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# Intra-individual information behaviour in daily life

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#### **Abstract**

This study addresses the lack of attention in the literature paid to detailed analysis of individuals' information behaviour in daily life contexts. In particular, the study characterizes one individual's information behaviour across different daily life situations, to seek behavioural patterns that might be associated with various aspects of each information seeking situation. Data was collected through participant diaries, and subsequent oral interviews. This study reports on source selection, and influence of various aspects of the situations described. These aspects were identified from analysis of the interview transcripts, and include time constraints and pressures, motivation for the information need, context of the information need, type of initiating event, location of information seeking activities, intended application of the information found, and source type.

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# 1. Background and purpose

This study was undertaken to address the lack of attention in the literature paid to detailed analysis of individuals' information behaviour in daily life contexts. In particular, the study sought to characterize one individual's information behaviour across different daily life situations, to seek behavioural patterns and identify specific variables that might be associated with various aspects of information seeking. "Situations" is defined as a particular set of circumstances in

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which people find themselves, which may be associated with information behaviours. Situations is broader than Dervin's "gaps" (Dervin, 1983), but is narrower than "context" as defined in all the discussions of context arising from the Information Seeking in Context Conferences (held in 1996, 1998, 2000, 2002). As an example, Solomon (2002) suggests that context may be as broad as "work life" or "searching the Web". Our definition of situation is more akin to Allen and Kim's (2001) definition of "task". As defined by the Oxford English Dictionary, situation may be "a particular conjunction of circumstances under which the characters are presented in the course of a play" (Oxford English Dictionary, 1989, p. 569). This definition works well for situation as used in this study, because it suggests more of the process that these circumstances initiate. For the purposes of this paper, a situation in daily life begins with an event, or a set of circumstances, that create for a person an awareness of an information need. These events or circumstances can be qualitatively described and may or may not affect the information seeking process. Aspects of situations that can be described may be tangible, such as location, or perceived, such as motivation. We are asking more than "what caused the information need?"; we are also asking "where was the person situated in her or his context when the information need arose?" and how did this situation affect subsequent information behaviour?

The study analyzes "intra"-individual information behaviour; that is, behaviour that varies within a single individual. No comparisons are made with the behaviours of others, "inter"-individually, since inter-individual studies have yet to discern between relevant aspects of situation and relevant personal characteristics (e.g., personality) which vary across individuals. The approach of this study may be considered a type of case-study, and has been applied previously by Kuhlthau (1999), although her research questions differed from those addressed in the current study, and her data was analyzed deductively, according to a pre-existing model.

#### 2. Literature review

That advanced capitalist societies have moved into a global information society is generally taken for granted. How people actually interact with information, however, has yet to be fully elucidated. Despite widespread research into information behaviour within organizations and other workplaces, a full understanding is lacking of human information behaviour in daily life situations. Outstanding work by Chatman (1987, 1990, 1991, 1992, 1996), Savolainen (1995), and Pettigrew (1999) among others, has examined information behaviour in daily life situations, but much analysis remains to be done. For instance, Chatman's work has focused on marginalized people (e.g., of low socio-economic status), and has focused on people's information behaviour in work situations; an exception is her analysis of the information behaviour of elderly, retired women (Chatman, 1992). Chatman's work suggests several contextual factors having to do with the way in which people manage social relationships, particularly to minimize personal risk. Savolainen (1995) has related information behaviour to people's overall "way of life", but his work focuses strictly on situations outside of work contexts, which, in the authors' opinion, are an integral part of "daily life". Pettigrew's (1999) study of the role of a particular social contact, nurses, in the information seeking of seniors, also points to the importance of social relationships in information seeking. A recent special issue of Library and Information Science Research, (volume 23, 2001), focuses on everyday life information seeking, but, as with the previously mentioned research, all these studies have focused on groups of people, seeking inter-individual patterns of information behaviour. This study sought to address an apparent gap in the literature. The purpose of the study was to examine, in an exploratory way, *intra*-individual information behaviour in daily life contexts; that is, to seek patterns and variation in one individual's behaviour across different situations. The purpose of this analysis is to characterize aspects of the specific situations that were the focus of the information behaviour described, to identify patterns demonstrated by a single individual. The expectation is that elucidating those aspects of the situation or context in which information behaviour occurs will more fuller characterize the relevant aspects of context which affect information behaviour.

#### 3. Methods

A pilot study refined the methods used this project. Specific data gathering techniques were qualitative, involving regular interviews and personal diaries, focusing on critical incidents in daily life information seeking situations. The study participant, whom we will call "Joe", took part in an initial interview in which the nature of the study was explained, informed consent was obtained, diary sheets were provided, and regular times for interviews were established. Specific demographic characteristics of the participant are not of particular interest, since these have been found to have very little predictive value for information behaviour (Dervin & Nilan, 1986; Baldwin & Rice, 1997). However, the participant was a male in his early twenties, working full-time in a technical position. He clearly exhibited confidence in his abilities to use a variety of information sources, including the Internet. Joe was selected as a research participant because he was actively involved in a variety of life contexts (e.g., work, hobbies), and he was willing to offer the considerable amount of time required for participation in the study.

#### 3.1. Diaries

Joe was asked to fill in his diary entries on a weekly basis for 10 weeks. The structure of the diary sheets suggested several open-ended questions to focus the participant's thinking about his information behaviours in a particular situation (i.e., focusing on a particular problem or decision he faced). Joe was asked to write his responses on the sheets. The diary questions used were:

- Describe a time this week when you needed help to figure out a problem or answer a question.
- What did you do to try to solve your problem or answer your question?
- How did you feel about your experiences as you tried to get help?
- What were you thinking about when you tried to get help?
- Was your problem solved or your question answered?

The diaries provided Joe with opportunities to reflect on his own information behaviour, and to recall details of particular information seeking situations. A similar diary method has been used successfully in workplace situations (Barry, 1997).

#### 3.2. Interviews

The diary entries were used as a basis for in-depth exploration of Joe's information behaviours in weekly interviews, scheduled at his convenience, over the 10 weeks period. Personal circumstances prevented one interview, thus nine interviews were held. The diaries were used primarily to stimulate the participant's thinking about his information behaviour, and to focus the interviews. Whatever situations the participant identified as salient, as worthy of focus, were accepted as sufficiently non-trivial for analysis. The interviews were relatively unstructured, but each interview centered on a specific situation selected from the participant's diary to maximize the diversity of contexts explored (work, domestic life, leisure activities). The questions used to focus the interviews were:

- 1. Let us focus on (insert a situation described in the diary). Can you tell me about this situation?
- 2. What kinds of help did you need?
- 3. Who did you talk or listen to/Where did you go/What did you read or watch to find help?
- 4. For each source mentioned (one at a time), please tell me what you found out (briefly)?
- 5. For each source mentioned, please tell me if and how this helped you?
- 6. How were you feeling/what were your thoughts/what were you trying to accomplish as you sought help from each source?
- 7. How did you feel after your encounters with each of these sources (ask separately for each source)? What concerns or questions do you still have?
- 8. How do you plan to find out more about these concerns or questions?
- 9. Can you describe the perfect source that could provide the help you wanted in this situation?
- 10. What would you want to find out?
- 11. What would make this source of help ideal?
- 12. What stopped you from getting the help you wanted/what barriers did you experience?

Joe was not asked directly why he selected the sources he did, but the reasons for his choices can be inferred from his responses to item #6, and the questions about perfect sources, discussed elsewhere (Julien & Michels, 2000). The questions used on the diary sheets, and the interview questions, were drawn from Dervin (1983), and have been found to provide reliable and valid data in previous work (Julien, 1999; Julien & Michels, 2000). The interviewer treated the interviews as conversations, following interesting leads as they arose, and allowing the participant to talk about those aspects of his informational experiences that were particularly salient for him. The interviews varied in length from one-half hour to an hour, depending on the participant's interest and available time. The interviewer was a master's student, trained by the first author. The interviewer conducted and audio taped the interviews, and transcribed each interview as soon as possible following the interview. Both authors analyzed the interview transcripts qualitatively and inductively, to identify patterns in the data, and quantitatively, characterizing information sources selected.

It is recognized that personality characteristics, and habitual patterns of information behaviour will heavily influence the patterns and variation found for one individual. However, it was not the purpose of the study to compare behaviour between individuals, but to highlight the variation

that occurs for an individual, depending on the situation in which information behaviour is demonstrated.

#### 4. Results and discussion

This report focuses specifically on the questions related to source selection, and influence of various aspects of the situations described. These aspects were identified from the authors' inductive analysis of the transcripts, and include time constraints and pressures, motivation for the information need, context of the information need, type of initiating event, location of information seeking activities, intended application of the information found, and source type. These were the aspects of the situations described by the participant that were evidently influencing his information behaviour.

#### 4.1. Situations

In summary, the situations that formed the basis of the analysis were these, juxtaposed with the specific initiating event (see Table 1).

Characterizing the specific situations that formed the bases of the interviews occurred through qualitative analysis of those factors that appeared to influence information seeking for Joe. Specifically, the following factors were identified as important to characterizing specific information seeking situations.

One obvious aspect focused on the *nature of the activity* in which the need for information arose (work-related, related to personal life). This was further subdivided for work-related activities according to whether the activity was related to regular duties, a special problem, travel, or Joe's role as an intermediary for somebody else. Personal activities were subdivided into those related to unpaid work (e.g., home repair, housework), a special problem, recreation, health, travel, and Joe's role as an intermediary for somebody else. Clearly, other types of activities are possible, but these categories encompassed the information-seeking situations discussed by Joe.

Table 1 Situations

Situation within which information need arises	Specific initiating event
Seeking to buy a CD recorder for self	Needing a CD recorder
Planning a ski trip	Anticipating travelling to area—heard about ski field
Planning info gathering trip for work	Discovering ambiguity in paper records
Preparing to participate in an online role-playing game	Accepted into online role playing game
Desiring to join online game	Exceeded capability of game playing against the computer
Needing to purchase a lawnmower	Landlord requires the lawn to be mowed
Planning a trip for work in winter and needs weather info	Repairs on power pylons required
Needing to fix a piece of equipment at work	Boss requested that a broken piece of equipment be repaired
Needing to monitor projects for work	Job requires tracking activities of contractors

In addition, it was recognized that *time* pressures influenced information seeking. As Verplanken notes in his study on time pressure and decision-making (Verplanken, 1993, p. 241), numerous studies suggest that time pressure affects decision-making processes including information seeking. His survey of the literature found three recorded types of reactions exhibited in response to time pressure in information gathering for decision-making. The individual may accelerate processing, one may be less selective in evaluating information or one may choose different search and processing strategies in response to time constraints. It therefore seemed reasonable to consider the time factor in coding these information situations. Thus, time was coded as a crisis (information needed today), short-term (information needed within a few days), long-term (information need within a few weeks), and undetermined (there was no set time within which the information was needed).

Other significant factors included apparent *motivation*, either internal (the information need arising from Joe), or external (an imposed need). Ryan and Deci (2000), in their survey of the literature on intrinsic and extrinsic motivations, suggest that there is much support for the idea that distinctions in creativity and effort may be evident depending on the nature of the motivations which drive each information seeking process.

Additionally, situations were classified as processes focused primarily on an "onsite" *location* (where the information seeking process begins and continues entirely in one locale), an "offsite" location (where the process required Joe to go physically someplace else to access the help he needed), or both. One might expect that onsite information seeking would utilize familiar and convenient sources whereas offsite seeking may require more creativity in source selection. Finally, the stated *purpose* of the information being sought was noted; i.e., situations were coded as primarily related to decision-making, to planning, or to obtaining instructions.

# 4.2. Information seeking process

The information seeking process can be described in terms of the sources selected, the types of sources these are, the number of sources used, the priority of the use of types of sources, and the usefulness of these resources. The following table summarizes the sources used by Joe in his information seeking (see Table 2).

## 4.3. Examination of influencing factors

The essential question asked of this data was how is the information seeking behaviour of this individual influenced by the context (situation) in which it occurs? The following considers four factors relating to information seeking behaviour: how many sources are selected, what role will the information from these sources play, what type of sources are selected, and how considered is the selection of sources, displayed by the degree of usefulness of the sources selected. These factors are examined in relation to changes in source of motivation, time constraints, location of the information seeking process, and the life context of the information problem.

# 4.3.1. Motivation for information search

Of the 56 sources selected in Joe's information seeking processes, 45% of these were chosen in situations in which his information seeking was self-motivated. An average of 6.3 sources was

Table 2
Information sources

	Information source	
Person	Co-worker	
	Friend/relative	
	Relative	
	Casual acquaintance	
	Stranger	
Print	Reference	
	Book	
	Flier/brochure	
	Newspaper	
	Letter/fax	
Electronic	Radio	
	Web	
	Telephone	
	TV	
	E-mail	
	Database	

used in each search. When the search was self-motivated, the information being sought by these sources was usually for decision-making purposes. The sources of preference in this process were electronic (60%) but when the telephone sources were added to the personal sources category, then personal sources were more than half the sources consulted (52%). Nearly half (44%) of sources selected were considered not useful while the smallest category was that of very useful (12%).

Forty-six percent of Joe's information sources were chosen in situations in which the information seeking was externally motivated. An average of 5.2 sources was used in each of these searches. When the search was externally motivated the information being sought by these sources was used for all three roles (planning, decision-making and instruction-seeking) almost equally. The sources of preference were electronic in nature (54%) but when the telephone sources were added to the personal sources category, then personal sources were nearly two-thirds of sources selected (65%). There was an equal distribution of sources by their perceived value with as many sources found to be not useful (27%) as those found to be very useful (27%).

Only 9% of Joe's information sources were selected in situations in which the information seeking was externally and internally motivated. An average of 5 sources was used in each of these searches. When the search was both externally and internally motivated, the information being sought by these sources was used for planning purposes. The sources of preference were electronic in nature (40%) and personal (40%) but when the telephone sources were added to the personal source category, then personal sources were half of the sources chosen (50%). There were no sources considered not useful or somewhat useful. Most sources (80%) were considered useful.

# 4.3.2. Time factor

Eleven percent of Joe's information sources were used in situations in which there was an immediate need for information to resolve a crisis situation. An average of 5 sources was used in

each of these searches. All the sources selected were sought for their ability to provide instructions to resolve a problem. The sources of preference were electronic in nature (66%) but when the telephone sources were added to the personal sources category, then personal sources were most of sources selected (83%). Two thirds (66%) of the sources selected were found not to be useful.

Twenty-three percent of information sources were chosen in situations in which there was a short-term need for information to resolve a non-crisis situation. An average of 4.5 sources was used in each of these searches. All the sources selected were chosen to assist the seeking in planning. The sources of preference were electronic in nature (45%) but when the telephone sources were added to the personal sources category, then personal sources were nearly two thirds of sources selected (63%). More than three-quarters (77%) of the sources selected were found to be useful or very useful. None selected were considered of "no value".

Twenty-nine percent of information sources were chosen in situations in which there was a long-term need for information to resolve a non-crisis situation. An average of 5.3 sources was used in each of these searches. Half the sources chosen were intended to assist in decision-making while planning (31%) and instructions (18%) also played significant roles. There was no clear preference for source type but when the telephone sources were added to the personal sources category, then personal sources were a preference of sources selected (38%). There was nearly an even distribution of source value with more than half (54%) being considered useful or very useful.

Thirty-eight percent of information sources were selected in situations in which there was no determined time frame for information to resolve a non-crisis situation. An average of 7 sources was used in each of these searches. Three quarters (76%) of sources selected were intended to aid in decision-making while the remaining sources (24%) were selected to provide instructions. The sources of preference were electronic in nature (71%) but when the telephone sources were added to the personal sources category, then personal sources were more than half of sources selected (57%). Nearly half of the sources selected (48%) were considered not useful. Only 14% were considered very useful.

#### 4.3.3. Influence of location

Eleven percent of information sources used were chosen in situations in which the information seeking was entirely or largely conducted offsite. An average of 6 sources was used in each search. The sources of preference were personal in nature (50%). Half of the sources selected were considered not useful. The remaining half was somewhat useful or useful.

Twenty-five percent of sources were chosen in situations in which there was an immediate need for information to resolve a crisis situation. An average of 5 sources was used in each search. These sources were all used to gather information for the purpose of planning. The sources of preference were electronic in nature (76%) but when the telephone sources were added to the personal sources category, then electronic sources were still the preference of sources selected (48%). Nearly half of the sources selected (43%) were not useful. Fifty percent of sources were considered useful or very useful.

A full 64% of information sources were chosen in situations in which there was an immediate need for information to resolve a crisis situation. An average of 6.4 sources was used in each search. About one third of the sources chosen were used to gather information for planning purposes (36%), while about two thirds (64%) were used for decision making purposes. The sources of preference were electronic in nature (53%) but when the telephone sources were added

to the personal source category, then personal sources were the most preferred of sources selected (61%). There was nearly an equal distribution of degree of usefulness of sources selected.

## 4.3.4. Life context

Thirty-four percent of sources were used in life contexts in which the information was needed to resolve a work situation. An average of 4.8 sources was used in each search. About two thirds of the sources chosen were used to gather information for planning purposes (68%), while about one third (32%) were used for instructions. The sources of preference were electronic in nature (53%) but when the telephone sources were added to the personal source category, then personal sources were the most preferred of sources selected (55%). More than half of the sources chosen (58%) were considered useful or very useful.

Nearly two-thirds (65%) of sources were selected in contexts in which the information was needed to resolve a personal situation. An average of 6.2 sources was used in each search. Less than two-thirds sources chosen were used to gather information for planning purposes (62%), while about two thirds (64%) were used for decision-making purposes, while the remainder was divided between planning (16%) and instructions (22%). The sources of preference were electronic in nature (57%) but when the telephone sources were added to the personal source category, then personal sources were the most preferred of sources selected (49%). Although the useful of sources was distributed over the range, a significant percentage (38%) of sources selected were considered not useful.

## 4.4. Summary of situational factors

How is information seeking behaviour influenced by the context in which it occurs? In the case of this individual it was found that some factors were more influential than others.

#### 4.4.1. Motivation

Table 3 shows that the when the motivation was internal, Joe utilized more sources, suggesting that self-motivation is more likely to inspire him to pursue the problem. It was observed that when the motivation was internal the information was more likely to be used for decision-making than when the motivation is external or mixed. Regardless of the motivation, personal sources, including phone conversations, were the preferred source of information. This might be an indication that "a second opinion" is more valued with this kind of situation to clarify expectations and obligations. However, in situations where the motivation was external there was an increased preference for personal communication. It was most significant that in situations where the motivation was internal, nearly half of the sources selected were considered not useful. This may suggest that Joe is less discriminating in his selections and must therefore use more sources.

## 4.4.2. Time

We also noted that the situations with open or undetermined time constraints used on average more sources than in other time frames (Table 4). This may simply be due to the longer time available for searching. The primary purpose of information in a crisis is instructions. This is to be expected. The short-term situation saw planning as the primary purpose. It was in the long-term and undetermined time frames that the dominance of information for decision-making was seen.

Table 3
Influence of motivation

	Internal	External	Both
	(% total sources used)	(% total sources used)	(% total sources used)
Purpose			
Planning	25	31	100
Decision-making	64	31	_
Instructions	12	38	_
Source			
Personal	20	38	40
Print	20	19	20
Electronic	60	54	40
Telephone	32	27	10
Usefulness			
Not useful	44	27	_
Somewhat useful	20	23	_
Useful	24	23	80
Very useful	12	27	20
Average # sources used	6.3	5.2	5

Table 4
Influence of time

	Crisis	Short-term	Long-term	Undetermined
	(% total sources used)			
Purpose				
Planning	_	100	31	_
Decision-making	_	_	50	76
Instructions	100	_	18	24
Source				
Personal	17	38	25	19
Print	17	15	37	9
Electronic	66	46	37	71
Telephone	66	15	13	38
Usefulness				
Not useful	66	_	21	48
Somewhat useful	17	23	25	24
Useful	=	62	29	19
Very useful	17	15	25	14
Average # sources	5	4.5	5.3	7

In a crisis situation most of the sources chosen were not useful. This may suggest haste on the part of the seeker, leading to poor discernment. As well, in undetermined time frames nearly half of sources were not useful, perhaps suggesting that the seeker does not feel as motivated to be discerning. He has time to check a lot of sources.

Table 5
Influence of location

	Offsite	Onsite	Both
	(% total sources used)	(% total sources used)	(% total sources used)
Purpose			
Planning	100	100	36
Decision-making	_	_	64
Instructions	_	_	_
Source			
Personal	50	14	28
Print	33	7	19
Electronic	17	76	53
Telephone	_	28	33
Usefulness			
Not useful	50	43	25
Somewhat useful	17	7	28
Useful	33	29	28
Very useful	_	21	19
Average # sources	6	5	6.4

#### 4.4.3. Location

It can be seen in Table 5 that the location did not appear to affect the number of sources chosen. The significant occurrence here was the higher percentage of face-to-face conversations which occurred when offsite. When onsite, the telephone takes a greater role. When offsite, the usefulness of the sources chosen decreases. The most useful sources were chosen when onsite, perhaps suggesting a greater familiarity with the sources at hand than in the field.

#### 4.4.4. Life context

It was observed that when the task is personal, Joe uses more sources (Table 6). This may suggest that he would go further to resolve his own problems than those of his employers. The primary role of information gathered in workplace contexts is planning, while in personal situations it is decision-making. This may suggest more about the nature of Joe's work duties than his information seeking behaviour. Personal information sources actually played a greater role in work situations than in personal situations. Sources selected for work tended to be far more useful than sources selected for personal reasons. It is interesting that although willing to work harder to resolve personal problems, this individual may be less careful and discerning in the sources he selects for his own purposes.

#### 4.5. Other aspects of information seeking

In addition to the detailed analysis of source selection and evaluated usefulness as these related to situation, each situation was characterized more qualitatively according to the way in which Joe described his information need, described the positive and negative attributes of the information sources he used, the attributes of "ideal" information sources for each situation, and the

Table 6
Influence of life context

	Work (% total sources used)	Personal (% total sources used)	
Purpose			
Planning	68	16	
Decision-making	_	62	
Instructions	32	22	
Source			
Personal	32	22	
Print	16	22	
Electronic	53	57	
Telephone	23	27	
Usefulness			
Not useful	21	38	
Somewhat useful	21	22	
Useful	42	22	
Very useful	16	19	
Average # sources	4.8	6.2	

barriers he identified in accessing the information he needed. These characterizations are summarized in Table 7.

Despite the variety of information seeking situations described, there are patterns of behaviour that emerge from analysis of the interview transcripts. One outstanding feature of Joe's information behaviour is that he tends to describe his information need in terms of "facts"; he simply "needed information" in the sense of "data". He makes this claim for eight of the nine situations. In these situations, he expresses a concern for the accuracy and currency of the information he seeks. For example, Joe notes, "...after watching it [TV] I felt some amusement at the variation among the weather reports, and some irritation that they appear to have lost accuracy in recent years, sorry, in recent months."

While this appears to suggest a very instrumental orientation, Joe clearly values affective aspects of his information seeking in those situations. Much of this value is characterized by Joe's apparent need to feel "confident" about his information source. When seeking information about purchasing a lawnmower, he reported that "the first person I called didn't fill me with much confidence, so I called a second person." When seeking to purchase a CD recorder, he turns to the experiences of others, though notes that personal sources of information are useful only insofar as he is assured of a level of expertise. He says, "It then became a matter of weighing up opinions on what people were expressing, . . .deciding whether they were technically competent." He believes that he is able, intuitively, to judge the trustworthiness of personal sources. Again, when purchasing a lawnmower, he notes, "It was more a matter of making as assessment on whether I felt that they were . . . whether they sounded like they were trying to flog something off. By asking various questions and seeing how they answered them you can get an impression. . . . "In addition, Joe mentions in several instances that he seeks to develop social relationships with his personal information sources, a goal explored by Solomon (1997a). Despite being highly computer literate,

Table 7 Information behaviour patterns associated with each situation

Situation	Description of information need	Positive attributes of sources used	Negative attri- butes of sources used	Attributes of ideal sources	Barriers noted
Seeking to buy a CD recorder for self	Facts	Personal experience Accuracy Currency Reliability Trustworthiness Opportunity to develop social relationships	Bias Sales orientation	Summarizes Organizes Accessible	Bias of commercial sources Disorganization of the Internet Busyness of people
Planning a ski trip	Facts	Provide reassurance Efficiency	Bias Sales orientation	Independent of commercial interests Convenient Detailed	Inefficient people Need to interpret complex informa- tion
Planning info gathering trip for work	Facts	Personalized, "extra" attention	Disorganized Inefficiency	Accessible Accurate Organized	Disorganized in- formation Sales orientation Inefficient Web design
Preparing to participate in an online role-play- ing game	Facts	Detail Ability to develop social relationship Accuracy	Unreliability	Accessibility Currency	Inefficiency
Desiring to join online game	Facts	Trustworthiness Efficiency Friendliness Cost Consistency	Lack of straightforward responses	Detail Consistency Currency Free	Lack of back- ground knowledge Infrequent up- dates Physical distance
Needing to purchase a lawnmower	Facts	Ability to develop social relationship	Lack of personal attention	Trustworthiness	Lack of source knowledge
Planning a trip for work in win- ter and needs weather info	Facts	Speed Convenient	Need to filter unwanted mate- rial	Organized Convenient Detailed Currency	Information over- load
Needing to fix a piece of equip- ment at work	Advice	Detail Sophistication Ability to develop social relationship	Inappropriate level Insufficient de- tail	Multiple levels of detail & so- phistication (flexibility)	Time needed to filter unwanted material
Needing to monitor projects for work	Facts	Need to develop social relationships	Information hoarding	Current Detailed Accessible Flexible	Information scatter

Joe says, "...as for chatting...aw, it's a social thing to do. Y'know, you chat about other things while you're about it. I'm not about to stop taking to people."

These data show that Joe values accuracy, detail, the ability to develop social relationships, and efficiency, in the sources he uses. Ideally, he wants his information sources to be accessible, organized, detailed, and current. The picture of Joe's information behaviour that emerges from this analysis is of a generally purposeful, deliberate information seeker, who finds a particular barrier in inefficiency. Interestingly, time is an important consideration for Joe, but he is willing to spend time if he believes it is warranted (e.g., he phoned 40 computer stores seeking information about purchasing a CD recorder).

The quantitative analyses highlighted the importance of self-motivation to stimulate information seeking, and of the value of personal sources of information, in personal and particularly in work-related situations. It was also apparent that externally imposed information seeking led to greater discrimination in source selection. The relevance of external motivation has been observed elsewhere (cf. Gross, 1995), but the implications of this variable in daily life situations (i.e., outside of libraries) has not been fully explored to date. As might be expected, when Joe felt few time constraints, his information seeking was more extensive, although the results of this information seeking were less useful than when he felt greater time constraints and selected sources more carefully. Solomon (1997b) has explored this variable in a workplace setting, as an influence on information behaviour. Our data also indicated that sources consulted were less useful if the location of the information seeking was away from the situation at hand (off-site). It appeared that Joe was better able to judge the usefulness of sources close by. Auster and Choo (1994) have found, in workplace contexts, that managers prefer on-site, personal sources of information, but will make use of off-site information sources in order to fulfill particular tasks. In this study, situations in which a personal concern was the focal point prompted Joe to be more active in his information seeking, than when the situation was work-related. Personal situations were characterized by Joe as being focused on decision-making, while work-related situations were characterized as focused on planning.

## 5. Conclusion

The unique contribution of this study is its emphasis on the information behaviour of a single individual, focusing on aspects of the situations giving rise to information behaviour, rather than on use of a specific type of information source (cf. Hektor, 2001), on comparisons with others' information behaviour styles (Solomon, 1997c), or on informational interactions with others. Indeed, the limited role played by information systems or services in daily life information seeking situations (cf. Hersberger, 2001) strongly suggests that the focus of our research move away from those formal frameworks. If the role of context or situation in information behaviour is going to be fully eludicated outside of work or academic contexts (two favourite contexts for information behaviour research), then further, more detailed, research is needed into how specific aspects of context are related to information behaviour in daily life. This study is only a start to thoroughly analyze the role of context.

Methodologically, this research has demonstrated that analyzing a single individual's information behaviour can elucidate important aspects of information seeking (i.e., those variables

association with a situation that may affect information behaviour), without confounding data from other individuals. In other words, in this study, aspects of "situation" were not confounded by aspects of individual preferences and habits belonging to a range of individuals. Thus, theoretically the empirical data analyzed in this study helps to build on previous models of information behaviour (e.g., Wilson, 2000), particularly elucidating specific aspects of situation that affect information behaviour in daily life contexts (nature of the activity, time, motivation, location, and purpose for which information is required). These particular aspects were those that the data suggested were most important, and none has been fully explored to date in the context of daily life. This contribution advances our understanding of information behaviour towards more comprehensive and detailed models, which remain to be developed, and towards which information behaviour researchers are being urged to move (Pettigrew, Fidel, & Bruce, 2001).

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