

Avoiding negative information as a strategy for emotion regulation

Jannica Heinström, Shahrokh Nikou and Eero Sormunen

Abstract

Introduction. *The aim of the paper is to investigate whether the personality trait negative emotionality and sense of coherence influence emotionally motivated information avoidance, i.e., avoidance of negative information that potentially evoke anxiety or worry.*

Methods. *Data from 412 respondents was collected in a survey which measured negative emotionality, sense of coherence and information avoidance.*

Analysis. *A conceptual model is proposed, and structural equation modelling (SEM) was applied to analyse the data.*

Results. *Negative emotionality was found to influence information avoidance not only directly, but also indirectly through the manageability dimension of sense of coherence. In other words, manageability mediates the relationship between negative emotionality and information avoidance.*

Conclusions. *The study contributes by showing that personal inclinations impact emotionally motivated information avoidance across contexts.*

Keywords: *information avoidance, personality, negative emotionality, sense of coherence, blunting*

Introduction

Information avoidance is an under-investigated phenomenon in information behaviour research. Yet, several studies show that many people do avoid information, both in everyday life (Karim, et al., 2019), and under specific circumstances, such as health concerns (McCloud, et al., 2013; St. Jean, et al., 2017). A study of young men found that one-fourth had avoided information on exercise and physical activity sometimes, often or regularly (Hirvonen, et al., 2012). Similarly, in a study among European youth, it was found that one-fourth avoided information which they expected would cause anxiety, embarrassment or discomfort (Karim, et al., 2019). The number is even higher in the context of health concerns. Studies reveal that as many as one-third of the population would avoid negative information related to their health (McCloud, et al., 2013; St. Jean, et al., 2017). Similarly, during the COVID-19 pandemic, one-third of people avoided COVID-19 related information (Link, 2021).

So, who exactly avoids information? Sweeny, et al. (2010, p. 347) give a clear answer: everyone! There are certain situations where we all avoid information for a variety of reasons; we expect the information to be false, it may be redundant, we do not have time to look for it or are not ready to cope with potentially bad news at that precise moment. Even though we all occasionally avoid information, however, this does not mean that we are equally inclined to do so. Several studies show that demographic factors such as gender and age (McCloud, et al., 2013), or level of health literacy (Link and Baumann, 2021) influence information avoidance. We know less about stable individual traits and their impact in this context. Research has found that negative emotions, such as anxiety, trigger information avoidance (Lee and Kim, 2021). In this study, we ask whether negative emotionality as a personality trait has a similar impact. Moreover, previous research has identified a lack of coping resources as a factor that instigates information avoidance (Link and Baumann, 2021). Therefore, in our study we investigate the role of sense of coherence as a coping resource for stress (Antonovsky, 1987).

The aim of the paper is to investigate whether the personality trait negative emotionality and sense of coherence influence information avoidance. We particularly focus on emotionally motivated information avoidance, i.e., avoidance of negative information which may evoke anxiety or worry. Our paper answers the following three research questions:

1. Does negative emotionality influence information avoidance, and if so, how?
2. Does sense of coherence influence information avoidance, and if so, how?
3. Does sense of coherence mediate the relationship between negative emotionality and information avoidance?

Literature review

Information avoidance has been defined as '*any behaviour intended to prevent or delay the acquisition of available but potentially unwanted information*' (Sweeny, et al., 2010, p. 341). Information avoidance is a diverse and multifaceted phenomenon that defies simple explanation (Sweeny, et al., 2010). Several personal and contextual factors contribute to it, and we need to embrace this complexity in order to gain a thorough understanding of the phenomenon (Germeni and Schulz, 2014).

In addition, information seeking and information avoidance should not be conceptualised as contrasting ends on a linear dimension; they may co-concur, so that people avoid certain kinds of information while actively looking for others in any given context (Germeni and Schulz, 2014). This may mean that people deliberately steer clear of negative and fear-inducing information (Germeni and Schulz, 2014; Jensen, et al., 2021). Lambert, et al. (2009) describe guarded information seekers as individuals who would avoid negative cancer information to control their emotions, at the same time as they would juggle a curiosity to find out more. Furthermore, people may move iteratively between information seeking and information avoidance through processes related to health scares such as cancer (Germeni and Schulz, 2014; Lambert, et al., 2009). Sometimes people temporarily avoid

information to keep their options open, delay discovery of negative information or to maintain hope (Barbour, et al., 2012).

Information avoidance is an active choice to avoid information as opposed to a passive compliance not to seek it (Barbour, et al., 2012; Case et al., 2005; Link and Baumann, 2021; Song, et al., 2021). Moreover, information avoidance itself may be either active or passive (Narayan, et al., 2011; Sweeny, et al., 2010). Active information avoidance occurs when a person intentionally chooses to avoid information (Narayan, et al., 2011). This may be a reaction to threatening circumstances such as serious illness. Passive information avoidance, on the other hand, often happens in connection with ingrained personal beliefs such as those related to religion, politics or worldview. In these contexts, people would ignore information that would challenge their previously held beliefs (Narayan, et al., 2011). Active information avoidance thus seems to be a coping mechanism triggered by threat while passive information avoidance is a less reactive and habituated behaviour. An essential difference between active and passive information avoidance is that, in the case of the former, people are unlikely to know the content of the information while in the case of the latter, people anticipate the content and therefore avoid it (Narayan, et al., 2011).

Information avoidance can be a behavioural response to either internal sentiments, such as emotional needs, or external circumstances, such as the type or amount of information (Germeni and Schulz, 2014). People often avoid information when they cannot control the consequences it may have or when they lack the resources to cope with it (Sweeny, et al., 2010). Moreover, it is common to avoid information that is expected to be difficult to obtain or interpret (Sweeny, et al., 2010). People generally tend to avoid information that (1) would prompt a change in beliefs, (2) require undesired action or (3) cause unpleasant emotions (Howell and Shepperd, 2013; Sweeny, et al., 2010). For example, investors check their portfolios less when markets are poor (Karlsson, et al., 2009). Sometimes, however, information is avoided for the simple reason that people already have enough information (Barbour, et al., 2012).

Information avoidance is particularly common in relation to health threats such as cancer (e.g., Miles, et al., 2008; Persoskie, et al., 2014; Vrinten, et al., 2018). Health information avoidance could either be a deliberate decision in order to shun negative emotions or a reactive response to unpleasant information (Sairanen and Savolainen, 2010). People who believe they run a realistic risk of developing cancer would avoid cancer-related information (Persoskie, et al., 2014). Studies have found that anything between one-third (St. Jean, et al., 2017) and 40 per cent (Emanuel, et al., 2015) of the adult population in the United States would rather not know if they were susceptible to cancer. Among cancer survivors, one-third would actively avoid cancer-related information (McCloud, et al., 2013). Even among people who recently received cancer treatment, nearly 40 per cent were uninterested in or purposely avoided cancer-related information (Loiselle, 2019). Barbour, et al. (2012) found that health information is avoided for the following reasons: denial, overexposure, limited options, flawed information, wish to maintain boundaries and wish to continue with day-to-day activities. Common strategies to avoid potentially negative health information are withdrawal from social situations that could expose it, selectively accessing information sources, avoiding healthcare professionals or trying not to think about health-related issues (Sairanen and Savolainen, 2010).

Information avoidance could have a positive impact on several aspects of life. For cancer patients, avoidance of negative and detailed information may be essential for their capacity to carry on a fairly normal everyday life (Leydon, et al., 2000). Furthermore, information avoidance helps people maintain hope and optimism, which may be essential in life-threatening circumstances (Barbour, et al., 2012; Brashers, 2001; Germeni and Schulz, 2014). The wish to remain positive and hopeful could also induce information avoidance in other contexts. A study on climate change found that people who were concerned about the climate were more likely to seek climate information, while those who felt optimistic would avoid it to maintain their positive outlook (Yang and Kahlor, 2012). Information avoidance may also decrease anxiety and depression during illness (Aust, et al., 2016; Bennett, et al., 2015). People sometimes withdraw from support groups and shun discussion forums related to cancer to avoid hearing about other peoples' negative experiences. This focus on survivorship instead of illness is an important coping response that helps to preserve hope and well-being (Miller, 2014). It

should, however, be noted that information avoidance also could have negative consequences when people avoid getting screened for serious diseases or avoid treatment (Golman, et al., 2017; Persoskie, et al., 2014). During the COVID-19 pandemic, information avoidance was found to lead to less compliance with health advice and fewer preventive measures against COVID-19 (Siebenhaar, et al., 2020; Song, et al., 2021).

Individual differences in information avoidance

Information avoidance has in previous studies been related to demographic factors such as gender (Eheman, et al., 2009; Emanuel, et al., 2015; Loisselle, 2019; McCloud, et al., 2013), age (Eheman, et al., 2009; Emanuel, et al., 2015; McCloud, et al., 2013; Persoskie, et al., 2014), education (Emanuel, et al., 2015; Karim, et al., 2019; St. Jean, et al., 2017), employment (Karim, et al., 2019; St. Jean, et al., 2017), income (McCloud, et al., 2013), occupation (Eheman, et al., 2009) or marital status (Eheman, et al., 2009).

Low levels of health literacy or low information literacy self-efficacy have also been connected to information avoidance (Karim, et al., 2019; Link and Baumann, 2021; Siebenhaar, et al., 2020). However, information avoidance may also be a sign of information literacy, since people tend to avoid information or certain information sources when they consider them to be flawed (Barbour, et al., 2012).

One factor that influences information avoidance is coping style. The monitoring-blunting coping theory describes two fundamental responses to information in threatening situations (Miller, 1987). Monitors actively look for threat-related cues and frequently look for information, while blunters distract themselves and actively avoid it (Miller, 1987). Both active information seeking and information avoidance are ways to cope with anxiety (Maslow, 1963). High anxiety, however, usually leads to active information seeking, i.e., monitoring, as opposed to information avoidance (Miller, 1987). When the amount of information does not match the coping style, anxiety increases. During the COVID-19 pandemic, frequent information seeking about COVID-19 was found to increase anxiety among blunters and to decrease anxiety among monitors (Cheng, et al., 2021). However, scholars have also challenged the notion of information avoidance as a trait-like coping style and argue that information avoidance is situation dependent (Barbour, et al., 2012; Germeni and Schulz, 2014).

Few studies have explored the impact of personality on information avoidance. A study by Howell and Shepperd (2016), however, suggests that tendencies to avoid information are relatively stable over time. The study found that conscientiousness and openness to experience were negatively linked to information avoidance, while negative emotionality was positively related to it (Howell and Shepperd, 2016). This suggests that individuals who are negligent, conservative and prone to negative emotions would be more likely to avoid information. The study also showed that avoidance tendencies are cross-contextual, so that individuals who would avoid information in one domain would also avoid it in another (Howell and Shepperd, 2016). In contrast, a high need for cognition has been identified as a trait that would prevent information avoidance. In such cases, the need to know and a curiosity to find out would override any tendency to avoid information (Naderbeigi and Isfandyari-Moghaddam, 2021).

The influence of negative emotionality as a personality trait on information avoidance

Negative emotionality is a personality trait that describes a tendency to experience difficult emotions such as worry, tension, frustration, guilt, fear, sadness, anxiety and depression (Costa and McCrae, 1992). Situational emotions such as anxiety (Lee and Kim, 2021) and fear (Nelissen, et al., 2017) are known to instigate information avoidance. However, less is known about negative emotionality as a trait and the few studies conducted report contrasting results. Chae (2016) found no direct link between trait anxiety and information avoidance, while Howell and Shepperd (2016) reported a significant positive connection between trait anxiety and negative emotionality.

Individuals with high negative emotionality often worry about or anticipate negative outcomes (Costa and McCrae, 1992). Pessimistic estimates of information content may therefore make them more

prone to information avoidance. People have been found to avoid information which they suspect will cause them stress (Brashers, 2001) or evoke anxiety, fear or depression (Sairanen and Savolainen, 2010). Moreover, people with high negative emotionality tend to have strong emotional reactions (Costa and McCrae, 1992). If they anticipate intense unpleasant feelings, they may avoid information that is likely to give them cause for concern. On social media, information avoidance is often a response to frustration, fatigue and dissatisfaction (Dai, et al., 2020; Kainat, et al., 2021). During the COVID-19 pandemic, encountering upsetting COVID-related information (Siebenhaar, et al., 2020) or experiencing general COVID-related anxiety (Song, et al., 2021) led to people avoiding COVID-related information. Based on these notions and on the study by Howell and Shepperd (2016), we develop our first hypothesis.

Hypothesis 1: Negative emotionality is positively related to information avoidance.

The influence of negative emotionality on sense of coherence

Sense of coherence is a coping resource for stress and consists of three components: comprehensibility, manageability and meaningfulness (Antonovsky, 1987). Individuals with a strong sense of coherence cope well with stressors in situations which individuals with a weak sense of coherence find overwhelming (Antonovsky, 1987). Previous research has found a strong link between negative emotionality and low sense of coherence (Barańczuk, 2021; Ebert, et al., 2002; Feldt, et al., 2007; Grevenstein and Bluemke, 2015; Hochwälder, 2012; Kase, et al., 2018). Despite this strong link, however, the two concepts are not identical. While negative emotionality influences several aspects of cognition, emotion and behaviour, sense of coherence is specifically a coping resource (Grevenstein and Bluemke, 2015). The association between these two concepts led us to the following set of hypotheses:

Hypothesis 2a: Negative emotionality is negatively related to the comprehensibility dimension of sense of coherence.

Hypothesis 2b: Negative emotionality is negatively related to the manageability dimension of sense of coherence.

Hypothesis 2c: Negative emotionality is negatively related to the meaningfulness dimension of sense of coherence.

The influence of sense of coherence on information avoidance

As mentioned above, sense of coherence is a multidimensional construct with three components: comprehensibility, manageability and meaningfulness (Antonovsky, 1987). *Comprehensibility* describes the degree to which people regard stimuli from the environment as predictable and understandable (Antonovsky, 1987). Individuals with a weak sense of coherence often find it difficult to process, sort and integrate information (Ek, 2005). As a result, they may be more inclined to avoid information. Both difficulty finding and comprehending information have been linked to information avoidance (McCloud, et al., 2013). If people consider that searching for relevant cancer-related information would require much effort or that the retrieved information would be difficult to understand or the quality unreliable, they would prefer not to know whether or not they are prone to cancer (St. Jean, et al., 2017). A meta-analysis found that information avoidance could be a reaction to the type or amount of information, such as distressing, difficult, confusing, overwhelming or inadequate (Germeni and Schulz, 2014). During the COVID-19 pandemic, this manifested in the way in which people avoided information as a result of encountering misinformation (Kim, et al., 2020).

Manageability refers to the belief that one has the resources needed to deal with life's challenges (Antonovsky, 1987). One pillar of manageability is trusted social connections (Antonovsky, 1987). If this social support is missing, it could lead to information avoidance (Howell and Shepperd, 2017; Link and Baumann, 2021; St. Jean, et al., 2017). Both formal and informal social support are essential in such situations (St. Jean, et al., 2017). If people feel they have nobody to turn to for emotional

support, they would often rather not know their risk of cancer (St. Jean, et al., 2017). Particularly those with prior cancer-related experience avoid cancer-related information if they feel that they lack interpersonal coping resources (Link and Baumann, 2021). Furthermore, less socially oriented (Costello and Veinot, 2020) or socially rejected (Howell and Shepperd, 2017) people are more inclined to avoid information. Lack of trust is another frequent cause of information avoidance. For example, people who do not trust healthcare providers (Costello and Veinot, 2020) or do not believe that good advice and information would be available to them in case of cancer (St. Jean, et al., 2017) are more likely to avoid cancer information. Similarly, lack of trust in health information sources was found to lead to information avoidance during the COVID-19 pandemic (Siebenhaar, et al., 2020).

Comprehensibility and *manageability* (Antonovsky, 1987) may also impact information avoidance through a lack of control of the information environment (Ek, 2005). Information avoidance often occurs as a result of information overload (Barbour, et al., 2012; Dai, et al., 2020; Guo, et al., 2020; Link, 2021; Song, et al., 2021). Moreover, information overload tends to result in negative effects which in turn may lead to information avoidance (Swar, et al., 2017). This manifested during the COVID-19 pandemic, when information overload led to anxiety and, consequently, to information avoidance (Soroya, et al., 2021). People may also avoid information to increase a sense of manageability and normality in their everyday lives. This may be the case when cancer patients choose to focus on aspects of their lives other than their cancer diagnosis (Germei and Schulz, 2014). As such, information avoidance could be a temporary choice to steer clear of information until the situation feels more manageable (Barbour, et al., 2012).

A strong sense of *meaningfulness* suggests that life makes sense emotionally and that even negative experiences can be conceptualised as challenges to be overcome with dignity (Antonovsky, 1987). Similar internal coping resources, such as self-efficacy, self-esteem and optimism, have been found to prevent information avoidance (Howell and Shepperd, 2016). People who trust that they can cope with knowing that they have a high risk of cancer are more open to knowing their cancer risk (Link and Baumann, 2021; Melnyk and Shepperd, 2012; St. Jean, et al., 2017). In contrast, individuals who are depressed or who have low self-esteem may be less equipped to handle negative information (Sweeny, et al., 2010). Previous research has found that a weak sense of coherence, particularly meaningfulness, leads to information avoidance among people with health concerns (Ek and Heinström, 2011). Similarly, external locus of control (Ek and Heinström, 2011) and fatalism (Link and Baumann, 2021; St. Jean, et al., 2017) increase information avoidance. In this case, people believe that their destiny lies in the hands of external factors such as chance, fate or powerful others. If one believes one cannot influence the situation regardless, it may seem pointless to look for information about it (Melnyk and Shepperd, 2012). Those who are less assertive and who do not advocate for their own care are also more inclined to avoid information (Costello and Veinot, 2020). Based on the above reasoning, we developed the following set of hypotheses:

Hypothesis 3a: Comprehensibility is negatively related to information avoidance.

Hypothesis 3b: Manageability is negatively related to information avoidance.

Hypothesis 3c: Meaningfulness is negatively related to information avoidance.

Figure 1 depicts the research model, where it is assumed that negative emotionality both directly and indirectly influence information avoidance through sense of coherence.

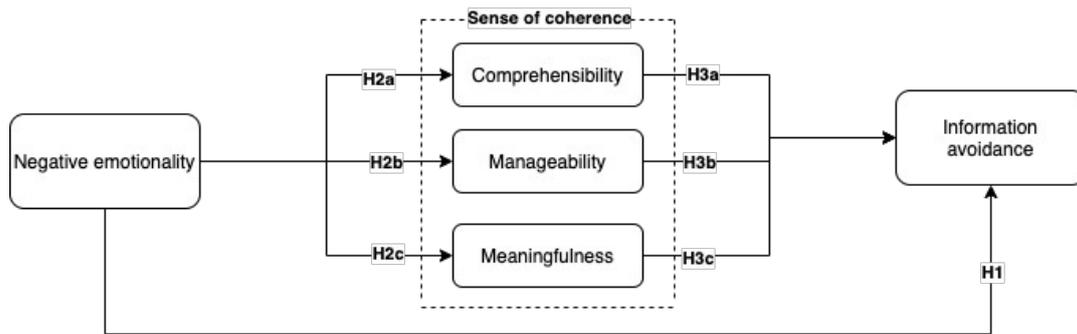


Figure 1: Research model

Method

Measures and data collection

Data was collected in eight upper secondary schools in Finland as part of a larger study (Heinström, et al., 2019). The schools were located in a medium-sized city and surrounding areas. The printed questionnaire was distributed to students by teachers in mother tongue and literature. The students completed the questionnaire in their free time and returned it to their teacher in a sealed envelope along with a signed parental consent. After seven of the 419 responses returned were excluded for being incomplete, the final data set comprised 412 respondents. The exact response rate is not known but is estimated at above 90 per cent. This high figure may be explained by the circumstances surrounding the data collection. The study was part of a larger research project in which the schools were involved. The schools were therefore committed to the data collection process. Moreover, the questionnaire was administered by the teacher in each class.

The survey included items measuring demographic information as well as the three constructs, i.e., negative emotionality, sense of coherence and information avoidance. Of the 412 respondents, 248 (60.2%), were female and 158 (38.3%), were male. Six respondents reported non-binary gender or did not answer. The age of the respondents ranged from 16 to 19 years.

To measure the constructs depicted in the research model, we used previously validated items. For example, negative emotionality was measured with two items from a 10-item scale of the five-factor model (Lönnqvist, et al., 2008). Both of these items consisted of a pair of adjectives that describe feelings typical in individuals with negative emotionality. The items were: (1) anxious, often worried, and (2) calm, emotionally stable (reversed). We asked the respondents to assess the extent to which these descriptions applied to them on a scale from 1 to 5 where 1 denotes ‘*strongly disagree*’ and 5 denotes ‘*strongly agree*’. Sense of coherence was measured by a seven-point scale by Antonovsky (1987). The scale consists of 13 items measuring the three components of sense of coherence, i.e., comprehensibility (five items), manageability (four items) and meaningfulness (four items). For example, we asked ‘*Do you often have the feeling that you are in an unfamiliar situation and do not know what to do?*’ (comprehensibility), ‘*How often do you have feelings that you are not sure you can keep under control?*’ (manageability), and ‘*How often do you have the feeling that there is little meaning in the things you do in your daily life?*’ (meaningfulness).

Finally, information avoidance was measured by the ‘*blunting*’ scale of the measure of everyday information mastering developed by Heinström, et al. (2019). The scale consists of the following three statements: ‘*Sometimes I do not want to hear news about myself if I suspect it to be bad*’, ‘*I avoid reading a piece of news if the title makes me feel anxious*’, and ‘*If I have delicate personal problems, I do not even want to read texts related to them*’.

Data analysis and results

Validity and reliability

The internal consistency and scale reliability of the data were assessed using several statistical tests (Cronbach's alpha, composite reliability and convergent validity). All the survey items were loaded above the recommended value of 0.70. However, we had to remove two items measuring sense of coherence (one from comprehensibility and one from manageability) due to low loadings. Internal consistency was assessed via Cronbach's alpha, measuring the internal reliability of latent constructs. The recommended threshold value is 0.70 (Hair, et al., 2011). Cronbach's α has a number of strong assumptions such as unidimensionality, uncorrelated errors, and essential tau-equivalence of all items. For example, essential tau-equivalence necessitates the equivalence of all covariances between the items. As such, these assumptions should be double-checked, since they are frequently violated. In addition, the Cronbach α test sometimes does not comply with the cut-off values. It has been shown to sometimes over- or underestimates the true reliability due to, for example, an insufficient number of items (e.g., fewer than five) used in the survey. This would violate tau-equivalence and give a lower reliability coefficient. Therefore, it is common to obtain low Cronbach values (e.g., Dall'Oglio, et al., 2010). In the assessment of Cronbach's alpha, negative emotionality, measured by two items, showed an internal reliability of 0.52. Reliability for sense of coherence with three components was 0.72 (comprehensibility), 0.75 (manageability) and 0.73 (meaningfulness). Reliability of information avoidance was above the recommended cut-off value of 0.70; see Table 1.

Table 1: Internal consistency and reliability results

<i>Construct</i>		<i>Item</i>	<i>Loadings</i>	<i>Mean</i>	<i>Std. dev</i>	<i>Cronbach α</i>	<i>CR</i>	<i>AVE</i>
Negative emotionality		NEG-1	0.89	3.14	1.24	0.52	0.79	0.65
		NEG-2	0.80	2.63	1.08			
Sense of coherence	Comprehensibility	COMP-1	0.71	4.61	1.47	0.72	0.81	0.58
		COMP-2	0.72	4.32	1.85			
		COMP-3	0.84	5.06	1.58			
		COMP-4	0.70	5.02	1.74			
	Manageability	MANA-1	0.70	4.92	1.51	0.75	0.81	0.57
		MANA-2	0.78	4.37	1.56			
		MANA-3	0.80	5.06	1.58			
	Meaningfulness	MEAN-1	0.72	4.88	1.49	0.73	0.83	0.55
		MEAN-2	0.73	4.29	1.73			
		MEAN-3	0.74	4.15	1.15			
		MEAN-4	0.79	4.44	1.43			
	Information avoidance		IA-1	0.75	2.61	1.16	0.71	0.73
IA-2			0.70	2.58	1.21			
IA-3			0.80	2.92	0.93			

Note: CR = composite reliability; AVE = average variance extracted

The composite reliability (CR) was calculated for construct reliability, with a desired threshold value of 0.70 or higher (Hair, et al., 2011). As shown in Table 1, the lowest composite reliability value was 0.73, for information avoidance and the highest was 0.83 for the meaningfulness component of sense of coherence. This indicates that all the constructs satisfied the threshold value; therefore, we established an acceptable construct reliability. Furthermore, convergent validity was assessed using the average variance extracted (AVE) values to examine the relationships. The recommended threshold is 0.50 or higher (Fornell and Larcker, 1981). In the average variance extracted assessment, all values were between 0.51 and 0.65, and thus convergent validity was established (see Table 1).

Table 2: Discriminant validity (Fornell and Larcker criterion)

	<i>COM</i>	<i>Information avoidance</i>	<i>MAN</i>	<i>MEA</i>	<i>Negative emotionality</i>
Comprehensibility	0.717				
Information avoidance	-0.180	0.706			
Manageability	0.673	-0.200	0.758		
Meaningfulness	0.593	-0.094	0.551	0.744	
Negative emotionality	-0.560	0.206	-0.406	-0.433	0.803

Unlike convergent validity, the discriminant validity test seeks to prove that there is no correlation or relationship between the measurements or concepts. To put it another way, the goal of discriminant validity is to show that the measures used to measure a construct truly measure the intended construct and that the construct is not captured by other measures (Henseler, et al., 2015). We were able to determine the distinctiveness of the constructs and discriminant validity in our data using the Fornell and Larcker (1981) criterion. The values are reported in Table 2. However, since we used partial least squares structural equation modelling (PLS-SEM) to perform the analysis, we also report the results of the heterotrait-monotrait ratio (HTMT), which is an alternative approach to establish discriminant validity. As recommended by Henseler, et al. (2015), all values were below the desired threshold value of 0.85; see Table 3. Overall, discriminant validity can be accepted for this measurement model and supports the discriminant validity between the constructs.

Table 3: Discriminant validity (heterotrait-monotrait ratio)

	<i>COM</i>	<i>Information avoidance</i>	<i>MAN</i>	<i>MEA</i>	<i>Negative emotionality</i>
Comprehensibility					
Information avoidance	0.295				
Manageability	0.843	0.303			
Meaningfulness	0.822	0.191	0.796		
Negative emotionality	0.888	0.341	0.754	0.744	

Furthermore, we examined the multicollinearity issue. If the dependent variable in the model is predicted by more than one independent variable, this test should be performed. Due to possible intercorrelation among the dependent variables, multicollinearity was investigated using the value of variance inflation factor (VIF), with acceptable value of 3.3 (Petter, et al., 2007). Based on the lowest (1.092) and highest (1.796) VIF values obtained, we determined that multicollinearity was not an issue in our data.

Common method bias

We examined the data against common method bias (CMB) to assess whether we could find any bias attributable to the measurement method. This was done using two different approaches, namely, Harman's one-factor test, as recommended by Podsakoff and Organ (1986), and the common latent factor (CLF) technique, as recommended by Podsakoff, et al. (2003). The results from the former approach showed that none of the constructs had a value of more than 50% of the variance. The latter approach provided a more robust understanding of the common method bias than the former (MacKenzie and Podsakoff, 2012). Here we compared the chi-square values of an unconstrained model with a model where all the paths were constrained to zero. The results showed that the common method bias had no effect on either model's path relationships.

Structural model analysis

Figure 2 shows the results of the structural model. The outcome variable, i.e., information avoidance, was explained by a variance of 22%. Moreover, the three dimensions of sense of coherence were explained by a variance of 32% for comprehensibility, 18% for manageability and 21% for meaningfulness. The structural equation modelling results revealed that negative emotionality was positively and directly related to information avoidance ($\beta = 0.16$, $t = 2.447$, $p < 0.001$). Therefore, H1 was supported by the model. Moreover, the results showed that negative emotionality was negatively related to all three dimensions of sense of coherence. Negative emotionality had a negative association with comprehensibility ($\beta = -0.56$, $t = 15.705$, $p < 0.001$), with manageability ($\beta = -0.41$, $t = 8.964$, $p < 0.001$) and with meaningfulness ($\beta = -0.43$, $t = 10.407$, $p < 0.001$). Therefore, H2a, H2b and H2c were all supported by the model. In addition, according to the structural equation modelling results, only one of the dimensions of sense of coherence, i.e., manageability, was found to be negatively related to information avoidance ($\beta = -0.16$, $t = 2.166$, $p < 0.001$). Therefore, only H3b was supported by the model. The other hypotheses (H3a and H3c) were not supported. In addition, it was found that the influence of negative emotionality on information avoidance is only mediated through one dimension of sense of coherence: manageability ($\beta = 0.10$, $t = 2.125$, $p < 0.05$).

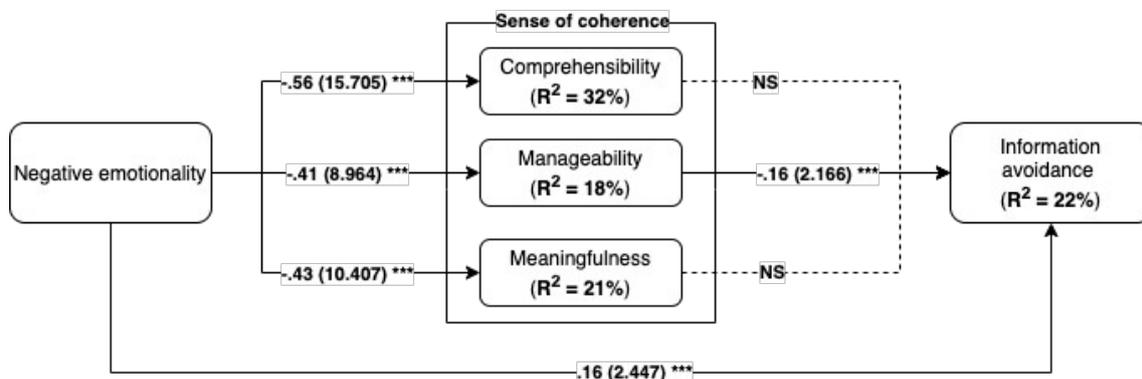


Figure 2: Structural model results

Discussion

Our study found that the personality trait negative emotionality impacted emotional information avoidance both directly and indirectly through the manageability dimension of sense of coherence.

Previous research shows that emotional information avoidance often results from anxiety, although most studies have explored this as situational anxiety (Lee and Kim, 2021). Our results suggest that emotionally driven information avoidance could also depend on individual inclinations. Individuals who generally have a high tendency to worry would also be more inclined to avoid negative information across contexts. This confirms the finding by Howell and Shepperd (2016). People with high negative emotionality tend to overestimate the severity of threats and at the same time

underestimate their own ability to cope with them (Matthews, 2008). Moreover, sensitivity and reactivity are distinctive features of negative emotionality (Costa and McCrae, 1992). Individuals with high negative emotionality may therefore expect strong undesired emotions and consequently avoid information that might cause them concern. In such situations, emotional information avoidance may be a means of regulating emotion. Typical strategies for emotion regulation are to actively prevent or direct attention away from a situation that is expected to cause undesirable emotions (Gross, 2015). Both these strategies would correspond to information avoidance.

The only dimension of sense of coherence that was significantly linked to information avoidance was manageability. This contrasts with Ek and Heinström (2011), who found meaningfulness to be most influential. The contradicting results could be explained by the context in which sense of coherence was investigated. Ek and Heinström (2011) investigated people with health problems, while the participants in the current study were upper secondary school students. Meaningfulness may be more relevant in a charged health context, while manageability may be more influential in a presumably healthy population. Moreover, comprehensibility did not influence information avoidance. This finding may be explained by the fact that this study specifically investigated emotional information avoidance. Comprehensibility may be more influential on cognitive instigators of information avoidance such as challenges in the processing of information (Ek, 2005).

Manageability signifies a notion that individuals have the necessary resources to deal with life's challenges when they arise (Antonovsky, 1987). When people lack these means, they feel less equipped to handle negative information and may therefore avoid it. Previous research has found that when people lack coping resources, such as social support, they are more likely to avoid information (St. Jean, et al., 2017). Weak manageability could also be compared to information overload, which is known to cause information avoidance (Song, et al., 2021). One of the items measuring manageability reads '*How often do you have feelings that you are not sure you can keep under control?*' The combination of negative emotionality as a personality trait and a weak sense of manageability may signify a higher susceptibility to emotional overload. In anticipation of this outcome, people may opt to avoid information. This pattern could be compared to guarded information seekers who avoid negative information to control their emotions (Lambert, et al., 2009).

The present study is not without limitations. Data was collected among upper secondary school students. The generalisability of the findings to other populations may therefore be limited. Furthermore, the study investigated general avoidance of negative information in a student population. Previous research has found that avoidance of negative information is particularly prevalent in relation to serious illness or other severe life crises (Persoskie, et al., 2014). Information avoidance may therefore have context-dependent triggers that were not covered in the present study. Beyond contextual triggers, however, the findings suggest that there are also cross-contextual patterns in information avoidance.

Conclusions

The main contribution of this study is the demonstration that individual traits influence the tendency to avoid negative information. The personality trait negative emotionality and sense of coherence were found to impact emotional information avoidance. People with an inclination to react with strong negative affect or who experience a lack of manageability in their daily lives may therefore be more likely to avoid information they expect might cause anxiety. In such situations, information avoidance would be a strategy for emotion regulation.

Acknowledgements

The study was part of the ARONI project funded by the Academy of Finland (grant no. 285638).

About the authors

Jannica Heinström is a professor at Oslo Metropolitan University, Department of Archivistries, Library and Information Science, Oslo, Norway. Her research focuses on psychological aspects of information interaction, particularly the role of personality and individual differences. She can be contacted by e-mail at jannicah@oslomet.no

Shahrokh Nikou is a docent in information systems and a senior lecturer at the Department of Information Studies at Åbo Akademi University, Turku, Finland. He is also affiliated with Stockholm University. His research interests are information management, literacy, digitalisation, digital platforms and business model innovation. He can be contacted by e-mail at shahrokh.nikou@abo.fi

Eero Sormunen is a professor emeritus at the Faculty of Information Technology and Communication Sciences, University of Tampere, Finland. Dr Sormunen's research focuses on information literacy and learning and on task-based information retrieval. He has authored or co-authored about 120 scientific and professional publications. He can be contacted by e-mail at eero.sormunen@tuni.fi

References

- Antonovsky, A. (1987). *Unraveling the mystery of health: How people manage stress and stay well*, Jossey-bass.
- Aust, H., Rüsç, D., Schuster, M., Sturm, T., Brehm, F., & Nestoriuc, Y. (2016). Coping strategies in anxious surgical patients. *BMC Health Services Research*, *16*(1), 1-10. <https://doi.org/10.1186/s12913-016-1492-5>
- Barańczuk, U. (2021). The five-factor model of personality and sense of coherence: A meta-analysis. *Journal of Health Psychology*, *26*(1), 12–25. <https://doi.org/10.1177/1359105319884597>.
- Barbour, J. B., Rintamaki, L. S., Ramsey, J. A., & Brashers, D. E. (2012). Avoiding health information. *Journal of Health Communication*, *17*(2), 212–229. <https://doi.org/10.1080/10810730.2011.585691>.
- Bennett, D. S., Kane, M., Aramburo, M., & Varlotta, L. (2015). Monitoring and blunting as predictors of internalizing symptoms among youths with cystic fibrosis. *Children's Health Care*, *44*(2), 155-168. <https://doi.org/10.1080/02739615.2014.896214>
- Brashers, D. E. (2001). Communication and uncertainty management. *Journal of Communication*, *51*(3), 477-497. <https://doi.org/10.1111/j.1460-2466.2001.tb02892.x>
- Case, D. O., Andrews, J. E., Johnson, J. D., & Allard, S. L. (2005). Avoiding versus seeking: The relationship of information seeking to avoidance, blunting, coping, dissonance, and related concepts. *Journal of the Medical Library Association*, *93*(3), 353. https://www.researchgate.net/publication/7688507_Avoiding_versus_seeking_The_relationship_of_information_seeking_to_avoidance_blunting_coping_dissonance_and_related_concepts (Archived by the Internet Archive at https://web.archive.org/web/20220614092147/https://www.researchgate.net/publication/7688507_Avoiding_versus_seeking_The_relationship_of_information_seeking_to_avoidance_blunting_coping_dissonance_and_related_concepts)
- Chae, J. (2016). Who avoids cancer information? Examining a psychological process leading to cancer information avoidance. *Journal of health communication*, *21*(7), 837-844. <https://doi.org/10.1080/10810730.2016.1177144>
- Cheng, C., Ebrahimi, O. V., & Lau, Y. C. (2021). Maladaptive coping with the infodemic and sleep disturbance in the COVID-19 pandemic. *Journal of Sleep Research*, *30*(4), e13235. <https://doi.org/10.1111/jsr.13235>
- Costa, P.T., & McCrae, R.R. (1992). *NEO PI-R. Professional Manual*. Psychological Assessment Resources, 396, 223-356. https://www.researchgate.net/publication/240133762_Neo_PI-R_professional_manual (Archived by the Internet Archive at https://web.archive.org/web/20220614092343/https://www.researchgate.net/publication/240133762_Neo_PI-R_professional_manual)
- Costello, K. L., & Veinot, T. C. (2020). A spectrum of approaches to health information interaction: From avoidance to verification. *Journal of the Association for Information Science and Technology*, *71*(8), 871–886. <https://doi.org/10.1002/asi.24310>
- Dai, B., Ali, A., & Wang, H. (2020). Exploring information avoidance intention of social media users: a cognition–affect–conation perspective. *Internet Research*, *30*(5), 1455-1478. <https://doi.org/10.1108/INTR-06-2019-0225>
- Dall'Oglio, A. M., Rossiello, B., Coletti, M. F., Caselli, M. C., Ravà, L., Di Ciommo, V., Patrizia Giannantoni, M. O., & Pasqualetti, P. (2010). Developmental evaluation at age 4: validity of an Italian parental questionnaire. *Journal of Paediatrics and Child Health*, *46*(7-8), 419-426. <https://doi.org/10.1111/j.1440-1754.2010.01748.x>

- Ebert, S. A., Tucker, D. C., & Roth, D. L. (2002). Psychological resistance factors as predictors of general health status and physical symptom reporting. *Psychology, Health and Medicine*, 7(3), 363-375. <https://doi.org/10.1080/13548500220139449>
- Eheman, C. R., Berkowitz, Z., Lee, J., Mohile, S., Purnell, J., Marie Rodriguez, E., Roscoe, J., Johnson, D., Kirshner, J., & Morrow, G. (2009). Information-seeking styles among cancer patients before and after treatment by demographics and use of information sources. *Journal of Health Communication*, 14(5), 487-502. <https://doi.org/10.1080/10810730903032945>
- Ek, S. (2005). *Om information, media och hälsa behaviour en samhällligkontext: en empirisk och analytisk studie [On information, media and health in a societal context: an empirical and analytic study]*. (Åbo Akademis förlag PhD dissertation). Retrieved from <http://bibbild.abo.fi/ediss/2005/EkStefan.pdf> (Archived by the Internet Archive at <https://web.archive.org/web/20220120205441/http://bibbild.abo.fi/ediss/2005/EkStefan.pdf>)
- Ek, S., & Heinström, J. (2011). Monitoring or avoiding health information—the relation to inner inclination and health status. *Health Information and Libraries Journal*, 28(3), 200-209. <https://doi.org/10.1111/j.1471-1842.2011.00947.x>
- Emanuel, A. S., Kiviniemi, M. T., Howell, J. L., Hay, J. L., Waters, E. A., Orom, H., & Shepperd, J. A. (2015). Avoiding cancer risk information. *Social Science & Medicine*, 147, 113-120. <https://doi.org/10.1016/j.socscimed.2015.10.058>
- Feldt, T., Metsäpelto, R. L., Kinnunen, U., & Pulkkinen, L. (2007). Sense of coherence and five-factor approach to personality: Conceptual relationships. *European Psychologist*, 12(3), 165-172. <https://doi.org/10.1027/1016-9040.12.3.165>
- Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50. <https://doi.org/10.1177/002224378101800104>
- Germeni, E., & Schulz, P. J. (2014). Information seeking and avoidance throughout the cancer patient journey: two sides of the same coin? A synthesis of qualitative studies. *Psycho-Oncology*, 23(12), 1373-1381. <https://doi.org/10.1002/pon.3575>
- Golman, R., Hagmann, D., & Loewenstein, G. (2017). Information avoidance. *Journal of Economic Literature*, 55(1), 96-135. <https://doi.org/10.1257/jel.20151245>
- Grevenstein, D., & Bluemke, M. (2015). Can the Big Five explain the criterion validity of Sense of Coherence for mental health, life satisfaction, and personal distress? *Personality and Individual Differences*, 77, 106-111. <https://doi.org/10.1016/j.paid.2014.12.053>
- Gross, J. J. (2015). Emotion regulation: Current status and future prospects. *Psychological Inquiry*, 26(1), 1-26. <https://doi.org/10.1080/1047840X.2014.940781>
- Guo, Y., Lu, Z., Kuang, H., & Wang, C. (2020). Information avoidance behaviour on social network sites: Information irrelevance, overload, and the moderating role of time pressure. *International Journal of Information Management*, 52, 102067. <https://doi.org/10.1016/j.ijinfomgt.2020.102067>
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139-152. <https://doi.org/10.2753/MTP1069-6679190202>
- Heinström, J., Sormunen, E., Savolainen, R., & Ek, S. (2019). Developing an empirical measure of everyday information mastering. *Journal of the Association for Information Science and Technology*. <https://doi.org/10.1002/asi.24305>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135. <https://doi.org/10.1007/s11747-014-0403-8>

- Hirvonen, N., Huotari, M. L., Niemelä, R., & Korpelainen, R. (2012). Information behaviour in stages of exercise behaviour change. *Journal of the American Society for Information Science and Technology*, 63(9), 1804-1819. <https://doi.org/10.1177/1359105307074253>
- Hochwälder, J. (2012). The contribution of the big five personality factors to sense of coherence. *Personality and Individual Differences*, 53(5), 591-596. <https://doi.org/10.1016/j.paid.2012.05.008>
- Howell, J. L., & Shepperd, J. A. (2013). Behavioural obligation and information avoidance. *Annals of Behavioural Medicine*, 45(2), 258-263. <https://doi.org/10.1007/s12160-012-9451-9>
- Howell, J. L., & Shepperd, J. A. (2016). Establishing an information avoidance scale. *Psychological Assessment*, 28(12), 1695. <https://doi.org/10.1037/pas0000315>
- Howell, J. L., & Shepperd, J. A. (2017). Social exclusion, self-affirmation, and health information avoidance. *Journal of Experimental Social Psychology*, 68, 21-26. <https://doi.org/10.1016/j.jesp.2016.05.005>
- Jensen, J. G., Petersen, E., & Frandsen, T. F. (2021). Avoiding Information during Serious Illness: Insights into the Information Behaviour of Cancer Patients. *Proceedings of the Association for Information Science and Technology*, 58(1), 466-471. <https://doi.org/10.2196/jmir.3117>
- Kainat, K., Ghorbanian Zolbin, M., Widén, G., & Nikou, S. (2021). User Information Satisfaction among Female Refugees and Immigrants as Assessed by the Level of Information Literacy on Social Media. In A. Pucihar, M. Kljaji Borštnar, R. Bons, H. Cripps, A. Sheombar, & D. Vidmar (Eds.), 34th Bled eConference Digital Support from Crisis to Progressive Change: June 27 – 30, 2021, Online Conference Proceedings (pp. 337-350). <https://doi.org/10.18690/978-961-286-485-9>.
- Karim, M., Widén, G., & Heinström, J. (2019). Influence of demographics and information literacy self-efficacy on information avoidance propensity among youth. In Proceedings of CoLIS, the Tenth International Conference on Conceptions of Library and Information Science, Ljubljana, Slovenia, June 16-19, 2019. *Information Research*, 24(4), paper colis1909 Retrieved from <http://InformationR.net/ir/24-4/colis/colis1909.html> (Archived by the Internet Archive at <https://web.archive.org/web/20191216154314/http://informationr.net/ir/24-4/colis/colis1909.html>)
- Karlsson, N., Loewenstein, G., & Seppi, D. (2009). The ostrich effect: Selective attention to information. *Journal of Risk and uncertainty*, 38(2), 95-115. <https://doi.org/10.1007/s11166-009-9060-6>
- Kase, T., Ueno, Y., & Oishi, K. (2018). The overlap of sense of coherence and the Big Five personality traits: A confirmatory study. *Health Psychology Open*, 5(2), 1-4. <https://doi.org/10.1177/2055102918810654>.
- Kim, H. K., Ahn, J., Atkinson, L., & Kahlor, L. A. (2020). Effects of COVID-19 Misinformation on Information Seeking, Avoidance, and Processing: A Multicountry Comparative Study. *Science Communication*, 42(5), 586-615. <https://doi.org/10.1177/1075547020959670>
- Lambert, S. D., Loiselle, C. G., & Macdonald, M. E. (2009). An in-depth exploration of information-seeking behaviour among individuals with cancer: part 2: understanding patterns of information disinterest and avoidance. *Cancer Nursing*, 32(1), 26-36. <https://doi.org/10.1097/01.NCC.0000343372.24517.bd>
- Lee, J., & Kim, Y. (2021). How terrorism cues affect attitude polarization over undocumented immigrants via negative emotions and information avoidance: A terror management theory perspective. *The Social Science Journal*, 1-16. doi: 10.1080/03623319.2021.1884777.
- Leydon, G. M., Boulton, M., Moynihan, C., Jones, A., Mossman, J. Boudioni, M., & McPherson, K. (2000). Cancer patients' information needs and information seeking behaviour: in depth interview study. *British Medical Journal*, 320(7239), 909-913. <https://doi.org/10.1136/bmj.320.7239.909>
- Link, E. (2021). Information avoidance during health crises: Predictors of avoiding information about the COVID-19 pandemic among German news consumers. *Information Processing & Management*, 58(6), 102714. <https://doi.org/10.1016/j.ipm.2021.102714>
- Link, E., & Baumann, E. (2021). Explaining cancer information avoidance comparing people with and without cancer experience in the family. *Psycho-Oncology*, 1-8. <https://doi.org/10.1002/pon.5826>.

- Loiselle, C. G. (2019). Cancer information-seeking preferences linked to distinct patient experiences and differential satisfaction with cancer care. *Patient Education and Counselling*, *102*(6), 1187-1193. <https://doi.org/10.1016/j.pec.2019.01.009>
- Lönnqvist, J.-E., Verkasalo, M., & Leikas, S. (2008). Viiden suuren persoonallisuustekijän 10-, 60-, ja 300-osion julkiset mittarit [Public 10-, 60-, and 300-item Big Five measures]. *Psykologia*, *43*(5), 328-341.
- MacKenzie, S.B., & Podsakoff, P.M. (2012). Common method bias in marketing: causes, mechanisms, and procedural remedies. *Journal of Retailing*, *88*(4), 542-555. <https://doi.org/10.1016/j.jretai.2012.08.001>
- Maslow, A. H. (1963). The need to know and the fear of knowing. *The Journal of General Psychology*, *68*(1), 111-125. <https://doi.org/10.1080/00221309.1963.9920516>
- Matthews, G. (2008). Personality and information processing: a cognitive-adaptive theory. In G. J. Boyle, G. Matthews and D. H. Saklofske. *The SAGE Handbook of Personality Theory and Assessment: Personality Measurement and Testing* (Volume 2), Sage, 56-79. <https://doi.org/10.4135/9781849200462.n3>
- McCloud, R. F., Jung, M., Gray, S. W., & Viswanath, K. (2013). Class, race and ethnicity and information avoidance among cancer survivors. *British Journal of Cancer*, *108*(10), 1949-1956. <https://doi.org/10.1038/bjc.2013.182>
- Melnyk, D., & Shepperd, J. A. (2012). Avoiding risk information about breast cancer. *Annals of Behavioral Medicine*, *44*(2), 216-224. <https://doi.org/10.1007/s12160-012-9382-5>
- Miles, A., Voorwinden, S., Chapman, S., & Wardle, J. (2008). Psychologic predictors of cancer information avoidance among older adults: The role of cancer fear and fatalism. *Cancer Epidemiology and Prevention Biomarkers*, *17*(8), 1872-1879. <https://doi.org/10.1158/1055-9965.EPI-08-0074>
- Miller, L. E. (2014). Uncertainty management and information seeking in cancer survivorship. *Health Communication*, *29*(3), 233-243. <https://doi.org/10.1080/10410236.2012.739949>
- Miller, S. (1987). Monitoring and blunting: Validation of a questionnaire to assess styles of information seeking under threat. *Journal of Personality and Social Psychology*, *52*(2), 345-353. <https://doi.org/10.1037/0022-3514.52.2.345>
- Naderbeigi, F., & Isfandyari-Moghaddam, A. (2021). Case Study of information Avoidance in Medical Students. *Library and Information Science Research*, *11*(1), 198-219. <https://doi.org/10.22067/infosci.2021.24209.0>
- Narayan, B., Case, D. O., & Edwards, S. L. (2011). The role of information avoidance in everyday life information behaviours. *Proceedings of the American Society for Information Science and Technology*, *48*(1), 1-9. <https://doi.org/10.1002/meet.2011.14504801085>
- Nelissen, S., Van den Bulck, J., & Beullens, K. (2017). A typology of cancer information seeking, scanning, and avoiding results from an exploratory cluster analysis. *Information Research: An International Electronic Journal*, *22*(2), paper 747. Retrieved from <http://InformationR.net/ir/22-2/paper747.html> (Archived by WebCite® at <http://www.webcitation.org/6r2QayaVb>)
- Persoskie, A., Ferrer, R. A., & Klein, W. M. (2014). Association of cancer worry and perceived risk with doctor avoidance: an analysis of information avoidance in a nationally representative US sample. *Journal of Behavioural Medicine*, *37*(5), 977-987. <https://doi.org/10.1007/s10865-013-9537-2>
- Petter, S., Straub, D., & Rai, A. (2007). Specifying formative constructs in information systems research. *MIS Quarterly*, *31*(4), 623-656. <https://doi.org/10.2307/25148814>
- Podsakoff, P., & Organ, D. (1986). Self-reports in organisational research: problems, and prospects. *Journal of Management*, *12*(4), 531-544. <https://doi.org/10.1177/014920638601200408>

- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioural research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879-903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Sairanen, A., & Savolainen, R. (2010). Avoiding health information in the context of uncertainty management. *Information Research, 15*(4), Paper No. 443. Retrieved from <http://informationr.net/ir/15-4/paper443.html> (Archived by the Internet Archive at <https://web.archive.org/web/20220121125412/http://informationr.net/ir/15-4/paper443.html>)
- Siebenhaar, K. U., Köther, A. K., & Alpers, G. W. (2020). Dealing with the COVID-19 infodemic: Distress by information, information avoidance, and compliance with preventive measures. *Frontiers in Psychology, 11*, 2981. <https://doi.org/10.3389/fpsyg.2020.567905>
- Song, S., Yao, X., & Wen, N. (2021). What motivates Chinese consumers to avoid information about the COVID-19 pandemic? The perspective of the stimulus-organism-response model. *Information Processing and Management, 58*(1), 102407. <https://doi.org/10.1016/j.ipm.2020.102407>
- Soroya, S. H., Farooq, A., Mahmood, K., Isoaho, J., & Zara, S. E. (2021). From information seeking to information avoidance: Understanding the health information behaviour during a global health crisis. *Information Processing & Management, 58*(2), 102440. <https://doi.org/10.1016/j.ipm.2020.102440>
- St. Jean, B., Jindal, G., & Liao, Y. (2017). Is ignorance really bliss? Exploring the interrelationships among information avoidance, health literacy and health justice. *Proceedings of the Association for Information Science and Technology, 54*(1), 394-404. <https://doi.org/10.1002/pra2.2017.14505401043>
- Swar, B., Hameed, T., & Reychav, I. (2017). Information overload, psychological ill-being, and behavioural intention to continue online healthcare information search. *Computers in Human Behaviour, 70*, 416-425. <https://doi.org/10.1016/j.chb.2016.12.068>
- Sweeny, K., Melnyk, D., Miller, W., & Shepperd, J. A. (2010). Information avoidance: Who, what, when, and why. *Review of General Psychology, 14*(4), 340-353. <https://doi.org/10.1037/a0021288>
- Sweeny, K., & Miller, W. (2012). Predictors of information avoidance: When does ignorance seem most blissful? *Self and Identity, 11*(2), 185-201. <https://doi.org/10.1080/15298868.2010.520902>
- Voss, U, Kolling, T., & Heidenreich, T. (2006). Role of Monitoring and Blunting Coping Styles in Primary Insomnia. *Psychosomatic Medicine, 68*, 110-115. <https://doi.org/10.1097/01.psy.0000195881.01317.d9>
- Vrinten, C., Boniface, D., Lo, S. H., Kobayashi, L. C., von Wagner, C., & Waller, J. (2018). Does psychosocial stress exacerbate avoidant responses to cancer information in those who are afraid of cancer? A population-based survey among older adults in England. *Psychology and Health, 33*(1), 117-129. <https://doi.org/10.1080/08870446.2017.1314475>
- Yang, Z. J., & Kahlor, L. (2013). What, me worry? The role of affect in information seeking and avoidance. *Science Communication, 35*(2), 189-212. <https://doi.org/10.1177/1075547012441873>