45 (PT)

References: this document contains references to 34 other documents.

To copy this document: permissions@emeraldinsight.com

The fulltext of this document has been downloaded 222 times since 2016*

Users who downloaded this article also downloaded:

(2016), "Library and information science and the digital humanities: Perceived and real strengths and weaknesses", Journal of Documentation, Vol. 72 lss 4 pp. 781-792 http://dx.doi.org/10.1108/JDOC-01-2016-0008

(2016), "Towards a comprehensive measurement of the information rich and poor: Based on the conceptualization of individuals as information agents", Journal of Documentation, Vol. 72 lss 4 pp. 614-635 http://dx.doi.org/10.1108/JDOC-03-2015-0032

Access to this document was granted through an Emerald subscription provided by emerald-srm:563821 []

For Authors

If you would like to write for this, or any other Emerald publication, then please use our Emerald for Authors service information about how to choose which publication to write for and submission guidelines are available for all. Please visit www.emeraldinsight.com/authors for more information.

About Emerald www.emeraldinsight.com

Emerald is a global publisher linking research and practice to the benefit of society. The company manages a portfolio of more than 290 journals and over 2,350 books and book series volumes, as well as providing an extensive range of online products and additional customer resources and services.

Emerald is both COUNTER 4 and TRANSFER compliant. The organization is a partner of the Committee on Publication Ethics (COPE) and also works with Portico and the LOCKSS initiative for digital archive preservation.

*Related content and download information correct at time of download.

696

Received 17 November 2015 Revised 15 February 2016 Accepted 16 February 2016

Readers' interest criteria in fiction book search in library catalogs

Anna Mikkonen and Pertti Vakkari

School of Information Sciences, University of Tampere, Tampere, Finland

Abstract

Purpose – The purpose of this paper is to investigate fiction readers' interest criteria when selecting novels in library catalogs for various search tasks.

Design/methodology/approach – The data of the book selection behavior from 80 genuine fiction readers were collected using recorded interviews and conversations. The data were qualitatively analyzed. Reuter's categorization of the components of aesthetic relevance has contributed to the construction of interest dimensions.

Findings – A five-dimension categorization of interest criteria is presented based on fiction readers' interpretations of the influential factors in fiction book selection in different search tasks. The findings revealed that readers apply the identified interest criteria in a flexible and multiphase way depending to the search task and the system used. The findings showed a context-related pattern in readers' fiction book selections. A combination of readers' search capacities, "behind the eyes" knowledge, affective factors and a well-functioning interaction with a system used results in a successful book selection.

Originality/value – A five-dimension categorization of adult fiction readers' interest criteria was created based on their search behaviors in library catalogs. The results provide a systematic step toward a comprehensive understanding of readers' fiction book selection in digital environments.

Keywords User studies, Reading, Books, Book selection, Fiction readers, Interest criteria, Library catalogs

Paper type Research paper

Introduction

There is some evidence (e.g. Ross, 2001; Saarinen and Vakkari, 2013) that book selection in physical libraries is influenced by a complex combination of previous reading experiences, elements from the books themselves, affective and personal factors and the informational needs of a person (Ross, 2001). In physical libraries, fiction readers have developed effective selecting strategies for fulfilling these multipart desires for recreational reading materials. In addition to known item searches, "looking around" at the shelves with the help of "behind the eyes" knowledge is constantly involved when considering a selection or a rejection of any particular book (Goodall, 1989; Ross, 2001).

Despite the knowledge on fiction readers' selection strategies in physical libraries, there are only a few studies focussing on users' book selection in library catalogs (e.g. McKay *et al.*, 2012; Reuter, 2007). Fiction e-collections are emerging in digital libraries at a rapid speed (The Reading Agency, 2013; The State of America's Libraries, 2014) and fiction is increasingly accessed, searched for and read on mobile devices, tablets and laptops (Buchanan *et al.*, 2015; Hayles, 2008; Miall and Dobson, 2006). A little evidence on fiction readers' book selection in various digital environments is available to support the designing of interfaces for fiction book search. It is not known what kind of selection criteria fiction readers apply when choosing interesting titles, and to what extent current online library catalogs support the book selection process.



Journal of Documentation Vol. 72 No. 4, 2016 pp. 696-715 © Emerald Group Publishing Limited 0022-0418 DOI 10.1108/JD-11-2015-0142 The notion of relevance defined by Cooper (1971) as "whether a piece of information is on a subject which has some topical bearing on the information need" functions ill-suited for the selection of recreational reading materials where the interaction with an information system often occurs without a topical search objective and where emotions and serendipity play a major role (Agosti *et al.*, 2014; Ross, 2001). Alternative evaluation criteria have been employed to measure untargeted searching behavior. For example, the concept of aesthetic relevance (Reuter, 2007) has been presented. However, a little attention has been given to the actual selection criteria applied by fiction readers in library catalogs. A potential means of tackling this issue is to let the readers themselves describe the influential factors in their book selection process and to apply these criteria in examining the book selection behavior.

In this paper, the interest criteria for novels are investigated as described by 80 genuine fiction readers while selecting novels in two library catalogs in various search tasks. The contributions of this paper are twofold. First, a five-dimension categorization of fiction readers' interest criteria for examining the book selection process is presented; second, an in-depth study of the fiction readers' interpretations of the influential factors in fiction book selection in different search tasks and library catalogs is provided.

The study seeks to address four research questions:

- RQ1. What kind of interest criteria readers apply in selecting novels in fiction search?
- RQ2. Do the readers' interest criteria vary between different search tasks? If yes, how?
- RQ3. Do the applied criteria vary between a traditional library catalog and an enriched library catalog? If yes, how?
- RQ4. Are there differences in the applied interest criteria between rejected and selected novels?

The study offers vital information on fiction readers' book selection behavior that could be used in designing interfaces for fiction. The paper presents a categorization of interest criteria as defined by the users themselves for evaluating performance in the fiction search. It may contribute to the designing of future studies for evaluating user behavior in digital libraries.

Literature review

Book selection in physical libraries

Previous research (e.g. Ooi and Liew, 2011; Ross, 2001; Saarinen and Vakkari, 2013) has identified several factors associated with fiction book selection in physical libraries. They include previous literary knowledge, literary preferences, mood and clues in the books themselves. Ross (2001) found that when choosing books to read for pleasure, readers used a variety of considerations to identify interesting novels. Ross (2001) refers to these considerations as "behind the eyes" knowledge where previous experience and meta-knowledge of authors, publishers, cover-art and recommendations from family or friends were involved when considering between selection and rejection of an item.

In a qualitative study of 16 fiction readers' book selection behavior, Saarinen and Vakkari (2013) found that in a quest for interesting novels on the shelves in a public library, fiction readers actively searched for clues of good novels in the books themselves. The authors suggested that as in Goodall (1989), the indicators of good

Fiction book search in library catalogs

698

novels could be categorized into clues that trigger interest toward a novel; and clues that determine the decision of borrowing the novel. The most important indicators of good novels were the author's name, back cover text and scanning a particular item.

Ooi and Liew (2011) found that fiction readers tended to have a book title or author already in mind when they visited their public library. Thus, fiction selection was often based on a pre-determined decision. Instead of browsing in public libraries, participants actively sought recommendations for interesting books outside libraries. Browsing of fiction was usually focussed on the "New Books" display and the "Book returns" section (Ooi and Liew, 2011). Similarly, Saarinen and Vakkari (2013) found that the shelf for returned books was a common place for avid readers to begin their search.

Book selection in library catalogs

Previous research (i.e. Mikkonen and Vakkari, 2012; Pejtersen, 1989; Spiller, 1980; Yu and O'Brien, 1996) has revealed two major approaches for selecting novels: selecting known titles or authors and browsing for possibly interesting items without a clearly defined idea. When searching for specific books, the selection process rests greatly upon authors' names (Yu and O'Brien, 1996). Adkins and Bossaller (2007) compared different entry points to fiction collections in online bookstores, reader advisory databases and public library catalogs. Known item search was the most supported selection strategy by library catalogs. Compared with known item search, browsing is a more complex search strategy where user's literary competence, affective factors, clues in the books themselves and expectations toward reading material influence the selection process (Ross, 2001).

In selecting novels by browsing, the process might be guided by a particular topic or a previously read interesting title or it might be untargeted aiming to find just interesting books (Pejtersen, 1989; Thudt *et al.*, 2012). When browsing for fiction in online library catalogs, it has been found that searching without a query, effort devoted to search results instead of querying and examining of the author and title information instead of the content description is associated to successful book selection (Mikkonen and Vakkari, 2016; Oksanen and Vakkari, 2012; Pöntinen and Vakkari, 2013; Vakkari and Pöntinen, 2015).

Relevance in fiction book selection

The concept of relevance has been acknowledged as central to the theory of information retrieval and a fundamental concern in evaluating information retrieval systems (Borlund, 2003; Cooper, 1971). The studies on relevance have focussed either on a system-centered perspective on relevance as a logical and topical relationship between a user's query and a subject of a document, or on a user-centered approach (Borlund, 2003; Cooper, 1971; Saracevic, 1996). Saracevic (1996) distinguishes between five basic types of relevance: algorithmic, topical, cognitive, situational and affective relevance. Saracevic's affective relevance as the relation between the intents, goals and motivations of the user and the document fits to the emotion-bound fiction selection process (Ross, 2001). However, affective relevance in fiction book selection has not been examined.

Previous research on relevance assessments in fiction book selection in library catalogs has been conducted by Reuter (2007) and Koolen *et al.* (2015). Reuter (2007) examined children's book selection in a digital library with the concept of "aesthetic relevance." Aesthetic relevance was defined as the potential of a document to provide a

suitable reading experience. The most influential factors in children's book selections were the metadata (such as title, author), the extrinsic appeal of a book (such as recency, format) and accessibility (such as length, text density).

Koolen *et al.* (2015) investigated the relevance aspects expressed in book requests in the Library Thing discussion forums. As in Reuter (2007), the authors identified relevance aspects such as accessibility, content, engagement, familiarity, metadata, novelty, known item and sociocultural. The most adopted relevance aspects in book requests were the content of a book and looking for familiar reading experiences. Also, a unique combination of content, context and examples in book requests was detected.

Fiction book search in library catalogs

699

Method

Participants

In total, 80 people with fiction reading interest were recruited in public libraries, in fiction reading groups and in writing and literature classes in the Open University of Finland. In addition, the Snowball sampling method and a newspaper advertisement were used. Participants were offered a movie ticket to participate in the study. Participants with no genuine fiction reading interest were excluded from the study.

Participants were randomized into control and test groups. In both the control and test group, 18 percent of the participants were male and 82 percent female. In both groups, the age distribution of participants varied from 20 to 80. In a traditional catalog participants averaged 34 years of age (SD 12.7). In an enriched catalog participants averaged 42 years of age (SD 16.8). In both catalogs, 18 percent of the participants had a middle-level education and 82 percent a high-level education. For a detailed description of the participants, see Mikkonen and Vakkari (2015).

Fiction reading activity and fiction reading preferences did not significantly differ between the control and test group. On average, the participants in Sampo read 26 novels a year while the respective figure in Sata was 18 (t=1.409, p > 0.05). Participants were asked to fill in a pre-questionnaire measuring their reading preferences. The questionnaire was designed to measure motives for fiction reading and important features in fiction texts while reading fiction books. No significant differences occurred in the 38 item scale: participants valued entertainment, aesthetic experiences and utilitarian aspects of fiction reading similarly in both groups.

Search tasks

Four search tasks were designed based on previous research (Adkins and Bossaller, 2007; Goodall, 1989; Peters, 2011; Pejtersen, 1989; Ross, 2001; Spiller, 1980; Thudt *et al.*, 2012; Yu and O'Brien, 1996). In two search tasks, the participants were given an author or a topic with which to begin the search process. The remaining two search tasks reflect the idea of individual and dynamic information needs as the participants were asked to proceed according to their personal preferences without any given topic. Simulated search tasks were as follows:

Known author search: "A friend of yours recommends you to familiarize yourself with the novels of Olli Jalonen. Find Olli Jalonen's novels and choose two novels which are of interest to you."

Topical search: "Find three novels of interest about upper class life in the 19th century."

Open ended browsing: "Find three novels that interest you which you would like to read."

Search by analogy: "Think of and mention one novel that you have read and found interesting recently. Now search for three novels that you would consider similarly interesting as the one you mentioned."

The catalogs used

As a traditional catalog, the Satakirjastot-service was used (www.satakirjastot.fi). As an enriched catalog, the BookSampo-service was used (www.kirjasampo.fi). The concept of an enriched catalog (or a metadata-enriched library catalog) refers to a unique metadata that enriches the bibliographic description of a collection (such as book cover images, book descriptions, virtual book shelves) and enables users to browse and interact with the collection allowing them to read, add reviews and generate content in addition to professional created metadata. In recent years, it has become increasingly available in online library catalogs (Eden, 2002).

Satakirjastot (Sata) is the web service of the city libraries of the Satakunta region in Finland. The service consists of a library catalog and an information retrieval system for the given databases. In Sata, the metadata for fiction contains bibliographic information added with subject terms from the fiction thesaurus Kaunokki. Cover images and blurbs from recently published books are also available. In Sata, the search options are basic and advanced search.

BookSampo (Sampo) is an enriched web-service for fiction in Finland. In Sampo, the associations and similarities between the works of literature are realized by semantic web technologies such as the ontologization of the fiction thesaurus Kaunokki, which is used for fiction indexing in Sampo (Hypén and Mäkelä, 2011). The front page of Sampo offers a variety of access points to the collection. The book page represents the content of a particular novel in detail. Book descriptions, automatic recommendations and text samples are also included. For a detailed description of the catalogs used, see Mikkonen and Vakkari (2015).

Experimental procedure

Before conducting the user tests, the experimental setting was pre-tested with one participant. The experiment consisted of the following steps:

- (1) pre-questionnaire including demographic questions, participants' search experience in online catalogs in general, participants familiarity with the catalog used in the experiment and their reading interest;
- (2) introduction to the experiment;
- (3) brief demo of the retrieval system (approximately two minutes);
- (4) execution of four search tasks;
- (5) a post-task questionnaire after each completed search task;
- (6) a post-session questionnaire after the completion of all search tasks; and
- (7) brief post-task interview after one search task (decided in advance).

The participants were randomized into control and test groups. Each participant completed the tasks either on Sampo or Sata. The pre-questionnaire yielded that the participants in both groups were unfamiliar with the catalogs used in the experiment. The known author task functioned as a training task and was conducted first with each participant. Latin square rotation was used with three other tasks.

Each participant completed the tasks individually. Public libraries, meeting rooms at a university, coffee shops and participants' homes were chosen as test environments according to participants' wishes. The time for completing the tasks was not limited. During the experiment, the researcher was present to help in case technical problems occurred. At the beginning of the search process, participants were not asked to follow the think-aloud strategy. As the experimental procedure contained various questionnaires and complex search tasks, it was considered as too stressful for the participants to say out loud what they were thinking. However, during the search process, a majority of the participants began naturally to "think-aloud" and give comments about their decisions while completing the search tasks. The researcher also asked questions on particular book choices during the search process. However, the researcher did not guide or help the participants in questions concerning the completion of the search tasks.

In each task, the participants were asked to search for three novels that were of interest to them. After each search task, the participants were asked to rank the novels found according to how much they were of interest to them with an ordinal scale ranging from 1 to 3, where 1 was "a little interesting," 2 was "somewhat interesting" and 3 was "very interesting." Scoring 0 was used if an interesting novel was not found.

Data and analysis

The search logs and participants' speech were recorded with Morae-software (www. techsmith.com/morae.html). For the purposes of this study, 80 participants' interviews and conversations with the researcher were transcribed. The audio material was transcribed word for word and qualitatively analyzed. The purpose of the qualitative data analysis was to identify the categories for the interest criteria for novels mentioned by the participants, and apply these criteria for examining participants' book selection behavior. To guide the qualitative data analysis, findings from previous research (Reuter, 2007; Ross, 2001; Saarinen and Vakkari, 2013) were taken into consideration. Particularly, the coding scheme for children's' book selection in a digital library developed and applied by Reuter (2007) supported the design of an initial coding scheme for this study.

Based on a preliminary review of the transcripts, the authors developed a coding scheme representing the factors that influenced fiction readers' book selection at each search task. The authors discussed and refined the code labels and definitions several times in order to ensure the coding scheme to be unambiguous with no overlapping sub-categories. A protocol for marking the utterances was then developed. An utterance was defined as a sentence or a unit of conversation covering a single aspect of a book selection. Utterance units that covered multiple topics were divided and each unit was given an appropriate code. Each utterance was given a single code, no multiple codes for a single utterance were allowed. The transcripts were then reviewed line by line and utterances were encoded according to the coding scheme. The final coding scheme with code definitions and example utterances is included in Appendix.

The total number of selection mentions in each dimension was first calculated over search tasks and catalogs. In addition, the total mentions concerning rejecting a book were calculated for each dimension. Then, the mentions in each dimension were calculated by tasks and by catalogs. To test for significant differences in the distribution of selection mentions between catalogs, $\chi^2 p$ -values were calculated.

Fiction book search in library catalogs

702

Results

Readers' interest criteria for novels

The qualitative data contained a total of 931 selection mentions for novels, 607 from Sampo and 324 from Sata. Rejecting mentions were far less as the data included a total of 118 rejecting ones, 85 of them in Sampo and 33 of them in Sata. Table I presents the distribution of the selecting and rejecting mentions over five major dimensions for novels' interest criteria.

The results show that when selecting novels in two library catalogs, the most applied interest criteria by readers were familiarity and bibliographic information. Familiarity was related to known item search, as the majority of the selecting mentions in familiarity covered selecting novels from a known author or searching for a known title. It seems that a common way of searching for interesting novels in library catalogs is to select books based on previous reading experiences, to select well-known authors and to select novels based on recommendations from the media.

When selecting a novel based on bibliographic information, the most important interest criterion was the title of a novel. In each task and in both catalogs, the title received a clear majority of the selecting mentions. In addition, the publication date and format of a book were also often mentioned. Readers' common habit was to select books published recently instead of older books. The format of a book was associated to a short story as a form of literature, as the mention of "short story" in bibliographic information either caused an immediate rejection or a book selection with delight.

The content dimension included selecting mentions related to the intellectual content description provided by library professionals such as subject headings, description of a novel's plot (blurb) and genre classification. Perhaps surprisingly, the content description received fewer mentions among readers' interest criteria compared with the bibliographic information. Content description was emphasized more over bibliographic information solely in the topical search task, which resembled a non-fiction search. This hints that when selecting topical novels, the content description influences the selection process as topically non-relevant novels are easily eliminated by examining the subject headings and the blurb. When selecting interesting titles according to one's genuine reading preferences, familiarity and bibliographic information seem to have greater popularity over the content description.

The engagement in reading as an interest criterion refers to the mentions indicating general liking or disliking of a novel. Readers often reflected the ideas and expectations triggered by a particular novel and made the selections based on these preliminary estimations. Mentions such as "This sounds really interesting" and "I would choose this book for real" were common in the engagement dimension.

Sociocultural aspects were the least mentioned in readers' book selections compared with the other major dimensions. Most of the selecting mentions in sociocultural

Table I.
Distribution of
selecting and
rejecting mentions
by the
interest criteria
dimensions (percent)

Dimension	Selecting mentions ($n = 931$)	Rejecting mentions ($n = 118$)
Familiarity	30	9
Bibliographic information	30	43
Content	21	44
Engagement	13	4
Sociocultural	6	0
) Total	100	100

dimension were related to identifying a personal connection to a particular novel which triggered an interest to select the book. The personal connection might have been identified from a title of the novel or by examining the blurb and the subject headings on a title page:

Becoming father and daughter. This sounds interesting as I have only daughters, not sons, and the relations of fathers and daughters are always interesting (KSk11).

In both catalogs, the rejecting mentions were most often associated to bibliographic information such as an author in a sense that readers had a clear vision of the undesired authors. Also, publication date was mentioned as readers often avoided older books. The rejecting mentions were also associated to a single subject term on a title page: an undesired theme or topic was easily detected from the subject headings section and the novel was quickly rejected.

Interest criteria in different search tasks and catalogs

Known author search. The findings show that when the author was given, readers selected the novels mostly based on bibliographic information, content description and with previous knowledge on the given author's literary production (Table II).

The major difference compared with the other search tasks was the notable influence of a novel's title in the book selection in the known author search. In Sata, 42 percent of the mentions concerned the title while the respective figure in Sampo was 24 percent. When the search results were examined, the titles were not just passively skimmed through. Instead, the participants analyzed and interpreted the ideas provoked by the titles in detail and evaluated the possible reading experience offered by a particular title. An appealing title was often mentioned as containing an aspect close to one's personal life. Also, the title could have been mentioned as engaging if it was funny, included interesting concepts or a clever play on words.

Overall the results show that when selecting books from a known author, bibliographic information turned out to contribute more to the book selection compared with the content description. The content description was often used as a secondary criterion for the selection after detecting an appealing title from the search results. In addition to the title, the publication year (Sampo 3 percent, Sata 11 percent) and genre of literature (Sampo 8 percent, Sata 3 percent) received some mentions. Especially in Sata, the publication year was an important criterion as participants favored novels published recently over older titles. The emphasis on bibliographic information over content description is an interesting notion: as the production of a given author was unfamiliar to the majority of the participants, it could have been expected that

	Selecting me	entions
Dimension	Sampo $n = 100$	Sata $n = 38$
Familiarity	21	11
Bibliographic information	39	55
Content	24	32
Engagement	8	0
Sociocultural	8	2
Total	100	100
$\chi^2 p$ -value	0.036	i

Fiction book search in library catalogs

703

Table II.
Selecting mentions
in the known
author search by
catalogs (percent)

704

especially the plot and the theme of a novel would have been more popular in book selection compared with bibliographic information. However, according to the data, this does not seem to be the case.

The findings show that familiarity and previous reading experiences as criteria were more important to the users of Sampo compared with the users of Sata. The post-task question yielded that the users of Sampo were significantly (t-test 2.326, p = 0.023) more familiar with the given author's literary production compared with the users of Sata. This explains the difference in the selecting mentions related to familiarity between catalogs.

Topical search. Table III shows that when the topic was given, readers selected the novels mostly based on familiarity and the content description.

In topical search, familiarity with the given topic was a major factor in the book selection. In Sata, previous knowledge of suitable authors and titles was the most often mentioned single criterion when selecting topical novels by the share of 39 percent. The respective figure in Sampo was 25 percent. Participants used their knowledge of authors and titles in two ways when selecting topical novels: they issued a keyword search with a suitable author or title; or they issued a keyword search with a topic (e.g. upper class nineteenth century) and selected known items from the result list. The post-task question showed no significant difference (t-test 0.674, p=0.503) in participants' familiarity with the given topic between the users of Sata and Sampo.

Compared with the other search tasks, topical search was the only one where content description overcame bibliographic information in selection. Both in Sampo and Sata, readers detected the topical relevance of a novel from the subject headings and the blurb on an item page. This explains why content description influenced the book selections greatly in the topical search. The results show that the enriched content description in the search results and item pages was the dominant interest criterion over the familiarity in Sampo. In Sata, the participants relied more on their knowledge of literature over examining the content description which was often limited and narrower than the one in Sampo. This might explain why the users of Sata emphasized known authors and titles as influencing their book selections more over Sampo.

The results also show that bibliographic information had a great role in selecting topical novels in both catalogs. The overwhelming majority of those mentions were about the title of a novel. Differing from the other search tasks, in topical search title mentions did not refer to particularly appealing or likable titles. Instead, they focussed on identifying classics such as *Jane Eyre* or *Pride and Prejudice* representing upper class life in the nineteenth century.

Dimension	Sampo $n = 99$	entions Sata $n = 64$	
Familiarity	26	42	
Bibliographic information	21	20	
Content	36	30	
Engagement	13	6	
Sociocultural	4	2	
Total	100	100	
χ^2 p-value	0.063		

Table III.Selecting mentions in the topical search by catalogs (percent)

Open ended browsing. In the open ended browsing task, there were no differences in selection criteria between catalogs. Readers in both catalogs relied greatly on their literary knowledge and familiarity with preferred authors and titles (Table IV).

Over half of the total selecting mentions in Sata, and over 40 percent in Sampo were related to previous reading experiences and items known from the media. A common pattern to select "just good books" was to search for favorite authors' novelties, or titles from personal reading lists kept and updated constantly on mobile devices and personal organizers. Selecting novels based on familiarity was detected at the beginning of the search task: if a participant was unable to come up with an author or a title after reading the indicative request, the task was experienced as challenging and difficult:

This is very difficult. Not to have any hint or direction where to go or begin with (KSh8).

I always know something about the writer or the book I want to discover. I never search for books this way (KSx23).

The lack of ideas explains why recommendations from the media received selecting mentions (8 percent in both catalogs) in the open ended browsing task more than in the other search tasks. Literary awards, television shows, newspaper articles and radio programs concerning recently published fiction books were mentioned as influencing the book selections in the open ended browsing task as they provoked ideas for the keyword searches.

Since participants' literary knowledge functioned as the most frequent interest criterion in the book selections for "just good reading," less emphasis was given to bibliographic information and the content description. When mentions concerned bibliographic information, the title of a novel was again the most important criterion (Sampo 15 percent, Sata 13 percent). Engagement in reading, especially a positive reading experience provoked by a novel, was also perceived as an important selection criterion in the open ended browsing task. This differs from the known author search and the topical search tasks and hints that when readers are selecting novels based on their true reading interests, the reading experience provided by a particular title is valued more compared to selecting topical novels or novels of a given author. It seems that when browsing for good reading in library catalogs, after having selected the known titles, the primary condition to select an item is an appealing title that provokes positive reading expectations and likely engages one in the reading process.

Search by analogy. In the search by analogy task, the participants selected three similarly interesting novels to a previously read one. At the beginning of the search task, the participants interpreted the idea of similarity and applied this interpretation to

	Se	lecting mentions	
Dimension	Sampo $n = 172$		Sata $n = 99$
Familiarity	43		55
Bibliographic information	18		16
Content	12		11
Engagement	17		11
Sociocultural	9		7
Total	100		100
χ^2 p-value		0.367	

Fiction book search in library catalogs

706

their book selection process. Participants mentioned the similarity to be related to the following aspects in novels: the same genre, the same author, a similar topic, the same mood and a similar narrative style.

Depending on the aspect of similarity, the search task was perceived either as an easy or a challenging one. If similar novels were selected based on a genre or an author, the search task was often completed easily. If a similar topic, mood or a narrative style was the starting point for the selection, the participants had difficulties in discovering similarly interesting novels. The similarity was often mentioned being a combination of various similarity aspects, such as a novel with a particular narrative style covering similar topics. These expectations were rarely met and participants compromised between similar topics and interestedness.

Table V shows that in the search by analogy task, the most important criterion for the book selections in both catalogs was bibliographic information, particularly the title and the author of a novel.

In Sata, almost 32 percent of the mentions concerned the title, while in Sampo the respective figure was 21 percent. In both catalogs, approximately 6 percent of the mentions concerned the author information. Selecting similar novels based on an author or a title often resembled a topical keyword search: participants issued a query with the wished for topic of a novel, and selected novels from the search result list based on the author information and the appealing title.

The content description and familiarity with authors and titles in selecting similar novels was emphasized slightly more in Sampo than in Sata. Similarly, the users of Sampo mentioned engagement in reading notably more compared to the users of Sata. Almost 20 percent of the mentions in Sampo were based on general interest or the mood of a novel, or selecting books based on serendipity. The respective figure in Sata was 11 percent. It seems that in a traditional catalog, selecting similar novels was associated to detecting an appealing title after topical search, whereas in the enriched catalog the title, the content and the positive expectations provoked by the former were emphasized evenly. This might hint that the enriched content description, the various visual and social navigational tools and the automatic recommendations in Sampo engage the participants in the book selection process more than the query-based selection process in Sata. As the selection process turns into an amusing and engaging flow instead of designing one query after another, the reading materials selected might begin to fulfill readers' expectations often unknown or unconscious:

I didn't actually know what I wanted to find until this book came up. Now I realized this is what I am aiming for (KSy38).

Dimension	Selecting m Sampo $n = 236$	Sata $n = 123$
Familiarity	23	19
Bibliographic information	30	43
Content	23	18
n Engagement	20	11
Sociocultural	4	9
Total	100	100
$\chi^2 p$ -value	0.049	

Table V.Selecting mentions in the search by analogy by catalogs (percent)

Selection and rejection of a novel

The findings from the four search tasks hint that in library catalogs, the process resulting in a book selection differs from the one resulting in a book rejection. Overall, it seems that the rejection of a book is a simple and quick process in which a single metadata element (such as a subject term, a publication year) often determines the decision of a non-interesting book and a rejection (see Table I). Quite the contrary, a book selection seems to be a complex chain of search actions, during which the influence of previous knowledge, expectations, emotions and interpretations is associated to the outcome. In library catalogs, a successful book selection combines successful information retrieval, reader's search skills, a strong capacity to apply one's knowledge on preferred literary genres, authors and topics to the book selection process, capacity to identify appealing items from a large amount of available readings, the interpretation of the expectations provoked by a particular title and system's support (such as a well-functioning search engine, complete and enriched metadata, a good recommender system). The challenge is to articulate one's idea of good reading as it is often unknown, especially at the beginning of the search.

The findings suggest that novels' interest criteria vary also within successful selection processes. According to a search task, readers create expectations toward the reading material to be selected and apply the interest criteria alternately to meet these expectations. The interest criteria for novels identified in this study seem to be well applicable to various search tasks for recreational readings, and readers seem to be skilled in altering the emphasis between the interest criteria in a dynamic way according to the search task.

Discussion

The primary motivation for undertaking this research was to understand fiction readers' book selection process in library catalogs and to identify the criteria for selecting a particular item in various search tasks. In this section, the findings are discussed in depth.

Influence on previous knowledge and metadata on book selection

Overall, the results of this study both confirmed and extended previous knowledge on fiction book selection. The interest criteria for novels as described by genuine fiction readers were found to bear similarity to the relevance aspects identified by Koolen *et al.* (2015) and Reuter (2007). Even though previous research had identified familiarity to be an influential factor in fiction book selection, readers' literary knowledge, literary preferences and a capacity to come up with authors and titles were found to have a remarkable role in the book selection process, particularly in browsing tasks. As the common selection strategies in public libraries (such as browsing the shelves of returned loans and new items) were not applicable in digital environments, readers were to discover alternative ideas for their book searches.

The book selection process was usually initiated by figuring out ideas for keyword searches such as known authors, titles or books nominated for a literary award. This confirms that searching for books based on authors' names (Spiller, 1980; Yu and O'Brien, 1996) applies also in library catalogs. At the beginning of a search task, a failure in discovering ideas for interesting reading based on literary knowledge turned out to be a major obstacle in the book selection process. The examination of participants' search behaviors revealed that a combination of good search skills,

Fiction book search in library catalogs

708

knowledge of authors and titles and a positive association derived from metadata of a particular item resulted in the most successful book selections in both catalogs. Compared with Ross's (2001) findings of the book selection process in physical environments, it seems to be even more challenging in library catalogs. "Behind the eyes knowledge" offers an effective starting point for the search but alone it is not sufficient for a successful book selection.

As in Reuter (2007), the participants of this study emphasized the role of a novel's title in the book selection. The attributes for a good title were found to be context related. In searches for truly interesting readings, the titles were carefully examined and clues to personal links to a subject of a novel were sought. Preliminary reading expectations were commonly produced based on title names in the search results. In searches for topical novels, the title names were examined in a quest for well-known classics about the topic instead of interestedness and engagement in the reading. Surprisingly, the readers in this study emphasized bibliographic information over the content in each task where a genuine reading interest was the point of departure for book selection. Only when the topic was pre-decided, the content description was emphasized over title and other bibliographic information. This suggests that selecting topical novels resembles searching for non-fiction books and offers an interesting perspective to the discussion (e.g. Macgregor and McCulloch, 2006; Spiteri, 2009) on the role of professional metadata and user-generated content in library catalogs. Confirming the notions of Goodall (1989) and Saarinen and Vakkari (2013), it seems that in library catalogs, a combination of a user's previous knowledge and bibliographic information such as a title, trigger the preliminary interest and a curiosity to examine a novel in detail, whereas the content description, provided either by library professionals or other users, determines the final decision for selecting a book. The richer the metadata on item pages, the easier the decision for selecting a particular item is to make. The outcome of incomplete or missing metadata on an item page is commonly a book rejection, as the user fails in interpreting the possible reading experience. This is consistent with the findings of McKay et al. (2012).

Book selection as a context-related process

The fiction book selections in library catalogs were found to be highly context related. According to the search task, different expectations toward the novels to be selected were created and the novels found and encountered were assessed in the light of these expectations. Readers applied the interest criteria in a flexible way: the book selection process turned out to be a combination of affective, personal, sociocultural and metadata-related factors. The results suggested that when the author was given but previously unread, the first phase of the selection was to browse for an appealing title. The second phase was to search for novels published recently followed by examining the content description to identify an interesting item. If the author's literary production was known, the first stage was to select the most recently published title or well-known favorites to be re-read. After that, the next stage was to select engaging titles followed by discovering interesting themes from the content description.

In selecting topical novels, an important starting point for the search was participants' prior literary knowledge which was used in designing suitable queries and in identifying suitable titles from the search results. Topical search differed from the other search tasks so that together with familiarity, a dominant interest criterion was the content description instead of bibliographic information and engagement in the reading. Contrary to Koolen *et al.* (2012), novels' topical relevance was detected from

professional metadata in content description. Emphasis on the content of the novels and the irrelevance of liking in participants' interest criteria suggest that the selection of topical novels resembles that of non-fiction documents.

Differentiating from selecting known items and topical novels, selecting interesting novels in explorative browsing tasks proved to be a complex and a multi-phased process during which personal, affective and situational factors functioned as the most influential factors; serendipity was continuously involved as the readers rarely knew what they wanted to find; and the satisfying result would have been impossible to predict at the beginning of the search task. Similar phenomenon has been noted by Koolen *et al.* (2015) who found that book requests for social book search were often a combination of content, context and examples. Overall, the results yielded that explorative browsing for novels was perceived as a challenging search task because it did not provide a particular, clearly defined starting point for the search. Even though difficulty was often experienced at the beginning of the search task, participants aimed at selecting truly engaging titles by applying their literary capacity in the book selection process.

Selecting fiction books with similar reading experience in library catalogs was found to rely greatly on novels covering similar topics. Readers often settled for a topical similarity yet a mood or a particular reading experience might have been the primary criterion for the similitude. Sometimes, recommender systems fail to create recommendations based on the affective side of books. Thus, novels providing similar reading experiences to a previously read one are challenging to detect in library catalogs.

Finally, the findings yielded that compared with book selection, rejection was a quick and a straightforward process where a single attribute in bibliographic information or content description determined the novel to be non-interesting. The findings in Vakkari *et al.* (2014) and Mikkonen and Vakkari (2015) are in line with the previous as assessing novels as non-interesting was found to require less time compared with assessing them as somewhat or very interesting.

Enriched catalog supporting engagement in the book selection

The study observed the use of a traditional and an enriched online library catalog. The results suggest that interest criteria in selecting novels varied by catalog. These differences concerned familiarity, bibliographic information, content description and engagement in reading. In general, the readers in Sata emphasized the association of prior knowledge and bibliographic information in selecting novels, whereas the readers in Sampo highlighted the influence of content description and engagement in reading in their book selections. As a traditional online library catalog, Sata offered little support for readers to select novels other than known items. The users of Sata were to rely on their own ideas and literary competence for good reading as the catalog did not provide any book recommendations, lists of novel publications or diverse navigation features. As commented on by the participants, topical keyword searchers were perceived as an unnatural search tactic and metadata was often limited and displayed in an unappealing way. Lists of subject terms were often the single attribute providing information for creating the image of the expected reading experience. This explains why familiarity and bibliographic information (the title) were the most influential factors in readers' book selections in Sata.

In Sampo, the enriched features at the starting page, in search results and at item pages distinguished the book selection process greatly from Sata. Sampo offered a Fiction book search in library catalogs

continuous stream of possibly engaging reading via visual and social navigational tools, which may have altered the search process as more serendipitous compared to relying on known authors and titles. This may reduce the role of the familiarity in book selections. The enriched item pages with cover images, blurbs and automatic recommendations might have provided more complementary information to readers for generating more associations of the novels compared with Sata. As a consequence, a general interest toward the novels selected might have been easier to detect in Sampo than in Sata.

Empirical research on fiction book selection in different library catalogs is scarce. The results by Vakkari and Pöntinen (2015) on the association of an enriched results list to successful book discoveries support the findings of our study. Overall, it seems that implementing diverse features to display the content of fiction books in library catalogs is associated to the book selection process in a positive way. The possible connection between the content description and the book selection process is interesting. If the enriched content description engages the user in the book search and selecting process more compared to the query-based book search in a traditional catalog, the enriched features could have an impact on enhancing the user experience in fiction book search in online library catalogs.

Limitations and implications

A few limitations should be noted. First, the sample was biased toward females. Previous studies (i.e. Ross, 2001) have shown gender to be associated to different reading interests of pleasure readers. For example, women are more likely to read a greater amount and variety of fiction books than men (Ross, 2001). In our study, women's possible wider literary knowledge might have overemphasized the importance of participants' previous literary knowledge in the results. Second, participants' greater engagement in the book selection process in Sampo might have been a consequence of different reading preferences between the two groups. Even though the pre-questionnaire did not yield significant differences in reading activity or reading preferences between the two groups, it is possible that the users of Sampo were more interested in fiction reading than the users of Sata, which might have affected the results. Third, as the systems used in the experiment were real, it was impossible to control participants' familiarity with particular books encountered during the experiment. This might have influenced the individual results. Finally, during the data collection, neither of the catalogs used in the experiment allowed users to add tags or book reviews to the book pages. The limited amount of user-generated content in the catalogs can be considered as a limitation in the identified interest criteria, as the influence on other users' tags and reviews of the book selection process cannot be evaluated. It is an essential issue in the light of recent system design, and should be of interest in further studies examining fiction book search in library catalogs.

A few suggestions on system design can be made based on the findings. The notable role of bibliographic metadata in the book selection process confirmed the importance of traditional bibliographic indexing in library catalogs. Our results suggest that in fiction searching, bibliographic information such as the number of pages or publication year partly substitute the touching of books and it is essential in selecting between interesting and non-interesting items. A book as a whole entity continues to be vital in the selection process also in library catalogs and fresh ways of displaying bibliographic information could be emphasized in fiction indexing.

When browsing the visual and social features in the enriched catalog, the participants perceived it as challenging to pick items for a detailed examination

without a specific scope to the books displayed. Thus, offering possibilities to narrow the amount of browsable items by publication year, a genre or media recommendation could enhance the browsing experience in library catalogs. On the front page, providing categories such as "This week's most viewed novels," "Novels recently in the media," "The new chick-lit novels of 2015" or "Famous books/awarded books from the past five years" could better simulate the browsing experience in a physical library.

As in Koolen et al. (2015), the results of this study revealed a great challenge in designing well-functioning recommender systems for fiction books. As the previous reading experiences were often the most influential factor in readers' book selections, a recommender system capable of taking the previous experiences into consideration would be of great support in fiction retrieval. When recommending novels within the same genre, from the same author or novels covering similar topics, the automatic recommendations seem to function mostly well. However, the shortcoming is in recommending novels with a similar mood or a narrative style or creating recommendations based on a combination of various similarity criteria. The designing of a recommender system capable of combining unknown wishes, emotions and personal expectations of a fiction reader in book selection is a challenging issue in future studies.

Conclusions

The aim of this paper was to investigate fiction readers' interest criteria for novels in library catalogs. A categorization of readers' interest criteria was created based on conversations and interviews with 80 genuine fiction readers. The study shows the basic characteristics of fiction book selection in various search tasks in library catalogs. The study confirmed that the fiction readers' book selection process in library catalogs resembled that in physical libraries. Readers' prior literary knowledge and the novel's title had a major role in book selection. However, book selection in library catalogs was found to be a highly context-related process, where a combination of readers' search capacities, "behind the eyes" knowledge, personal and affective factors and a well-functioning interaction with the system being used resulted in a successful book selection. Diverging from the previous, the rejection of a novel turned out to be a quick and simple process where a single (or missing) metadata element determined a book to be rejected.

The study revealed that selection criteria varied by search tasks. Readers applied the identified interest criteria in a flexible and multiphase way depending on the search task and phase. It was found also that differences in metadata elements and content description between the catalogs were associated to the book selection process. Depending on the catalog used, the emphasis on selecting interesting titles was on either searchers' literary knowledge and bibliographic information, or content description and engagement in reading. The possible connection between the rich content description and book selection process suggested that users' engagement in selecting books in library catalogs could be enhanced by implementing rich metadata into search results and item pages.

A profound understanding of readers' book selection behavior in library catalogs is vital as fiction is increasingly accessed in digital environments. Designing well-functioning and user-friendly interfaces for fiction readers with varied search skills and literary interests requires both in-depth qualitative and large scale evaluative user studies. The findings of this study are an important step toward a comprehensive understanding of readers' book selection behaviors in digital environments.

Fiction book search in library catalogs

References

- Adkins, D. and Bossaller, J.E. (2007), "Fiction access points across computer-mediated book information sources: a comparison of online bookstores, reader advisory databases, and public library catalogs", *Library and Information Science Research*, Vol. 29 No. 3, pp. 354-368.
- Agosti, M., Fuhr, N., Toms, E. and Vakkari, P. (Eds) (2014), "Evaluation methodologies in information retrieval", Report from Dagstuhl seminar 13441, Dagstuhl Reports Vol. 3 No. 10, available at: http://drops.dagstuhl.de/opus/volltexte/2014/4433/ (accessed October 8, 2015).
- Borlund, P. (2003), "The concept of relevance in IR", Journal of the American Society for Information Science and Technology, Vol. 54 No. 10, pp. 913-925.
- Buchanan, G., McKay, D. and Levitt, J. (2015), "Where my books go: choice and place in digital reading", *Proceedings of Joint Conference on Digital Libraries 2015 in Knoxville, Tennessee, USA, ACM, New York, NY*, pp. 17-26.
- Cooper, W.S. (1971), "A definition of relevance for information retrieval", Information Storage and Retrieval, Vol. 7 No. 1, pp. 19-37.
- Eden, B. (2002), "Using metadata to build an enriched library catalog", *Library Technology Reports*, Vol. 38 No. 5, pp. 65-70.
- Goodall, D. (1989), "Browsing in the public libraries", LISU Occasional paper No. 1, Library and Information Statistics Unit, Loughborough.
- Hayles, K.N. (2008), Electronic Literature: New Horizons for the Literary, University of Notre Dame, Notre Dame, IN.
- Hypén, K. and Mäkelä, E. (2011), "An ideal model for an information system for fiction and its application: Kirjasampo and semantic web", *Library Review*, Vol. 60 No. 4, pp. 279-292.
- Koolen, M., Kamps, J. and Kazai, G. (2012), "Social book search: comparing topical relevance judgements and book suggestions for evaluation", *Proceedings of CIKM'12, ACM*, *New York, NY*, pp. 185-194.
- Koolen, M., Bogers, T., van den Bosch, A. and Kamps, J. (2015), "Looking for books in social media: an analysis of complex search requests", Proceedings of ECIR'15, LNCS 9022, Springer, pp. 184-196.
- McKay, D., Buchanan, G., Vanderschantz, N., Timpany, C., Cunningham, S.J. and Hinze, A. (2012), "Judging a book by its cover: interface elements that affect reader selection of ebooks", Proceedings of OzCHI'12, ACM, New York, NY, pp. 381-390.
- Macgregor, G. and McCulloch, E. (2006), "Collaborative tagging as a knowledge organization and resource discovery tool", *Library Review*, Vol. 55 No. 5, pp. 291-300.
- Miall, D.S. and Dobson, T. (2006), "Reading hypertext and the experience of literature", Journal of Digital Information, Vol. 2 No. 1.
- Mikkonen, A. and Vakkari, P. (2012), "Readers' search strategies for accessing books in public libraries", Proceedings of Information Interaction in Context 2012, ACM, New York, NY, pp. 214-223.
- Mikkonen, A. and Vakkari, P. (2015), "Books' interest grading and fiction readers' search actions during query reformulation intervals", Proceedings of Joint Conference on Digital Libraries 2015 in Knoxville, Tennessee, ACM, New York, NY, pp. 27-36.
- Mikkonen, A. and Vakkari, P. (2016), "Finding fiction: search moves and success in two online catalogs", *Library and Information Science Research*, Vol. 38 No. 1, pp. 60-68.
- Oksanen, S. and Vakkari, P. (2012), "Emphasis on examining results in fiction searches contributes to finding good novels", Proceedings of Joint Conference on Digital Libraries 2012, ACM, New York, NY, pp. 199-202.

- Ooi, K. and Liew, C.L. (2011), "Selecting fiction as part of everyday life information seeking", Journal of Documentation, Vol. 67 No. 5, pp. 748-772.
- Pejtersen, A.M. (1989), "The Bookhouse: modelling user's needs and search strategies as a basis for system design", Risø Report No. M-2794, Roskilde Risø National Laboratory, Roskilde.
- Peters, I. (2011), "Folksonomies, social tagging and information retrieval", in Foster, A. and Rafferty, P. (Eds), *Innovations in Information Retrieval Perspectives for Theory and Practice*, Facet Publishing, London, pp. 85-116.
- Pöntinen, J. and Vakkari, P. (2013), "Selecting fiction in library catalogs: a gaze tracking study", Proceedings of TPDL'13. LNCS 8092, Springer, pp. 72-83.
- Reuter, K. (2007), "Assessing aesthetic relevance: children's book selection in a digital library", Journal of the American Society for Information Science and Technology, Vol. 58 No. 12, pp. 1745-1763.
- Ross, C.S. (2001), "Making choices: what readers say about choosing books to read for pleasure", The Acquisition Librarian, Vol. 13 No. 25, pp. 5-21.
- Saarinen, K. and Vakkari, P. (2013), "A sign of a good book: readers' means of accessing fiction in the public library", *Journal of Documentation*, Vol. 69 No. 5, pp. 736-754.
- Saracevic, T. (1996), "Relevance reconsidered '96'", in Ingwersen, P. and Pors, N.O. (Eds), Proceedings of CoLIS2, Second International Conference on Conceptions of Library and Information Science: Integration in Perspective in Copenhagen, Royal School of Librarianship, Copenhagen, pp. 201-218.
- Spiller, D. (1980), "The provision of fiction for public libraries", Journal of Librarianship and Information Science, Vol. 12 No. 4, pp. 238-266.
- Spiteri, L.F. (2009), "The impact of social cataloguing sites on the construction of bibliographic records in the public library catalogue", Cataloging & Classification Quarterly, Vol. 47 No. 1, pp. 52-73.
- The Reading Agency (2013), "Library facts", available at: http://readingagency.org.uk/news/library-facts004/ (accessed October 10, 2015).
- The State of America's Libraries (2014), "A report from the American Library Association", available at: www.ala.org/news/sites/ala.org.news/files/content/2014-State-of-Americas-Libraries-Report.pdf (accessed October 10, 2015).
- Thudt, A., Hinrichs, U. and Carpendale, S. (2012), "The Bohemian Bookshelf: supporting serendipitous book discoveries through information visualization", *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, ACM, New York, NY*, pp. 1461-1470.
- Vakkari, P. and Pöntinen, J. (2015), "Result list actions in fiction search: an eye-tracking study", Proceedings of Joint Conference on Digital Libraries 2015 in Knoxville, Tennessee, ACM, New York, NY, pp. 7-16.
- Vakkari, P., Luoma, A. and Pöntinen, J. (2014), "Book's interest grading and dwell time in metadata in selecting fiction", Proceedings of Information Interaction in Context 2014, ACM, New York, NY, pp. 28-37.
- Yu, L. and O'Brien, A. (1996), "Domain of adult librarianship", in Godden, I. (Ed.), Advances in Librarianship, Academic Press, San Diego, pp. 151-190.

(The Appendix follows overleaf.)

Fiction book search in library catalogs

JDOC 72,4

Appendix

	Dimension	Theme	Definition	Example utterances	
714	Familiarity	Known author or title	Mention of a specific known title or an author, based on a personal reading experience	"Åsa Larsson, I know this author very well. The newest book is called The Secondly Deadly Sin. I haven't read that one yet" (SKe79) "The Captain's Daughter is one that I have read" (KSp40) "Of course I know this author, but I have never read anything from him" (KSk35)	
		Known item from media and book awards	Mention of a specific known title or an author, based on a recommendation or a book review in media (newspaper, blog, television show, etc.) or literary awards	"I attended the Turku International Book Fair and there was a discussion on this book there. I will choose it" (KSa1) "Of course, I want to read Popula by Pirjo Hassinen which is nominated for a	
	Bibliographic information	Author	Mention of the author of the book not known in advance	Finlandia Book Prize" (SKm64) "Annikki Karikasniemi, I have never heard of her" (KSv46)	
		Title	Mention of the title of the book not known in advance	"I choose Becoming Father and Daughter, solely based on the title" (SKk85)	
		Cover	Mention of the book's cover	"The cover image affected my selection, in the cover there was an image of an old poster" (KSl36)	
		Format	Mention of the format of the book	"It should be a paperback as I will put it in my suitcase" (KSk11)	
		Publication date	Mention of the age of the book	"I prefer books published recently. I think I would choose a book published in the 21st century" (SKc53)	
		Length	Mention of how long the book is	"391 pages, it determines that I will not choose this one, it is way too long for a holiday trip" (KSy48)	
	Content	Genre	Mention of the genre of the book	"I want horror stories because they are easy and entertaining" (SKa51)	
		Plot and Topic	Mention of the plot, topic or events of the story, including interpretation, expectations or questions	"I guess this is about different cultures, there are topics such as joy and shame" (SKe79) "I will take a look at that book called Faithful. This is about a life in an Orthodox monastery. I am a Christian but I am interested in other religions" (KSf6)	
		Subject headings	Mention of the subject headings contained in the "Subject headings" field	"I will choose this because there are colonialism and cultural differences in the subject headings" (KSf6)	
Table AI. Coding scheme for	Engagement	Interest/Liking	Mention of general interest, like or dislike in the book	"This is absolutely brilliant, fascinating, an incredible topic" (KSp40)	
dimensions				(continued)	

Dimension	Theme	Definition	Example utterances	Fiction book search in
			"I wonder would it be boring to read Baby Jane, as I am not particularly really interested, but a little interested anyway []" (KSl36)	library catalogs
	Mood	Mention of the mood of a particular book and mention of a wished mood for a book	"Definitely this one, this seems to be totally senseless" (KSq17) "I want to be entertained, I don't want to become anguished" (KSq17)	715
	Serendipity	Mention of an unfamiliar and serendipitous discovery	"It says Mika Waltari of France. Ooh, I can't believe this! Is this possible? What an amazing discovery!" (KSe5) "These three were found by chance, and actually I found more interesting titles that I expected" (SKm87)	
Sociocultural	Social book sharing	Mention of friends, family members, teachers, etc. who have recommended the book not known in advance	"My mother has this book at home, I have never read it. She has recommended this to me so I will choose it" (SKv96)	
	Personal connection	Mention of personal connection to som aspect of the book	e "This says that the milieu of the book is Tampere and it is about students and universities. I am interested as I have studied and lived in Tampere for a year now" (KSc3)	
	Intertextuality and similarity between various media formats	Mention of another book, television show or movie	"This is 14 knots to Greenwich. The topics are universities, Great Britain, stepbrothers. It reminds me of the book called Brideshead Revisited, there could be similarities" (SKn88) "I will choose Berlin Poplars by Anne B. Ragde. I have watched the television show based on this novel" (KSl36)	Table AI.

About the authors

Anna Mikkonen is a PhD Student at the School of Information Sciences, University of Tampere, Finland. Her research interests are on user behavior in fiction book search in digital libraries, and she has published in Proceedings of Information Interaction in Context 2012 and 2014 and in Proceedings of Joint Conference in Digital Libraries 2015. Anna Mikkonen is the corresponding author and can be contacted at: anna.mikkonen@uta.fi

Pertti Vakkari is a Professor Emeritus of Information Studies at the School of Information Sciences, University of Tampere, Finland. His research interests include fiction searching, information seeking, the growth of theories in information studies, subject knowledge and query expansion based on relevance feedback, task-based information searching and use of digital libraries. His work has appeared in the proceedings of numerous conferences, in edited monographs and in journals such as *Information Processing and Management, Information Research, Journal of Documentation* and *Journal of the American Society for Information Science and Technology*.