

Sallamaria Moilanen

ASSESSING THE CREDIBILITY OF TIKTOK CONTENT

How factors relevant to online credibility
evaluation apply in the context of TikTok

Faculty of Information Technology and Communication

Bachelor's Thesis

June 2023

ABSTRACT

Sallamaria Moilanen: Assessing the credibility of TikTok content – How factors relevant to online credibility evaluation apply in the context of TikTok

Bachelor's thesis

Tampere University

Bachelor's Programme in Multidisciplinary Communication Studies

June 2023

Being a new environment for spreading and receiving information, the social media platform TikTok has caused concern about how users are able to navigate through its contents. This study aims to provide insight on how users' processes can be researched through the lens of credibility, and how previous research on credibility may benefit these developments. This study will focus on whether previous findings in online credibility research are relevant to credibility assessment in TikTok.

TikTok users participated in an online survey, in which they viewed four TikTok videos by different creators, responded to questions about how credible they found each video to be, and how relevant different factors were to these assessments. Participants were also asked about whether they found the creator behind the video competent in discussing the topic. These factors were drawn from the findings of previous research on online credibility.

The findings of this study suggest that studies on TikTok credibility can benefit from previous online credibility research, by utilizing features that have been found to be relevant in credibility assessment in other environments. This type of investigation is beneficial for future research, as it provides an implication for how such research could be approached.

Key words: TikTok, social media, information processing, information credibility, source credibility

The originality of this publication has been reviewed with Turnitin OriginalityCheck program.

TIIVISTELMÄ

Sallamaria Moilanen: Assessing the credibility of TikTok content – How factors relevant to online credibility evaluation apply in the context of TikTok

Kandidaatintutkielma

Tampereen yliopisto

Viestinnän monitieteinen tutkinto-ohjelma

Kesäkuu 2023

Noustuaan suureen kansainväliseen suosioon, kiinalainen sosiaalisen median alusta TikTok on herättänyt keskustelua sen asemasta uutena informaatioympäristönä ja tiedonjaon välineenä. Pohdintaa on aiheuttanut muun muassa se, miten alustan käyttäjät hankkivat tietoa alustalla ja millaiselle informaatiovaikuttamiselle he altistuvat. Tämän tutkimuksen tavoitteena on tuottaa tietoa siitä, miten käyttäjien informaatiokäyttäytymistä voitaisiin tutkia uskottavuuden näkökulmasta, sekä miten aikaisempaa tutkimusta voitaisiin hyödyntää tässä tutkimustyössä. Tämän tutkimuksen päätavoite on selvittää, miten hyvin aikaisempien uskottavuuteen keskittyvien tutkimuksien löydökset ovat hyödynnettävissä tutkittaessa TikTokin sisältöjen uskottavuutta.

Tutkimuksessa TikTokin käyttäjiä osallistui kyselytutkimukseen verkossa. Kyselyn lomassa osallistujat katsoivat neljä TikTok -videota eri sisällöntuottajilta, arvioivat jokaisen videon uskottavuuden sekä vastasivat kysymyksiin siitä, miten olennaisia erinäiset tekijät olivat tämän arvioinnin tekemisessä. Osallistujilta kysyttiin myös sitä, pitivätkö he videon tuottajaa pätevänä aiheeseen liittyen. Tutkimuksessa hyödynnetyt tekijät valikoituivat aikaisemmista verkkosisältöjen uskottavuuteen liittyvistä tutkimuksista.

Tämän tutkimuksen löydökset viittaavat siihen, että TikTokin sisältöjen uskottavuuteen keskittyvät tutkimukset voivat hyötyä aikaisemmista verkkosisältöjen uskottavuutta käsittelevistä tutkimuksista, hyödyntämällä niitä tekijöitä, joiden on todettu vaikuttavan uskottavuuden arviointiin muissa ympäristöissä. Tämä edesauttaa tulevaa tutkimustyötä osoittamalla, miten TikTokin uskottavuuden tutkimusta voidaan vastaisuudessa lähestyä.

TABLE OF CONTENTS

1	INTRODUCTION.....	1
2	THEORETICAL BACKGROUND	3
	2.1 Social media and TikTok.....	3
	2.2 Existing literature on credibility	4
3	RESEARCH SETTING.....	8
	3.1 Factors in credibility assessment	8
	3.1.1 Visual aspects	8
	3.1.2 Public response	8
	3.1.3 Popularity.....	9
	3.1.4 Commercial motive.....	9
	3.1.5 Competence	10
	3.2 Research questions	10
	3.3 Participants	10
	3.4 Data collection	11
	3.5 Data analysis	12
4	RESULTS.....	13
	4.1 What is relevant to the credibility of TikTok videos?	13
	4.2 Creator competence	15
5	DISCUSSION.....	20
	5.1 Further research	21
	5.2 Conclusion	22
	BIBLIOGRAPHY.....	23

1 INTRODUCTION

We are constantly processing information, both consciously and subconsciously. This may happen for example while interacting with others or through consuming media contents. Therefore, it is conducive to consider the impact of different information sources and how we perceive and process the information from them. When removed from environments in which information is considered trustworthy – such as educational or scientific spaces or discourses – the need for making our own deductions is heightened significantly.

The emergence and exponential growth of social media has had an undeniable effect on our daily activities. Social media allows for the production and sharing of a wide range of contents, much of which is unmatched by anything we would have been able to find previously. Therefore, with the development of such contents new issues regarding information consumption are bound to arise. On social media, users may be faced with content created by individuals they have no connection to and companies they do not consume from. In addition to having no personal relationship with these creators, users are left to make their own deductions on the content, usually with a very limited frame of reference.

The perceived quality of information is affected by much more than just the content itself or the informant's ability to refer to other sources. For example, environment and location, peer pressure and preconceptions are factors, that despite the informative aspects of the content, may shift perceptions. The focus of this thesis will be on the factors that are not strictly related to the information itself, but rather may affect how that information is perceived despite what the content is.

The Chinese video sharing platform TikTok (originally musical.ly) became massively popular after its release in 2016 and is now amongst the most popular social media platforms in the world (Montag et. al. 2021). While social media in itself is a rather new and increasingly relevant topic of research, TikTok inspires special interest due to its massive popularity and the constant media conversation concerning it. TikTok has caused

controversy in multiple aspects, including the spreading of false and harmful information. Montag et. al. (2021) also note the young demographic and their vulnerability to the “detrimental aspects of social media use” (p. 4). The existence of misinformation is arguably one of the most detrimental of these aspects, making TikTok a particularly advantageous platform for misinformation.

Credibility may be defined as concepts such as – but certainly not limited to – believability or reliability. While the study of this term dates back to mid-20th century in academia, the study of online environments has brought on new perspectives and aspects to it. The study of online credibility has shifted studies to a more active and collaborative perspective and motivated the founding of the concepts of recipients’ heuristics and technological cues. (Salwen & Stacks, 2009) It should also be noted that credibility refers to a perceived quality (Fogg & Tseng, 1999). Therefore, credibility in this thesis inherently refers to the participants’ perception of it.

This study will aim to provide some insight as to how applicable the findings from previous studies on online information credibility are in the context of TikTok. An online survey has been conducted to collect data from TikTok users. The findings from previous research will be discussed in chapter 2, as well as TikTok and social media in general as information environments. Chapter 3 will focus on how the study was conducted, also specifying the features from previous research that will be used in this study. The results of the study will be reviewed in chapter 4. Chapter 5 will revise the results and values of the study, discussing them in the context of further possibilities for such research.

2 THEORETICAL BACKGROUND

Conducting a study on the credibility of TikTok information and sources required assessing previous research on information and source credibility. The survey was to be designed based on what different sources expressed as factors relevant to these aspects.

2.1 Social media and TikTok

Differing from mass media platforms, social media allows essentially all users to participate as both producers and consumers of content, both sharing and receiving information. This feature of free, or only somewhat controlled content sharing and creation causes social media to serve as platforms for an endless stream of information – both verifiable and false.

Understanding the concept misinformation is necessary to studying social media information. Wu et. al. (2019) use misinformation as an umbrella term for all false and unverified information. Misinformation includes both deliberate and unintentional false information – the former being also referred to as disinformation. Although this study does not focus on misinformation specifically, it is important to acknowledge its existence in social media.

The content on TikTok consists of short (max. 3 minute) videos that can be shared by anyone with an account. Users may interact with the content by liking, commenting, and sharing, but also by collaboration. Users may create their own videos by making a continuation to (a *stitch*), or by joining via split screen (a *duet*) an already existing video by another user. Videos are presented on the main “For You” -page, where users scroll down onto new contents that they have not yet seen. The videos come in a vast variety of themes and topics with new subcategories constantly being founded. While these contents may be in the form of dance, comedy, a challenge or other type of entertainment, this thesis will focus on videos that clearly have a primarily informative intent and convey a relatively straightforward message.

TikTok has become a popular space for scientific communication on social media. However, educational content must often take a specific form in order to be suitable for this particular platform, on which for example humor and a charismatic persona usually generate better success. Abbie Richards, an active scientific communicator on TikTok sees it as a beneficial platform for providing people with small doses of education. Richards recognizes the need to adapt science communication to suit the platform, claiming that she herself uses jokes and attempts to make her delivery charismatic and interesting. Richards also discusses the difficulty of TikTok communication, in that creators must be extremely clear in their attempts and communications and still be prepared to receive a vast amount of criticism and negative feedback. (Cell, 2022)

TikTok has been approached with skepticism due to critique about the spread of misinformation on it. Montag et. al. (2021) suggest, that due to its young demographic TikTok may be seen as a potent information channel. While they recognize the potential for spreading valuable information, the risk of negative influencing efforts should also be acknowledged. In line with this, Abbie Richards notes that the aim of much of their communication on TikTok is to combat misinformation and debunk false claims – especially when those contents have become popular (Cell, 2022).

2.2 Existing literature on credibility

As stated in the introduction, the study of credibility well precedes the creation of social media. When studying information and sources and their quality and reliability, credibility represents the perspective of the recipient. This perspective may also take into account the social environment and perceived dimensions of communication. Source and information credibility are also counteractive, as the perceived quality of information may strengthen source credibility and vice versa. (Stacks & Salwen, 2019) Using credibility as the framework of this study allows the survey to rely on the participants' perspective and opinions.

In the context of social media, credibility is faced with an array of additional issues. While credibility in online and social media environments has been studied from different

perspectives and previous research consist of a diverse collection of frameworks, there can be detected clear similarities and consistencies regarding these issues. Metzger et. al. (2010) conducted a study on credibility evaluation online, which found online information sources to be approached with increased skepticism. Social networking tools – which include social media – caused recipients to be skeptical of not only the content, but also the source. Especially dubious agendas were a cause for concern, as participants were skeptical of the motive sources would have in sharing information. Suspicions of commercial motives and undisclosed affiliations for example, were stated as reasons for a skeptical approach. This study also determined social information pooling as one of the credibility assessment strategies. Participants identified the use of reviews for example, as a means to evaluate information online. The number of reviews was noted as important, with the ratio of negative to positive reviews seen as a relevant indicator as well. These participants also claimed to have relied more on the negative reviews: the existence of only positive reviews was found to cause suspicion, as *“nothing’s all good”*. Having negative reviews as well as positive was seen as an indication of a balanced, more realistic representation of what was being reviewed.

Viviani and Pasi (2017) proposed a multi-criteria decision-making approach to assessing credibility in social media. The depth and accuracy of credibility evaluation is essentially defined by the recipients’ cognitive abilities in that particular moment, making them susceptible to misleading information such as fake news or rigged reviews. This was considered particularly concerning in social media, where unverified information can diffuse and become popular without being reviewed by trustworthy authorities.

Sohn and Choi (2019) studied the relationship between a user’s social standing and the perceived credibility of information. Relationship-based communication is imperative to social media, and receiving online information does not happen in social isolation. Participants were requested to rate how credible they found the given information. Source credibility was considered by the researchers by providing all the participants with the same information, but giving the information two different sources, dividing the participants into two groups with the same information but different sources. Requiring

participants to rate the credibility of the information provides insight on what experience users have regarding the information.

Whereas social media introduces additional aspects and issues to considering credibility, the intricacies of different social media platforms must also be acknowledged. Keshavarz (2021) noted, that different social media platforms pose their own complications to credibility assessment. Moreover, it was suggested that different platforms could affect credibility, as *“the platform acts as a gatekeeper for online information”* (p. 274). As there is a lack of literature on credibility in the context of TikTok, there should be additional and valuable new findings to discover there.

Social media has created a new kind of celebrity and person of public influence. Djafarova and Trofimenko (2019) considered micro-celebrities and social media users' perceptions of them in relation to their content. Source credibility was assessed by dividing it into four different dimensions: Attractiveness, trustworthiness, competence, and online behavior / self-presentation. Although this study focused on Instagram and general engagement with micro-influencers, the trustworthiness of these contents was also taken into consideration. Especially commercial motives in product promotion and competence in being an influential persona were noted by the participants. Image quality was found to be an important factor in whether users found content to be engaging – for example, a “professional look” was appreciated. It was also found that users value competence over expertise, meaning that rather than requiring micro-influencers to be qualified experts, users appreciate the existence of relevant experience when sharing information. Participants of this study agreed, that in order for recommendations by micro-celebrities to be credible, they would have to be able to show their competence in the use of the product.

In a social media environment, micro-celebrities, or – how they are often referred to as – influencers have been found to gain an increased level of trustworthiness and through that, credibility. De Veirman et. al. (2017) studied the impact of the number of influencers' Instagram followers on brands' expectations of their ability to market products. It was theorized and consequentially found, that a higher number of followers indicates

popularity. However, popularity did not necessarily indicate better credibility. The study suggests that different influencers may evoke different effects, but that a high number of followers would not guarantee for the influencer to be able to provide beneficial promotion for the brand. In fact, considering the kind of content the influencer usually makes, and their existing audience would provide much more valuable insight when choosing a promoter for the brand. However, with the “right” influencer, increased popularity would most likely support better credibility.

While there exists an extensive collection of literature concerning credibility, it should be acknowledged that in social media context additional issues arise. According to Sohn and Choi (2019) in mass media (e.g., TV and newspapers) audiences are able to focus on medium- or sight-specific indicators of authority, reputation, consistency, and expertise. However, in social media users are more inclined to be affected by inter-personal relationships, which may diminish attentiveness to those indicators. Therefore, conducting research on credibility assessment in social media may reveal what cues and indicators users might utilize.

When credibility is studied from multiple perspectives, new and different relevant features are discovered. Therefore, as there exists an array of literature regarding the evaluation and assessment of credibility, a multitude of features used to evaluate credibility are discovered and suggested. This thesis will be utilizing features acknowledged in the sources referred to in this chapter.

3 RESEARCH SETTING

The study was conducted as an online survey, in which participants watched four (4) TikTok videos and answered the same questions – both multiple choice and open ended – about each video. The videos were about leptons (video 1), hormonal birth control (video 2), breast feeding (video 3), and the indohyus, an extinct mammal from the Eocene (video 4). These videos were chosen because they contain information that can easily be proven or debunked with existing scientific knowledge and research.

The factors listed in the next section were applied from what has been found to be relevant to credibility assessment in previous studies. This study aimed to investigate whether factors that have been previously shown to affect credibility would also have a similar influence in the context of TikTok. Existing literature shows that there is value for studying credibility in the context of a specific social media platform such as TikTok.

3.1 Factors in credibility assessment

The factors discussed in chapter 2.2 were used – and slightly adjusted for the context – as survey selections for how credibility was evaluated. These factors and the reasoning for applying them in this study are discussed in the following paragraphs.

3.1.1 Visual aspects

Djafarova and Trofimenko (2019) found visual aspects to be of importance when choosing which social media contents to engage with and focus on. Despite their study focusing on micro-celebrity on social media, the significance of visual styling, quality, and overall feel were regarded as some of the central features in social media communication in general. In the context of this thesis, considering visual aspects takes into account a quality that may not be highly significant in the study of information credibility itself, but a possibly defining quality in social media.

3.1.2 Public response

Metzger et. al. (2010) identified social information pooling – and the use of reviews especially – as a significant tool in credibility evaluation online. In the context of TikTok

this could be compared to comments and other responses (stitches and duets) to a video. As a social media platform, TikTok makes communication between users and creators easy and responses to videos are encouraged with the stitch and duet features. Therefore, open discussion around contents allows users to see how others have viewed them.

3.1.3 Popularity

The importance of popularity in the context of social media is intriguing and often a point of consideration in studies concerning social media (see e.g., Djafarova & Trofimenko, 2019 or De Veirman et. al., 2017). Therefore, it should be taken into account in this study as well. Although the role and effect of popularity in social media is not exactly straightforward, studies such as De Veirman's (2017) suggest that depending on the context, increased popularity – or lack thereof – may have a positive or negative effect on credibility.

Most studies seem to have focused on the popularity of the creator. On TikTok however, videos can gain a huge number of likes and views and become incredibly popular, even if the creator has never shared a single video on the platform before. Therefore, this study will focus on the popularity of the specific video, rather than its creator.

3.1.4 Commercial motive

The effect commercial motive and background have on credibility differs depending on the situation in which the information occurs. In the study by Metzger et. al. (2010) participants had considered commercial motives and, for example, undisclosed affiliations with brands to weaken trust in the information. However, Djafarova and Trofimenko's (2019) influencer-related approach showed that content creators could also make promotional content be seen as more trustworthy, if they indicated competence related to the product of service. Hence, this could suggest that although commercial motive behind a video may negatively affect credibility, good source credibility could in turn make commercially motivated information be perceived as more credible.

Because a commercial motive may be undisclosed, it was necessary to allow participants to decide whether they thought the video was promoting a product or service and whether this was relevant to their assessment of credibility.

3.1.5 Competence

Djafarova and Trofimenko's (2019) study found that social media users value micro-influencers being competent – as in having subject related relevant experience – in what they are sharing and claiming. Although this thesis does not focus on micro-celebrity, the importance of competence can be adopted here, as users seem to value it in social media creators as a sign of source credibility.

3.2 Research questions

The aim of this study was to investigate how findings in previous studies about information credibility apply in the context of TikTok. Specifically, this study tested how certain factors already shown to be relevant to information credibility in online environments were relevant to users assessing the credibility of TikTok contents. One of these factors was the competence of the creator behind the content. However, this was approached in an attempt to find what users consider when assessing that competence.

1. How do factors that have been found to be relevant in assessing credibility apply in the context of TikTok?
2. What is relevant to users' perception of the competence of a TikTok video's creator?

3.3 Participants

This study was conducted as an online survey and participation was anonymous. Participation required previous experience in using TikTok, having a TikTok account, and speaking English. There were fifteen (15) participants, all of whom accessed the survey via a link shared on the researcher's Instagram story, which was available for three days. Since the survey was anonymous, any personal details of the participants could not be

disclosed. However, it could be assumed that these participants were at least somewhat regular social media users, as they accessed the survey through a social media platform.

3.4 Data collection

The survey was divided into four sections. Each section began with a link to a TikTok video and followed by questions about that video. The study was conducted as a survey, as the factors that would be investigated had been already chosen. Therefore, this would specify which details participants should focus on for the purpose of this study. (Hirsjärvi & Hurme, 2022) First the participants were asked to rate the credibility of the video on a scale of 1 to 5. The next four questions asked about the relevance of the visual aspects, public response, popularity and commercial motive. These questions required participants to rate how relevant each factor was to the credibility of the video. Rating was conducted as a multiple-choice question, from which participants could choose how relevant the given factor was to the credibility of the given video. The options were *“Not relevant”*, *“Somewhat relevant”*, *“Highly relevant”* and *“Did not change my assessment but rather further supported it”*. The question about commercial motive had the additional option *“I don’t think the video was promotional”*.

Two open-ended questions with text-input fields were applied for each section, a mandatory one to explain whether the participant found the creator to be competent in discussing the topic and why, and another as an optional response for anything additional the participant may have wanted to express about the video. All questions except for this optional text-input field were coded to require input.

Multiple-choice responses were used to gather simple and easily comparable data about the effect on credibility. (Fowler & Mangione, 1990) The choices allowed for participants to determine the relevance of a factor on credibility. Participants also had an option *“not relevant”* and *“did not change the assessment but rather confirmed it”*. The latter was made an option in order to allow participants to recognize the positive effect of a factor, even if the assessment would have been the same, nevertheless. This way it would also

be possible to recognize an effect even if it were minute and the effects of different factors could be compared more effectively.

Creator competence was measured via text input due to the concept of competence being difficult to specificize – especially in this context. Open questions also allowed for participants to comment on details, that had not been anticipated (Fowler, 2002). Participants gave a written response to the question: *“Did you find the creator of this video to be competent in discussing this topic? Give a short explanation for this assessment”*. Written responses allowed participants to explain what impacted the competence of a creator from their perspective, which is necessary when observing a user’s perspective. Additionally, there was a question, *“Based on these assessments, would you find other information shared by this creator to be credible?”* to provide some insight on whether participants found the creator to be competent in sharing information on the specific topic or in general. This was a multiple-choice question, with response options *“no”*, *“maybe”*, *“on a similar topic, yes”*, and *“yes”*.

3.5 Data analysis

The results in this study were both controlled, pre-defined values from multiple-choice questions, and open replies from written-input fields. The controlled data concerning the relevance of different factors were processed as numerical values: 1 = *“not relevant”*, 2 = *“somewhat relevant”*, 3 = *“highly relevant”*, and 4 = *“did not change my assessment but rather supported it”*. In the response options for commercial motive the additional option, *“I don’t think the video was promotional”* was valued 0. This way the relevance of factors could effectively be compared to each other by coding them into standard categories (Fowler, 2002).

Open replies were evaluated as qualitative data. This data was also analyzed together with the quantitative data from the multiple-choice questions, in order to gain a wider understanding of the participants’ perceptions. Written replies were also categorized based on recurring mentions of certain details.

4 RESULTS

The results in this study were divided into two sections: the relevance of the factors in this study to credibility evaluation and the assessments on creator competence. Results to both of these sections were based on multiple-choice and written replies.

4.1 What is relevant to the credibility of TikTok videos?

When calculating the total mean value of the relevance of popularity, response, and visual aspects of all the videos together, there was very little difference. Relevance of popularity had the mean value of 1.8, response 2.0 and visual aspects 2.1. Therefore, a general difference between the relevance of these factors to the credibility of TikTok videos could not be detected from this study. However, after analyzing each video on their own, differences could be found.

Two of the videos in this study (video 1 and video 4) utilized visual demonstrations of the subject very clearly. In both videos, graphs, drawings, and images about the subject were shown to support what was being said. For both of these videos visual aspects had been rated as highly relevant by 66,7 % of the participants. Only one (6,7 %) response to one of these videos suggested that visual aspects had no relevance. Therefore, the rest of the replies suggested that visual aspects had some relevance to credibility, even if they had not changed the overall evaluation.

In their written replies, several participants implied that visuals such as images and graphs had supported the claims made in the video, and also made it easier to follow and understand, which in turn had a positive effect on credibility. One participant noted that the use of pictures as evidence implied, that the creator had done research on the topic. Regarding the video about indohyus, one participant replied: *“I must admit that the visuals strongly affected my judgement. The ‘old school textbook’ look is something I associate with school knowledge, which (almost always) is trustworthy”*. This video featured drawings of the evolutionary development of the mammals in question, which is what most likely reminded this participant of “old school textbook” visuals.

Response was found to be most relevant in videos that had a lower rating of credibility. A negative correlation could be detected between the mean value of credibility and relevance of response, meaning that the video with the lowest rating of credibility (video 2) had the highest relevance of response and vice versa (video 4). Participants' written responses provided insight as to why. According to the replies to video 2, some participants had noticed comments that claimed the video to contain false and harmful information and questioned the creator's professional knowledge. In addition to such comments, one reply noted that the creator had not acknowledged these critical comments and that their initial output in the video seemed opposing to any skepticism.

The balance of negative and positive responses was noted in a response to video 3. One participant commented, *"The lack of any negative or critical comments was rather suspicious"*, which is in line with the findings in the study by Metzger et. al. (2010).

The popularity of videos – which was specified as the number of likes, views and comments – was not particularly relevant in this study. The average rating for relevance of popularity of all videos was only 1.8, with the highest average of a single video being 2. The video with the highest rating for popularity (video 1) had significantly less likes than the rest of the videos, with its likes being in the thousands, while the others had like counts over 500 000. The most significant indicator of relevance of popularity was a participant's written response to video 1: *"The [credibility] was difficult to assess, because there were not a lot of likes and comments"* (translated from Finnish to English).

In examination of multiple-choice responses alone, commercial motive did not seem to be of significant relevance. In all videos, most participants had replied *"I don't think the video was promotional"* and out of those replies that acknowledged the existence of a commercial motive, *"not relevant"* was most popular in all videos. However, written replies offered more insight, as some of the participants recognized the relevance of commercial motive after all.

Response to video 2: *"According to their profile, this creator seems to be a nutritionist or something and possibly offers a related service. For this reason, I think they cannot be*

unbiased, and even if the things they are saying may be somewhat true, they are framing them in a way that supports their agenda.” (Translated from Finnish to English). This participant rated this video 3 on the credibility scale.

Response to video 3: *“[...] it was a little suspicious that the creator seemed to have a company or something behind the account, they seemed knowledgeable but then again there was no real argument stating that the video was factual.”* (Translated from Finnish to English). This participant rated this video 2 on the credibility scale.

Response to video 4, which was directed to all videos in this study: *“All of these videos are somewhat promotional in the sense that their purpose is to gain a bigger audience and to grow the creator’s brand, however this kind of a transaction is in [most social media contents]. I do think that [video 2] was the most promotional, as the creator was selling some kind of courses related to the topic.”* (Translated from Finnish to English).

Although these responses do not show a direct link between commercial motive and credibility, they do imply that a suspicion of commercial or promotional motive is relevant to how the information in a video is perceived.

4.2 Creator competence

From interpreting the participants’ answers to *“Did you find the creator of this video to be competent in discussing this topic? Give a short explanation for this assessment”*, certain recurring remarks could be observed. For an effective analysis, these were simplified into four most commonly noted themes: Educational or professional authority of the creator, personal experience of the creator, the creator’s ability to provide scientific or other factual proof and/or sources, and the overall impression from the creator. All these themes occurred as positive and negative remarks, both as indicators of creator competence and lack thereof.

Responses to videos 1, 2 and 4 included some kind of notices of educational or professional authority of the creator at least once. In the responses to videos 1 and 2 these notices were all negative and skeptic, as participants doubted or questioned the

professional or educational authority of the creators. Video 1 gained responses, in which participants were unsure whether the creator or creators behind the video had a degree in physics. One participant wrote: *"[This creator] didn't justify their knowledge with e.g., a degree, so there was no professional authority-based argument"*. These responses insinuated that no clear proof or statement of education had been provided, which left participants unsure of whether the creator held such authority.

Video 2 gained criticism and skepticism on whether the claimed professional background of the creator made them competent: *"They were not a medical professional [...] In the comments it was noted that this creator was some sort of a 'holistic nutritionist', which does not give any credibility to them", "The title 'holistic nutritionist' means nothing to me"*. The creator had provided insight on their professionalism on the subject, but these participants did not find it to have value in how competent the creator was.

The creator of video 4 claimed to be an archeologist, and this was noticed in responses: *"In their bio it says that they are an archeologist, which adds to the impression of competence"*. Contrary to video 2, participants valued this creator's professional claim to this knowledge and found it to be relevant to their competence.

Personal experience of the creator was noticed in videos 2 and 3. In the responses to both videos personal experience was regarded as something that may have made the claims in the videos partially true, but not generally applicable facts. This was the case especially with video 3, with responses such as: *"Possibly she herself is a mother and has experienced it"*, and *"Maybe (she may be a mother), but there were no facts [presented]"*. The responses to video 2 were very similar: *"To a degree. She is a young woman and would definitely know more than a man who is, of course, not an expert on the subject"*, *"They may have had some personal experience on the subject, but I doubt they have any scientific proof for it"*.

Responses to all videos included observations of the creator's ability to provide scientific or other factual proof and/or sources. In responses to videos 1, 2 and 3 participants expressed skepticism towards the trustworthiness of the creator and video. According

to participants, the creators of these videos had failed to support the claims they were making with scientific proof or sources, which in turn was disadvantageous to their perceived competence.

Response to video 1: *“The creator did not for example provide any studies to support this information”* (Translated from Finnish to English).

Response to video 2: *“They seemed very biased, and did not support their claims with e.g., scientific results or charts. They seemed to be stating their opinion rather than facts”* (Translated from Finnish to English).

Response to video 3: *“I’m not sure. They were clear in their arguments and seemed trustworthy but did not base their claims on scientific evidence or other sources either”* (Translated from Finnish to English).

All responses regarding sources or evidence in videos 1, 2 and 3 were similar to these. According to the participants, none of the creators of these videos had been able to present evidence or sources to support their claims – at least not in a way that would have been clear to the participants. Although evidence and source citation are features of content, the participants seemed to associate the creator’s ability to refer to sources and present evidence to their competence.

Most responses to video 4 that mentioned the ability to provide evidence or cite sources also mentioned the visual demonstrations in the video (as discussed in chapter 4.1). The use of such elements in this video seemed to have a positive impact on how competent the participants found its creator, and none of the responses to video 4 mentioned a lack of evidence or sources. *“[They] did actually name some sources and questioned their own stated fact”* – the creator providing sources for the information they were sharing and still showing critical thinking on that information clearly had a positive impact on how competent the participants found this creator.

Some mention about the overall impression of the creator occurred the most frequently and was mentioned in regard to all videos. Once again, there was a distinction between

the first three videos and video 4. Assessments of the creators' competence based on their performance or overall presence varied in videos 1, 2 and 3, while in video 4 they were all similar and positive. Most participants found the creator of video 1 to give off an impression of competence with their confident performance and professional language, whereas one participant had the complete opposite view: *"Maybe, although their performance did not give off a competent vibe. More like a sleazy car salesman"*.

A similar pattern occurred in videos 2 and 3. In video 2 most participants considered the creator to be incompetent based on their overall impression: *"the person is giving off a [pseudoscience] vibe"*, while some found their confidence to have a positive effect: *"They spoke with a lot of confidence and gave the impression, that they had really familiarized themselves with the subject"*. In the responses to video 3 some participants found the enthusiasm of the creator to be an indicator of competence: *"Yes, I did find them competent. The tone of voice and the enthusiasm made it seem like they're really into the topic and really know something about it"*, whereas some had the complete opposite reaction to that enthusiasm: *"Not at all. I would not trust someone who starts and ends a 'factual' video by saying that 'guys this is so cool' or such"*.

The responses to video 4 that mentioned an overall impression of the creator, all mentioned some other factor as well. Participants found this creator to be competent based on their performance and general presence, but other factors weighed in as well in every such response: *"They seemed competent and were able to describe the subject clearly. The visuals supported their assessments and made [the video] more credible"*.

These four themes detected in the responses on creator competence did also overlap. Educational or professional authority and the ability to provide scientific proof or sources clearly overruled personal experience and an overall impression in responses in which such overlap occurred. For example, one response to video 2 suggested that personal experience was not reliable enough when scientific evidence was missing: *"[Not really]. She can speak from experience but if she knows about science, [I'm] not sure"*.

Based on the written responses, the creator of video 4 seemed to be considered the most competent. This was also supported by the responses to the multiple-choice question: *“Based on these assessments, would you find other information shared by this creator to be credible?”*, as 80 % of participants had responded either *“yes”* or *“on a similar topic, yes”*. Only 1 participant had replied *“no”*. Video 2 had the highest percentage of *“no”*-responses by 60 % (the remaining 40 % were *“maybe”*), which was also in line with the written replies.

5 DISCUSSION

While credibility is a concept measured from a recipient's perspective, it is apparent that certain features are relevant in different information. As a new kind of information source TikTok has most likely created new patterns of behavior in information processing, but it seems that users are also applying credibility assessment tools from other environments as well. The use of certain tools and features may be modified to the attributes of the environment, with for example reviews being applied as responses and popularity being measured through a media-specific feature such as likes.

The findings of this study suggest that factors that affect credibility in other environments are considered when assessing information credibility on TikTok as well. Although this comparison was not user-specific – as the participants in this study did not assess credibility in other environments – it can be concluded that similar features are relevant in the study of credibility on TikTok as they are in other environments. Moreover, these results suggest that findings in credibility research do have value in research concerning TikTok as well. This could also allow for speculation on whether similar findings could be utilized in the research of other social media platforms. Despite social media platforms having their differences, many aspects from TikTok can be found on other platforms as well, which would suggest that similar results could be expected from them.

The relevance of visual aspects and public responses were the most apparent in this study. The relevance of public responses suggests, that features relevant to credibility can be applicable in the context of TikTok, even if they have been slightly changed in order to adapt to a different environment. In the study by Metzger et. al. (2010) participants had identified the use of reviews in online credibility evaluation, and despite TikTok comments being slightly different from reviews, they were still highly relevant to credibility evaluation on TikTok. The importance of visual aspects, however, were considered in this study despite previous research by Djafarova and Trofimenko (2019) not being focused exactly on information credibility, but rather social media behavior in

general. TikTok's contents rely heavily on the use of visual features, which is why the relevance on credibility those features have was a valuable – and successful – perspective.

The factors that were found less relevant in this study, popularity and commercial motive, should perhaps be approached in a more suitable manner. For example, there was very little variation in the popularity of the videos used in this study. Only one of the videos had a significantly lower number of likes than the other three. Popularity may be a factor that is perceived as more relevant in certain contexts, for example when a video is very unpopular or – on the other end of the spectrum – has gone viral with millions of likes. De Veirman et. al. (2017) also did not find an unequivocal relationship between credibility and popularity, as other factors seemed to weigh in on what kind of an effect popularity would have. Commercial motive on the other hand, may require a different approach for its importance to be properly identified. This study did, however, show some indication of its relevance in credibility assessment on TikTok.

This study also provides insight on how users perceive the competence of a creator behind TikTok content and what features are relevant to these assessments. In order to study the relevance of competence to information credibility on TikTok, such insight is necessary. Therefore, although this study could not review the relevance of the competence on credibility, it has now created basis for how competence is perceived by users. Djafarova and Trofimenko (2019) had already established the relevance of competence – rather than expertise – on online source credibility. Now that this study has specified four different features that users take into account when assessing the competence of a creator on TikTok, future research may focus on how these features may affect credibility altogether.

5.1 Further research

This study was only a small-scale investigation on whether research on online credibility assessment would be valuable in the context of TikTok. Therefore, the results of this study – although not perfect – do encourage further research. Future studies could

include more findings from previous studies, perhaps from those focusing on non-online environments as well. Some investigation on whether these assessments on credibility are reliable and resulting in correct detections about the quality of information could also produce valuable data.

A similar study could be conducted about another social media platform. TikTok was chosen for this study due to its massive popularity and it being an influential platform for spreading information, both factual and false (see e.g., Montag et. al., 2021). However, if a similar social media phenomenon were to arise, research like this could produce valuable information for the use of that platform. Even currently existing platforms such as Instagram and Twitter would be valuable topics for a study like this.

5.2 Conclusion

This study does not suggest that credibility evaluation in TikTok is completely the same as in other online contexts. It does, however, encourage further research on TikTok credibility as well as other social media platforms, by showing how already existing research can be utilized in these contexts. The purpose of this study was also not to produce data that could alone show how credibility on TikTok is evaluated, as this requires greater research. If such research were to be conducted, it could help combat the spread of misinformation on TikTok.

How information is processed in different environments is valuable information, and credibility research allows focus on the recipients' perspectives. Social media users are provided a constant flood of information coming from unfamiliar sources, and guidelines on information criticism are unable to stay up to date. Credibility research provides insight on how social media users are instinctively reacting to information and sources, despite what that source or information is. TikTok is only one example of how influential and hugely popular social media can be, and we can expect to see similar – and probably even more powerful – social media platforms in the future. Social media platforms should be a topic of extensive research in the future, and utilizing already existing research has the potential to benefit such developments greatly.

BIBLIOGRAPHY

- De Veirman, M., Cauberghe, V., & Hudders, L. (2017). Marketing through Instagram influencers: the impact of number of followers and product divergence on brand attitude. *International Journal of Advertising*, 36(5), 798–828.
<https://doi.org/10.1080/02650487.2017.1348035>
- Djafarova, E., & Trofimenko, O. (2019). ‘Instafamous’ - credibility and self-presentation of micro-celebrities on social media. *Information, Communication & Society*, 22(10), 1432–1446. <https://doi.org/10.1080/1369118X.2018.1438491>
- Fogg, B., & Tseng, H. (1999, May 15–20). *The elements of computer credibility* [Paper presentation]. Conference on Human Factors in Computing Systems: Proceedings of the SIGCHI Conference on Human Factors in Computing Systems: The CHI Is the Limit; 15-20 May 1999, 80–87. <https://doi.org/10.1145/302979.303001>
- Fowler, F. (2002). *Survey Research Methods* (3rd ed.). (Volume1.). Sage Publications.
- Fowler, F., & Mangione, T. (1990). *Standardized Survey Interviewing: Minimizing Interviewer-Related Error*. (Volume 18.). Sage Publications.
- Hirsjärvi, S., & Hurme, H. (2022). *Tutkimushaastattelu : teemahaastattelun teoria ja käytäntö* (2nd edition). Gaudeamus.
- Keshavarz, H. (2021). Evaluating credibility of social media information: current challenges, research directions and practical criteria. *Information Discovery and Delivery*, 49(4), 269–279. <https://doi.org/10.1108/IDD-03-2020-0033>
- Metzger, M. J., Flanagin, A. J., & Medders, R. B. (2010). Social and Heuristic Approaches to Credibility Evaluation Online. *Journal of Communication*, 60(3), 413–439.
<https://doi.org/10.1111/j.1460-2466.2010.01488.x>
- Montag, C., Yang, H., & Elhai, J. D. (2021). On the Psychology of TikTok Use: A First Glimpse From Empirical Findings. *Frontiers in Public Health*, 9, 641673–641673.
<https://doi.org/10.3389/fpubh.2021.641673>
- Scientific communication on TikTok. (2022). *Cell*, 185(17), 3066–3069.
<https://doi.org/10.1016/j.cell.2022.07.015>
- Sohn, D., & Choi, S. (2019). Social embeddedness of persuasion: effects of cognitive social structures on information credibility assessment and sharing in social media.

International Journal of Advertising, 38(6), 824–844.

<https://doi.org/10.1080/02650487.2018.1536507>

Stacks, D. W., Salwen, M. B., & Eichhorn, K. C. (2019). *An Integrated Approach to Communication Theory and Research* (3rd ed.). Routledge.

<https://doi.org/10.4324/9780203710753>

Viviani, M., & Pasi, G. (2017). A Multi-criteria Decision Making Approach for the Assessment of Information Credibility in Social Media. In Petrosino, A., Loia, V., & Pedrycz, W. (Eds.), *Fuzzy Logic and Soft Computing Applications* (pp. 197–207).

Springer International Publishing. https://doi.org/10.1007/978-3-319-52962-2_17

Wu, L., Morstatter, F., Carley, K., & Liu, H. (2019). Misinformation in Social Media: Definition, Manipulation, and Detection. *SIGKDD Explorations*, 21(2), 80–90.

<https://doi.org/10.1145/3373464.3373475>