

DOI: 10.35643/Info.28.1.10

Dossier temático: Comportamiento humano informativo

Information behaviour research in Eastern Europe in 2013-2022

Comportamiento informativo en Europa del Este en 2013-2022

Pesquisa de comportamento informacional na Europa Oriental em 2013-2022

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Fecha de recibido: 09/01/2023

Fecha de aprobado: 20/04/2023

Introduction

In 2013, I wrote a chapter on theoretical approaches to information behaviour used in Eastern Europe and Russia (Maceviciute, 2013). Monitoring of this research area in the same region over the last ten years does not reveal significant changes in theoretical approaches, especially in Russia. There, information behaviour has never been of great interest as any other empirical research in library and information science, except for the investigation of information needs and reading. However, empirical research is done in other countries of this contested region. It is necessary to explain some characteristics of Eastern Europe before writing more about information behaviour research there.

The name Eastern Europe is not a geographical location, it is more of a political construct. It has emerged after the World War II as a result of secluding the area

of influence of the Soviet Union and the start of the Cold War. This seclusion is known as the “iron curtain” that separated the “East” from the other regions of Europe and practically the rest of the world by different means, including severe restrictions to movement, but not only that. For decades after the World War II and till 1990s, social science and humanities of this region were under ideological constraints unknown to Western researchers. If some of the research from the West reached different countries in the region through abstracting services and scholarly journals to a greater or lesser degree, research from the East European countries was walled behind ideological and language walls. The common language for the whole area was Russian and most of research in social sciences was published in local languages or in Russian. Publishing outside the region was practically impossible as such attempts were regarded with suspicion on both sides of the “iron curtain”. Thus, library and information science was quite isolated from the global development, which was not the case of the natural or technological sciences as they were under less ideological control and scientists were encouraged to partake of science achievements from all over the world. The concept of information behaviour was not known in many countries before the first reviews of conferences and first research accounts on the subject appeared in scholarly journals and books (Steinerova, 1996; Maceviciute 1997), though research on information needs and use of library resources was carried out long before this (see: Maceviciute, 2006).

Some of these early constraints still are felt, but others are related to more natural issues, such as diversity of languages. Many languages are used in East and Central Europe in publications in the field of library and information science, as its research problems are of local and national importance and connected to the national information society interests. Most authors from non-Russian speaking East European countries also publish in international scholarly journals and in English and participate in international research conferences. Their research published in English is more readily available for analysis of the outsiders and is growing. On the other hand, it is practically impossible for a single person to review the literature on information behaviour published in all languages of the region. Therefore, I will provide a very general overview of the information behaviour research of the region as it is reflected in English language publications

from 2013 up till now with some inclusion from publications in other local languages that I can read and understand at least to some extent. This depends entirely on my personal limitations, but also on what was available in my search. Thus, e.g. Belarus does not figure in the account, as I failed to find information behaviour research in this country either in English, Russian or Belarusian.

These last ten years are chosen as the continuation of the previous overview (Maceviciute, 2013).

The aim of this text is to *introduce a general overview of the information behaviour research done by Eastern and Central Europe researchers (or the previously socialist space) over the last decade*. Thus, research, which was done by outsiders about this region, is not included in the review.

The question that this text seeks to answer is:

What aspects and topics of information behaviour research are covered by researchers from Eastern and Central Europe?

Method

The analysis is based on a review of information sources in English and some languages of Central and Eastern Europe, e.g. Polish, Lithuanian, Czech, Slovakian, Croatian and others. The languages were chosen on the basis of what the author could understand at least to some extent, but also on the affiliation of authors found in English language publications.

I have used the key word “information behaviour” in English and the name of a country in Google Scholar. I also used the translation of the key word into respective languages of the region: e.g. “zachowania informacyjne” (Polish) or “informačníchování” (Czech). Some snowballing method following the references in found texts helped to find additional texts. I have not kept the exact count of publications, but have monitored the overall trends in research exemplifying them with selected references mainly in English, but in local languages too.

The texts that I have found were categorised according to the emerging topics (e.g., information behaviour of students, academics, health information behaviour, consumers information behaviour, professional information behaviour, theoretical

or methodological issues of research etc). The topics were assigned after reading abstracts (especially, if the articles were in other languages than English or Lithuanian), but also in some cases turning to the full text of an article. At first, I was planning to use the coding categories emerging from Wilson's model (Wilson and Walsh, 1996) and Case's seminal review of information seeking research (2007), but it turned out that a simpler combination of both was more useful.

Before examining the developments of the latest decade, we need to introduce what has happened prior to it in information behaviour research in the region. The following text is a short summary of the findings presented in my previous review (Maceviciute, 2013).

Earlier developments

During the Soviet era in the previous Soviet republics, regardless of the area of study the underlying methodology used to be always a positivistic one, based on the Marxist approach. This may be one of the reasons why theoretical frameworks are not described in detail in Russian publications in library and information science. The research direction related to information needs was among the most developed areas of information behaviour. In 1965 Mikhailov *et al.* discussed the needs of scientists in relation to scientific information resources. Further investigations have followed, but Bliumenau states that the "historical period of research into information needs is characterised by ups and downs and among hundreds and hundreds of publications very few investigated this complex problem in depth..." (Bliumenau, 1997, p. 38).

Russian literature on information needs was focused on the nature of the concept, the structure of information needs, and the typology of information needs. There were several typologies of information needs developed for various purposes by leading Russian researchers, the latest ones after 1990s by e.g., Voverienė, (1996), Cherny (2008) and Sokolov (2013). Roughly at the same time, the term of information behaviour emerges in Russian information science literature closely related to term information culture, which basically was synonymous with information literacy (Melentjeva, 2009). However, the most relevant research was directed at information behaviour of scientists defined as efforts that a person

makes to get and use new knowledge or transfer and disseminate it in the community (Kugel' *et al.* 1995, p. 12). Markusova *et al.* (1996) used the framework of the cycle of a research project and Garvey and Griffith's (1965) scientific communication model to capture the recent use and production of information sources in science. This is one of the examples where influence of the Western models (though old ones) is visible in an empirical study.

Kulakova (2000) has developed this concept in her doctoral dissertation about the essence of information behaviour of professionals. She has emphasized the influence of psychological approaches and detailed analysis of research on different types of human behaviour (work in organisations, political, consumer behaviour, etc.). She attempted to evaluate the effectiveness of information behaviour by looking at the success of the big activity. The author has used fully the previously presented model and looked at the motivation, needs, information seeking, as well as production of new messages, sharing and dissemination as information use (Kulakova, 2000).

Maksimov and Zabegaeva (2001) have also introduced the term '*information behaviour*' in the sense of information search behaviour of the user in interaction with an information retrieval system. There were also studies that looked into information needs and seeking information sources, as well as attitudes towards libraries and information services (Krasikova 2010, Jukhnovec 2012). Some of studies have been produced by psychologists about information stress relating it to information behaviour and increased information competence (Kalinovskaja and Ustimov, 2006). A library and information science researcher Matvienko (2009) has coined a concept of 'culture of information behaviour' in his dissertation on Internet users. He links it to the concepts of information sharing, information borrowing, and information interaction as a foundation for information activity.

The other countries of Eastern Europe have broken away from the long-standing influence of Russian influence on Library and Information Science research immediately after 1990. This has happened mainly for political, economic reasons and for changing language and ideological preferences. Among new areas of library and information science research the interest in information behaviour has emerged. Researchers such as Steinerova (2005, 2008, 2011) from Slovakia and Niedzwiecka (2001, 2002, 2003) from Poland have been interested in the

development and extension of theoretical models in the area. Vilarand colleagues (2008, 2011, 2012) were interested in information behaviour of academics and its implications for information services.

There were researchers interested in business and industry related information behaviour. Tibar in Estonia was exploring information needs in Estonian industry and information behaviour of engineering scientists (2005). Janiuniene from Lithuania was exploring the context of managers' information behaviour in relation to the use of social networks (2007), while Skyrius was interested in complex information needs in business activities (Skyrius 2008, Skyrius and Bujauskas 2010).

However, information behaviour researchers seemed to approach it episodically, among other research topics and without further development due to the lack of research resources in information studies departments in the universities and possibly changing perspectives of financing bodies.

Growth of information behaviour research

While I was conducting the search on information behaviour since 2013, it was immediately clear that the number of publications on information behaviour in both English and local languages of East European countries has vastly grown during the last decade in comparison with previous ones. The search engine has returned numerous relevant hits to Polish, Czech, Slovak, and Croatian language terms corresponding to "information behaviour". Somewhat less relevant publications were returned to similar search in Slovenian, Romanian, Ukrainian, and Lithuanian, while practically nothing relevant was found in the hits returned to Bulgarian, Russian, Serbian, Latvian, Macedonian, and Belarusian. As I am not capable to conduct search in Estonian and Hungarian, much less to assess the relevance of returned hits, I only can say that there are slightly more publications on information behaviour issues published by Hungarian researchers in English than those of Estonian researchers, though in both cases the numbers are moderate.

These findings are confirmed by the participation of information behaviour researchers from Eastern Europe in international conferences, such as The

Information Behaviour Conference (ISIC). The first two East European researchers from Slovakia and Lithuania have appeared on it in 2008 when the conference was organised in Vilnius, Lithuania. After a break of two years, from 2014 Eastern Europe is steadily represented by 3 to 5 Croatian, Lithuanian, Polish, Slovakian, and Slovenian participants. They are not the same persons and more varied participation could be observed in those ISICs, which were organised in the region: Zadar (Croatia) in 2016 and Krakow (Poland) in 2018.

In other conferences, such as COLIS or iConference, we also can very occasionally see information behaviour researchers from East Europe, though this topic is just one of many in these conferences and scholars from the region are seen in these sections just once in a while. The conference ECIL – European Conference on Information Literacy – should be mentioned in particular. It was started in 2013 and among the initiators there were some scholars and practitioners from East Europe due to strong tradition of researching information culture and information competence in the region. This conference is oriented to both scholars and practitioners and accepts participants on the basis of the abstracts rather than fully developed scholarly papers. Thus, the number of participants in this conference is higher and their interests are more varied than in other mentioned conferences. The participation from the East European countries is also much larger and richer in terms of represented countries and presented issues. Therefore, we can also see a number of papers on information behaviour and some of them are published by rarely seen Serbian, Moldovan, Bulgarian, and Romanian participants, but also by Czech, Polish, and Croatian authors. I would see this conference as not only a forum for discussions of different aspects of media and information literacy, but also as a place where many newcomer practitioners and researchers can acquire skills of participation in international conferences and presenting themselves and the results of their studies. There they create useful research networks that are visible in many co-authored articles on information literacy in other publishing outlets.

The documents retrieved by Google Scholar from open access repositories show that information behaviour or information needs of different social groups are very popular topics among students writing their final theses in the information studies

departments in the Czech Republic, Poland, Slovakia, and Slovenia. It is almost one third of all relevant documents retrieved by the search engine. This is a good sign showing the growing interest, not only of library and information science students, but also of their lecturers who are doing similar research. There is a clear overlap between the publishing activity of researchers in some countries and the number of students' thesis written on the subjects related to information behaviour. Most probably, we can see more scholarly activities from these countries quite soon.

The search engine has also retrieved a number of irrelevant documents, especially, in the countries where much research is done into information literacy (otherwise named information culture) (Ukraine) or provision of library services (Belarus) and management of information resources (Lithuania). More relevant research was found in the return lists in other languages.

Topics of information behaviour research

Users

As we have observed in general in library and information science, most research is done in the closest environment. Thus, it should not be surprising that *students* as the most easily accessible audience figured in the most of research both in English and local languages, e.g. in Ukrainian (Cimbal, 2020). Moreover, several studies present the findings on library and information science students. Researchers paid most attention to usage of e-resources by students: the motivation to use (FaletarTanacković et al., 2017), preferences between print and digital (Zabukovec and Vilar, 2015), different perceptions and use related to study areas (Dukić and Strišković, 2015; Kamińska, 2014; Kowalska-Chrzanowska and Książek, 2019). The perceptions of study e-materials of students were compared to those of teachers and librarians (Vilar and Zabukovec, 2016). Other aspects of students' behaviour were personal information management in two different countries (Swigon, 2014), information grounds (Cisek et al., 2018), and digital information archiving of their personal materials (Marčetić, 2015; Krtalić et al., 2016), or the information habits of information system users of one university

(Kudma et al., 2017). Despite being conducted on the easily available audiences, these studies help to identify some emerging features of information behaviour in the most dynamic and intensively using information groups and may usefully affect university and library service provision.

The second most popular audience among information behaviour researchers is *scholars and scientists* in the scholarly communication environment. The researchers are interested in the high-level processes of organisations, such as information culture (Lauri et al., 2016), information transfer mechanisms (Deja and Próchnicka, 2018), modelling the process of scholarly information seeking (Pulikowski, 2018; Cisek and Krakowska, 2020), or factors influencing usage of open access repositories for scholarly publishing (Maceviciute and Kepaliene, 2022). On the other hand, the perception of information environment by the researchers themselves (Steinerova, 2018) or their general characteristics and information activities (Vilar et al., 2015; Zhigalkina, 2018) are studied in different countries. Some researchers focus on objects of research, such as information seeking of mathematicians (Sapa et al., 2014) or information sharing between doctoral students and supervisors (Janiuniene and Maceviciute, 2016). Even very small groups of information users attract attention of researchers, e.g., scholars of one faculty (Mierzecka, 2015) or doctoral students in psychology (Wiorogórska, 2015).

A Lithuanian researcher was doing a doctoral study into information behaviour of *politicians* and the factors affecting it (Vernickaitė, 2014) as well as their information seeking styles (Vernickaitė, 2016).

Apart from academics and politicians I have failed to find any other professional groups attracting similar attention of researchers. The only study close to this group was done by Šobota and Špiranec (2022) exploring *workers'* information literacy and behaviour in relation to their rights at work and finding that the higher the literacy and the activeness of workers, the less violation of rights they experience.

We also can identify much smaller groups and study of their information behaviour. Thus, we see interest in consumers' information behaviour from the point of view of marketing (Rogala, 2020) or the work by Gudinavičius (2020)

who has explored beliefs of taxpayers affecting their information use. Information needs and behaviour of Croatian prisoners was of interest to Faletar et al. (2022), while Mierzecka and Łączyński (2022) have looked into the information needs of a particular gamers' community. Noc and Zumer (2014) were also interested in mental models of music resources.

To my great surprise, there were very few studies on information behaviour of elderly adults in comparison with English speaking countries. One of those was exploring research done into this social group through a lens of life goals perspective (Manzuch and Maceviciute, 2020). The other was conducted by Lipková et al. (2017) exploring news seeking behaviour and selection of sources of elderly people in digital environments.

There were equally few studies into information needs and behaviour of children and young people. Jermak (2014) explored the role of the internet in the life of young people. A very interesting study was conducted by Havigerová and Haviger (2014) looking into the sources, from which pre-literate pre-school children get information reflecting a plethora of media used by them, mainly the conversations and asking questions. It was continued by Burešová and Havigerová (2015) by studying information behaviour of gifted children in the same age group, which has shown that the difference between the two groups is not in the number of questions asked, but in the way of posing questions by gifted children and manipulating the received answers. Both studies were carried out in the area of educational psychology, but have close link to information studies.

Areas

Health-related information behaviour can be identified as a growing area of research in East Europe, though it is obviously more fragmented and varied than in other countries. As elsewhere, it is often directed at particular groups of patients, such as those with rare chronic diseases (Stanarević Katavić et al, 2016) or those treated for infertility (Erčulj et al., 2019). Besides patients' information behaviour, the researchers looked into information needs of students worrying about sexual health (Katavić et al., 2020), of parents with autistic children (Martinović, 2016), and information behaviour and literacy related to healthy

eating in five European countries (Niedźwiedzka et al., 2014). Kisilowska (2015) has explored health information searching in a computer network environment. Another area that attracts significant research resources in Eastern Europe is *reading*, though more often it is done from an educational perspective rather than as an information behaviour study. However, recently there was a growth of reading studies in information science related to reading of printed and digital books. The study of the students' preferences between print and digital reading by Zabukovec and Vilar (2015) was already mentioned above. A similar study was done by Lakowska and Gustowski comparing choices of Polish and Slovakian students (2014). Scholars of reading were looking into the cognitive motivation of engaging in reading choices of different media (Jurić, 2017), and into the relation between reading in different media and brain activity showing different levels of attention needed to read from paper compared to any size or type of screen (Gudinavičius, 2016). Maceviciute and Manzuch (2018) have explored digital reading research and found that it was extended to the areas of device manipulation, navigation and searching in digital texts. The team from Lithuania has also published research on perceptions and consequences of book piracy in relation to different interest groups and readers among them (Grigas and Gudinavičius, 2022; Gudinavičius and Grigas, 2022, Grigas et al., 2021). The issues of more diversified groups of readers are not frequently met, but we have found a study of prisoners' reading in Croatia that was focused more on choices of genre and topic than medium (FaletarTanacković et al., 2021). Another small but interesting study was conducted using eye-tracking equipment into the readers' choice of a book related to the design of its cover (Gudinavičius and Šuminas, 2018).

There are other miscellaneous aspects and areas explored by information behaviour researchers in Eastern Europe. One should note the recent interest to misinformation including information misbehaviour aspects by a team of Slovakian researchers who have broadly conceptualized these terms and explored other aspects of such misbehaviour (Hrčková et al., 2019). Polish researchers have been interested in affective aspects of information behaviour as opposed to cognitive (Mierzecka et al., 2019; Krakowska, 2020). Sapa (2022) is one of the very few addressing collaborative information behaviour mainly in the

organizational context. Krakowska (2020) just started the exploration of information behaviour in crisis as a concept and a research object.

The only researchers publishing about information behaviour study methods that I have found are Cisek and Krakowska, who have looked into use of the diary method for identifying mental representations of information spaces (2019a) and into the visual data use for studying information behaviour (2019b).

We find a growing number of empirical studies on information behaviour during the last decade, but the overarching theoretical works are few. An overview of the information behaviour research was written by Mierzecka in 2013. Babik (2014) looked at consuming information from the perspective of information ecology. A more recent and original attempt for a wider generalisation was presented by Steinerova at the COLIS conference in 2019, where she has explored the impact of information behaviour research on modelling academic information ecology at large. Another very recent example is a monograph published by Krakowska (2022) in Poland. She explores the epistemology of information behaviour research within a wider context of human agency.

Conclusion

It is interesting to follow how the concept of information behaviour has spread through some of the East European countries, but has diminished or has not taken root in others. One could suspect that the concept of information practice could have been adopted instead. So, I have used for the query the local language equivalents of information practice and searched using them in several languages, especially, if I could not find anything relevant for the query on information behaviour. However, in each and every language the returns were quite similar and on the lines of theory and practice of library and information work, profession, or science. Not a single hit associated it with activities of information users or remotely something like this. The approaches to information behaviour research in East Europe are quite varied, and the researchers are working with qualitative and interpretive approaches as well as with functionalist and quantitative ones. So, the difference in terminology is not a sign of backwardness of research, rather a matter of linguistics.

Though unequally spread, the information behaviour research is an area growing in significance in the region. A group of scholars working on this subject over longer time and producing publications emerge in the region as the repetition of names in the reference list shows. One can also see that this research is often done on the boundary of information and communication study areas and is strongly focused on digital environments. The research lacks variety in exploring different professional groups or everyday information behaviour, but it sometimes leads into unexpected areas such as piracy and misinformation or information seeking by pre-literal children. The increasing variety of such research is a sign of its health and one can only hope that financial support to this area will help to develop it further.

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Editor's Note

The editor responsible for the publication of this article is Martha Sabelli.

Author contribution note

The article was written 100% by its author.