

Everyday Life Information Seeking

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Abstract

Information seeking may be analyzed in two major contexts: job-related and nonwork. The present entry concentrates on nonwork information seeking, more properly called everyday life information seeking (ELIS). Typically, ELIS studies discuss the ways in which people access and use various information sources to meet information needs in areas such as health, consumption, and leisure. The entry specifies the concept of ELIS and characterizes the major ELIS models. They include the Sense-Making approach (Dervin), the Small world theory (Chatman), the ecological model of ELIS (Williamson), ELIS in the context of way of life (Savolainen), the model of information practices (McKenzie), and the concept of information grounds (Fisher). ELIS practices tend to draw on the habitualized use of a limited number of sources which have been found useful in previous use contexts. Since the late 1990s, the Internet has increasingly affected the ELIS practices by providing easily accessible sources. Even though the popularity of the networked sources has grown rapidly they will complement, rather than replace, more traditional sources and channels.

INTRODUCTION

Information seeking is a major constituent of information behavior or information practices, that is, the entirety of ways in which people seek, use, and share information in different contexts.^[1,2] Information seeking may be analyzed in two major contexts: job-related and nonwork. The present entry concentrates on nonwork information seeking, more properly called *everyday life information seeking* (ELIS). Typically, ELIS studies discuss the ways in which people use various information sources to meet information needs in areas such as health, consumption, and leisure.

Due to space restrictions, the present entry focuses on ELIS research conducted in the field of information studies or library and information science since the 1990s. First, for this reason, certain types of studies relevant to ELIS will not be discussed. These studies include marketing and consumer research, communication studies (e.g., audience research), and public library use studies. Second, specific questions of ELIS such as search strategies during interactions with Internet search engines will not be considered in the present entry. The entry is structured as follows. In the next section, the concept of ELIS will be clarified. Then, the ways in which various sources and channels are used in ELIS will be discussed, and the major conceptual models of ELIS will be characterized. The last section concludes the entry.

THE CONCEPT OF ELIS

Thus far, a rich variety of themes have been explored in ELIS studies. They have focused on people belonging to diverse groups such as the following:

- Urban young adults^[3–5]
- Adolescents making career decisions^[6]
- Elderly people^[7]
- Parents with children under the age of 5 years^[8]
- Abused or battered women^[9,10]
- Women struggling with overweight^[11]
- Hospital patients^[12]
- Blind and visually impaired citizens^[13,14]
- Homeless parents^[15]
- Immigrants^[16,17]
- People interested in paranormal issues^[18]
- Those having reading-for-pleasure as a hobby^[19]
- Hobbyist cooks^[20]
- Environmental activists^[21,22]

As the above examples suggest, the phenomena of ELIS can be approached from a number of viewpoints, for example, by concentrating on people's specific roles such as parents or hospital patients. ELIS can also be approached by focusing on the demographic features of information seekers, for example, by investigating information needs and seeking of elderly people. Finally, the issues of ELIS can be explored in the context of leisure activities such as hobbies.

Particularly in the early years of ELIS research, concepts such as *citizen information needs and seeking* were utilized to denote information seeking taking place outside work tasks.^[23] Even though the above concept is illuminating in itself, it is rather narrow because it primarily refers to people's rights and obligations toward social institutions as voters or participants in activities of civil society. Alternative concepts such as *nonwork information seeking* are problematic due to its residual nature and negative connotations: nonwork information seeking is implied to be less significant because it deals with something that is not associated with daily work.^[24] The definition problem is further aggravated by the fact that issues of job-related and nonwork information seeking tend to overlap and they may be interwoven in everyday settings.^[25] For example, seeking information about computer courses may serve both professional ends and hobbies.

Terminological problems originating from the false dichotomy of work-related and "nonwork" information seeking may be avoided by taking the concept of ELIS as starting point.^[24] The key word is *everyday life*, which refers to a set of attributes characterizing relatively stable and recurrent qualities of both work and free time activities. The most central attributes of everyday life are familiar, ordinary, and routine, and they qualify the structural conditions of action (e.g., the recurrent "rhythms" of work and leisure hours). The above characteristics of familiar, ordinary, and routine become real only in the process in which they are reproduced, day after day.

From this perspective, information seeking may occur in both work-related and leisure-related contexts of everyday life. Because the field of work-related information seeking is relatively well defined and the term *work-related information seeking* is self-explanatory, usually there is no need to use the more specific expression of "work-related information seeking in the context of everyday life." Thus the concept of ELIS may be reserved to denote information acquisition taking place in less clearly specified contexts and activities such as hobbies and household care. These activities and contexts are seen as important in their own right, and not only as residuals of work-related phenomena. Hence, the positive term ELIS indicates that ELIS is not inferior to work-related information seeking.

Generally defined, the concept of ELIS refers to the acquisition of various informational (both cognitive and expressive) elements, which people employ to orient themselves in daily life or to solve problems not directly connected with the performance of professional tasks or full-time study.^[24] Like work-related information seeking, ELIS may have two modes. On one hand, it may refer to seeking of *problem-specific information* (e.g., finding a fact). On the other hand, ELIS may manifest itself as seeking for *orienting information* (i.e., monitoring of everyday events by using various sources and channels).

EVERYDAY INFORMATION NEEDS AND THE USE OF INFORMATION SOURCES

A considerable number of ELIS studies focus on the ways in which information sources are used to meet various information needs. The specificity of research settings varies from general-level surveys of source usage to studies on ELIS focusing, for example, on health issues.^[26,27] However, due to space restrictions, the present entry concentrates on general-level studies.

Strictly defined, the tradition of ELIS research dates back to the early 1970s, when extensive surveys were launched in the United States to investigate ordinary people's information needs and seeking. At that time, the first attempts were made to elaborate conceptual and methodological tools for ELIS studies. Marcia Bates^[28] pioneered by introducing the concept of *life information* in 1974:

By 'life information' is meant information needed for successful living. The area of need ranges all the way from sheer survival (stay away from dogs that walk funny and foam at the mouth) to the most advanced forms of self-realization (where can I study ceramics or transcendental meditation?).

Thus defined, the above concept includes "vast amounts of information about how to do many different things in one's culture that will be acceptable and lead to one's survival and emotional satisfaction."

Somewhat later, Brenda Dervin, a communication scholar created innovative approaches to enrich traditional ELIS survey research settings. Douglas Zweigig also contributed significantly to methodological issues, primarily in the field of public library use studies.^[29,30]

One of the pioneering surveys of ELIS was based on interviews with about 1000 people in Baltimore in 1972. The informants represented various demographic groups. This massive study revealed almost 9000 everyday life questions or problems reported by the interviewees. These problems were categorized into problem areas indicating daily information needs as follows:^[31]

- Neighborhood
- Consumer habits
- Housing and household maintenance
- Crime and safety
- Education
- Employment
- Transportation
- Health
- Recreation
- Discrimination
- Financial matters
- Legal problems
- Public assistance

Later surveys have demonstrated that these need areas are largely also valid today. For example, a nationwide project on citizenship information conducted in Great Britain in 1997 revealed similar areas of everyday information needs.^[32] Apparently, the major information need areas are relatively stable, and the variation between (Western) countries is rather insignificant.

ELIS studies have also identified the most popular information sources and channels used to meet these needs. An extensive telephone survey conducted in New England, United States in 1979 revealed people's strong preference for human sources in ELIS.^[33] Three out of four respondents reported that they had drawn on their own experience in problem solving; in addition, friends, neighbors, and relatives appeared to be popular sources. A recent study of ELIS practices of environmental activists showed that they prefer newspapers, the Internet, and television while seeking for orienting information.^[21,34] In the seeking of problem-specific information, human sources such as friends are preferred most strongly, followed by the networked sources and organizational sources such as health centers. In ELIS, people tend to favor familiar sources that have functioned well in earlier use contexts.^[22] Overall, ELIS seems to be characterized by a conservative attitude: people tend to draw on familiar information sources that are often used almost routinely.

The Role of the Internet in ELIS

Since the late 1990s, particularly e-mail and Word Wide Web (WWW) have been widely accepted as new tools for communication and information seeking. The surveys indicate that people use the networked services for various purposes (e.g., keeping in contact with others by e-mail, seeking health information from Web pages, buying products and services, and participating in online discussions).^[27,35-38]

Savolainen^[39,40] explored the significance of the Internet in seeking for problem-specific and orienting information in Finland. E-mail and WWW appeared to be the most frequently used services in information seeking, but discussion groups and mailing lists were also utilized to some extent. The same study revealed that network services were used to seek both orienting and problem-specific information for nonwork purposes. Most often, information seeking was based on the browsing of Web pages. Similar findings were received also in a study conducted in Sweden.^[41] The study demonstrated that since the late 1990s, the Internet had already gained a fairly significant place in the informants' communication and information-seeking practices, providing a wide variety of sources for different purposes of use.^[41] The Internet was also found to be useful as a source of market information (e.g., flight schedules, car rentals, objects for sale, and job opportunities).^[41] Another study focusing on the role of WWW in ELIS showed that the major relevance criteria by which people select Web pages are largely the

same both in online and Web searching environments.^[42] To fight information overload, Web searchers tend to favor Web pages that provide sufficiently specific information. Also criteria such as familiarity with Web pages seem to be fairly significant, reflecting the importance of habitual factors in ELIS. On the other hand, Web searchers may face a number of problems such as the lack of relevant material and information overload.^[43]

Despite these problems, the Internet has become a highly popular source of information, largely due to the availability of search engines such as Google. However, the Internet has not been able to replace other media such as the telephone, television, radio, and newspaper in ELIS.^[21,22,28] On the contrary, the network sources and services complement them both in job-related and nonwork contexts.^[44]

THEORIES AND MODELS OF ELIS

Compared to job-related information seeking, the number of theoretical frameworks and models of ELIS is still relatively low. This is partly due to the relatively short tradition of this subfield and the smaller number of researchers who are active in ELIS issues.

The Sense-Making Approach (Dervin)

Brenda Dervin can be counted among the most influential researchers of ELIS since the early 1970s. Her early studies focused on the communication practices of urban poor people.^[45] In the early 1970s, Dervin began to develop the Sense-Making approach as a methodology focusing on human communication and the design of communication-based systems and activities. Since then, the theoretical and methodological bases of the Sense-Making approach have been transformed and refined, and it has been applied in numerous contexts to explore information needs and seeking of specific groups of people.^[46-50]

Dervin employs the metaphors of *situation*, *gaps*, and *uses* to depict information seeking and use them as a Sense-Making process. Metaphorically, the situation stands for the time-space context, where the individual becomes aware of the insufficiency of one's earlier definition of a situation. Gaps refer to questions or information needs elicited in situations of this kind. Uses stand for the ways in which information being sought or received from various sources helps to bridge the gap and to create a new sense. Examples of use include getting ideas and understanding, being able to plan ahead, deciding what to do, and getting out of a bad situation.^[46] More generally, information seeking and use may be approached by drawing on the metaphor of *gap-bridging*. However, this metaphor does not suggest a substantive conception of information seeking and use; the metaphor gives methodological and heuristic guidance to posit contextual questions as to how people interpret information in order to

make sense of it. These questions focus on the ways in which cognitive, affective, and other elements useful for Sense-Making process are constructed and shaped in order to bridge the gap.^[51]

Although the Sense-Making approach draws heavily on metaphorical formulations, it has gained empirical support, which strengthens the hypothesis that information seeking is a constructive process based on the utilization of categories of situation, gaps, and uses. For example, a study focused on blood donors who were asked to describe the process of donating.^[52] What happened first in the donating situation? What are the questions they themselves posed? How did they hope the answers to their questions would help them? Other Sense-Making studies have focused, for example, on the information needs and seeking of cancer patients.^[53] The Sense-Making theory has inspired, for example, the investigation of Julien,^[6] which discusses barriers to adolescents' information seeking for career decision making; and the study of Pettigrew,^[54] which concentrates on the ways in which people use public library-community network systems.

In sum, the Sense-Making approach has contributed significantly to the conceptual and methodological development of ELIS research. By emphasizing the role of individuals trying to bridge gaps in everyday situations and the nature of information as a situation-bound human construct, sense making has advocated the user-based approach, as opposed to the traditional information system-centered viewpoint. Thus Dervin has not only introduced a new viewpoint to ELIS studies, but has also more broadly contributed to the theoretical and methodological breakthrough of the user-centered approach to information-seeking studies.^[55]

ELIS in the Context of Small World (Chatman)

Elfreda Chatman is one of the most prominent figures in ELIS studies since the 1980s. Chatman's highly original research project focuses on information-seeking behavior of people living in the margins of society. Her research project is characterized by an attempt to develop a genuine social scientific theory, which describes ELIS in the context of "small world." This concept refers to social environments where individuals live and work, bound together by shared interests and expectations, and often economic status and geographic proximity as well.^[56] In small-scale communities of these kinds, activities are routine and fairly predictable, and everyday information seeking and sharing are oriented by generally recognized norms and role expectations based on beliefs shared by members of the community.

In a series of ethnographic studies conducted in the 1980s and 1990s, Chatman explored ways in which poor people seek, use, and communicate information within the context of their everyday settings. In a study characterizing

the information world of low-skilled workers, Chatman^[57] examined the information needs and seeking behavior of female janitors at a university. It appeared that they had a narrow, concrete, and local view of the world restricted to the most familiar social milieu. Thus information originating outside of this "small world" was not of great interest to them. The repertoire of information sources appeared to be narrow. Much daily information came from television. To some extent, information was also sought in newspapers. Most informants felt that personal experience was the most reliable source of information. They favored "first-level information" received through personal experiences or hearsay from someone who is accepted as having knowledge of the matters to be discussed. In contrast, the value of "second-level" information received from outsiders is suspected and often ignored because this type information is not compatible with the common sense reality of the small world.

The specific features, characteristic of information seeking in the small world were also studied among elderly women residing in a retirement complex.^[58] Ethnographic analysis was conducted to ascertain their information and recreational needs, and to explore the most popular information sources. The informants appeared to be active users of mass media. In contrast to the janitor study, the informants of this study favored quality TV programs, and they read books and magazines quite frequently, but were not active users of public library.

Based on the above studies, Chatman^[58] concluded that everyday information seeking of small world people is affected by four major factors forming the basis of the theory of information poverty: risk taking, secrecy, deception, and situational relevance. For example, the women of the retirement community avoided risk taking by not telling anyone about declining health concerns, thus giving up to seeking information or gaining emotional support.^[59] The notion of secrecy is closely related to risk taking in that the elderly women concealed physical and mental ailments. Third, deception represents a deliberative attempt to act out a false social reality.^[59] In this way, one engages in activities in which personal reality is consciously and forcefully distorted, and the individual tries to appear better than one really is. Finally, situational relevance is instrumental in explaining information poverty. Potentially useful information will be not used because people living in a small world do not see a generalized value of sources provided by outsiders intended to respond to their situation. The source is ignored because it is not legitimized by "contextual others."^[59]

To specify the ideas of small world, Chatman^[60] developed "a theory in the round," based on the ethnographic study of female prisoners. The concept of "life in the round" refers to a dynamic world based largely on approximation; in this world, things are understood implicitly.^[60,61] When people live in the round, imprecision

is largely accepted and inexactitude is tolerated, and where “members move in and out of the round depending on their need for more systematic, precise, and defined information.”^[62] Understanding life in the round results when information is clear enough to give sensible meaning to things. The most important consequence of this construct for the practice of ELIS is that life in the round adversely affects information seeking in day-to-day situations; people will not search for information if there is no need to do so. Small world inhabitants ignore information if they perceive that their world is working without it (i.e., they have enough certainty, comfort, and situational predictability so that the need to seek information is negated).^[62] Individuals will cross information boundaries only if: 1) information is perceived as critical; 2) there is a collective expectation that the information is relevant; and 3) a perception exists that the life lived in the round is no longer functioning.^[60]

Chatman^[63] summarized the theoretical developments in a theory of “normative behavior.” The theory may be seen as an elaboration and extension of the theory of life in the round. In brief, the normative theory of behavior suggests that ELIS is affected by the worldview and norms characteristic of specific communities; in addition ELIS is affected by the ways in which actors are classified into insiders or outsiders. Ultimately, norms and roles determine what kind of information sources will be preferred, accepted, and used.

Chatman’s research project on the information-seeking practices of marginalized people inspired other projects (e.g., the study of Hersberger^[15] focusing on the ways in which homeless parents living in family shelters seek for everyday information). The research line opened by Chatman is promising both theoretically and methodologically. Importantly, Chatman’s research project exemplifies the genuine need to utilize the repertoire of social scientific theories and ethnographic approaches to enhance our understanding of information seeking as an integral part of everyday action in social contexts.

The Ecological Model of ELIS (Williamson)

By drawing on the findings of an empirical study in which some 200 older adults were interviewed in Australia in 1992–1994, Kirsty Williamson^[7,64] developed an ecological model of information seeking and use. It can be called ecological because it sets information seeking and use in the context of social and cultural factors, which may have an influence on the ways of selecting and using information sources and channels. The model suggests that, although people purposefully seek information in response to perceived needs, they also monitor their world and receive information incidentally. The ways in which they monitor the everyday world is mediated by social-cultural backgrounds and values, physical environments,

and personal characteristics (e.g., their states of health), as well as their socioeconomic situations and lifestyles.

The model suggests that in purposeful and incidental information seeking, information sources of various types are given differing importance. The intimate personal networks (family and friends) are closest to the user and are probably also perceived by the user as most easily accessible. The other source types are located farther in the “ecology of sources” [i.e., wider personal networks (clubs, churches, and voluntary organizations) and the mass media (newspapers, television, radio, and magazines)]. Institutional sources such as professionals, government departments, and other organizations are perceived to be even more remote in this sense. The ecological model has been applied in empirical studies focusing on ELIS of diverse groups such as blind and visually impaired people.^[13] The strength of the ecological model is that it allows information seekers to be conceptualized as both individuals and members of social groups. The model also allows for the influence of particular physical and social environments: the individual is seen as a creative and thinking entity, but within contexts which involve various kinds of biological and social constraints.

ELIS in the Context of Way of Life (Savolainen)

“Way of life” is a social scientific concept, which provides a broad context to investigate individual and social factors affecting ELIS. Savolainen^[24] defined the concept of way of life as “order of things,” which is based on the choices that individuals make. “Things” stand for various activities taking place in the daily life world, including not only jobs but also necessary reproductive tasks such as household care and voluntary activities (hobbies); “order” refers to preferences given to these activities. Because, in most cases, the order of things is a relatively well-established constellation of work and nonwork activities taking place in a day or a week, this constellation is easily taken to be the most natural or normal way of organizing one’s everyday life. Correspondingly, people have a “cognitive order” indicating their perceptions of how things are when they are “normal.” Through their choices, individuals have practically engaged in a certain order of things, and it is in their own interest to adhere to that order as long as they find it meaningful. Thus at least implicitly, most people seek for an internal coherence in everyday matters because it gives them better chances to plan their choices and act meaningfully.

The most central issues of way of life manifest themselves in the *structure of the time budget*, described as a relation between working and leisure time, *models of consumption of goods and services*, and *nature of hobbies*.^[24] The structure of the time budget reveals the proportions of time spent on work, necessary activities outside work such as household care, and, finally, the time devoted to recreational activities such as hobbies. By analyzing the

models of consumption, one may draw a picture that indicates the share of money spent on the acquisition of various goods or services (e.g., books). The analysis of hobbies sheds light on the substance of way of life because the nature of hobbies informs us of the things that people find most pleasant; the analysis also reveals the role of informational interests (for instance, newspaper reading) in leisure time.

Because the meaningful order of things may not reproduce itself automatically, individuals are required to take active care of it. This caring activity can be defined as *mastery of life*, implying the importance of the coherence of the everyday life projects at large. The nature of these projects may vary. As aptly specified by Hektor,^[41] some life projects may be generic in that they are common to most people (e.g., household care). Other projects are specific because they originate from an individual's life situation (e.g., child rearing or one's specific interests, i.e., hobbies).

Mastery of life serving one's life projects may be either passive or active. It is passive when people are satisfied with seeing that everything is going on as expected, at least on the whole.^[24] Active mastery of life is associated with pragmatic problem solving in cases where the order of things has been shaken or threatened. Mastery of life is a general preparedness to approach everyday problems in certain ways in accordance with one's values. Information seeking is an integral component of mastery of life, which aims at the elimination of continual dissonance between perceptions of "how things are at this moment" and "how they should be." If there is no dissonance, mastery of life goes on quite routinely and the information seeking attached to it can be characterized as a rather *passive monitoring* of everyday life events. In other cases, mastery of life may grow into active problem solving aimed at restoring the disturbed order, usually requiring *active seeking of practically effective information*.

Savolainen^[24] utilized the above model in an empirical study conducted in Finland. The study focused on two groups: that is, teachers and industrial workers. The empirical study strengthened the assumption that way of life directs information seeking in a significant way. Teachers were more eager to seek factual information from various media, and they took a more critical stand toward the supply of light entertainment from radio, television, newspapers, and magazines. The interviews revealed that personal interest and current life situation also affect media use. There appeared to be teachers not particularly interested in the culture or politics sections of newspapers; similarly, some workers preferred documentaries and other serious programs and took a critical view of entertainment.

Information Practices (McKenzie)

One of the newest models of ELIS is proposed by Pamela McKenzie.^[65] The model was developed in the context

of health information seeking by pregnant women. McKenzie specifies a two-dimensional model of context-bound information practices. The model describes four modes: that is, active seeking, active scanning, nondirected monitoring, and obtaining information by proxy. When seeking information, the modes may appear in varying order, depending on the information need at hand and the situational factors. The modes can take place in two phases: first, at times of connecting information sources; and, second, interacting with them. Thus the second phase implies the use of the information source to which one has been connected. The indications of use are, for example, reading a text or actively asking specifying questions when consulting a doctor.

By drawing on the above model, the process of health information seeking may be described as follows.^[65] *Active seeking* can be defined as the most directed mode of information practice. Consulting a previously identified source (e.g., a family physician), rereading an article in an encyclopedia, or conducting a systematic known-item search in a medical database exemplifies active seeking. *Active scanning* refers to semidirected browsing or scanning in likely locations (e.g., medical books in a bookstore, or Web pages discussing diabetes). *Nondirected scanning* involves serendipitous encounter with, and recognizing, a source (e.g., incidentally getting a useful idea from a TV program on how to reduce smoking). Finally, *obtaining information by proxy* may take place when interacting with information sources through the initiative of another agent: either the information source or some other gatekeeper or intermediaries. For example, a colleague interested in the stopping of smoking may refer to new Web pages related to this topic, recommending the information seeker to visit them. Alternatively, the colleague may have bought a new book on this topic and lends it to the information seeker.

McKenzie's model exemplifies the major tenets of recent studies on information seeking. Information seeking is seen as a highly dynamic and context-dependent activity, drawing on a number of modes that may appear in various orders. The model also exemplifies the growing complexity of ELIS processes (e.g., the ways in which various information resources perceived to be accessible afford ELIS to meet the needs of orienting and problem-specific information).

Information Grounds (Fisher)

Drawing on a series of ethnographic studies, Karen Fisher (née Pettigrew) and her colleagues have recently developed the concept of *information grounds* that stands for a spatiotemporally sensitive context of ELIS.^[66] Information grounds may be defined as an environment temporarily created by the behavior of people who have come together to perform a given task, but from which emerges a social atmosphere that fosters the spontaneous and

serendipitous sharing of information.^[67] In other words, information grounds stand for an individual's combined perceptions of place, people, and information.^[68] Examples of everyday information grounds include medical clinics, hair salons, bars, clubs, day-care centers, metro buses, bookstores, and libraries.^[17] Grounds of these kinds stand for information-rich places where people indicate an awareness that an appropriate source might be located.

A major characteristic of information grounds is that they can occur anywhere, in any type of temporal setting and are predicated on the presence of individuals. Second, people gather at information grounds for a primary, instrumental purpose other than information sharing and seeking. Third, social interaction is a primary activity at information grounds, and information flow is a by-product. Fourth, people engage in formal and informal information sharing, and information flow occurs in many directions.^[66,69] Even though information grounds primarily serve the needs of information sharing, they are also interesting from the viewpoint of ELIS; while people share information they may also ask specifying questions related to the topic of discussion. Purposive information seeking occurs when someone voluntarily visits an information ground with the purpose of obtaining information.^[66] Nonpurposive information seeking takes place when someone serendipitously encounters information without prior intent.^[70]

In a study focusing on information sharing and seeking at the foot clinic Pettigrew^[67,71] found that everyday information flow did not occur solely from nurses to customers, but the latter appeared to be ripe sources of everyday information for the nurses themselves. Multiple persons participated in exchanges and customers shared information while waiting for treatment and afterwards. It also appeared that information needs were rarely stated as direct requests but instead emerged subtly as people shared their situations with one another and chit-chatted. This suggests that information sharing may give rise to occasional seeking of information. On the other hand, information may also be shared in the context of information encountering, because the information received this way may be passed on to others. Another study explored how new immigrants use coping skills and literacy programs run by Queens Public Library, New York.^[16] The study showed that the immigrants share information in multiple directions often as a part of social interaction and that topics of information could arise quite serendipitously as well as through framing via the literacy program's subjects. Finally, a survey drawing on telephone interviews residents in East King County, United States showed that people favor information grounds by diverse criteria.^[69] However, a common denominator was the opportunity to share common interests or needs, and the feeling as if other people understood their needs, and that these people may be trusted. For example, a health care

facility can provide opportunities to talk with people having similar life experiences.

In the most recent characterization of information grounds, the concept is specified by referring to the people-place-information trichotomy.^[68,72] More specifically, information grounds are perceived as a social construct rooted in an individual's combined perceptions of place, people, and information. As the numerous examples of recent studies^[66,68,69,72] suggest, the construct of information grounds has not been explicated in a final form; on the contrary, the approach is continually elaborated, both conceptually and empirically.

CONCLUSION

The ELIS studies conducted since the 1970s indicate that everyday life information needs and seeking are affected by a number of cognitive, emotional, cultural, and situational factors. ELIS has two major modes. On the one hand, people may seek for orienting information by monitoring daily events through the media; newspapers, television, and the Internet are the most central sources of orienting information. On the other hand, they may seek for problem-specific information. Most frequently, information seeking of this kind is triggered by needs related to health issues, consumer problems, housing, and various kinds of hobbies. To meet these needs, people tend to favor a limited number of easily accessible sources, which have been found useful in previous use contexts.

To a large extent, the major features of ELIS may be condensed into the principles of information seeking proposed by Harris and Dewdney.^[73,74] Most importantly, these principles suggest that the needs for problem-specific information arise from the situations in which information seekers find themselves; that is, any need for information is situationally based and dependent on a particular context. People also tend to look for the information that is most accessible, sometimes referred to as the principle of the least effort. It also seems that daily information-seeking habits change quite slowly. One of the recurrent findings of ELIS research is people's tendency to favor human sources due to easy access to and the opportunity to get immediate feedback. However, source preferences may vary in differing information need situations; depending on their requirements, for example, printed encyclopedias may be preferred over human sources. Since the late 1990s, the Internet has increasingly affected ELIS practices by providing easily accessible sources. Even though the popularity of the networked sources has grown rapidly, it seems that they will complement, rather than replace, more traditional sources and channels.

As the daily information environment becomes more complex and information seeking is affected by an increasing number of contextual factors, there is a need to elaborate the research settings of ELIS. The major

challenge is to study contextually the dynamic (situation-bound, sometimes nonlinear and cyclical) processes of ELIS as related to the recurrent patterns of information seeking. More reflective attention is being devoted to the ways in which the researchers gain access to the everyday life settings of the informants and conceptualize the phenomena of ELIS.^[74–76] One indication of the progress made in this respect is the elaboration of the theoretical and methodological bases, as exemplified by Chatman's project to develop a social scientific theory of ELIS. Recent examples of promising lines of research include the approaches to information grounds^[66] and information practices.^[34,65] These approaches suggest that the best way to elaborate the picture of ELIS both conceptually and empirically is to thematize it as a contextual everyday practice.^[2,34,65] However, ELIS is not rendered meaningful as a separate practice because it is often connected to practices of using and sharing information.

REFERENCES

1. Wilson, T.D. Human information behaviour. *Inf. Sci.* **2000**, *3* (2), 49–56. <http://www.inform.nu/Articles/Vol3/v3n2p49-56.pdf> (accessed April 2008).
2. Savolainen, R. Information behavior and information practice. Reviewing the “umbrella concepts” of information seeking studies. *Libr. Quart.* **2007**, *77* (2), 109–132.
3. Agosto, D.E.; Hughes-Hassell, S. People, pages, and questions: An investigation of the everyday life information-seeking behaviors of urban young adults. *Libr. Inf. Sci. Res.* **2005**, *27* (2), 141–163.
4. Agosto, D.E.; Hughes-Hassell, S. Toward a model of the everyday life information needs of urban teenagers. Part 1: Theoretical model. *J. Am. Soc. Inf. Sci.* **2006**, *57* (10), 1394–1403.
5. Agosto, D.E.; Hughes-Hassell, S. Toward a model of the everyday life information needs of urban teenagers. Part 2: Empirical model. *J. Am. Soc. Inf. Sci.* **2006**, *57* (11), 1418–1426.
6. Julien, H.E. Barriers to adolescents' information seeking for career decision making. *J. Am. Soc. Inf. Sci.* **1999**, *50* (1), 38–48.
7. Williamson, K. Discovered by chance. The role of incidental information acquisition in an ecological model of information use. *Libr. Inf. Sci. Res.* **1998**, *20* (1), 23–40.
8. Nicholas, D.; Marden, M. Parents and their information needs. A case study: Parents of children under the age of five. *J. Libr. Inf. Sci.* **1998**, *30* (1), 35–47.
9. Dunne, J.E. Information seeking and use by battered women: A person-in-progressive-situations approach. *Libr. Inf. Sci. Res.* **2002**, *24* (4), 343–355.
10. Harris, R.; Stickney, J.; Grasley, C.; Hutchinson, G.; Greaves, L.; Boyd, T. Search for help and information. Abused women speak. *Libr. Inf. Sci. Res.* **2001**, *23* (2), 123–141.
11. Bar-Ilan, J.; Shalom, N.; Shoham, S.; Baruchson-Arbib, S.; Getz, I. The role of information in a lifetime process: A model of weight maintenance by women over long time periods. *Inf. Res. Int. Electron. J.* **2006**, *11* (4), <http://InformationR.net/ir/11-4/paper263.html> (accessed April 2008).
12. Cameron, P.; Corbett, K.; Duncan, C.; Hegyi, K.; Maxwell, H.; Burton, P.F. Information needs of hospital patients: A survey of satisfaction levels in a large city hospital. *J. Doc.* **1994**, *50* (1), 10–23.
13. Williamson, K.; Schauder, D.; Bow, A. Information seeking by blind and sight impaired citizens: An ecological study. *Inf. Res. Int. Electron. J.* **2000**, *5* (4), <http://informationr.net/ir/5-4/paper79.html> (accessed April 2008).
14. Beverley, C.A.; Bath, P.A.; Barber, R. Can two established information models explain the information behavior of visually impaired people seeking health and social care information? *J. Doc.* **2007**, *63* (1), 9–32.
15. Hersberger, J. Everyday information needs and information sources of homeless parents. *New Rev. Inf. Behav. Res.* **2001**, *2*, 119–134.
16. Fisher, K.E.; Durrance, J.C.; Hinton, M.B. Information grounds and the use of need-based services by immigrants in Queens, New York: A context-based, outcome evaluation approach. *J. Am. Soc. Inf. Sci.* **2004**, *55* (8), 754–766.
17. Fisher, K.E.; Marcoux, E.; Miller, L.S.; Sánchez, A.; Cunningham, E.R. Information behaviour of migrant Hispanic farm workers and their families in the Pacific Northwest. *Inf. Res. Int. Electron. J.* **2004**, *10* (1), <http://InformationR.net/ir/10-1/paper199.html> (accessed April 2008).
18. Kari, J. *Information Seeking and Interest in the Paranormal: Towards a Process Model of Information Action*; Acta Universitatis Tampereensis 826; University of Tampere: Tampere, Finland, 2001. <http://acta.uta.fi/haku.phtml> (accessed April 2008).
19. Ross, C.S. Finding without seeking: The information encounter in the context of reading for pleasure. *Inf. Process. Manag.* **1999**, *35* (6), 783–799.
20. Hartel, J. Information activities and resources in an episode of gourmet cooking. *Inf. Res. Electron. J.* **2006**, *12* (1), <http://InformationR.net/ir/12-1/paper282.html> (accessed April 2008).
21. Savolainen, R. Information source horizons and source preferences of environmental activists: A social phenomenological approach. *J. Am. Soc. Inf. Sci. Technol.* **2007**, *58* (12), 1709–1719.
22. Savolainen, R. Source preferences in the context of seeking problem-specific information. *Inf. Process. Manag.* **2008**, *44* (1), 274–293.
23. Durrance, J.C. *Armed for Action: Library Response to Citizen Information Needs*; Neal-Schuman: New York, 1984.
24. Savolainen, R. Everyday life information seeking: Approaching information seeking in the context of “way of life”. *Libr. Inf. Sci. Res.* **1995**, *17* (3), 259–294.
25. Given, L.M. The academic and the everyday: Investigating the overlap in mature undergraduates' information-seeking behavior. *Libr. Inf. Sci. Res.* **2002**, *24* (1), 17–29.
26. Eriksson-Backa, K. *Sickness and in Health—How Information and Knowledge Are Related to Health Behaviour*; Åbo Akademi University Press: Åbo, Finland, 2003.
27. Harris, R.M.; Wathen, C.N.; Fear, J.M. Searching for health information in rural Canada. Where do residents look for health information and what do they do when they

- find it? *Inf. Res. Electron. J.* **2006**, *12* (1), <http://InformationR.net/ir/12-1/paper274.html> (accessed April 2008).
28. Bates, M.J. Speculations on the sociocultural context of public information provision in the seventies and beyond. In *Library and Information Service Needs of the Nation: Proceedings of a Conference on the Needs of Occupational, Ethnic, and other Groups in the United States. Sponsored by the National Commission on Libraries and Information Science*, Cuadra, C.A., Bates, M.J., Eds.; U.S.G.P.O: Washington DC, 1974; 51–76.
 29. Zweizig, D.; Dervin, B. Public library use, users, uses. Advances in knowledge of the characteristics and needs of the adult clientele of American public libraries. In *Advances in Librarianship*, Voigt, M.J., Harris, M.H., Eds.; Academic Press: New York, 1977; Vol. 7, 231–255.
 30. Dalrymple, P.W. A quarter century of user-centered study: The impact of Zweizig and Dervin on Library Information Science research. *Libr. Inf. Sci. Res.* **2001**, *23* (2), 155–165.
 31. Warner, E.; Murray, A.D.; Palmour, V.E. *Information Needs of Urban Citizens. Final Report*; U.S. Department of Health, Education and Welfare, Office of Education, Bureau of Libraries and Learning Resources: Washington, DC, 1973.
 32. Marcella, R.; Baxter, G. The information needs and the information seeking behaviour of a national sample of the population in the United Kingdom, with special reference to needs related to citizenship. *J. Doc.* **1999**, *55* (2), 159–183.
 33. Chen, C.; Hernon, P. *Information Seeking: Assessing and Anticipating User Needs*; Neal-Schuman: New York, 1982.
 34. Savolainen, R. *Everyday Information Practices. A Social Phenomenological Perspective*; The Scarecrow Press: Lanham, MD, 2008.
 35. Howard, P.E.N.; Rainie, L.; Jones, S. Days and nights on the Internet. In *The Internet in Everyday Life*, Wellman, B., Haythorntwaite, C., Eds.; Blackwell: Oxford, 2002; 45–73.
 36. Savolainen, R. “Living encyclopedia” or idle talk? Seeking and providing consumer information in an Internet news-group. *Libr. Inf. Sci. Res.* **2001**, *23* (1), 67–90.
 37. Rieh, S.Y. On the web at home: Information seeking and web searching in the home environment. *J. Am. Soc. Inf. Sci. Technol.* **2004**, *55* (8), 743–753.
 38. Savolainen, R.; Kari, J. Placing the Internet in information source horizons. A study of information seeking by Internet users in the context of self-development. *Libr. Inf. Sci. Res.* **2004**, *26* (4), 415–433.
 39. Savolainen, R. Seeking and using information from the Internet. The context of non-work use. In *Exploring the Contexts of Information Behaviour*, Proceedings of the 2nd International Conference on Research in Information Needs, Seeking and Use in Different Contexts, Sheffield, UK, August 13–15, 1998; Wilson, T., Allen, D., Eds.; Taylor Graham: London, 1998; 356–370.
 40. Savolainen, R. The role of the Internet in information seeking. Putting the networked services in context. *Inf. Process. Manag.* **1999**, *35* (6), 765–782.
 41. Hektor, A. *What's the Use? Internet and Information Behavior in Everyday Life*; Linköping University: Linköping, Sweden, 2001.
 42. Savolainen, R.; Kari, J. User-defined relevance criteria in Web searching. *J. Doc.* **2006**, *62* (6), 685–707.
 43. Savolainen, R.; Kari, J. Facing and bridging gaps in Web searching. *Inf. Process. Manag.* **2006**, *42* (2), 519–537.
 44. Nguyen, A.; Western, M. The complementary relationship between the Internet and traditional mass media: The case of online news and information. *Inf. Res. Int. Electron. J.* **2006**, *11* (3), <http://InformationR.net/ir/11-3/paper259.html> (accessed April 2008).
 45. Greenberg, B.S.; Dervin, B. *Use of the Mass Media by the Urban Poor: Findings of Three Research Projects, with an Annotated Bibliography*; Praeger: New York, 1970.
 46. Dervin, B. An overview of sense-making research: concepts, methods and results to date, International Communication Association Annual Meeting: Dallas, TX, 1983. (mimeo).
 47. Dervin, B. From the mind's eye of the 'user': The Sense-Making qualitative-quantitative methodology. In *Qualitative Research in Information Management*, Glazier, J.D., Powell, R.R., Eds.; Libraries Unlimited: Englewood, CO, 1992; 61–84.
 48. Dervin, B. On studying information seeking methodologically: The implications of connecting metatheory to method. *Inf. Process. Manag.* **1999**, *35* (6), 727–750.
 49. Dervin, B.; Loreman-Wernet, L.; Lauterbach, E., Eds. *Sense-Making Methodology Reader. Selected Writings of Brenda Dervin*; Hampton Press: Cresskill, NJ, 2003.
 50. Savolainen, R. The Sense-Making theory: Reviewing the interests of a user-centered approach to information seeking and use. *Inf. Process. Manag.* **1993**, *29* (1), 13–28.
 51. Savolainen, R. Information use as gap-bridging: The viewpoint of Sense-Making methodology. *J. Am. Soc. Inf. Sci. Technol.* **2006**, *57* (8), 1116–1125.
 52. Dervin, B.; Nilan, M.S.; Jacobson, T.L. Conducting helpful communications research. An approach with blood donors, Annual Meeting of the International Communication Association, Boston, MA, 1982 (mimeo).
 53. Dervin, B.; Nilan, M.; Krenz, C.; Wittet, S. *When Cancer Strikes: How Cancer Patients Make Sense of Their Health Situations*; Report Presented to the National Cancer Institute, National Cancer Institute: Washington, DC, 1982.
 54. Pettigrew, K.E.; Durrance, J.; Unruh, K.T. Facilitating community information seeking using the internet: Findings from three public library-community network systems. *J. Am. Soc. Inf. Sci. Technol.* **2002**, *53* (11), 894–903.
 55. Dervin, B.; Nilan, M. Information needs and uses. In *Annual Review of Information Science and Technology*, Williams, M.E., Ed.; Knowledge Industry, Inc.: White Plains, 1986; Vol. 21, 3–33.
 56. Burnett, G.; Besant, M.; Chatman, E.A. Small worlds: Normative behavior in virtual communities and feminist bookselling. *J. Am. Soc. Inf. Sci. Technol.* **2001**, *52* (7), 536–547.
 57. Chatman, E.A. Life in a small world: Applicability of gratification theory to information-seeking behavior. *J. Am. Soc. Inf. Sci.* **1991**, *42* (6), 438–449.
 58. Chatman, E.A. *The Information World of Retired Women*; Greenwood Press: Westport, CT, 1992.
 59. Chatman, E.A. The impoverished life-world of outsiders. *J. Am. Soc. Inf. Sci.* **1996**, *47* (3), 193–206.

60. Chatman, E.A. A theory of life in the round. *J. Am. Soc. Inf. Sci.* **1999**, *50* (3), 207–217.
61. Fulton, C. Chatman's life in the round. In *Theories of Information Behavior*, Fisher, K.E., Erdelez, S., McKechnie, L., Eds.; Information Today, Inc.: Medford, NJ, 2005; 79–82.
62. Pettigrew, K.; Fidel, R.; Bruce, H. Conceptual frameworks in information behavior. In *Annual Review of Information Science and Technology*, Williams, M.E., Ed.; Information Today, Inc.: Medford, NJ, 2001; Vol. 35, 43–78.
63. Chatman, E.A. Framing social life in theory and research. *New Rev. Inf. Behav. Res.* **2000**, *1*, 23–17.
64. Williamson, K. The information needs and information seeking-behaviour of older adults: An Australian study. In *Information Seeking in Context*, Proceedings of an International Conference on Research in Information Needs, Seeking and Use in Different Contexts, Tampere, Finland, August 14–16, 1996; Vakkari, P., Savolainen, R., Dervin, B., Eds.; Taylor Graham: London, 1998; 337–350.
65. McKenzie, P.J. A model of information practices in accounts of everyday life information seeking. *J. Doc.* **2003**, *59* (1), 19–40.
66. Fisher, K.E.; Naumer, C.M. Information grounds: Theoretical basis and empirical findings on information flow in social settings. In *New Directions in Human Information Behavior*, Spink, A., Cole, C., Eds.; Springer: Dordrecht, 2006; 93–111.
67. Pettigrew, K.E. Waiting for chiropody: Contextual results from an ethnographic study of the information behaviour among attendees at community clinics. *Inf. Process. Manag.* **1999**, *35* (6), 801–817.
68. Fisher, K.E.; Landry, C.F.; Naumer, C. Social spaces, casual interactions, meaningful exchanges: 'Information ground' characteristics based on the college student experience. *Inf. Res. Int. Electron. J.* **2007**, *12* (2), <http://informationr.net/ir/12-2/paper291.html> (accessed April 2008).
69. Fisher, K.E.; Naumer, C.; Durrance, J.; Stromski, L.; Christiansen, T. Something old, something new: Preliminary findings from an exploratory study about people's information habits and information grounds. *Inf. Res. Int. Electron. J.* **2005**, *10* (2), <http://InformationR.net/ir/10-2/paper223.html> (accessed April 2008).
70. Erdelez, S. Information encountering. In *Theories of Information Behavior*, Fisher, K.E., Erdelez, S., McKechnie, L., Eds.; Information Today, Inc: Medford, NJ, 2005; 179–184.
71. Pettigrew, K.E. Lay information provision in community settings: How community health nurses disseminate human services information to the elderly. *Libr. Quart.* **2000**, *70* (1), 47–85.
72. Fisher, K.E.; Landry, C.F. Understanding the information behavior of stay-at-home mothers through affect. In *Information and Emotion. The Emergent Affective Paradigm in Information Behavior Research and Theory*, Nahl, D., Bilal, D., Eds.; Information Today, Inc.: Medford, NJ, 2007; 211–233.
73. Harris, R.M.; Dewdney, P. *Barriers to Information: How Formal Help Systems Fail Battered Women*; Greenwood Press: Westport, CT, 1994.
74. Wathen, C.N.; Harris, R.M. An examination of the health information seeking experiences of women in rural Ontario, Canada. *Inf. Res. Int. Electron. J.* **2006**, *11* (4), <http://InformationR.net/ir/11-4/paper267.html> (accessed April 2008).
75. Carey, R.F.; Kechnie, L.E.F.; McKenzie, P. Gaining access to everyday life information seeking. *Libr. Inf. Sci. Res.* **2001**, *23* (4), 319–334.
76. Tuominen, K. Whoever increases his knowledge merely increases his heartache: Moral tensions in heart surgery patients' and their spouses' talk about information seeking. *Inf. Res. Int. Electron. J.* **2004**, *10* (1), <http://informationr.net/ir/10-1/paper202.html> (accessed April 2008).