Avoiding health information in the context of uncertainty management

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Abstract
Introduction. The study elaborates the picture of health-related information behaviour by exploring the reasons and strategies for avoiding information. The study draws on the ideas of uncertainty management suggesting that people reduce uncertainty because they find it threatening. However, in some instances, people avoid information so that they can manipulate uncertainty to suit their needs.
Method. The empirical data were gathered by semi-structured interviews conducted with nine university students in 2007. The data were scrutinized by means of qualitative content analysis.
Results. The extent of information avoidance varied from comprehensive to selective avoidance, depending on the topic of health issues and the context in which health information was provided. Health information was primarily avoided because of the risk of experiencing negative emotions such as fear, anxiety and depression, or to face information that is unsuitable for one's needs. The major avoidance strategies included intentional withdrawal from social situations, which would expose to undesired information, accessing information sources selectively, avoiding health care professionals and abstaining from thinking about health issues.
Conclusions. Uncertainty management provides a relevant framework for empirical research on information avoidance as a significant constituent of information behaviour.

Introduction

A typical point of departure of information seeking studies is the assumption of an individual who actively accesses and uses information sources to solve problems or perform work tasks (see, for example, [Johnson 1996](#); [Kuhlthau 2004](#)). Such assumptions are not new since the idea of the active information seeker can be traced to the history of Western philosophy. One of the originators of this idea is Aristotle who claimed that '*All men by nature desire to know*' (cited in [Case *et al*. 2005: 354)](#). From this perspective, wanting not to know and avoiding information may merely appear as an anomaly of information seeking and use. However, the issue is more complex than it appears at first sight.

The concept of information avoidance appears paradoxical from the viewpoint of empirical investigation. If the individual does not seek information but avoids it, there seems to be nothing relevant to be explored. All we are left with is the negation of action, that is, non-seeking and non-use of information. However, such paradoxicality is spurious. Even though it is not possible to observe something that the individual chooses not to do, attention may be devoted to reasons for which the abstaining from action may be rendered as meaningful. Second, attention can be paid to strategies by which the individual makes attempts to avoid information in practice.

The questions of information avoidance have primarily been explored in psychology, communication science and health sociology, whereas information scientists have rarely been interested in these issues (see, however, Case *et al*. 2005, Wilson 1997: 554-556). The present study contributes to this under-researched field by exploring the avoidance of health-related information. Information of this type is particularly intriguing because health issues exemplify perhaps best the domains of human life where the stakes are high. For example, wrong nutritional choices can result in health risks such as diabetes type two. Due to such high stakes, there are often conflicting motives to seek and avoid health information. The present study investigates such tensions from the viewpoint of uncertainty management. This approach was chosen because it provides a well-founded research perspective on how and why people perform balancing acts between seeking and avoiding information (Brashers 2001).

The study is structured as follows: the literature review discusses the main research approaches to information avoidance. Particular attention will be devoted to the ideas of uncertainty management since the present study draws on them. Then, the empirical design of the study is specified and empirical findings are reported. The article ends with the discussion of the main results and conclusions drawn from the empirical findings.

Related literature

The avoidance of information is a multi-faceted phenomenon that defies exact definition. The conceptual setting has been complicated by the fact that there are closely related terms such as *blunting* behaviour and selective exposure to information (Case *et al*. 2005: 360). In addition, it is not always clear how to differentiate the issues of avoidance from passive seeking of information, for example, the absent-minded browsing of a newspaper (Case 2007: 97-108). Passive seeking does not, however, mean factual avoidance of information but rather selective action that indicates low interest in information. On the other hand, information may be avoided intentionally and it is not accessed even though it would be possible. Such avoidance may focus on individual information sources or specific information content available in the source. Information may also be avoided by intentionally abstaining from thinking about an issue of concern.

Case and his colleagues (2005: 354-355) demonstrated that the notion of avoiding health-related information has a long history in psychology and communication studies. In the beginning of the 1900s, Freud's theories about psychological defences (repression, suppression, and denial) shed light on psychic mechanisms that people employ to censor uncomfortable thoughts. In the 1940s, communication scientists became interested in factors explaining the failure of health promotion campaigns, for example. One of the explaining factors appeared to be people's selective exposure to information. Humans tend to seek information that is congruent with their prior knowledge, beliefs, and opinions and to avoid exposure to health information that conflicts with those internal states. The questions of health information avoidance have also been approached from the viewpoint of '*fear appeals*' (Case *et al*. 2005: 365). Studies conducted in the 1950s showed that extreme attempts to frighten people into practicing good dental hygiene, by showing them pictures of mouth cancer

and deformed teeth, were not very effective. On the contrary, such strong arousals lead people to ignore the threat. If it is perceived as extreme, or if any potential responses are not expected to be effective, then an attractive alternative is to ignore the threat entirely.

Since the 1960s, psychologists have explored information avoidance as a trait in the context of coping behaviour and stress management. Typologies have been developed to elaborate the emotional component of threatening information in particular. Lazarus and Folkman (1984) identified *problem-focused coping*, which draws on efforts to do something active to alleviate stressful circumstances, whereas *emotion-focused coping* involves efforts to regulate the emotional consequences of stressful or potentially stressful events. Miller (1987: 345) investigated experimentally how individuals expose themselves in stressful situations to information that concerns worrisome issues. Again, two major types were identified: *monitors* scan actively the environment for threats, whereas *blunters* tend to avoid threatening information or distract themselves from it. On the other hand, the division between monitors and blunters is not absolute because the individual may emphasize monitoring and blunting differently in the various phases of a disease, for example. Thus, the role of blunting may be less central if the patient learns that he or she can enhance his or her capacities to act or maintain them at the current level (Williamson and Manaszewicz 2002: 209).

Lambert and her colleagues (2009a, 2009b) also demonstrated that the traditional dichotomy of monitors versus blunters will result in an all too coarse-grained picture of how people with a chronic disease seek information. A study focusing on individuals with cancer revealed three patterns of active information seeking characteristic of monitoring: *intense information seeking* exhibits keen interest in detailed cancer information, while *complementary information seeking* is driven by the intent of getting good enough cancer information. Moreover, *fortuitous information seeking* aims at making use of opportune discoveries mainly from other people diagnosed with a cancer (Lambert *et al*. 2009a).

In addition, two patterns of information seeking more characteristic of blunting were identified (Lambert *et al*. 2009b). First, *minimal information seeking* exhibits limited interest for cancer information. Few, if any activities are taken toward obtaining such information and there is a disinterest even for passive information seeking. Second, *guarded information seeking* is characterized by juggling between the interest for selectively seeking cancer information and apprehension of coming across undesirable information of this kind. However, in guarded information seeking, '*not knowing is better*' was the main thought expressed toward cancer information (Lambert *et al*. 2009b: 30). This approach was often motivated by the tremendous anxiety after the cancer diagnosis; the participants wanted to control their emotions by shunning additional cancer information. On the other hand, guarded information seeking is not totally driven by escapism and denial since such activity is characterized by the juggling of fears and curiosity for information.

Information avoidance in the context of uncertainty management

The issues of information avoidance characteristic of guarded information seeking can further be elaborated from the perspective of uncertainty management. The theories of *uncertainty management* suggest that people experience uncertainty variously, not simply as an uncomfortable tension demanding reduction (Bradac 2001: 463; 469). This suggests that the perception and strategic use of uncertainty can have both a positive and negative influence on behaviour. So far, however, most discussions of uncertainty in information seeking have focused on undesirable uncertainty, that is, the negative feelings associated with the experience of uncertainty (Anderson

2006). This viewpoint is maybe best exemplified by the *uncertainty principle* proposed by Kuhlthau (2004: 92). According to this, uncertainty is a cognitive state that commonly causes affective symptoms of anxiety and lack of confidence. Uncertainty due to lack of understanding, a gap of meaning, or a limited construction initiates the processes of information seeking. More generally, information seeking research has drawn attention to the uncertainty as a natural part of a searcher's experience, with discussion of the anxiety that can be associated with it (Wilson *et al*. 2002).

However, information scientists have also characterized desirable uncertainty (Cole 1993). In an empirical study on information seeking within the creative processes of scholarly research Anderson (2006) demonstrated that the positive form of uncertainty provided the academic researchers an opportunity for growth, marking the evolving horizon of their understanding. An awareness of such uncertainty drove researchers forward within the wider research tasks in which they were engaged. Thus, desirable uncertainty was particularly related to the aspirational qualities of research work and the recognition of the exciting moments of discovery. On the other hand, there appeared to be a dynamic interplay between positive and negative forms of uncertainty: what might be considered desirable as opposed to undesirable uncertainty was not easily unravelled.

Interestingly, the theories of uncertainty management also assume that people may wilfully invite lack of clarity in diverse contexts of everyday action. This implies that in every situation there is an optimal level of uncertainty and that people attempt to achieve and maintain that level by means of uncertainty management. More precisely, uncertainty exists when details of situations are perceived as ambiguous, complex, unpredictable or probabilistic, when information is unavailable or inconsistent and when people feel insecure in their own state of knowledge (Brashers 2001: 478: 480-481). The temporal contexts in which uncertainties may appear range from a transient situation to life-long coping with a chronic disease.

Responses to uncertainty are shaped by appraisals and concurrent emotional reactions, dependent on how people judge the meaning of an event or an issue (Barbour *et al*. 2005: 7-8, Brashers 2001: 481-482). Negative emotional responses indicate that an uncertainty is perceived as a danger or threat focusing on one's health and safety. A negative appraisal will produce either mobilizing strategies (for example, information seeking) or affective control (for example, coping with anxiety produced by the inability to reduce the danger). However, there may be positive appraisals, too. The uncertainty is framed as beneficial (for example, an opportunity to maintain hope when faced with an illness with a negative trajectory). Positive appraisal results in buffering strategies that attempt to maintain the uncertainty of this kind. Often, buffering strategies result from self-deceptions (illusions), but may also be an appropriate response motivated by different aspects of an illness experience. However, chronic uncertainty may also be accepted as a part of the rhythm of one's life.

The above ideas suggest that information can be employed to manipulate uncertainty (Brashers 2001: 482-484). On the one hand, people may seek information to confirm or disconfirm the current state of beliefs, or to render an event meaningful. On the other hand, people may intentionally seek information to increase uncertainty, for example, to add new alternatives for consideration. Finally, people may directly or selectively avoid information that is found as overwhelming and distressing. The avoidance can provide escape from a distressing certainty by maintaining uncertainty. For example, a person who is healthy (without signs or symptoms of illness) may avoid information in order to prevent anxiety if risk awareness calls into question the person's health or potential for disease (Brashers *et al*. 2002: 260-261; 267). To this end, people can employ diverse strategies such as selective attention, selective ignoring, intentional forgetting, suppressing currently held knowledge and discounting negative information by discrediting information sources due to their poor quality.

[Barbour and his associates (2005)](#) drew on the ideas of uncertainty management in a questionnaire survey focusing on the reasons and strategies used in the avoidance of health information. Five hundred and seven undergraduate students at a Midwestern university participated in the study. It revealed that the students offered a number of reasons for avoiding information (Barbour *et al.* 2005:12-22):

- *Wanting to maintain the possibility of denial.* This reason is because avoiding information helps people buffer themselves from the dangers of knowing; uncertainty from not knowing is seen as better than knowing for certain. For example, a participant who was scared of the possibility of unwanted pregnancy did not take the pregnancy test because she preferred to buffer herself from the potential reality.
- *Feeling overexposed to a topic.* The individual feels tired or bored of a health issue because it is 'beaten to death' in the media, for example. Such topics mentioned by the participants included smoking and eating disorders.
- *Feeling that no (or no more) action can be taken.* A health issue was avoided because the individual had already taken the needed action, for example, quitted smoking. In addition, the avoided health issue (for example, menopause) was not applicable to one's current life situation, or the time constraints made it impossible for the individual to take the needed action.
- *The available information or source was found as flawed, poorly delivered or not credible.* For example, people preaching their beliefs about health issues were avoided for this reason.
- *Managing negative emotional reactions.* Health information was avoided because it was seen as too gross, unpleasant, disgusting, morbid, embarrassing or saddening.
- *Maintaining boundaries.* The individual wanted to hold some spaces such as the dinner table as inappropriate for health discussions.
- *Protecting privacy.* Avoiding health-related information about topics that were found as personal or associated with negative stigma (for example, sexually transmitted diseases)
- *Avoiding interference with enjoyable or habitual activities.* For example, smokers appeared to be well aware of the health risks of smoking but still wanted to keep the habit regardless of such risks.

The study also revealed strategies by which health information could be avoided in practice (Barbour *et al.* 2005: 17-19).

- *Reframing how to think about a health issue.* For example, smoking a few cigarettes a month was not defined as risk behaviour. Therefore, information about health risks of smoking was not seen as relevant.
- *Avoiding health care providers* such as doctors. For example, a participant wanted not to be tested and diagnosed with something worse than his current symptoms indicated.
- *Blocking health-related pop-ups* while surfing on the Internet.
- *Turning off the TV or changing the channel* while bumping into undesirable topics such as anti-drug campaigns.
- *Avoiding telling others* such as parents who might offer information that is not wanted.
- *Purposefully not paying attention to people who try to broach health-related subjects.*
- *Changing the topic of conversation or making a joke.*
- *Denying or withholding the truth about a health issue*, for example, overweight.

Interestingly, the study also showed that the above strategies maybe used in conjunction with one another to manage uncertainty (Barbour *et al.* 2005: 30). For example, the individual may avoid health care providers and deny the truth about a distressing health issue. The authors concluded that

information seeking and avoiding may be a balancing act for individuals who need to achieve multiple goals (e.g., reducing uncertainty, improving or sustaining health, and maintaining optimism). Thus, people may employ information seeking and buffering strategies together. To seek information, people may have to buffer themselves from parts of the uncertainty, thus limiting the danger and making it seem more manageable.

Empirical research design

The present study draws on the ideas of uncertainty management discussed above. This approach was chosen because it provides a contextually sensitive conceptual framework to elaborate the picture of information avoidance. The study also makes use of the empirical findings of Barbour and his colleagues (2005) discussed above. Importantly, they demonstrated that the perspective of uncertainty management provides opportunities to specify the reasons and strategies for information avoidance. These issues will be investigated in the present study, too. Similar to the study conducted by Barbour and his colleagues (2005), the present investigation focuses on health information avoidance among university students. This approach provides opportunities to compare the findings and elaborate on the picture of information avoidance in the context of uncertainty management. However, the present investigation differs from that of Barbour and associates in that two new aspects of health information avoidance will be explored: the extent of avoidance and how such avoidance may vary during the information seeking process.

The present study addresses the following research questions:

- How extensively do people avoid information related to health topics?
- For what reasons do people avoid health-related information?
- What kinds of strategies do they employ in order to avoid such information?

To strengthen the focus of the study, no attempt will be made to examine the relationships between the reasons for avoidance and the extent of avoidance. Second, the relationships between the reasons for avoidance and strategies for avoidance are not analysed in this study.

The empirical data were gathered by interviews with nine students at the University of Tampere, Finland in 2007. They were chosen for the study because university students tend to be subject to diverse health risks such as exhaustion, depression, declining levels of physical activity and poor diet. Despite the existence of such risks, students may believe that they are healthy or even immune to diseases. On the other hand, we may assume that students are interested in seeking and using health-related information in order to maintain well-being and to avoid self-inflicted diseases (Barbour *et al*. 2005: 5).

The fact that only nine informants were willing to participate in the study is mainly due to the sensitivity of the topic. People may find it difficult to explain face-to-face their motives for not engaging in action that can be seen as morally desirable in our day's society, that is, seeking for health information. Eight of the informants were females and one was male. The participants had diverse majors ranging from literature studies to political science. The youngest informant was 22 and the oldest 52 years. All interviews were conducted by the first author of the present study. The interviewees were encouraged to discuss the issues of information avoidance that they personally had experienced as particularly important. Eight interviews were conducted face-to-face and one interview by means of a chat channel in the Internet.

The interview data were analysed by drawing on qualitative content analysis. More specifically, the coding and analysis of the data drew on the method of constant comparison by which similarities and differences of the articulations concerning information avoidance were identified (Lincoln and Guba 1985: 339-344). The preliminary coding resulted in diverse categories such as strong avoidance of information and the avoidance of negative emotions. The preliminary categories were further refined until no new categories could be identified. The main categories thus created included the extent of avoidance and the reasons and strategies for avoidance. In order to specify the former category, two sub-categories, that is, (i) comprehensive and (ii) selective avoidance of information were identified. In the definition of the category of selective avoidance of information, further support were obtained from closely related concepts such as *guarded information seeking* (Lambert *et al.* 2009a, 2009b), as well as *selective attention* and *selective ignoring* (Brashers *et al.* 2002). The category of comprehensive avoidance of information was identified inductively from the interview data. Similarly, the categories for reasons and strategies for avoidance were identified inductively. The final categories appeared to be specific enough, and there were no significant anomalies. Despite the low number of participants, the interview data turned out to be saturated enough since the interviewees shared similar views and experiences with regard to health information avoidance. Thereby, it became apparent that additional interviews would not have elicited totally new aspects of this issue and that the empirical data are detailed enough for the needs of the qualitative study.

Empirical findings

In general, the participants regarded health as a significant matter. Unsurprisingly, the importance of health issues was emphasized more if they appeared to be problematic in some respect.

The extent of avoidance

The empirical analysis revealed two major categories that indicate the extent of health information avoidance.

- *Comprehensive avoidance of information*. The individual refrains from accessing any sources that may provide undesirable information about a health issue.
- *Selective avoidance of information*. The individual is interested in accessing and consulting some health information but the motivation to avoid such information tends to be stronger.

Comprehensive avoidance of information

Almost all interviewees reported examples of comprehensive avoidance, and the avoidance of this kind was expressed very clearly by the participants. Importantly, comprehensive avoidance can provide escape from a distressing certainty by maintaining uncertainty. Comprehensive avoidance was particularly characteristic of situations in which information seeking was expected to give rise to strong negative emotions such as anxiety or fear. Some of the participants were preparing themselves for operation or had been operated upon previously. They clearly indicated a lack of interest in issues such as how the operations are carried out; in particular, they were unwilling to see photographs of medical operations. Similar results concerning avoidance of information about e.g., cancer care have been found in earlier studies (Rees and Bath 2001: 904). The participants of the present study were especially distressed about photographs that display blood or viscera.

Interviewer: Have you ever felt, while waiting for the operation that you are not willing to know anything related to it?

Sanna (anonymised name): Sure, I don't wanna know about it at all. There is a video about the medical operation available through *Helsingin Sanomat* (a major Finnish newspaper). You may upload and watch it but I really don't want to do that. It will be much better if you just go to the surgery, not knowing before how they are going to operate on you.

Selective avoidance of information

In the case of selective avoidance, the individuals are willing to seek and receive some information to manipulate uncertainty to suit their needs. However, in choice situations, they rather avoid than expose themselves to such information, even though the motivation to avoid is less strong than in the case of comprehensive avoidance. Selective avoidance can occur in the context of seeking information for a health issues, as well as outside this process.

Examples of selective avoidance were reported by all participants. In these cases, they had been unwilling to reflect on the matter in detail because it would have been given rise to fear or concern. For example, *Saara* had earlier subscribed to a magazine providing articles about the disease she is suffering from. However, she had abandoned the subscription because she no longer was willing to read realistic stories about how people cope with this disease from day to day. She found such stories as frightening and unpleasant. Overall, she felt calmer if the stories remained unread. However, she occasionally browsed the magazine if it happened to be available.

Selective avoidance also occurred during the information seeking process. The individual started seeking health information to meet a specific information need. However, the process was discontinued at a certain point because the information no longer met the original need. The decision to abandon information seeking was mainly because of unpleasant, unreliable or excessive information faced at this point. Particularly if the information turned out to be unpleasant, seeking further information was stopped immediately. If information appeared to be unreliable, it was definitely avoided. However, attempts to find more reliable information were not abandoned and information seeking was continued. On the other hand, facing an excessive amount of low quality material on Websites often resulted in the abandoning seeking additional information.

For example, *Eeva* avoided the accessing of certain Web pages on this basis. An additional factor affecting her decision was that information available on the pages appeared to be in conflict with her views and thus was found as irritating.

Interviewer: Have you behaved this way in other cases if you notice that information is in conflict with your personal experiences?

Eeva: Yes, sometimes, if the information seems to be a boundary case. I may not be sure how to think about it. Then, it is easy to kill off that particular information.

Interviewer: Why do you kill off such Web pages, for example?

Eeva: Just because I find them irritating. I don't know how to express it otherwise.

The reasons for information avoidance

The analysis of the empirical data revealed two major reasons for avoiding health-related information:

- Willingness to avoid negative emotions
- Willingness to avoid information that is unsuitable for one's needs

The avoidance of health-related information was rendered understandable by referring to the risk of facing negative emotions or feelings caused by information seeking. Such emotions included anxiety, depression, fear, feeling bad, irritation and self-disappointment. In the end, the avoidance of negative emotions was preferred even though it might be better to know more about health-related issues. For instance, *Sanna* said that in her family, asthma and coronary diseases appear as hereditary. Therefore, she was unwilling to know about her mother's coronary medication because it would make her suspect that something awful is going to happen. On the other hand, she was willing to find out how to prevent such diseases. Information about such topics was found as less threatening.

Interviewer: Have you sought any information related to coronary disease or asthma?

Sanna: I just don't wanna know about them. I guess my mother has some medication for heart and blood pressure. However, I'm not necessarily interested to know about them in more detail. I'm afraid I would watch her more and more and fear for her. However, I might read some articles about this issue.

Getting irritated was mentioned several times as a reason for information avoidance. In particular, cases in which other people intervene in one's health matters were found as particularly irritating. For example, *Annu* had sometimes avoided eating candy because there was the risk that other people would comment on her weight and remind her of the fact that too much candy is unhealthy. Emotions similar to irritation are anger, frustration and distress. *Laura* said that cancer-related information distresses her because some of her family members had died of this disease. *Kaisa* avoided allergy tests because she feared that diagnosis of the existence of an allergy would make her daily life much more inconvenient.

Health information was also avoided because it may result in bad feelings or make one sad. For example, a doctor pushing his or her personal views on health issues can give rise to such feelings. In addition, emotions such as guilt and self-disappointment may lead to the avoidance of information. For example, *Heli* had not taken physical exercise for a while. At that time, she was unwilling to read any articles praising the health effects of physical exercise. Such articles would just have elicited self-blame because her current way of life was not in accord with the health ideals.

Health information had also been avoided because it was perceived as unsuitable for one's needs. *Laura* regarded herself as an active information seeker who tries to find out health-related matters. However, she did not like to visit Internet discussion groups that provide messages about ordinary people's experiences. Because the views presented by these people tend to be 'amateurish' and, hence, unreliable, *Laura* preferred information provided by health professionals. Health information was also avoided if it appeared to be in conflict with one's beliefs. For example, Heli had avoided /web pages discussing alternative treatments before she went for an ophthalmological operation.

Heli: Sometimes I bumped into views claiming that short-sightedness can be cured by means of desensitisation. These views made me somewhat hesitant and I wondered whether it would be stupid to have a medical operation.

Interviewer: However, you said that you were willing to know about alternative views and that you read messages there.

Heli: Yes, I read some of them. I was anxious about this issue because these messages might have provided something relevant, even though I was very doubtful about it. Finally, I was not interested to know more about what these people say because I had decided to undergo that operation. So, I was no longer interested to think about it because it might have affected my decision.

Interviewer: How did you experience it, I mean, the fact that you did not want to know about their views?

Heli: I just got an off-putting feeling that those people may keep their views with themselves.

The strategies for avoiding health information

Four major avoidance strategies were identified in the empirical study:

- Intentional withdrawal from social situations which would expose to undesired information
- Accessing information sources selectively
- Avoiding health care professionals
- Abstaining from thinking about health issues.

One of the avoidance strategies was the intentional withdrawal from situations that may expose the individual to undesired health information. For example, the comments presented by family members were sometimes felt so irritating that they could lead to conflict. However, the participants preferred not to engage in such conflict. In some cases, unpleasant information was avoided by changing the topic of conversation or fabricating a subterfuge that directed attention away from undesirable questions. Sometimes, it appeared to be best to walk out of situations in which people begin to talk about an unpleasant issue. For example, *Annu* had acted this way.

Annu: One of my friends is really an alcoholic, and this is quite hard. Whenever I see her, she talks about her alcoholism. She moans and tells about it in an unembellished way. I don't want to hear anything about it because it makes me feel anxious. I don't want to know even though I am worried about it. Just because I cannot do anything to help it, I have to go away.

The above example suggests that affective factors such as feeling anxious may strongly influence the maintenance of the avoidance strategies.

One of the strategies was the avoidance of health professionals. For example, *Kaisa* decided not to go to the allergy test. In addition, to avoid exposure to undesired health information, the participants selectively accessed individual information sources like the Internet's discussion groups. Previously, they had obtained some health information from there but were no longer interested to continue information seeking or to know other people's opinions. Finally, health information was avoided by refraining from thinking about a problematic issue in greater detail. In these cases, the individual already had some information about a concerning issue. However, if the issue was felt too distressing or frightening, it will be closed from consciousness. By suppressing currently held knowledge, the individual can delude herself into believing that he or she does not truly know about the worrying issue.

Lennart: Our family members have suffered from cancer. My grandmother had breast cancer. So, if you think too much about such matters, you have to be scared all the time.

Discussion

The present study concentrated on the issues of undesirable uncertainty (cf. Anderson 2006). This is mainly due to that health concerns tend to be anxiety-laden and thus associated with negative rather than positive feelings. The empirical findings support the basic assumption of the uncertainty theories suggesting that people may directly or selectively avoid information that is found as distressing (Brashers 2001: 491). In this way, people can manipulate uncertainty to suit their needs. In particular, the present study found empirical support for the assumption that a person who is healthy (without signs or symptoms of illness) may avoid information in order to prevent anxiety if risk awareness calls into question the person's health or potential for disease (Brashers *et al*. 2002: 260-261; 267). This characterization is particularly descriptive of the participants of the empirical study, that is, university students having no serious or chronic diseases.

Health information avoidance can occur in the context of an information seeking process or outside it. In the former case, people initially seek some information but they stop the seeking process after having faced undesired information. Thus, the avoidance is selective. However, it can be comprehensive, too. In this case, no information seeking process is initiated because the individual wants to refrain from accessing any sources that may provide information about a health topic. The comprehensive avoidance is mainly driven by the need to shield oneself from negative emotions. The empirical analysis showed that for this reason the participants had particularly strong aversion towards visual information about medical operations, as well as diseases that are chronic or potentially life-threatening. Other health topics such as depression were found as less threatening and they were not avoided extensively.

As the above findings suggest, the reasons for avoidance are affectively laden; health information is avoided because it may give rise to negative emotions such as fear, depression and irritation. Another major reason for avoidance is the willingness to shield oneself from information that is perceived as unsuitable for one's needs, due to its low quality, for example. The study revealed four major strategies for information avoidance. First, health information was avoided by withdrawing from social situations that may expose the individual to unpleasant or undesirable questions or comments. Second, information was avoided by selectively accessing sources or channels that may provide undesirable material. Third, the avoidance of health professionals appeared to be one of the strategies. Finally, information was avoided by abstaining from thinking worrisome issues by suppressing thoughts.

Overall, the present study strongly supports the findings of the survey conducted by Barbour and his associates (2005). The reasons and strategies for avoiding health information appeared to be fairly similar among American and Finnish university students. Both studies showed that people may draw on a number of reasons and strategies and that they can be employed alone or in conjunction with each other. However, there were some differences with regard to reasons for avoidance. The Finnish participants placed less emphasis on the feeling that no (or no more) action can be taken to enhance one's health or that health information is avoided in order to protect privacy, because of the negative stigma associated with certain diseases. As to the avoidance strategies, the Finnish informants drew less strongly on how one may refrain from seeing unwanted television programmes, for example. As a whole, however, these differences were marginal and probably result from the different methods of data gathering. Semi-structured interviews allowed the emergence of new viewpoints to avoidance issues that were not necessarily included in the survey questionnaire employed by Barbour and his associates. The study reported in this paper goes beyond the findings reported by Barbour and colleagues by elaborating the extent of information

avoidance. In addition, the present study specifies the picture of information avoidance by showing how it varies during the information seeking process.

The study also showed that information avoidance and information seeking may occur together or separately. This conclusion supports the main assumption of uncertainty management. Often, the individual has to seek balance between seeking and avoiding information. As Lambert and her associates (2009b) suggest, juggling of this kind is a particular characteristic of guarded information seeking. Sometimes people prefer information avoidance despite the fact that the relief yielded by not knowing may be temporary. This is particularly obvious in cases in which we may think, from the perspective of medicine in particular. that the individual should be aware of risks caused by his or her current way of life.

Conclusion

The present study is explorative and it draws on the interviews conducted with a small sample of university students. In order to elaborate the qualitative picture of these issues, there is a need to explore more systematically the relationships between various reasons and strategies for avoidance. Moreover, there is a need to conduct comparative studies by focusing on diverse study populations, among others those with a chronic disease and those with a considerable health risk, for example, obesity. In particular, it would be intriguing to elaborate the issues of information avoidance by devoting attention to its moral justification among diverse study populations (cf. Tuominen 2004).

The perspective provided by uncertainty management is relevant while exploring information avoidance in the context job-related information seeking, too. It is obvious that the motivation to balance between seeking and avoiding information will be strengthened as the information overload increases in the context of performing work tasks. Tackling the questions of information avoidance contributory to uncertainty management may specify the picture of task-based information seeking and indicate that information avoidance is not just an anomaly of information seeking and use.

Acknowledgements

About the authors

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