# Assessing the credibility of information sources in times of uncertainty: online debate about Finland's NATO membership

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# Abstract

**Purpose** - To elaborate the context-sensitive nature of credibility assessment by examining how such judgments are made in online discussion in times of uncertainty caused by Finland's intent to join the North Atlantic Treaty Organization (NATO) in spring 2022.

**Design/methodology/approach** – The empirical findings draw on the qualitative content analysis of 3324 posts submitted to a Finnish online discussion in February-March 2022. It was examined how the participants of online discussion assess the credibility of information sources referred to in debates on the NATO membership. It is assumed that the believability of the author of information is indicative of his or her expert power, e.g., based on the credentials of a scholar, while the credibility of information content, e.g., the provision of factual evidence is indicative of the source's informational power.

**Findings** – Political decision-makers, particularly the President of Finland were assessed as most credible information sources, due to their access to confidential knowledge and long-time experience in politics. The credibility assessments differed more strongly while judging the believability of researchers. On the one hand, their expertise was praised; on the other hand, doubts were presented about their partiality. Fellow participants of online discussion were assessed most negatively because information sources of these types are associated with low expert and informational power.

**Research limitations/implications** – As the study concentrated on credibility assessments made in a Finnish online discussion group, the findings cannot be extended to concern the credibility judgments occurring information in other contexts.

**Originality/value** - The study is among the first to characterize the role of expert and informational power in credibility assessment in times of uncertainty.

**Keywords**: Credibility, Credibility assessment, Expert power, Informational power, Information credibility, Online discussion; Uncertainty

Paper type: Research paper

# 1. Introduction

The ways in which people seek and share information in times of uncertainty have mainly been examined in the context of natural disasters, for example, hurricanes and bushfires (Choo and Nadarajah, 2014; Lopatovska and Smiley, 2014; Ryan, 2018). Recently, there is a growing literature on information behaviour occurring during crises of diverse types, for example, the COVID-19 pandemic (Montesi, 2021). Since 24 February 2022, the main attention all over the world has been directed to the crisis resulting from Russia's attack to Ukraine. The crisis gave rise to a large-scale

uncertainty because it was feared that the war could escalate into a wider pan-European conflict or even World War 3.

As a small, militarily non-allied country with 5.5 million inhabitants, Finland has a risky position in this regard because it shares a 1,344 km border with Russia. Finland is a member of the European Union since 1995 but this alliance alone may not protect the country if the war escalates. On the other hand, since the mid of 1990s, Finland has cooperated with the North Atlantic Treaty Organization (NATO). It is an intergovernmental military alliance of 30 countries that was established in 1949, in the aftermath of World War 2. NATO's most important task is to maintain a credible defence capability against any threat of aggression if the security of an individual ally is targeted. More specifically, Article 5 - the cornerstone of NATO - states that an attack on one member of NATO is an attack on all of its members (Olsen, 2020). In recent years, Finland has actively participated in NATO's military exercises and systematically strengthened the compatibility of military equipment for NATO forces by purchasing F-35 fighter jets, for example.

Before Russia's invasion to Ukraine, the public opinion in Finland was quite strongly against the full membership in NATO; only about 25% of Finns supported it. The majority of people preferred the traditional non-allied status; it was assumed that it would serve best the country's security policy. However, immediately after Russia's attack to Ukraine, the public opinion began to change radically in Finland. An opinion poll conducted on 28 February 2022 revealed that the share of respondents supporting the NATO membership had risen to 53% (Wieslander and Skaluba, 2022). Similarly, most political parties took a positive view on the full membership because it was believed that NATO would offer the best security guarantee for Finland. However, the NATO issue became more complicated. Russia forewarned already on 25 February 2022 that the NATO membership application would lead to serious political and military consequences for Finland (Wieslander and Skaluba, 2022). The announcement gave rise to a growing worry and uncertainty. They were reflected in heated debates about the pros and cons of the NATO membership in the Finnish Parliament, as well as in the legacy media, for example, major newspapers, and social media forums. Despite Russia's warning, the Finnish Government started the work to prepare the NATO membership application, thereby signaling that Finland will independently make its security policy choices.

By focussing on the above context, the present study contributes to research on information behaviour occurring in social media in times of uncertainty. More specifically, an attempt will be made to elaborate picture of credibility assessment of information sources relevant to uncertainty management. To achieve this, a sample of 40 online discussion threads debating Finland's intent to join NATO were analysed. The posts submitted to these threads during the period of 25 February - 16 March 2022 offer a rich picture of the views expressed by ordinary citizens in times when the national security risks involved in the membership project were particularly high. As the participants of online discussion are lay people lacking in-depth knowledge about the preparation of the membership project, they are necessarily dependent on external information sources while considering the advantages and potential dangers involved in joining the military alliance. Due to the controversial nature of this issue, there is a lot of competing information about the NATO membership in diverse sources such as newspaper articles, television talk shows and social media forums. Therefore, the question about the credibility of information sources becomes particularly important. In this regard, the type of information source is significant because it offers clues about the believability of information available in the source. As an information source, a prominent researcher specialised in NATO-related issues may be found more credible than a parliamentary politician, for example. The former can be perceived as an expert capable of objectively specifying the pros and cons of the NATO membership while the latter may be labelled as a "NATO zealot" marketing the advantages offered by the alliance.

This suggests that the credibility of an information depends on who says it and what is said. As explained in greater detail below, the aspect of "who says" can be elaborated further by examining the qualities of expert power associated with the author of information, for example, a scholar with credentials in the field of security policy research. The aspect of "what is said" may be specified in terms of the informational power inherent in an information source, for example, the factual evidence offered by the scholar. Drawing on these assumptions, the present investigation elaborates the picture of credibility assessments of information sources by examining two aspects of such judgments: the credibility of the (i) author of information, for example, a researcher and (ii) the credibility of the information content generated by the author. The credibility assessment will be examined as a context-sensitive activity because it focusses on sources of uncertainty-related information dealing with Finland's NATO membership during the first three weeks of the Ukrainian war.

#### 2. Literature review

#### 2.1 Uncertainty and its management

Experiences of *uncertainty* culminate in emergency situations such as a terror attack or the occurrence of a tsunami. In general, uncertainty exists "when details of situations are ambiguous, complex, unpredictable or probabilistic; when information is unavailable or inconsistent; and when people feel insecure in their own state of knowledge" (Brashers, 2001, p. 478). Uncertainty can continue a longer time before it has been resolved, as exemplified by the uncertainties involved in Finland's NATO membership process. When an individual encounters uncertainty, he or she assigns its meaning through a process of appraisal (Brashers, 2001, p. 481-482). Appraisals may be positive (e.g., hope or optimism), negative (e.g., danger), neutral (e.g., inconsequential), or a mixed response.

Once appraised, individuals may engage in a range of behaviours in an attempt to manage uncertainty (Rains and Tukachinsky, 2015, p. 1276). Extreme threat can result in panic, as exemplified by Ukrainians who fled abroad in the war's earliest days in February 2022. One strategy that appears to be particularly important to uncertainty management is information seeking (Brashers, 2001). It may range from unintentionally obtaining information to goal-directed efforts to acquire specific forms of information. As exemplified by the present study, information behaviours used to make sense of an uncertain situation also include communicating with others in online discussion forums. To decrease uncertainty, information seeking and sharing can serve to distinguish options, making one appear more attractive or more likely than another. Information can also decrease uncertainty when it allows people to develop meaning for a threatening event. Moreover, some information sources may be preferred over others because it is believed that there are differences in their credibility and efficacy (Brashers, 2001, pp. 482-483). On the other hand, the credibility judgments are rendered more difficult because information available in diverse sources can be contradictory.

#### 2.2 Expert power and informational power as factors affecting credibility assessment

There is no universal agreement on what is meant by *credibility* (Savolainen, 2021). Researchers have approached it in diverse terms such as believability, trust, reliability, accuracy, and objectivity (Hilligoss and Rieh, 2008: Metzger *et al.*, 2003). For example, Rieh (2010, pp. 1337-1338) suggested that trustworthiness is a core dimension in credibility because it captures the perceived goodness and morality of the source. A person is trustworthy for being honest, careful in choice of words, and disinclined to deceive (Hilligoss and Rieh, 2008, p. 1469]. Information is trustworthy when it appears to be reliable, unbiased, and fair. Despite the variety of approaches to the concept of credibility, most researchers agree that the key dimensions of credibility are expertise and trustworthiness. Expertise indicates an individual's ability to provide information that is both accurate and valid, while information content is trustworthy when it appears to be reliable and unbiased (Hilligoss and Rieh, 2008, p. 1469).

In the contemporary media environment, however, credibility assessment has become more difficult because information is increasingly provided by a wide range of sources of often unknown reputation. This is mainly due to the growing amount of user-generated content available in diverse online forums (Flanagin, Winter and Metzger, 2020, p. 1039). Along with this development, the boundaries between expert information sources offering accurate and reliable information and sources generated by laypersons (non-experts) have been blurred. While assessing the credibility of information sources, people can make use of heuristic cues. For example, expertise as an indicator of credibility may efficiently be signalled heuristically by cues manifest in the type of information source. For instance, the *authority heuristic* finds that 'a major criterion for assigning credibility to a web site is whether the source is an official authority or not" (Sundar, 2008, p. 84). People may also draw on *reputation heuristic* so that familiar sources are often judged to be more credible than unfamiliar sources. This suggests that people are likely to believe expert sources, and especially those whose name they recognize, as most credible compared to less familiar sources and those that rely upon information provided by non-experts. (Flanagin, Winter and Metzger, 2020, pp. 1040-1041).

The factors affecting credibility assessment can be elaborated further by characterizing expert power and informational power inherent in sources of information. *Expert power* derives from knowledge and skills possessed by an individual (French and Raven, 1959; Savolainen, 2022, pp. 2-3). Power of this type is usually highly specific and limited to a particular area in which the individual is qualified. People tend to trust him or her if one is believed to possess knowledge and skills that enable others to understand a situation, suggest solutions, and use solid judgment. *Informational power* is different in nature in that it derives from an information source's potential to influence other people because of the judged relevance of the information content (Raven, 1965). More specifically, informational power is based on the characteristics of the information (Raven and Kruglanski, 1970). While perceived expert power can affect the extent to which a person is seen as a credible source of information, perceived informational power is independent on a particular person because power of this type is based on the existence of objective evidence such as statistical facts.

Expert power and informational power are theoretical constructs; thus, the qualities of these power types cannot be directly inferred from information sources. However, this can be done by examining the credibility assessments. It is assumed that the credibility judgments dealing with a generator or author of information are affected by people's perceptions about his or her competence and that such judgments are indicative of expert power possessed by the author. Authors generating information about Finland's NATO membership may possess a varying amount of expert power, depending on their status such as the President of the Republic, as well as their credentials, for instance, research articles published by a scholar. Second, it is assumed that credibility judgments dealing with the information content (generated by authors such as scholars) are affected by people's perceptions about the extent to which a statement or claim is supported by evidence, indicative of informational power.

## 3. Research framework

The above review suggests that the assessment of the credibility of information sources is an integral element in processes in which people make attempts to manage uncertainty. Russia's warning about serious political and military consequences for Finland offers a recent example of processes whose outcomes are not totally predictable. In such situations, online discussions offer an important way to manage uncertainty. To achieve this, the contributors to discussion present their views and support them by drawing on information sources of diverse kind. Fellow participants may then assess the credibility of such sources using various criteria. Drawing on the ideas presented in the literature review above, it is assumed that the credibility judgments are indicative of how the discussants perceive the expert and/or information source is believed to incorporate power of these types, while a negative assessment indicates the lack of such powers. More specifically, the judgment concerning

the qualities of the author of information source are indicative of the qualities of expert power, while the assessment of the information content implies how the discussant perceives the strength of informational power.

To examine the credibility assessments of information sources dealing with Finland's NATO membership project, the present investigation makes use of the conceptual framework developed in Savolainen's (2021) study on information credibility. The above study focussed on the credibility assessment of mis/disinformation related to COVID-19 vaccination. As Finland's NATO membership represents a controversial topic of similar kind, Savolainen's (2021) framework was deemed relevant for the present investigation, too, although it was slightly modified for the purpose of the present study. To this end, two criteria indicative of the credibility of information content, that is, *accuracy of information* and *scholarliness of information* were excluded because it appeared that they are not relevant for the empirical analysis. The criteria of credibility assessment used in the present investigation are specified in Table 1.

Criterion	Short definition and examples from the coded research material
Credibility of the author	
Author reputation	The extent to which the author is generally evaluated positively or negatively ("Your writings indicate that you draw on childish arguments and emotion-based views, provoked by stupidities expressed by similar writers". Thread 3)
Expertise of the author	The extent to which the author is considered as competent in a specific area ("Our president knows these issues better than NATO zealots yelling that Finland should immediately submit the membership application". Thread 24)
Honesty in argumentation	The extent to which the author is able to consider an issue in a balanced way, for example, weighing both the pros and cons of the NATO membership ("Aaltola's views represent an example of hybrid influencing from NATO". Thread 14)
Fairness in the interpretation of an issue	The extent to which the author is able to consider an issue in a balanced way, for example, weighing both the pros and cons of the NATO membership ("The President's statement indicates reasonable deliberation and impartial assessment concerning Finland's foreign policy issues". Thread 1)
Presentation qualities	The extent to which the author is able to communicate his or her ideas clearly and using appropriate language ("Learn to write words correctly. You would be more convincing, at least a little bit". Thread 25)
Similarity to receiver beliefs	The degree to which the ideas presented by the author are found as acceptable due to compatibility with one's own views ("Once again, I completely agree with you. You described the issue as it is in reality". Thread 10)
Credibility of the information content	
Objectivity of information	The extent to which information provides an impartial and unbiased description of reality (" <i>Taloustutkimus</i> (a Finnish service market company) conducts high-quality opinion polls. The sample is representative and the reliability of the results is excellent". Thread 5)
Currency of information	The extent to which information is timely, recent, or up-to-date ("Ehrensvärd's thoughts from the 18th century and Finland in 2022,

	hmm. Ancient quotes are seldom relevant to the current situation". Thread 24)
Plausibility of arguments	The extent to which the author is able to express his or her ideas in an apparently valid manner ("Niinistö claimed that there exists no rational reason for the attack. But has there ever been in the history any rational reason for launching a war?" Thread 24)
Provision of evidence	The extent to which an information source is supported by facts or a reference to an external source of information ("What is this absurd claim based on? You have repeated it several times but never offered any evidence". Thread 17).
Usefulness of information	The extent to which information is considered as helpful to meet the need of a person or a group ("What will happen in the final end does not depend on what we are writing here. In reality, things are or are not in a certain way, even if you would babble until the end of world". Thread 24)

 Table 1. Criteria of credibility assessment (modified from Savolainen, 2021)

The categories of information sources referred to in online discussion were identified inductively from the empirical material because there were no previous categorizations relevant to the present study. The categories are presented in Table 2.

# Political decision-makers

- President of the Republic of Finland
- Government (Prime Minister and other ministers)
- Member of the Parliament of Finland (MP) or the Finnish member of the European Parliament (MEP)

# Researchers, security policy experts and opinion polls

- Researcher working at a research institute, e.g., the Finnish Institute of International Affairs
- Security policy expert, e.g., General Gustav Hägglund, former Chief of Defence, Finland
- Opinion poll

# Mainstream Media

- Articles published by influential newspapers, e.g., *Helsingin Sanomat* and tabloids, e.g., *Iltalehti*
- Television programs offered by public service broadcasters and main commercial television channels in Finland, e.g., *Yle* (The Finnish Broadcasting Company) and *MTV3*

# Social media

- Material published in NATO-related websites, blogs and YouTube videos
- Posts submitted to Suomi24 discussion group debating Finland's NATO membership

# Other (miscellaneous) sources

• for example, the statements presented by President Vladimir Putin and Russian Minister of Foreign Affairs Sergey Lavrov.

Table 2. Types of information sources referred to in online discussion

Drawing on the above specifications, the research framework of the present investigation is presented in Figure 1.

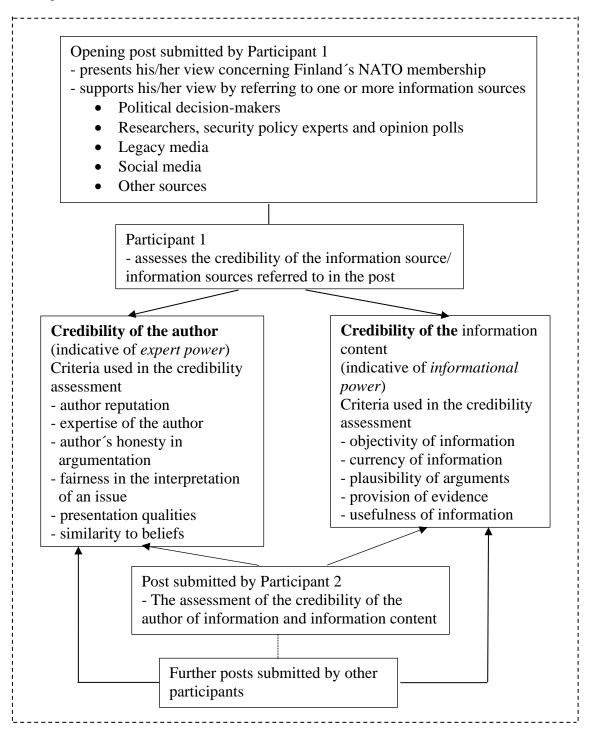


Figure 1. The conceptual framework, modified from Savolainen (2021)

Figure 1 illustrates how the credibility assessments are made in the online discussion group. Figure 1 is schematic in that all information sources mentioned in the posts submitted to the discussion threads are not necessarily evaluated from the viewpoint of credibility. The discussion is initiated by an opening post submitted by Participant 1 presenting his or her view about Finland's NATO membership. To support his or her view, Participant 1 refers to one or more information sources, for example, a statement presented by a researcher or a newspaper article. In the first post,

Participant 1 may then assess the credibility of the author of information, for example, a researcher, as well as the believability of the source's information content. In the assessment, the opening poster can make use of one or fewer credibility criteria such as the reputation of the author and the objectivity of information in order to judge whether and in which regard the statement presented by the author should be taken seriously. The discussion is continued when other contributors (Participant 2, Participant 3 and so on) make their own credibility assessments. While doing this, they can agree with the initial assessment made by the opening poster or present a different credibility judgment. A similar process occurs when a new discussion thread focusing on another issue dealing with Finland's NATO membership is initiated.

# 4. Research questions

Drawing on the research framework presented in Figure 1, the present study sought answers to the following questions:

- RQ1. How frequently do the contributors to online discussion make use of diverse criteria while assessing the credibility of information sources dealing with Finland's NATO membership?
- RQ2. Using diverse criteria, how do the contributors assess the credibility of the authors of information sources dealing with Finland's NATO membership?
- RQ3. Using diverse criteria, how do the participants assess the credibility of the information content of such sources?

# 5. Empirical data and methodology

The empirical data were gathered from *Suomi24* [Finland24] platform (https://www.suomi24.fi/). It is one of the largest non-English discussion forums in Europe, offering an open-access corpus on posts discussing a variety of topics. The users of Suomi24 consider it as a platform where ordinary people can express their views that often go unheard in the legacy media (Harju, 2018). The users can submit posts anonymously, but the discussion threads are moderated in order to prevent incivility. The platform is divided into 21 main subforums under headings such as *terveys* (health) and *yhteiskunta* (society). The latter includes many subgroups, for example, *politiikka* (politics) and *NATO*.

The empirical data were downloaded from the subgroup of NATO in the end of March 2022. To obtain a preliminary picture of the nature of discussions on this topic, threads focussing on Finland's NATO membership were read tentatively. The sampling criteria required that the thread contains a sufficient number of posts relevant from the perspective of credibility assessment. On the basis of reading 50 threads with the newest updates, a working solution was found: threads containing at least 10 posts are sufficient to meet the aforementioned requirement. Therefore, ten threads with 1-9 posts were excluded from the final sample. It contains 3224 posts submitted to 40 threads within the period of 25 February - 16 March 2022. The number of posts per thread varied from 11 to 486. It appeared that the sample is sufficient to allow a detailed analysis of the credibility assessments made by the discussants. It became evident that the inclusion of additional threads would not have essentially changed the quantitative and qualitative picture of how the discussants assess the credibility of information sources dealing with Finland's NATO membership.

The coding was an iterative process in which the data were scrutinized several times by the author. The categories of credibility assessment and information sources specified in Tables 1 and 2 above were then used to code all the data - while still allowing new codes to emerge. However, all credibility assessments and information sources referred to in the posts fit into the existing categories defined above; no new categories were needed to cover the data. The 3224 posts were assigned with

altogether 1831 codes. Of them, 1063 were assigned to information sources and 768 to credibility assessments. A post was coded only once for a criterion category once it was identified for the first time in the post. In long posts, the same criterion was often identified in several segments of the same post. In these cases, once a post was coded for a criterion category, other instances were simply ignored. On the other hand, a message could be assigned with several criteria of author credibility and/or the credibility of information content, for example, expertise of the author and currency of information. The coding of information sources was a relatively straightforward task because in most cases they were easy to identify from the data. However, while coding of the categories of *legacy media* and *social media*, a few borderline cases were faced. The discussants often referred to newspaper articles reporting the views presented by an individual author of information, for example, the President of Finland. In this case, the source was coded as "President", not "newspaper article". However, if a newspaper article contained no references to individual authors of information, the latter code, that is, "newspaper article" was employed. The same approach was adopted while coding television programs and material published in social media forums.

The internal reliability of the coding was improved in that the coding categories specified in Tables 1 and 2 above are built on the solid foundation of research on information credibility (Flanagin, Winter and Metzger, 2020; Hilligoss and Rieh, 2008; Metzger *et al.*, 2003). To strengthen the reliability of the coding, only explicit judgments concerning credibility assessment were coded by using the categories specified above. Moreover, the initial coding was refined by repeated reading of the data. Miles and Huberman (1994, p. 65) consider the careful checking of the codes as a useful method for the lone researcher; they recommend that code-recode consistencies should be at least 90%. Following this advice, the coding was refined until it was found that the codes appropriately describe the data and that there are no anomalies.

In order to examine the relative share of the information sources of various types and the criteria used in credibility assessment, percentage distribution was calculated for individual information sources and credibility criteria. Thereafter, the data were scrutinized by means of qualitative content analysis. More specifically, the constant comparative method was used to capture the variety of articulations of the online contributors' credibility assessments (Lincoln and Guba, 1985, pp. 339-344). To achieve this, their judgments of the credibility of the author of information, as well as the information content were systematically compared per individual information source specified in Table 2 above. In this way, it was possible identify similarities and differences in the ways in which the discussants assessed, for example, the expertise of a researcher interviewed in a talk show or the objectivity of opinion polls.

The reporting of the qualitative findings incorporates an ethical issue because they are illustrated by excerpts taken from the contributors' posts. The excerpts originally written in Finnish were translated into English by the present author. Since the posts submitted to Suomi24 discussion platform are freely accessible to anyone interested, they can be seen as contributions which are intended to elicit public interest in the NATO membership issues. Due to their public nature, the posts can also be utilized for research purposes, provided that the identity of an individual contributor is sufficiently protected. On the other hand, there was no special need for this because without a few exceptions, the posts were submitted anonymously. This is understandable because the discussion topic is controversial. As it was impossible to differentiate individual contributors from the crowd of anonymous participants, the analysis occurred at the level of posts. To this end, the posts were identified by technical codes. For example, in the code P52-T10, P52 refers to the 52th post submitted to a discussion thread, while T10 refers to discussion Thread 10. Finally, all information about the submission dates for the posts was deleted from the illustrative excerpts. This procedure makes it even more unlikely that an individual post and its author could be identified from the excerpts.

#### 6. Findings

#### 6.1 *Quantitative overview*

In the discussion threads, the participants made altogether 1063 references to information sources of various types. The distribution of information sources is presented in Table 3.

Type of information source	%	
Social media Posts submitted to Suomi24 discussion group NATO-related websites, blogs and YouTube videos	46.4	38.8 7.6
Political decision-makers President Member of the Finnish/European Parliament (MP/MEP) Government (ministers)	21.1	11.6 5.0 4.5
Researchers, security policy experts and opinion polls Opinion poll Researcher Security policy expert	15.1	6.4 4.5 4.2
<i>Legacy Media</i> Newspaper articles Television programs	12.3	7.2 5.1
Other sources	5.0	
Total	100.0	100.0

Table 3. The percentage distribution of codes assigned to information sources referred to by the contributors to online discussion (n = 1063)

Table 3 indicates that the posts submitted by fellow contributors were most frequently referred to as sources of information. Together with information sources such as NATO-related websites and YouTube videos, social media represented the most popular source of information among the discussants. The contributors also frequently referred to political decision-makers; among them, the President of Finland was most popular. Similarly, research-based sources and legacy media were mentioned quite often. The role of sources of other types remained marginal. Miscellaneous sources of this type included, for example, the statements presented by Russian Minister of Foreign Affairs *Sergey Lavrov*.

As a part of the quantitative over, the percentage distribution of criteria used in the credibility assessment of information sources is presented in Table 4.

Criterion	%	
Credibility of the author of information source $(n = 589)$	76.7	
Author reputation Expertise of the author Honesty in argumentation Similarity to beliefs Presentation qualities Fairness in the interpretation of an issue		22.7 17.1 16.3 10.1 5.7 4.8
Credibility of the information content $(n = 179)$	23.3	
Plausibility of arguments Objectivity of information Currency of information Usefulness of information Provision of evidence Total	100.0	8.3 8.2 3.3 2.3 1.2

Table 4. The percentage distribution of codes assigned to the criteria used in credibility judgments (n=768)

As Table 4 indicates, the discussants mainly made use of criteria pertaining to the credibility of the author of information source while criteria dealing with the credibility of information content were employed less frequently. Of individual criteria, author reputation, expertise of the author and honesty in argumentation appeared to be particularly significant. Overall, the quantitative findings suggest that the discussants quite rarely evaluated the credibility of information content. In these cases, attention was mainly devoted to the plausibility of arguments and the objectivity of information. The role of other criteria such as provision of evidence remained marginal.

#### 6.2 Assessing the credibility of information sources

The picture offered by the quantitative overview can be elaborated further by reporting the results of the qualitative content analysis. In this section, the credibility assessments will be reviewed by starting from information sources which are assumed to incorporate the greatest amount of expert and informational power. As it is evident that the President of Finland, the Government and the members of the parliaments (MPs and MEPs) possess the most detailed, timely and strategically important information about the NATO membership project, the credibility assessments dealing with information sources generated by researchers, security policy experts and opinion polls will be discussed, followed by legacy media and social media forums. Media of these types differ from two first-mentioned source types in that they not only generate new information but also communicate original information obtained from political decision-makers, researchers, security policy experts and opinion polls.

Finally, contributors to online discussion function in a double role. On the one hand, they assess the credibility of information sources generated by others, for example, journalists writing newspaper articles. On the other hand, the contributors to online discussion function as authors of information while presenting their views on the NATO membership. In so doing, they mainly draw on information obtained from media sources. Due to this dependency and the secondary role as a generator of information, it is evident that expert and/or informational power inherent in the posts

submitted by the discussants is relatively weak. As information sources of other types were referred to only occasionally, they will not be discussed in more detail.

# 6.2.1Political decision-makers

*Sauli Niinistö*, the current President of Finland occupies a key role among political decision-makers because he leads the foreign and security policy (together with the Government) and negotiates with political leaders at the international level. On this basis, it is evident that he has the best and most timely information about the issues dealing with Finland's NATO membership. The credibility assessments focussing on information communicated by the President mainly dealt with his expertise as an author of information. Many of these assessments praised his long-time experience in international political issues.

It is best to rely on our president. He owns knowledge that an ordinary John Smith never can have (P104-T24).

The discussants also assessed the extent to which information originating from the President's statements is fair and balanced. Without exceptions, these judgments were positive.

The President's statement indicates reasonable deliberation and impartial assessment concerning Finland's foreign policy issues. (P15-T1)

The credibility assessments also dealt with the ways in which the President communicates his views to the public. These judgments appeared to be quite critical, due to the somewhat "philosophizing" style in which the President expresses his thoughts in television interviews, for example.

As the president is an opinion leader, he should talk in a straightforward way to people. However, he speaks so mysteriously. That what the President says can everyone interpret in his or her own way. (P241-T24)

The only criterion used in the assessment of the credibility of information content dealt with the plausibility of the arguments presented by the President. These judgments were critical in tone, as exemplified by the following excerpt depicting the President's television interview on 28 February 2022.

The interviewer: Mr. President, do you consider it possible that Russia will invade Finland?

Niinistö: No, I do not. There is no rational reason for it.

This view is pretty naïve (P1-T24)

Niinistö claimed that there exists no rational reason for the attack. But has there ever been in the history any rational reason for launching a war? (P254-T24)

The statements presented by Prime Minister *Sanna Marin*, as well as other ministers were mostly evaluated positively or neutrally. Many of the credibility assessments focusing on the Government as an information source concentrated on the expertise of the ministers. In many cases, these judgments were critical.

Yesterday in Brussels, minister Haavisto was shadowed even by the East European ministers. He had not prepared himself for the press conference. The reporters asked about the threat of war but he just babbled something about Chernobyl. (P10-T38)

Closely related, critical judgments such as these were related to the presentation skills of the authors of information.

How could citizens assess the dangers and risks of the NATO application because the government just says that its submission may lead to negative consequences of some kind. Why on earth can't we discuss these dangers explicitly, using clear Finnish terms? (P216-T25)

Sources of political information also include members of the Parliament of Finland (MPs) and the Finnish members of the European Parliament (MEPs). Different from the President and the ministers, the credibility of individual MPs and MEPs was assessed more critically, mainly due to the belief that they advocate partisan views. Traditionally, right-wing parties, particularly the National Coalition Party have advocated the NATO membership while left-wing parties have been more critical in this regard. In particular, the partisan views associated with individual politicians negatively influenced their credibility dealing with their honesty and fairness in argumentation.

Orpo [MP, the leader of the National Coalition Party] is in fire and rushes the NATO application process. (P24-T35)

Left-wing politicians are now coming out, presenting statements conforming the Russian views. For example, Tuomioja [MP, the Social Democratic Party] has asserted that Finland is not Ukraine. (P92-T24)

## 6.2.2 Researchers, security policy experts and opinion polls

Information implying the existence of expert and informational power is also offered by researchers working in universities and organizations such as the Finnish Institute of International Affairs (FIIA). While assessing the credibility of researchers, particular attention was directed to their perceived expertise. Again, the assessments were divided in that both positive and negative judgments were presented. Of the researchers, Dr. *Mika Aaltola*, the leader of the FIIA appeared to be a highly valued source of information.

As a researcher, Aaltola approaches the issues at hand directly. Because he has no need to be politically correct, his way to express things may sound tough. However, all what he says is based on extensive analysis and expertise. (P13-T14)

However, the researchers' expertise was often challenged in dialogues in which a discussant asserted that instead of presenting facts, some researchers tend to advocate the NATO membership rather than adopt an impartial approach characteristic of experts. Another argument used in the questioning of their expertise was that researchers have no experience in real-world politics. They lack access to confidential knowledge available to political leaders only.

Aaltola does not know Putin personally. Unlike President Niinistö, he has never negotiated with Putin about the relationships between Russia and Finland. (P10-T24)

As noted above, researchers' expertise may also be questioned if their fairness in the interpretation of an issue is doubted. In particular, the participants opposing the NATO membership

appeared to be very critical in this regard. The critical views reflect the assumption that researchers working at FIIA are not politically neutral.

The objectivity of FIIA has been replaced by a partisan right-wing research hypothesis and a monopolistic status regarding expertise in foreign policy issues. (P274-T21)

In addition to researchers, security policy experts provided information about the NATO membership. Of them, General *Gustav Hägglund*, former Chief of Defence was mentioned most frequently. In the credibility assessment, the main attention was devoted to his perceived expertise.

It is worth listening to the wise men of our country. Hägglund has broad experience in security and defence policy. He has led peacekeeping operations in different regions all over the world. (P53-T10)

As Finland's NATO membership was a highly timely issue in March 2022, the credibility of information content was often assessed by devoting attention to the currency of information. Many of the discussants praising Hägglund's expertise referred to his article published in 2017. On the other hand, it was asserted that Hägglund's critique towards NATO-enlargements presented five years ago is no longer valid because the security-political situation in Europe has changed dramatically after the outbreak of the Ukrainian war. The credibility of information content was also judged by deeming the plausibility of arguments presented by security policy experts.

Hägglund was afraid of that Finland's NATO membership will weaken our army. However, his view seems to be ungrounded. East European countries which joined NATO have not ruined their armies. (P62-T10)

To compare, the credibility of opinion polls as sources of information appeared to be a more sensitive issue reflecting the division between discussants supporting or opposing the NATO membership. The former emphasized that the polls conducted in Finland during the first three weeks of the Ukrainian war objectively depict the rapid changes of public opinion, while the latter asserted that the polls are manipulated.

*Taloustutkimus* (a Finnish service market company) conducts high-quality opinion polls. The sample is representative, and the reliability of the results is excellent. (P87-T5)

The share of NATO supporters, 53 % implies that respondents are affected by fear and feelings of insecurity. However, they were not asked about such things. They just were lured to say yes to NATO. (P290-T25)

Different from researchers and security policy experts, the credibility assessments were more frequently directed to the objectivity of information. This reflects the discussants' doubts about the honesty or fairness of opinion polls. As expected, the supporters of the NATO membership were eager to defend the objectivity of polls, as compared to a referendum.

Referendums are subject to opinion manipulation, but polls are not. The results of polls are somewhat imprecise but only in terms of the error marginal. (P117-T5)

On the other hand, the objectivity of information offered by opinion polls was questioned. One of the arguments for low credibility of such information is the method used in the selection of survey respondents.

The poll was conducted by means of an internet panel. Why is Yle (the Finnish Broadcasting Company) afraid of organizing normal surveys by asking the views of ordinary people? Why is Yle surveying the opinions of pre-selected individuals whose background is known to the survey organizers? (P234-T5)

# 6.2.3 Legacy Media6.2.3.1 Newspaper articles

The credibility of information available in newspapers was not always assessed because many of the discussants merely provided links to freely accessible electronic versions of articles published in tabloids in particular. Overall, in cases in which credibility judgments were made, the tone of assessments was negative. The honesty of newspaper journalists was doubted particularly among the discussants opposing the NATO membership. The critique was mainly directed to *Helsingin Sanomat* - a leading Finnish newspaper and one of the strongest advocates of the NATO membership.

This newspaper (Helsingin Sanomat) frightens people and manipulates their opinions. (P81-T-29)

Interestingly, the discussants rarely evaluated the credibility of information content because the main attention was directed to the believability of the journalists writing NATO-related articles. In fact, only the currency of information was assessed, mostly in a negative tone.

Free-lance columnist Olli Kivinen writing in Helsingin Sanomat paints a gloomy picture by criticizing people for their ignorance. This is just hindsight. (P54-T5)

## 6.2.3.2 Television news and programs

Similar to newspaper articles, the credibility of television programmes was not always assessed explicitly; many of the discussants just offered links to programmes that are publicly available in the digital archive of the Finnish Broadcasting Company, for example. Different from newspaper journalists, the credibility of authors offering information in television, for example, talk show hosts were sometimes assessed positively.

In my view, the host of the talk show was fairly good. https://areena.yle.fi/1-50949906. (P27-T19)

In most cases, however, the credibility judgments were critical, thus reflecting the doubts about that television programmes reporting about NATO-related topics are politically biased, particularly on the channels of the Finnish Broadcasting Company (Yle). These assessments were often associated with how the results of opinion polls are interpreted in television news and talk shows.

This is drivel. Yle can't know the number of people supporting the NATO membership. Yle has become a fake news agency. (P359-T5)

In itself, Yle represents a pro-NATO party. It is amusing that the reporters interview each other about the NATO issues and ask each other how are we doing! (P265-T25)

#### 6.2.4 Social media

#### 6.2.4.1 NATO-related websites, blogs and YouTube videos

To a growing extent, information about the NATO membership is available in blogs and YouTube videos, for example. The discussants sometimes persuaded the fellow participants to have a look at NATO-related websites because they offer alternative views on the membership issues ignored by legacy media. Different from the types of information sources reviewed above, the credibility assessments were often directed to the reputation of the authors of information. In this regard, the most negative judgments were directed towards trolls spreading disinformation about Finland's NATO membership project. Closely related, the honesty of authors generating information available in social media forums was assessed negatively. The same applies to the perceived fairness in argumentation.

No wonder that the majority of people now supports NATO. Trolls have advocated it in the net for several years. The trolls just try to manipulate the Finnish people in order to launch a war with Russia. (P84-T10)

The discussants also assessed the credibility of information content available in social media forums. Not surprisingly, negative judgments about the objectivity of information were common. Moreover, the currency of information available in blogs was criticized.

Once again, someone has scraped together stuff from the bottom of the garbage can of history. (P105-T5)

#### 6.2.4.2 Posts submitted to Suomi24 discussion group

The quantitative analysis revealed that the source type most frequently referred to by the discussants was a post submitted by a fellow participant. Information generated by fellow contributors mostly consists of opinions about the NATO membership, as well as the interpretation of material obtained from external sources such as newspaper articles and television programs. In the credibility assessments focusing on fellow discussants as authors of information, their reputation in the eyes of the participants appeared to be an emotional topic. Ad hominem attacks were common in cases in which the supporters, as well as the critics of the NATO membership tried to put the opponent in a dubious light.

A Russian troll, trying to earn a couple of roubles. Your credibility is zero. (P165-T17)

You stupid NATO clown. Stop glorifying the aggressive alliance. (P48-T5)

Similarly, the expertise of the author was a significant criterion while assessing the believability of fellow participants. Again, negative judgments dominated. It was asserted that the fellow contributors have insufficient understanding about the nature of NATO, as well as the advantages and risks of the membership. A recurrent argument was that the views presented by fellow discussants draw on emotion-based opinions, at the cost of rational deliberation.

I cannot understand why some people urge here that Finland should join NATO as soon as possible. These people are driven by emotions which disregards logical reasoning. Emotional reactions prevail and rage occupies a central role. Fortunately, the key decision makers are not driven by emotions, similar to some contributors to this discussion group. (P52-T10) The negative assessments were even more explicit while considering the honesty of fellow participants as authors of information. Many of these judgments departed from the assumption that the views presented by fellow discussants are intentionally biased in order to advocate the NATO membership or to resist it.

The opening post is an example of the NATO zealots' Fake News. (P232-T25)

Even though the fellow contributors made attempts to strengthen their arguments by drawing on the views presented by researchers, for example, this approach was put in a doubtful light. It was asserted that research-based sources are quoted selectively, leaving out arguments that are incompatible with an individual's beliefs and values.

Mika Aaltola also said that it is too early for Finland to apply for the NATO membership. Do you agree with Aaltola's interpretation or do you just pick the best parts of his message? It seems to me that you draw on Aaltola's views only if they conform to your beliefs. (P7-T24).

A particular characteristic of the credibility assessment focusing on the posts submitted by fellow participants was that similarity to beliefs was often used as a criterion of the believability of the author of information. Judgments drawing on this criterion were positive, thus differing from the negative tone of credibility assessments. These assessments are indicative of conformation bias, that is, the tendency to prefer information consistent with pre-existing attitudes. People tend to perceive attitude-consistent information, for example, an opinion opposing the NATO membership as more credible than attitude-inconsistent information supporting joining to NATO.

Once again, I completely agree with you. You described the issue as it is in reality. (P70-T10)

You are right. NATO zealots lack knowledge and ability to deliberate things. They don't understand that the NATO membership will bring the war to Finland. (P2-T3)

The credibility of the author of information was also assessed by devoting attention to his or her ability to communicate clearly and using appropriate language. Given the negative tone of credibility assessments, it is no surprise that the judgments focussing on the presentation skills of the fellow contributors were critical. Negative comments were particularly common in cases when it was suspected that the contributor is a troll whose primary language is not Finnish.

Learn to write words correctly. You would be more convincing, at least a little bit. (P99-T25)

A smaller part of the credibility judgments focussed on the believability of information content. Again, negative assessments dominated, reflecting the low credibility of information generated by fellow contributors. The objectivity of information offered by the fellow discussants was put in a doubtful light, as exemplified by the following dialogue.

Immediately after the submission of the NATO membership application, Finland will obtain the security guarantees, according to NATO's Article 5. (P101-T5)

Don't lie. Article 5 solely concerns the NATO's members. The article does not come into effect before all of the 30 member countries have accepted the application in their parliaments. (P106-T5)

Similarly, the currency of information offered by fellow participants was evaluated critically.

He just copied his blog writing from the year 2009. These are primeval stories whose "best before" date expired ten years ago. (P56-T5)

In the assessment of the credibility of the information content, the plausibility of argumentation is a key issue. Again, negative judgments overshadowed the positive judgments. The discussants were keen to identify poor reasoning in the views presented by fellow participants.

I really wonder what's wrong with the NATO zealots. They are rushing to make Finland as a heap of ruins, like in Syria. (P101-T24).

I`m baffled about the "pearls of logic" like this. There are NATO countries in Europe since 1949. Do you think that Europe is a heap of ruins? In fact, since that time, we have enjoyed the most peaceful period in the history of Europe. (P126-T24)

The credibility of information content was also assessed by drawing attention to the evidence offered for the support of arguments. The assessments were negative in tone, emphasizing the problems of insufficient or lacking evidence.

The government has stated that the NATO membership will cost 5 billion euros per year, at a minimum. (P43-T12)

No, the government has nowhere stated anything like that. You might specify the government's statement you used in your claim. "Evidence" like I heard this from somewhere (though don't remember where) does not represent knowledge of any kind. (P44-T12)

Finally, it was contended that information generated by fellow participants would not be particularly useful for people trying to make sense of pros and cons of the NATO membership in times of uncertainty. This is because views presented by fellow discussants were often seen as speculative or unrealistic.

Your bookish ideas will be of no use if a million Putin's soldiers attack Finland. Your sophisticated arguments will evaporate as smoke into the air. It's only the practice that has an effect. (P125-T21)

## 7. Discussion

Drawing on the case study dealing with Finland's NATO membership project in spring 2022, the present study contributed to information behaviour research by examining how participants of online discussion assess the credibility of information sources in times of uncertainty caused by the Ukrainian war. The findings of the quantitative analysis revealed that in the assessment of the credibility of information sources, the main attention is directed to the believability of the authors of information, while credibility judgments dealing with the information content are made less

frequently. This suggests that expert power inherent in information sources affects more strongly people's credibility assessments. To compare, informational power is less important in this regard, as indicated by the relative paucity of credibility judgments concerning the information content. The above conclusions may be reflected in more detail by discussing the main qualitative findings summarized in Table 5.

Information source	Credibility of the author of information (RQ2)	Credibility of information content (RQ3)	Perceived amount of expert power	Perceived amount of informational power
Political decision- makers	<ul> <li>+ expertise of authors,</li> <li>based on long-time</li> <li>experience in politics</li> <li>and the possession of</li> <li>inside information</li> <li>- dishonesty, due to</li> <li>the partisan agenda</li> <li>- vague articulation of</li> <li>political issues</li> </ul>	<ul> <li>+ the provision of timely and up-to-date information</li> <li>- doubts about the plausibility of arguments</li> </ul>	President: high Government: high/moderate MPs and MEPs: moderate	President: high/moderate Government: high/moderate MPs and MEPs: moderate
Researchers, security policy experts and opinion polls	<ul> <li>+ expertise based on the specialization in political issues</li> <li>- biased interpretation of issues, due to political inclination</li> <li>- biased selection of the respondents of opinion polls</li> </ul>	<ul> <li>+ relatively objective picture of the current state of public opinion indicated by professionally conducted polls</li> <li>- doubtful objectivity of the results of opinion polls, due to biased sampling methods</li> </ul>	Researchers: high/moderate Security policy experts: moderate Opinion polls: moderate/low	Researchers: high/moderate Security policy experts: moderate Opinion polls: moderate/low
Legacy media	<ul> <li>+ expertise of some television reporters</li> <li>- biased provision of information advocating the NATO membership</li> </ul>	- doubts about the objectivity of information offered by newspapers and television, due to advocacy of the NATO membership	Newspapers: moderate/ low Television: moderate/low	Newspapers: moderate/ low Television: moderate/low
Social media	<ul> <li>+ authors, e.g., fellow participants offering information consistent with one's pre- existing attitude</li> <li>- poor reputation of authors suspected as trolls</li> <li>- dishonesty of authors advocating partisan agendas</li> </ul>	<ul> <li>lacking objectivity of information</li> <li>provision of non- current information</li> <li>low plausibility of arguments, due to</li> <li>weaknesses in logical</li> <li>reasoning</li> <li>weak evidence</li> <li>supporting one's</li> <li>arguments</li> <li>low usability of</li> <li>information</li> </ul>	Blogs, websites and YouTube videos: low Posts submitted by fellow contributors to online discussion: low	Blogs, websites and YouTube videos: low Posts submitted by fellow contributors to online discussion: low

- low-level or lacking expertise in political		
issues		
- poor presentation		
skills		

Table 5. Summary of the main qualitative findings. Legend: + = main positive qualities indicative of the credibility of information source. - = main negative qualities undermining the credibility of information source

Overall, as Table 5 suggests, the credibility assessments were negative in tone regarding both the believability of authors of information and the information content. Of individual criteria dealing with the credibility of author of information, his or her reputation, expertise and honesty were particularly important. In the judgment of the information content, the key criteria were objectivity of information and plausibility of arguments. Table 5 also suggests that the share of positive or negative credibility assessments is associated with the perceived amount of expert and informational power inherent in a source. In Table 5, the amount of power of these types is evaluated at a general level only by drawing on the characterizations of main positive and negative qualities indicative of the credibility of information sources of diverse types. In the particular context of the NATO membership project, the strongest expert power and informational power are associated with politicaldecision makers and researchers. At the other end of continuum are the posts submitted by fellow contributors to online discussion. These posts exhibit the least amount of both expert and informational power, thus reflecting the low credibility of fellow participants as sources of information. Most information sources of other types fall between the poles of the continuum in that they are associated with moderate amount of expert and informational power, thus indicative of somewhat varying credibility of these sources.

As to the credibility of individual sources of information, the President of Finland was assessed most positively, mainly due to his perceived expertise in political issues. The credibility of parliamentary politicians was undermined by the assumptions that they advocate a partisan agenda rather than present a balanced view on the NATO membership. The credibility assessments differed more strongly while judging the believability of researchers. On the one hand, their expertise was praised; on the other hand, doubts were presented about their impartiality. Similarly, the credibility judgment of opinion polls resulted in divided views, depending on whether the discussant was supporting or opposing the NATO membership. The credibility of information offered by legacy media was assessed quite critically, mainly due to the belief that leading newspapers and broadcasting corporations are inclined to advocate the NATO membership.

At the other end of the continuum, almost without exceptions, the material available in social media was assessed negatively. This suggests that the NATO membership is an issue whose deliberation requires specific knowledge that exceeds the level of lay knowledge possessed by online contributors. Lay knowledge is mainly dependent on the interpretation of information available in the media. Therefore, lay knowledge may not add very much to the original information available in other sources although the interpretation of such information is vitally important for citizens making sense of complicated political issues such as the NATO membership in times of uncertainty.

Overall, the uncertainty as a context of credibility assessment was most clearly reflected in the strongly divided judgments dealing the believability of fellow participants, depending on whether they supported or opposed the NATO membership. For many discussants, this was seen as a "life or death issue", due to the worries caused by Russia's warning that the NATO membership application would lead to serious political and military consequences for Finland. On the other hand, the context of uncertainty was reflected in the participants' strong reliance on the President's expertise, due to his long-time experience in foreign policy. There is a paucity of comparable results, due to the lack of similar studies. For example, the investigations focusing on information behaviour in times of crisis such as natural disaster have not examined the issues of information credibility from the viewpoint of expert power and informational power inherent in information sources (e.g., Choo and Nadarajah, 2014; Ryan, 2018). The same applies to surveys examining citizen's perceptions about security threats related to the outbreak of war, for example (Stevens and Vaughan-Williams, 2016).

The closest study offering opportunities for the comparison of findings was conducted by Savolainen (2021). He examined how *Redditors*, that is, contributors to a Reddit discussion group assessed the credibility of claims presented by anti-vaxxers. As the Redditors strongly advocated vaccination against COVID-19 in particular, the credibility of anti-vaxxers as authors of vaccinerelated information was very low in the eyes of the discussants. Anti-vaxxers were characterized as people with poor reputation because they lack adequate knowledge of the nature and effects of the COVID-19 vaccines. Anti-vaxxers were also found dishonest because they deliberately draw on false or biased evidence in order to exaggerate the risks of COVID-19 vaccines. Moreover, anti-vaxxers were ridiculed for their inability to express their claims logically and clearly. The present investigation revealed similar features in the credibility assessments presented by opposing parties, that is, those advocating and those resisting the NATO membership.

The Redditors also assessed very critically the credibility of the information content generated by anti-vaxxers. It was asserted that the anti-vaxxers' claims about COVID-19 vaccines are false and that their conclusions are based on selective use of evidence supporting their agenda. Finally, from the Redditors' point of view, the claims presented by the anti-vaxxers tend to have low use value for those considering vaccination decision; in the worst cases, vaccine refusal advocated by the anti-vaxxers can endanger the health of people with chronic condition. Again, as the above critiques demonstrate, there are many similarities in the credibility assessments presented by online contributors advocating opposite views about the NATO membership.

The findings of the present study also support observations of earlier studies on credibility assessment occurring in online discussion forums. Similar to Kim (2010) and Savolainen (2011) it was found that the judgments concerning the person's reputation and expertise are key criteria used in the assessment of the author's credibility. The results of the present study also confirm the conclusions drawn in the above investigations in that objectivity of information, as well as plausible argumentation are highly important in the evaluation of the credibility of the information content. Moreover, the findings lend support to the conclusions drawn by Yin and Zhang (2020). They found that while assessing microblog information credibility, people tend to take for granted the argument quality (related to the message content); poor argument quality is simply unacceptable. On the other hand, information credibility can be best increased by enhancing the credibility of author: the more credible the author, the more users rely on information content. Similarly, the findings of the present investigation suggest that if the credibility of the author is seriously doubted due to the person's poor reputation, dishonesty or incompetency, it is difficult or even impossible to rely on any information content created by that person. Therefore, due to this labelling effect, author credibility is crucially important for the credibility judgment as a whole.

In recent years, the assessment of the believability of the authors of information, as well as the credibility of information content has undergone changes in the forums of social media in particular. In the era of "post-truth" characterized by the growing distribution of mis- and disinformation in the form of fake news and conspiracy theories, the assessment of expert and informational power inherent in information sources has become more complex than before. These developments were reflected in the findings of an empirical investigation focussing on Scottish citizens' perceptions of the credibility of online political facts. Baxter, Marcella, and Walicka (2019) found that the participants struggled to identify actual agencies of experts whom they would consider reliable and consult to check a fact. As the present study demonstrates, credibility problems such as these tend to culminate while debating ideologically sensitive and controversial issues such as the NATO membership.

# 8. Conclusion

The most important contribution of the present investigation is elaboration of the nature of credibility assessment by demonstrating that it is affected by the perceived amount of expert power and informational power inherent in information sources of various types. One of the key findings is that the ways in which people make judgments about the expert power is crucially important for the credibility assessment as a whole. The findings also highlight the contextually sensitive nature of credibility judgment. In times of uncertainty such as the threat of war, such assessments tend to become more categorical, primarily depending on the extent to which an author of information is associated with good reputation, honesty and competency. The contextual sensitivity of credibility assessment can be elaborated further by making use of sociocultural research approaches. For example, Haider and Sundin (2022) have demonstrated that such approaches enable us to better understand the phenomena related to crisis of information. Crisis of this kind not only manifests itself in the volatility of information shared in online forums but also in the fragmentation, individualisation, emotionalisation, and the erosion of the collective basis for trust more generally. As the findings of the present investigation is based on the analysis of a sample of 40 Finnish online discussion threads on a particular topic, that is, the NATO membership, the results cannot be generalized to concern credibility assessment at large. More research is required to elaborate the picture of context-sensitive credibility assessment by examining topics which may be less dramatic and controversial.

# References

Baxter, G., Marcella, R. and Walicka, A. (2019). "Scottish citizens' perceptions of the credibility of online political "facts" in the "fake news" era: an exploratory study", *Journal of Documentation*, Vol. 75 No. 5, pp. 1100-1123.

Brashers, D. (2001), "Communication and uncertainty management", *Journal of Communication*, Vol. 51 No. 3, pp. 477-497.

Choo, C.W. and Nadarajah, I. (2014), "Early warning information seeking in the 2009 Victorian bushfires", *Journal of the Association for Information Science and Technology*, Vol. 65 No. 1, pp. 84-97.

Flanagin, A.J., Winter, S. and Metzger, M.J. (2020), "Making sense of credibility in complex information environments: the role of message sidedness, information source, and thinking styles in credibility evaluation online", *Information, Communication & Society*, Vol. 23 No. 7, pp. 1038-1056.

French, J.R.P. and Raven, B. (1959), "The bases of social power", in Cartwright, D. (Ed.), *Studies in Social Power*, University of Michigan Press, Ann Arbor, MI, pp. 151-164.

Haider, J. and Sundin, O. (2022), Paradoxes of Media and Information Literacy. The Crisis of Information, Routledge, New York, NY.

Harju, A. (2018), "Suomi24-keskustelut kohtaamisten ja törmäysten tilana [Finland-24 discussions as a discursive space of encounterings and collisions]", *Media & viestintä*, Vol. 41 No. 1, pp. 51-74.

Hilligoss, B. and Rieh, S.Y. (2008), "Developing a unifying framework of credibility assessment: construct, heuristics, and interaction in context", *Information Processing & Management*, Vol. 44 No. 1, pp. 1467-1484.

Kim, S. (2010), "Questioners' credibility judgments of answers in a social question and answer site", *Information Research*, Vol. 15 No. 2, available at: http://informationr.net/ir/15-2/paper432.html (accessed 5 August 2022).

Lincoln, Y.S. and Guba, E. (1985), *Naturalistic Inquiry*, Sage, Newbury Park, CA.

Lopatovska, I. and Smiley, B. (2014), "Proposed model of information behaviour in crisis: the case of Hurricane Sandy", *Information Research*, Vol. 19 No. 1, available at: http://InformationR.net/ir/19-1/paper610.html (accessed 5 August 2022).

Metzger, M.J., Flanagin, A.J., Eyal, K., Lemus, D.R. and McCann, R.M. (2003), "Credibility for the 21st century: integrating perspectives on source, message, and media credibility in the contemporary media environment", in Kalbfleisch, P.J. (Ed.), *Communication Yearbook*, Vol. 27, Lawrence Erlbaum Associates, Inc., Mahwah, NJ, pp. 293-335.

Miles, M.B. and Huberman, A.M. (1994), *Qualitative Data Analysis: An Expanded Sourcebook*, 2nd edition, Sage, Thousand Oaks, CA.

Montesi, M. (2021), "Human information behavior during the Covid-19 health crisis. A literature review", *Library & Information Science Research*, Vol. 43 No. 4 (no pagination).

Olsen, J.A. (2020), "Introduction: an alliance for the 21<sup>st</sup> century". in Olsen, J.A. (Ed.), *Future NATO. Adapting to New Realities*, Royal United Services Institute for Defence and Security Studies, London, UK, pp. 3-7.

Rains, S.A. and Tukachinsky, R. (2015), "Information seeking in uncertainty management theory: exposure to information about medical uncertainty and information-processing orientation as predictors of uncertainty management success", *Journal of Health Communication*, Vol. 20 No. 11, pp. 1275-1286.

Raven, B.H. (1965), "Social influence and power", in Steiner, I.D. and Martin, F. (Eds.), *Current Studies in Social Psychology*, Holt, Rinehart & Winston, New York, NY, pp. 371-382.

Raven, B.H. and Kruglanski, A.W. (1970), "Control and power", in Swingle, P.G. (Ed.), *The Structure of Conflict*, Academic Press, New York, NY, pp. 69-109.

Rieh, S.Y. (2010), "Credibility and cognitive authority of information", in Bates, M. and Maack, M.N. (Eds.), *Encyclopedia of Library and Information Sciences*, 3rd edition, Taylor and Francis Group, New York, NY, pp. 1337-1344.

Ryan, B. (2018), "A model to explain information seeking behaviour by individuals in the response phase of a disaster", *Library and Information Science Research*, Vol. 40 No. 2, pp. 73-85.

Savolainen, R. (2011), "Judging the quality and credibility of information in Internet discussion forums", *Journal of the American Society for Information Science and Technology*, Vol. 62 No. 7, pp. 1243-1256.

Savolainen, R. (2021), "Assessing the credibility of COVID-19 vaccine mis/disinformation in online discussion", *Journal of Information* (published online 19 August 2021), available at: https://journals.sagepub.com/doi/full/10.1177/01655515211040653 (accessed 5 August 2022).

Savolainen, R. (2022), "Cognitive authority as an instance of informational and expert power", *Libri*, Vol. 72 No. 1, pp. 1-12.

Stevens, D. and Vaughan-Williams, N. (2016), "Citizens and security threats: issues, perceptions and consequences beyond the national frame", *British Journal of Political Science*, Vol. 46 No. 1, pp. 149-175.

Sundar, S. (2008), "The MAIN model: a heuristic approach to understanding technology effects on credibility", in Metzger, M. and Flanagin, A. (Eds.), *Digital Media, Youth, and Credibility*, Cambridge, MA: MIT Press, pp. 73-100.

Wieslander, A. and Skaluba, C. (2022), "Will Finland and Sweden join NATO now?", *New Atlanticist*, March 3, 2022, available at:

https://www.atlanticcouncil.org/blogs/new-atlanticist/will-finland-and-sweden-join-nato-now/ (accessed 5 August 2022).

Yin, C. and Zhang, X. (2020), "Incorporating message format into user evaluation of microblog information credibility: a nonlinear perspective", *Information Processing & Management*, Vol. 57 No. 6 (no pagination), available at:

https://www.sciencedirect.com/science/article/pii/S0306457320308402 (accessed 5 August 2022).