Views on Covid-19 information: preliminary results of free association in an online survey

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Introduction

During the year 2020, the new coronavirus (Covid-19) pandemic has caused one of the largest global crises in decades. In times of crisis, our information behaviour might be affected; in order to cope with the situation we might need more information and seek it more actively (e.g. Bento et al. 2020; Gutteling & de Vries 2017; Lopatovska & Smiley 2014), through different channels and sources (e.g. Lopatovska & Smiley 2014; Tran et al. 2020). However, also

avoidance of information might be the result (e.g. Gutteling & de Vries 2017). The sought and obtained information can be of different types, ranging from comforting and valid information to mis- and disinformation (Ashrafi-rizi & Kazempour 2020). The fast spread of rumours and misinformation on the topic has indeed been enabled by widespread internet access and use of social media (e.g. Laato et al. 2020; Li et al. 2020; Pulido et al. 2020).

In the aftermath of the pandemic, researchers from different disciplines have been interested in and conducted studies mainly metrically on online seeking (Bento et al. 2020) and contents of Covid-related information in social media platforms (e.g. Pulido et al.; Li et al. 2020). Others have conducted online surveys inquiring about information behaviour, often during short periods of time (e.g. Laato et al. 2020; Tran et al. 2020). This abstract presents some first results from an online survey study conducted within the subject Information studies at Åbo Akademi University, on the reception and use of Covid-19 information and emotions related to this, opened right after a state of emergency due to the pandemic was declared in Finland in March 2020.

Aim and Methods

The online survey was available in Finnish, Swedish and English from mid-March to mid-May 2020. Respondents were recruited mainly through Åbo Akademi university's website and internal message services, and project members' advertisements on social media platforms (Facebook, Instagram, Twitter, LinkedIn, WhatsApp), and reposts of these, as well as on the national public library websites kirjastot.fi and biblioteken.fi. Respondents were asked about their possible own experience of the disease, their use of information sources, and possible avoidance of related information. Moreover, they were requested to give examples of positive and negative experiences related to information on the virus and disease. In addition, they were allowed to freely express their thoughts ("Any other experiences you would like to share regarding corona information in general?"), and the answers to this open question were collected for this particular presentation. These answers give an overview of what people considered important when given the opportunity to freely associate on matters. The given responses were analysed through inductive content analysis.

Results

In total, 258 respondents took part in the survey. Of these, 203 were female, 49 were male, and six persons did not want to answer the question about gender. Respondents' ages ranged from 20 to 79 years. A total of 119 persons had responded to the open question, but simple answers like "no" were excluded from the analysis. Hence, the analysis is based on the answers by 94 respondents. Table 1 presents the identified themes, subcategories, and examples of quotes that illustrate the subcategories. Altogether six main themes were identified: Information provision, Relations/attitudes, Emotions, Society and effects on it, Evaluation of information, and General/other. These themes contained up to six subcategories each. Both the themes and the subcategories are ordered according to how many quotes could be placed under each category.

Table 1. Themes, subcategories and examples of quotes

Themes (number of quotes)	Subcategories	Examples of quotes
Information provision (32)	1. Dissatisfaction with information from authorities 2. Sensationalism 3. Information from peers 4. Satisfaction with information from authorities 5. Satisfaction with media information 6. Emphasis on format	1. "The communication in the beginning of the coronavirus epidemic was too careful" 2. "The evening papers binge on severe stories of illness and famous dead people" 3. "Especially through social media I have got another angle on the topic, when my friends have shared links…" 4. "Important that the Finnish government's communication has been open" 5. "It is good that there is continually updated information that is easily accessible" 6. "It is also important to think of HOW it is said: many fact based opinions can feel unempathetic and thus spread anxiety".

Relations/ attitudes (23)	1. People's actions 2. Actions of authorities 3. Relations to other people 4. Belittling of the threat 5. Actions of health/pharmacy personnel	1. "I think that we could do a lot more in terms of wearing masks and being careful in public" 2. "I wonder why we in Finland don't try to suppress the epidemic by testing and ordering people into quarantine…" 3. "There are improper fears towards people who have fallen ill with corona" 4. "…the fact is that over time it is not more dangerous than an ordinary influenza." 5. "I would especially like to thank the pharmacy personnel and druggist who gave me advice and help in the beginning of the epidemic…"
Emotions (19)	1. Anxiety/indifference 2. Confidence/resilience 3. Information overload/fatigue 4. Humour	1. "You cannot do anything but follow the communication about it and wait for what will happen." 2. "I am well prepared. I always plan through catastrophic thinking" 3. "You also get information overload, in between you need to take a break from e.g. TV and social media" 4. "At work we noticed and laughed at the name of a local bar: Korona bar…"
Society and effects on it (17)	1. Work or education 2. Economic crisis 3. Political discussion 4. Differences between countries	1. "The employer's communication in the workplace has been brilliant" 2. "I think that the economic catastrophe that we have ahead of us is underestimated" 3. "It is unpleasant to notice that corona is used as a political weapon…" 4. "Interesting that Sweden and Finland handle this in so different ways"

Evaluation of information (10)	1. Mis-/disinformation 2. Source criticism	1. "Because there is so much information and disinformation available, I think it is very individual how you handle it" 2. "But remember to think for yourself and source criticism!!!!!!!!!!!!!!!!!!!"
General/ other (10)	1. Well-wishes 2. Nothing to add 3. Thank you 4. General comments on medical science	1. "I wish strength to everyone who has to drudge with this corona epidemic" 2. "I don't have any other experiences to mention" 3. "Thank you for all you do" 4. "Epidemiology is a branch, that it would be good to inform about also other times than during a pandemic"

The main theme under which the largest number of responses could be organised was hence Information provision with 32 quotes, and under this theme, the subcategory with most quotes (10) was Dissatisfaction with information from authorities. As the quote shows, there were, for example, perceptions of the governmental information provision being too careful in the early days of the epidemic. Other themes were not necessarily limited to information, but also, e.g., themes containing views on own or others' actions or emotions caused by the new situation emerged.

Conclusions

Issues related to information have become very central during the Covid-19 pandemic, as the results show also in the current study. Moreover, when given the opportunity to freely associate on a topic, people find very different things important to share. Some issues were, however, in this study occurring more frequently, indicating matters that are of particular importance in a new crisis situation, whether they are related to information or, for example, emotions caused by the situation. One major limitation is that this analysis was based on responses to only one open question, and the responses were in a way taken out of their context, that is, they were not analysed together with the responses to the other questions. Some answers may be a follow-up to something the respondent had already answered in the previous questions and are possibly

difficult to understand fully when standing on their own. On the other hand, a possible repetition might indicate that the issue is very important to the respondent. The open question also gave the chance to deepen some previous answers, or even to bring up completely new aspects that were not previously covered. As the results show, although the question was asking about corona-related information, many responses contained issues that were not limited to information.

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