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How do people appraise to what extent TikTok videos are informative?

Exploring the processes and factors that play a role in the evaluations of informational content on TikTok

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Sammendrag

TikTok er en plattform for korte filmklipp som har eksplodert i popularitet de siste årene. Det er rikelig med innhold i denne applikasjonen som fokuserer på underholdning som dans eller memes. Imidlertid er en betydelig del av innholdet skapt med det formål å formidle informasjon. Det er umulig for TikTok å gjennomgå hvert eneste filmklipp som postes, som har resultert i at oppgaven å evaluere klippene har blitt taktisk overført til de brukerne som ser videoklippene. Den aktuelle forskningen fokuserer på å utforske hvordan mennesker vurderer i hvilken grad TikTok-videoer er informative, ved å identifisere evalueringsprosesser og generelle aspekter som kan påvirke menneskers vurdering. Tidligere forskning på troverdighet ble brukt til å utforme en undersøkelse for å måle evalueringer av 137 deltakere av tre ulike informative videoer. Dataene som ble samlet inn var av både kvantitativ og kvalitativ art. Dette åpnet for en bedre forståelse av interne prosesser, så vel som aspekter som deltakerne viet mest oppmerksomhet når de evaluerte denne typen innhold. Samtidig som prøvestørrelsen var begrenset til et lavt antall, kan noen initielle observasjoner bane vei for videre studier som kan fokusere på spesifikke aspekter og dypere problemer. Det ble funnet at *Elaboration Likelihood Model* for overtalelse (ELM-modellen) kan benyttes for å forklare interne evalueringsprosesser. Med dette i tankene ble noen spesifikke aspekter identifisert til å fungere som utløsere som påvirket deltakernes vurderinger av informativt innhold på TikTok. Visuelle elementer som verifiseringsmerket, å ha kunnskaper om innholdsprodusenten, bevis, og medieaspekter kom opp som noen av de største faktorene som påvirket deltakernes evaluering. I sammenheng med TikTok og lignende plattformer, burde også andre elementer som funksjonalitet, algoritmer, og brukererfaring utforskes når man studerer evaluasjon av informasjon. Dette er fordi innhold ikke ender opp i en brukers strøm tilfeldig, men heller blir anbefalt av plattformen. Den nåværende forskningen er bred, da det ikke var mulig å finne lignende studier utført om TikTok. Derfor fokuserer utfallet på å identifisere hovedaspekter som senere kan dissekeres en etter en av videre studier.

Abstract

TikTok is a short-form video platform that exploded in popularity in recent years. There is plenty of content on this application that focuses on entertainment like dances and memes. However, a substantial part of it is created with the purpose of communicating information. It is impossible for TikTok to review every single piece of content posted on it; thus, the task of evaluating information has been tacitly transferred to each of the users who watch these videos. The current research focuses on exploring how people appraise to what extent TikTok videos are informative, by identifying evaluation processes and general aspects that may influence people's assessments. Previous research on credibility was used to design a survey to measure evaluations by 137 participants of three different informative videos. The data gathered was of both quantitative and qualitative nature. This allowed for a better understanding of internal processes, as well as aspects that participants paid attention to the most when evaluating this type of content. While the sample size was limited to a small number, some initial observations may pave the way for further studies that can focus on specific aspects and deeper issues. It was found that the elaboration likelihood model of persuasion (ELM) could be used to explain internal evaluation processes. With that in mind, some specific aspects were identified to serve as triggers that influenced participants' appraisal of informative content on TikTok. Visual elements like verification tick, having knowledge of the video presenter, evidence, and media aspects came up as some of the biggest factors that influenced evaluation by the participants. In the context of TikTok and similar platforms, other elements like functionality, algorithms, and user experience should also be explored when studying evaluation of information. This is because content does not randomly land on a user's feed, but rather comes recommended by the platform. The current research is broad, as it was not possible to find similar studies done about TikTok; therefore, the outcomes focused on identifying main aspects that could later be dissected one by one with further studies.

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1. Introduction

The ways in which people and organizations transmit information are constantly changing. Through the advancements of the internet, any person can publish their own content on a variety of platforms for others to see and share. Myspace, Facebook, and YouTube may be some of the earliest spaces which succeeded in this endeavor. Their users constantly exchanged ideas and perspectives that contributed to conversations where any individual could partake in. As this trend moved forward, current platforms provide other affordances that have led to the formation of more dynamic experiences for users. TikTok is one of them, with 689 million monthly active users (Kemp 2021), this application has become popular for the way in which users are able to communicate and interact through it. TikTok's features allow users to easily produce and consume content. The platform succeeds in connecting people based on their behavior, so actions such as liking, subscribing, or following creators are not necessary to fully enjoy the application. It is as simple as scrolling through a feed of videos that are continuously adapting to a user's preferences.

The massive amounts of content being created and consumed on TikTok do pose questions about how users assimilate the information being exchanged on it. The company has set some guidelines in the past to let users know that content may be misleading or extreme. This could be seen most recently with the COVID-19 crisis, where TikTok videos that dealt with that subject had a message bubble informing them about what official sources said about the virus. In other instances, messages would state that actions in a video are dangerous. For both cases, TikTok was trying to have some control or supervision over what was being uploaded. However, with the vast amounts of videos uploaded daily, the task of reviewing or fact checking every single one of them is impossible. Often, users post videos informing about political issues, reacting to news headlines, reporting on scientific studies, providing professional and amateur advice, teaching something, or providing evidence for something. These pieces of content can deal with topics that can carry serious consequences, as they tell people how things work or behave in the real world. With no way for the platform to filter through all the content, it has been left up to the audience and their own discretion to evaluate what is being shown to them.

There are several aspects that could influence how people evaluate content online. They may focus on appearances, arguments, professionalism, or their evaluations may be guided by their

own preconceptions. There are, however, more structured ways to look at this problem that have been developed in previous research on credibility, which can also be applied to TikTok.

To identify what processes and aspects influence evaluations of information on TikTok, the current research will attempt to answer the following research question:

How do people appraise to what extent TikTok videos are informative?

With this question, the goal is to find the mechanisms that people use to evaluate information they receive on this platform. In addition, it will also investigate what specific characteristics of TikTok's informative videos may trigger these processes. It is important to clarify that this study will not focus on finding out whether people can be deceived by misleading content or not.

Ultimately, a clearer picture of how information is spread and absorbed by people on TikTok may be found by answering the question. Moreover, this could also bring new perspectives as to how social media platforms in general function as distributors of information. These findings can later be investigated separately in future research.

2.TikTok: The phenomenon

Tiktok has become widely popular around the world in a relatively small period. The short-form video content app started as "Douyin" in China, where it proved to be successful reaching 100 million users after just one year since its release in 2016 (Leskin 2020). TikTok's parent company, Bytedance, was able to expand the application's operations around the globe quite rapidly. It bought Musical.ly in 2018, an app that focused on lip sync videos, and which was especially popular with younger people in the US. The merger of TikTok and Musical.ly exponentially increased the app's popularity in the US and rest of the world. Today, TikTok accumulates around 2 billion downloads in total (Singh 2020), with some estimates claiming it has up to 800 million active monthly users worldwide (Iqbal 2019).

The application's popularity is the result of many factors according to media and tech experts (Taulli 2020). Tiktok gives anyone's content the chance to be seen and even go viral. This means that users do not need to have big fan bases for their videos to appear in other people's feeds. This goes alongside the application's algorithm, which quickly learns preferences of users, providing them with tailored experiences. Content seems to be the priority on TikTok. Upon opening the application for the first time, no actions such as friending, following, or joining groups are needed for users to be presented with endless streams of videos. Besides the low barrier of entry to become a consumer of content, the barrier of entry to be a producer of videos is low as well. TikTok offers a variety of easy-to-understand tools to edit videos. This encourages participation in content creation regardless of the level of proficiency users may have in editing. On top of that, the application provides options to add visual effects, popular music, and sounds, all of which play a big role in the constantly emerging challenges and trends that develop in this platform's environment. It should be noted that, while the application seems to appeal mostly to younger generations, its numbers show there is an increasing userbase made up of older ones (Hutchinson 2021). TikTok's design and features have proven to effectively resonate with audiences, who keep engaging in conversations and continuously push others to get involved.

The social element that the application brings is very significant as well. It is evident that remixing, commenting, and sending direct responses are features that the TIkTok community enjoys. This is well explained by John Herrman for the *New York Times*: "TikTok instead encourages users to jump from audience to audience, trend to trend, creating something like

simulated temporary friend groups, who get together to do friend-group things: to share an inside joke; to riff on a song; to talk idly and aimlessly about whatever is in front of you" (Herrman 2019). These interactions are so organic and seamless because TikTok has flipped the order of actions for users. This application pushes content consumption and creation first, leaving actions like searching, friending, and subscribing for later as an option. By arranging audiences by grouping individuals based on the algorithm, the experience of using TikTok is a breeze. This application has successfully eliminated several steps that used to be necessary for users to get content. On a personal note, I do not follow people, do not have friends on TikTok, nor do I feel encouraged to do so because I am able to use the app to its full extent effortlessly. I can tell that the experience is already tailored to me, making all those actions unnecessary and even obsolete.

The affordances that TikTok has brought into the social network ecosystem seem to have tapped into people's curiosity, and most importantly, their willingness to participate and to become creators themselves. By providing easy tools to make short and engaging videos (that get watched no matter who the creator is), millions of users are constantly returning and sticking to the platform.

Bytedance has taken advantage of the current state of technology and society to create a massively influential product. Technology in the form of smartphones is widely available to most of us. We are also continuously looking for the next thrill that can satisfy our hunger for interaction and entertainment. TikTok has been able to provide this and become a channel of expression for many of its users.

Dances or challenges are not the only types of videos being uploaded. The platform has also been used as a tool for political change, like rallying for the BLM movement (Banjo 2020), or to discuss whether getting vaccinated is a good idea or not (Keane 2020). The application is being used as a means of action that can impact the real world. So, understanding how information is spreading and how people are processing it in the context of TikTok, seems to be an inevitable task.

2.1 How TikTok is different

In the grand scheme of things, TikTok shares common characteristics with YouTube, Snapchat, Instagram, and the extinct Vine. All these applications and sites have focused on video content, which their users can create, share, and watch. Unlike YouTube, Tiktok's videos are typically short, ranging a few seconds up to a minute. Like Snapchat, videos are recorded in a portrait format, which means users hold their phones vertically. Also, the "stories" feature of displaying short snippets of video, like in the case of Instagram and Snapchat, can be said to be quite similar to TikTok's content. Nevertheless, this application itself most resembles Vine, a platform that also focused on short-form video content, but which was shut down towards the end of 2016 (Newton 2016).

Some of Vine's characteristics appear to have heavily influenced TikTok's design. Vine had videos which could be no longer than 7 seconds; however, this did not mean that they had to be made in just one take. The application provided a basic editing tool that allowed users to start and stop the recording of videos as necessary. This made it possible to build 7-second-long videos that could be more creative. Another big similarity is the way content was displayed in the feed. Vine had the users scroll through the videos which would automatically play. All in all, Vine probably served as the biggest inspiration for TikTok, while also showing that there was an audience for short-form video content.

TikTok adapted elements from existing platforms and created features of its own. It expanded editing tools available to users. For example, it keeps the feature of starting and stopping the recording of videos, but also offers special effects (like face filters), text overlays, and sounds from a large audio library. In addition, this application allows for the uploading of videos, instead of always requiring the native recording tools. These videos can be further edited in the application as well. The usual comments, shares, and likes are present on TikTok as well; however, this application adds more to them. Comments that a creator receives can be responded to directly with a video. Another similar feature is called "duet." Users can respond or react to another video showing both videos simultaneously (the response video and the original one).

Perhaps the biggest difference for the application is its algorithm, which provides an easier experience for the users. Vine "was notorious for promoting recycled content. The people

commonly endorsed already had large followings…" (Lennon 2020). TikTok is different because it shows videos regardless of the following or previous success of an account's content. As stated earlier, the algorithm learns from the user. So actively searching for new quality content, something that was necessary on an application like Vine, became optional on TikTok. Further explanations of how the recommendation system works are covered in the next section.

The way the algorithm and recommendation system work allow for trends and challenges to be some of the biggest types of videos on this platform. The use of hashtags, text, sounds, and special effects are all tracked for both creators and viewers. This connects users by showing them several videos that are related to the same topic. In addition, it encourages them to produce similar videos by showing exactly what effects, sounds, and hashtags go with the trend.

All in all, TikTok was able to develop an identity of its own, by building on top of previous ideas in the social network landscape. Like YouTube, Snapchat, Instagram, TikTok found a niche to be filled in how users seek to consume content and interact with each other. The application improved on the premise of Vine and differentiated itself enough by expanding and creating features that would allow for more enjoyable experience to its users.

2.2 "For you" page – How the recommendation system works

TikTok's main page or feed is called "For You." This is the first thing that users are shown when opening the application. It is important to note that the "For You" page is unique for all users, and due to the popularity of the application, this space is said to be "some of the most valuable digital real estate in the world" (Matsakis 2020).

In a 2019 article, TikTok provided some explanations for how they selected the endless streams of videos that are shown to the users. It turns out it is a combination of factors that are "weighted based on their value to a user" (TikTok 2019). Some of these factors are "user interactions" (such as likes, shares, etc.), "video information" (sounds, hashtags and captions), and device specifications. Other strong indicators mentioned are whether videos are watched all the way through from beginning to end, and whether the viewer and the creator are located in the same region. Finally, the article makes the clarification that "neither follower count nor whether the account has had previous high-performing videos are direct factors in the recommendation system" (TikTok 2019).

TikTok presents convoluted narratives when explaining its recommendation system. On one hand, it says that it wants to show users content that they may be interested in, while on the other it claims it wants to show users content that is different. TikTok states that it is aware of a "filter bubble" problem with recommendation engines, so it tries to fix that by once in a while showing content that "isn't quite to your taste." Nevertheless, TikTok also claims that if users see something they do not like, they can just tap on "not interested" to have a better experience.

TikTok states that it is trying to find an equilibrium for the content it presents: "[o]ur goal is to find balance between suggesting content that's relevant to you while also helping you find content and creators that encourage you to explore experiences you might not otherwise see" (TikTok 2019). This is somewhat conflicting to what was stated earlier. Instead of showing content that a user may not be interested in (to supposedly fight the filter bubble), it may seem as if it is introducing new types of content that users have not yet seen, but to which they could be very well interested in.

All in all, the information available about the recommendation system for TikTok is rather vague (and provided by the company itself). Besides avoiding specific technical details about the processes for recommendation, it does not explain how the application uses what it has learned about the user for other purposes like advertisement targeting. In general, TikTok's recommendation system shows that there are several factors that are taken into consideration for videos to show on the "For You" page. These can be behavioral, like how users engage in deliberate actions such as liking or following, but also more subtle, like how long a user watches a video. Other factors such as geolocation and device specifications also count, but according to the application are weighed less, since these are not preferences that users have specifically chosen.

2.3 Spreadability of TikTok

A more theoretical way of explaining the popularity of TikTok can be done from the "spreadability" perspective. Jenkins et al. (2013) coined the term "spreadability" referring to "the technical resources that make it easier to circulate some kinds of content than others, the economic structures that support or restrict circulation, the attributes of a media text that might

appeal to a community's motivation for sharing material, and the social networks that link people through the exchange of meaningful bytes." These concepts provide a clear approach for how the affordances that TikTok opened for its users and the way the application is used, have caused it to grow quickly. In this section the research will focus on stating general ways that make TikTok successful in spreadability terms.

Technical aspects of this application make its content available when and where audiences want it, portable, easily reusable in a variety of ways, relevant to multiple audiences, and part of a steady stream of material (Jenkins, Ford, and Green 2013), all of which are factors that affect spreadability of content. TikTok's videos are available when and wherever due to the options the application gives its content to be shared across platforms. It is possible to just share links, but also its content can be sent as encoded video directly to multiple external apps (like Snapchat or Whatsapp). When talking about portability Jenkins et al. (2013) refer to content being "quotable and grabbable." One of the ways TikTok achieves this is by letting users respond and react to content through duets or video responses. Reusability is also present in this app, besides internal options like duets, users often make remixes or compilations of TikTok videos for other sites like Youtube or Instagram. A way in which TikTok's content becomes relevant to multiple audiences is when users replicate a trend. In this scenario they are introducing new content to their own circle of friends or followers. Another example could be when someone shares a TikTok video through links or encoded video, so friends who do not have the application installed can still watch them. At last, TikTok's content is a part of a stream of material when, for instance, creators stick to the same theme for all the videos they create. Another example can be when a user watches several videos that are related to each other because they use the same sound. An argument could be made that TikTok provides an endless stream of material, due to the ease that one has to watch videos by simply scrolling or swiping the screen up (no search or interruption is needed).

As it can be appreciated, TikTok's features make it very successful in all the technical categories that contribute to its content's spreadability. Even my 75-year-old Ecuadorian grandma forwards me TikTok videos through the messaging platform Whatsapp.

2.4 Popular content

When Jenkins et al. explored what types of content are spread online, they observed that internet users took advantage of the products of traditional media to remix, repost, and comment on. For example, internet users clip funny moments from TV shows and post them on YouTube; or they can take screenshots of cartoon characters and make memes out of them. The reason for this is because these TV shows or characters are common knowledge among large groups of people; thus, making this type of content easier to relate for more individuals. In the case of TikTok, however, the type of content can be quite different. A large part of videos on this application do not present widely recognized characters or products of established media. They rather show the people creating the videos themselves. On this platform finding common ground among its users is achieved through trends, themes, or challenges. One can find thousands of videos, all created by users who do not know each other (in username or physical appearance), yet they can interact with each other because they are engaging in similar actions through the trends. While in the past Internet users would create content based on known pieces of media to exchange thoughts, on TikTok this becomes less necessary, as features and user interaction allow for trends to be the connecting tissue that allows users to have conversations between one another. This is not to say that content that remixes other media does not exist on TikTok, there is plenty of that as well, but TikTok is prominent for the way in which people show themselves to the public in their physical body and displaying their personalities.

Users are putting themselves under the spotlight because of TikTok's ability to link one another through trends or challenges. What do these usually entail? Trends can rely on either physical ability (such as dances or tricks), or personal experiences (stories, advice). This encourages users to participate and see whether they can successfully or not complete these tasks. To illustrate this, I recently came across a trend on TikTok for which the challenge was to take off one's hoodie only by using one's feet. Some users were able to do it, and were rejoiced, while others failed but resulted in having a laugh. Many of the trends and challenges follow this pattern. Sometimes people performing them are very prolific, but other times they hardly try. Some people may give these trends their own spin, and for others they may end up in a complete disaster. Trends seem to be the go-to for users who want to create content. These are pre-existing ideas and they do not have to be perfectly executed. All in all, the most popular and

recognizable content from TikTok heavily relies on people showing themselves. They do so through the performance of simple actions which follow all kinds of trends and challenges.

2.5 Influence

TikTok's popularity seems to have brought with it questions for society in terms of what outcomes may come from its use. The application's appeal comes, in part, by trends and challenges which encourage users to replicate them. This shows that there could exist some sort of influence that TikTok may have on single individuals and large groups of people alike.

There have been reports of teenagers who have died following TikTok challenges (Lambert 2020) (Tiplady-Bishop 2020). Such cases are not exactly new to social media networks and could also be attributed to other factors such as bullying or mental health issues (Görzig 2016). Nevertheless, these cases show that there can be serious implications that come from how people evaluate content online.

There are also some examples for how TikTok's platform has been used to influence real-life events at a society level. Organizers of a Trump rally in Tulsa in 2020 may have overestimated the number of confirmed attendees, and trolls may have been responsible for it. TikTokers encouraged their followers to register for the event claiming seats for it (Solender 2020). Trump's campaign expected over 19,000 people to show up, while at the end of the day the turnout was only around 6,000. An additional event that had been planned due to the expected large number of attendees also had to be cancelled. Besides trolling, TikTok has been used to spread awareness and action regarding issues of discrimination in the US. Users took to the platform to discuss ongoing racial issues that were sparked by the killing of George Floyd. Videos on how to protest safely, learning one's rights, and showing clashes with authorities were widely shared on the application (CNN 2020). Even if the hashtags #blacklivesmatter or #GeorgeFloyd seem to have been blocked by the app due to a "glitch," representatives of the company say they fully support the cause and the users of TikTok who keep posting related content (Spangler 2020).

TikTok has shown to have the potential to influence individuals or groups of people in both positive and negative ways. While this may seem to be having big consequences for society,

this perception is not necessarily unique to this application. Approaching new forms of communication and technologies like this is rather common. Whenever a platform like this gets fast adoption, society often treats it as a controversial matter. This is better explained by Neta Kligler-Vilenchik, from Hebrew University of Jerusalem for *The New York Times*:

> As early as Socrates's concern that the written word would eradicate wisdom, every new technology has been believed to either be our savior (the internet will bring people around the world into one global community!) or our doom (robots will make us all unemployed!) ...To me, this continuity is quite reassuring, because it shows us that our fears and hopes are not so much around the traits of the specific new technology, rather they are broad societal fears and hopes that are projected onto whatever technology is new and not yet understood. To most of its adult commenters, TikTok is a big unknown. (Herrman 2020)

In conclusion, TikTok does appear to have the power to influence society. Just as the TV, radio, or Facebook, all types of media have had that potential. As stated by Kligler-Vilenchik, new forms of communication always carry with them a level of uncertainty that may seem frightening. The ways in which TikTok can connect people is quite mesmerizing, however at some point society will likely get used to it just as it has with all past media.

2.6 Reputation

It has been established that TikTok's content is exceptionally spreadable, that a big part of its content are people taking part in simple trends (that do not require much effort or skill), and that it can be influential (in positive and negative ways). When expanding this discussion to economic and self-centeredness aspects, it becomes possible to see how preconceptions may form about TikTok as a platform in general.

Internet fame is nothing new, personalities like Logan Paul or Jenna Marbles have been widely recognized for years since they began uploading content on Vine and Youtube respectively. TikTok has already provided plenty of new young stars. Such is the case of 16-year-old Charli D'Amelio, who got famous in 2019 for her dance videos. Her rise to popularity and visibility, along with many other TikTokers, may make it seem like an achievable goal for many to become popular on this application. A recent study found that in the US and UK the top

profession that children aged 8 to 12 would like to seek was to become a "vlogger/youtuber" (Leskin 2019). This shows that there is a clear interest for younger generations to take part in these types of activities.

The pursuit for attention, solidified in the form of views and likes, may lead to an increasing production of content that could be considered bizarre or misleading. When trying to win the popularity contest that many of the TikTok trends end up becoming, users will often push to get higher priority in the algorithm recommendation system. Videos may turn increasingly more extreme to preserve their shock value, thus increasing their views, comments, shares. There are hundreds of trends that could be mentioned that represent the extreme, suggestive, and dangerous side of TikTok content. Some of them include teenagers pretending to be holocaust victims telling their stories from heaven; the "skullbreaker challenge," in which a person is asked to join a dance and then tricked to fall on their back; the "big bank" trend in which young women (and possibly teenagers) participate performing suggestive dance moves; or finally, men dipping their scrotum in soy sauce to see if they can taste it. All of these are just a miniscule sample of the trends that makes waves on this application that go to the extremes to be favored by the algorithm.

The attention or financial gain that TikTok users can obtain from the application are factors that influence the way content is produced. In many cases this presents itself as people performing edgier dances, wearing smaller clothes, engaging in more dangerous actions, divulging controversial information, or even fabricating stories. While most content on TikTok are people doing harmless things, the videos that get the most visibility (within the application and externally as well) are often the extreme ones. On one side of the spectrum, TikTok content may seem inconsequential, while on the other side it may appear as bizarre, dangerous, or misleading.

In conclusion, TikTok's reputation could be shaped by the ways in which its users are interacting through it thanks to the application's features. TikTok content spreads easily within itself and to the outside. When these aspects are combined with the ease of production capabilities and the potential gains that users may get from it (financial or attention), the application may propel the spread of large amounts of shocking videos. This could generate a certain type of assumptions about the content that is expected to come from TikTok as a platform in general.

2.7 TikTok in the post truth era

Another factor to consider about information, social media, and the internet are the current times we are living in, otherwise known as the "post-truth" era. TikTok has risen to popularity at a time when the power of similar platforms has been exposed. The "post-truth" era seems to have been solidified in 2016 during the US election and UK's Brexit vote (Iosifidis and Andrews 2019) (Horne 2021). "Post truth" refers to "the highly polarized and vitriolic political and public discourse…an era where not only is truth hard to find, but even more worrisome, where truth has become irrelevant or even unnecessary" (Horne 2021). In other words, Donald Trump's victory and the UK leaving the European Union are likely to have occurred due to the dissemination of misinformation online which confused voters by twisting facts and distorting reality. Misinformation was distributed by widely known platforms such as Facebook and Google. These are places where "false reporting, propaganda machines, biased algorithms, malicious applications of artificial intelligence, weaponized social media bots, and deceptive information campaigns" (Horne 2021) seem to have taken place constantly. It took, then, these two major events with massive implications for millions of people to really comprehend the influence and power that these platforms can have through internet-abled affordances.

Companies like Facebook and Alphabet have such great influence in society through practices that revolve around providing "free" services. Through them they can collect user data and supply spaces for other companies to operate on. Giving an interview about surveillance capitalism, Shoshana Zuboff explains that tech companies provide usability of the internet in the form of platforms or services, while at the same time they record the "behavioral surplus" of its millions of users to generate revenue (Zuboff 2019).

> Because as long as I'm monetizing that page, I don't care what's on it. This is a logic of accumulation. It's not, Facebook is broken. It's not any of the things people are saying. It's working perfectly. As long as you understand that it's capitalism and its specific logic, it's working perfectly... This is terrible for democracy because it is asserting control in the form of new capabilities for behavioral modification that are completely invisible to us. (Zuboff 2019)

Zuboff refers to the idea that it should be assumed that the business these companies are in is that of information gathering for profit, not just search engines, or platforms for connecting

people. TIkTok's collection of data "is comparable to other data-hungry social networks such as Facebook" (Tidy 2020). According to reports, it collects text inputs, location, phone specifications, phone number, contacts, keystroke patterns, personal interests, and more (Sky News 2020) (Tidy 2020). This should not come as a shock, as this is how it was built. It recommends videos and places advertisements on its users' feeds (as far as public knowledge goes). Under these conditions, it is possible to see how users may be cautious with information they receive on TikTok. The collecting of data by giant tech companies has allowed for more effective targeting of ads, as well as for political interests to develop campaigns aimed at disrupting citizens' sense of reality. This manipulation of information and narratives occurs right on the same platforms created by these companies, oftentimes leading users to be trapped in echo chambers. On the ideological side of this issue, what is considered to be "the truth" then becomes a term that any political figure or organization can decide on.

All in all, since the realization of how much power online platforms have, and how they have been used for, many users of the internet may approach information more cautiously. Learning how these large corporations are set up has probably pushed people to be more critical of the content they consume.

3. Literature review

The ways how people evaluate informative qualities on the internet have increasingly become the subject for many researchers. The landscape started to change drastically when compared to the way people perceived information on TV, radio, and newspapers. With the internet, the barrier of entry to publish information for anyone to see was lowered tremendously. This has made it much easier for regular individuals (groups and organizations) to spread their narratives through websites, blogs, or social media accounts. The amount of information available to the public is vastly greater than before, which in turn has changed the way people assess the credibility of information they receive. The system is not as centralized anymore, "the abundance and diversity of such information sources make traditional notions of credibility as originating from a central authority (e.g., a teacher, expert, doctor, or organization) problematic, and traditional credibility assessment strategies and techniques potentially outdated" (Metzger, Flanagin, and Medders 2010).

Information on the internet brings many different aspects into the table. As explained by Metzger et al. (2003), there is a lack of professional gatekeepers. Unlike with previous media, there are no rigorous processes to filter or review what is being published, there are no experts such as journalists or editors overlooking this process. Another aspect is the "blending of advertising and informational content" (Metzger et al. 2003). On the internet it becomes harder to distinguish between the two, as well as to who the producer of them is. Reputation is also of importance because with the innumerable sources of information, it becomes hard to check whether sources if come from people experienced in the area. Metzger et al. emphasize that it becomes even harder to tell reputable sources, as professional-looking pages are not too hard to create. Finally, information on the internet can be distorted by anyone intentionally or unintentionally.

3.1 What is credibility?

The topic of my research has to do with people's assessment of information of videos on TikTok, which can be studied from the perspective of credibility of information.

In the digital media context of today, credibility is defined as "the believability of information" (Metzger and Flanagin 2015). It is also subjective, meaning that different people can judge the same information differently. Credibility can be seen as divided in different dimensions: source

credibility, message credibility and medium credibility (Metzger et al. 2003). Source credibility focuses on who the communicator of the information is, and is itself affected by the source's expertise, trustworthiness, attractiveness and dynamism. Message credibility concerns the characteristics that make the content of the message itself credible, some of these include message structure, quality, and delivery. Finally medium credibility has to do with the channel that is used to communicate information. Aspects that may affect this last dimension are the medium's technological and structural features.

Previous studies have been carried out regarding the perceived credibility of information on the internet and the processes people engage in to make those evaluations. As the internet moves forward with new digital platforms being created, some studies may become less relevant than others. However, the studies have value in that they may help to find trends, similarities, comparisons, or explanations for shifts in the perceptions of credibility.

3.2 Credibility and Websites

In the early days of the Web 2.0, Fogg et al. aimed to classify the characteristics that made websites seem more credible. It was found that there were several factors that affected the level of credibility a site, these included: showing connection to the real world, expertise, trustworthiness, good user experience (UX), remembering the user (as in the site recognizing that the user had visited before), avoiding too many ads, and avoiding glitches (Fogg et al. 2001). Most of the criteria by which users judged the credibility of a website can be said to remain until this day. However, a couple aspects such as a connection to the real world and a site remembering the user may be outdated. Today there are companies that are solely present online like Netflix, and sites tracking activity can have a bad connotation due to privacy and surveillance concerns. Fogg et al., in a 2003 study, added the prominence-interpretation theory into the research on credibility. This theory focuses on two things: what people notice about a website (prominence), and how people evaluate those features (interpretation) (Fogg 2002). It was found that "design look" was the element users saw as a factor that affected credibility the most. This may be due to design look being the most prominent and easier element to notice. So, web users saw the appearance of a site as a main cue for credibility as they have little time or motivation to look further into other aspects.

Flanigan and Metzger focused on how younger generations assessed credibility of information on the internet. Their studies found that children (from ages 11 to 18) were in general able to differentiate good and bad quality of information online. Their results were encouraging, as the "worries that all adolescents are helpless and at the mercy of unscrupulous others on the Internet appear to be generally overstated" (Flanagin and Metzger 2010). Furthermore, it was found that older adolescents, who had more experience with the internet, appeared to see more value on the internet as a source of information. At the same time, they were more concerned with the quality of information they found online.

Sundar (2008) looked at digital media, distinguishing affordances and cues that may trigger heuristic responses that lead to credibility judgements. Heuristics are mental shortcuts that people keep stored in their memory which are employed to make quick decisions. Modality, agency, interactivity, and navigability are affordances found in digital media that form Sundar's MAIN model. Each modality has its own cues that trigger heuristics responses which become apparent when people interact with digital media. The modality cues are closely tied to the medium. For instance, the modality of newspapers is text, radio sound, and TV is audiovisuals. A teenager's credibility judgment may be affected by whether they receive information on a newspaper, or by someone on the internet through a vlog. Agency cues may put the source of the information on the computer or the users, all which may trigger different heuristic responses that increase or decrease their credibility. The interactivity cues are a big part of why digital media has taken over, according to Sundar. Heuristics related to interactivity are based on response activities, self-expression, and customization. Navigability may cue different heuristic responses related to whether a website is intuitive, playful, or helpful. Navigability is how a person gets to the information they seek, so doing so in a way they find appealing may increase the credibility of a site. The MAIN model provides a good compilation of heuristics and their relation to affordances of technology developments.

Metzger, Flanagin, and Medders classified some heuristic and social processes that they identified when people looked at information online. Social approaches included information pooling (such as having large number of reviews and testimonials available on the site), confirmation of personal opinion (when information presented matches one's opinions), enthusiast endorsements (trusting another person's expertise when they provide guidance or advice regarding the information presented), and interpersonal exchange (sharing websites among groups of people). Another significant part of this study is the heuristic approaches that

were identified. These were: "reputation, endorsement, consistency, expectancy violation, and persuasive intent" (Metzger, Flanagin, and Medders 2010). The reputation heuristic is when people recognize a known source, such as the CNN, therefore making the information they receive feel more believable. The endorsement heuristic relies on noticing that many others already show approval of a piece of information; therefore, making it easier to accept and believe in it. The consistency heuristic may take more effort because it has to do with cross validation. This means that a user may find a piece of information more credible if the same information is presented in other websites. This study (Metzger, Flanagin, and Medders 2010) also suggests that the appearance (or look) of the website is a factor when deeming sites more credible or not.

The studies on credibility of information on the internet provide some clues about how people process information and make evaluations. Due to the vast amounts of information, people are relying on heuristics and other processes that may help them make judgements more rapidly. New affordances allowed by the internet, as shown by the MAIN model, affect people's credibility on information because of how information is delivered. As the study with the youth showed, the more experience people had with dealing with websites, the more they felt it is a valuable source of information. Nevertheless, those participants were also aware that there may be false information or biases on the internet. "Appearance" or "look" of a site has come out as a general theme. Studies found that participants were not concerned with looking deeply into the content itself, but many times assess credibility based on looks and usability. If a site appears amateur, has grammar mistakes, or does not function properly, then it may not be reliable. All these studies on credibility of information on the internet provide good initial insights for how humans deal with big amounts of information. Moving ahead towards specific examples of social media networking sites (SNSs), some of these findings may or may not still be relevant. SNSs have created their own environments with features and affordances that can vary significantly. However, these studies present a good basis for a general understanding of the types of processes people engage in when evaluating information online.

3.3 Credibility on Social Media

During the current research, studies about assessment of information on TikTok were not found. However, there are other SNSs that have been previously studied regarding credibility of information on them. In this section, some of the most popular sites will be reviewed.

3.3.1 Twitter

Twitter has become a site known for continuous updates, official statements, and real-time reporting (many times in cases of crises). Studies on credibility of information on the site have focused on those aspects. Westerman, Spence, and Van Der Heide investigated whether the recency of updates influenced the credibility of Twitter posts. It was found that recency did not significantly increase credibility, but it did show a positive relationship with cognitive elaboration (the active participation and involvement in information processing). Ultimately, this means that faster updates made individuals more engaged in processing the information, suggesting that cognitive elaboration is a "mediator in the relationship between recency of updates and credibility" (Westerman, Spence, and Van Der Heide 2013). Other studies have focused on predicting the credibility of posts on Twitter with tools that consider several features that may not be readily available for a common user of the site. Alrubaian et al. (2016) calculates public sentiment, popularity, and reputation to determine the credibility of a Twitter user. Castillo and colleagues looked at the best features to assess the credibility on Twitter. They tested this with a "supervised classifier" and "supervised learning methods." Castillo et al. (2011) suggest that some of the best features to assess credibility on Twitter are: the inclusion of URL, sources of a tweet being constantly active, having followers, and a number of retweets. Other studies suggest that, indeed, it is possible to find credible and newsworthy information by looking at the appropriate features (Castillo, Mendoza, and Poblete 2013). A 2012 study found that the same piece of information presented on a website and on the Twitter account of the same website can affect credibility. Information on the Twitter account was found to be less credible (Schmierbach and Oeldorf-Hirsch 2012). Another study carried out a comparison between real people and an automatic system to see how they would evaluate information. It turns out people were much more inclined to believe in news found on Twitter than the automatic tool did (Shariff, Zhang, and Sanderson 2017). This may be due to people focusing only on surface-level features that Twitter presents, while the automatic system took into account deeper aspects which led to a better prediction.

3.3.2 Facebook

Li and Suh proposed and tested potential factors that could affect the credibility of information on Facebook. They focused on: medium and message credibility. For medium credibility, they found that dependency on the use of Facebook did not increase credibility that people had on

information on it. A positive relationship with credibility was found when it came to interactivity (ease of interaction and feeling of responsiveness) and medium transparency (independent information not associated with mainstream powers). For message credibility, the study found that the argument strength factor was positively connected to credibility, "even though information on Facebook-based platform is based on user-generated content, respondents hold the opinion that the information was well-planned and had some degrees of strength of persuasive arguments" (Li and Suh 2015). Furthermore, Facebook groups are a well-known feature of this SSN. Mansour and Francke (2017) studied credibility assessments that occur in this environment. It was found that the subject group, made up of mothers, was perceived by them as not a reliable source of information. There are many reasons for this, for example, participants said they saw the group as a way to socialize with others. The nature of the group may also have to do with this, as participants did not find information credible when it dealt with domains other than direct experience raising children. When it came to information regarding topics that were not related, members would search in other sites. The mentioned study does find ways in which people assess information through observing their specific characteristics. These include members' language use, style, expertise, life experience, own educational background, and similarities in worldview. Borah and Xiao (2018) looked at the importance of likes when it comes to Facebook. In accordance with other studies that tested health information posts, they found that a higher number of likes increases the credibility of information. These results are consistent with the bandwagon heuristic in Sundar's work (2008) and endorsement heuristic that Metzger, Flanagin, and Medders (2010) saw in their studies. People seem to judge information as more credible when others have already approved it. On the other hand, Keib and Wojdynski (2018) found that Facebook's cues (shares, likes, images) did not have a strong or consistent effect on credibility heuristics when testing news content. One reason mentioned by the authors is that "users evaluate Facebook posts on a more cursory basis" (Keib and Wojdynski 2018).

3.3.3 YouTube

Studies on YouTube expand on the previous research by focusing on audiovisual characteristics. Michalovich and Hershkovitz researched factors may affect the credibility of videos that present scientific information. First and foremost, they found that video quality was a significant characteristic for determining credibility. These findings corroborated what was also observed in previous research on online videos (Chen et al. 2017). Source attributes of the

presenter within the video also appear to play a role. The presenters perceived "benevolence" was positively associated with his credibility. In addition, the bandwagon heuristic was found not to be a strong factor in this study. This is possibly because experienced users of YouTube could have developed some skepticism towards videos with high amounts of views. As a participant stated: "others were influenced by the video… I am more experienced and therefore less gullible" (Michalovich and Hershkovitz 2020). Some participants in the study searched the internet for information presented in the video (thus showing more interest and higher cognitive processes) which reduced the effects of peripheral cues such as presenter attributes and number of views. The authors then suggest that both central and peripheral processes may take place simultaneously at varying degrees to determine the credibility of information.

Booth and Trauth (2019) studied how teenagers evaluated information on YouTube videos in several aspects. Participants disliked the presence of too many advertisements and negative language of the presenter, both of which decreased the video's credibility (Booth and Trauth 2019). These findings are similar to Michalovich and Hershkovitz's which showed that benevolence (or perceived good intentions) of the source increased credibility. Furthermore, quality of the video was once again highly valued as a characteristic that made videos more credible. The bandwagon heuristic in this study was supported, as participants agreed that the higher number of views meant the video was more reliable.

Xiao, Wang, and Chan-Olmsted (2018) dove more into the presenters of the videos, which due to the increasing popularity of user generated content on SNSs, are now known as influencers. In other words, the study focused on source credibility in the context of today's digital media consumption and advertisement. Several heuristic cues were found to affect the credibility of influencers, these were: expertise, trustworthiness, homophily, social advocacy and interactivity (Xiao, Wang, and Chan-Olmsted 2018). Many of these heuristic cues (peripheral) were, however, rendered insignificant when systematic (central) cues for credibility were included in a second model. These specific cues were argument quality and involvement. The researchers did find an interrelation between some heuristic (peripheral) and systematic (central) cues that had an additive effect to credibility, which supports the findings by Michalovich and Hershkovitz.

Research on credibility perceptions on SNSs is, in many instances, similar to previous studies done on website credibility. They both focus on the cues that prompt users to base their evaluations on. However, while presentation was the main theme observed that influenced

credibility on websites (appearance, user experience, navigability), for SNSs it was more about looking at specific features these sites offered. On Twitter, studies investigated recency of updates and prediction of credibility of posts and accounts. On Facebook, certain features were explored like how credibility is assessed in a group environment. Other aspects such as visual elements like the number of likes or whether dependency on the application were also seen to affect evaluations of credibility. YouTube provided further insights, as it presents some audiovisual elements like TikTok offers. Quality of video, characteristics of the presenters, and information were explored on this SNS. All in all, this compilation of credibility studies and approaches provides a strong base for understanding how people may evaluate information online, from its evolution from websites to applications.

4. Methodology

So far, a review on how credibility has been researched in websites and different SNSs has been carried out. These concepts and methods will be adapted and applied to TikTok to attempt to answer the thesis question. Without previous research on evaluation processes and credibility done specifically about this application, the main goal for this research will be to identify phenomena that occur on TikTok and suggest possible explanations.

The instrument chosen for this study is a survey, which will prompt participants to assess credibility elements of informative TikTok videos. Surveys have many advantages (Wright 2006) because they are used to reach out to people who otherwise would be difficult to. This is especially important as this research was being conducted during the Covid-19 pandemic. This made face-to-face meetings unfeasible. Another benefit suggested by Wright, is that surveys save time and costs. Furthermore, due to the nature of the research, participants needed to be shown videos, something that is possible with online survey tools. Finally, the data analysis is easier to carry out since Google Forms (the platform used for the survey) provides the option to export the results as spreadsheets.

4.1 Video selection and descriptions

Three videos have been selected from TikTok to be used in the survey. They are informative videos, in the sense that they are intended to communicate information to the viewer about something. It is important to reiterate that the goal of the research is not to find out whether people believe on fake information on TikTok. The focus is to uncover mechanisms and factors that influence people's evaluations. The content selected may present real, partially real, incomplete, or false information. Nonetheless, these are examples of the thousands of videos on TikTok that present information as facts, not as opinions, comedy, or fiction.

Covering all the different styles of videos that could be considered informative on TikTok is an unachievable task for the scope of this research. For this study, videos that presented noticeable differences have been sought to understand how people would react to them. It is a small selection, however by looking at these specific examples, some mechanisms as to how information is processed may be identified. When it comes to the characteristics of each of the videos, what remains constant for all three is that: they are informative, in English language, and

have a presenter who is communicating a message. They vary in origin, topic of information, presenter characteristics, tone, length of video, effects, sounds, music, among others.

To keep the experience of watching the videos as close as possible to the way they are intended to in the application, they have been screen-recorded from a smartphone. This is because when videos are downloaded or exported directly from TikTok, there are visual pieces of information that are not shown. These could potentially influence credibility judgements. These elements include likes, shares, comments, hashtags, and sound names. Following are detailed descriptions of the videos.

4.1.1 Video A

The topic of this video is the existence of an application in Iceland that tells users if they are related. This is to prevent them from engaging in incestuous activities. According to the information provided in this video, the reasoning is that Iceland is a small country with a small population, so the chances of hooking up with a distant relative are high. By "bumping" phones, people can know right away if they are related to each other. The application achieves this because it has the genealogical information of hundreds of thousands of Icelanders that goes back 1200 years.

This topic is presented as an unusual solution to an unusual problem that apparently makes sense in the context of where it is coming from. The way the presenter talks about this topic implies that, at least his audience, is not familiar with this information. However, it is something they may find interesting (or even strange). In essence, this video tells the audience about specific characteristics of a culture and society that may be different from their own.

The presenter of this video is a young male, likely in his mid to late twenties. His apparel seems very casual. He is wearing a cap backwards and a t-shirt. He does not seem to be very well groomed. He has an irregular beard and mustache.

The phone or camera seems to be still in place (as opposed to being handheld). It is shooting in a portrait format, meaning that it is placed in a vertical position. The presenter of the video is situated quite close to it and in a straight angle, so his head and upper torso are visible. The presenter looks straight into the camera for the entire duration of the video.

The video is made up of several takes. It cuts between each sentence or statements made by the presenter. It also makes use of the green screen effect that TikTok offers. The background continuously changes to show images that illustrate what the presenter is talking about. The presenter is positioned in the lower part of the frame, while images that illustrate the application appear above him. There is background music that plays all throughout the video. This track is called "Classical Music," which could be considered to have an intellectual tone.

4.1.2 Video B

Video B is about the height of Natives when Europeans arrived to what would be called the Americas. According to the video, Native Americans were the tallest people in the world and the reason is because of their good nutrition.

This information is apparently closely connected to the presenter of the video. The person claims that she is Native American, calling the people who the Europeans encountered as her ancestors. She starts off the video by saying "did you know…" as a way of revealing information that is not commonly known by most people. Her tone and way of presenting this information make it seem as she is proud of her ancestry. In addition, it sounds as if she is trying to put forward a specific narrative about the quality of life that Natives had before Europeans arrived.

The presenter is a female who could be in her thirties. She has piercings on her nose, ear stretchers, and a necklace. She also seems very casual, wearing a hoodie, and does not seem to have much make-up on.

This presenter recorded the video in a portrait format and is handholding her phone. As opposed to the first video, this one is just one take (not edited from several cuts). This person seems to be filming at her own home. She is not using a green screen effect, so her real background is visible. The room seems to be empty, but there are a few boxes and luggage around, which could mean she has just moved to this place. She is recording from a higher angle, so she points her phone down at herself. The video has title boxes added to it, which serve as closed captions for everything she says. These boxes are placed right at the center of the screen all throughout the video.

4.1.3 Video C

Video C explains that, according to official information from the CDC and Red Cross, the Covid-19 virus was present in the US before previously thought. This is because blood donation samples from December 2019 were found to have antibodies for Covid-19. According to the video, this would be before China officially reported their first case.

The presenter of this video looks like an official news reporter. His intonation and expressions align with the traditional TV news conventions. He presents information with ease and no hesitation. This person wears a black coat, sweater, and mask which covers his mouth. Something to note is that the account that put this video forward is CBS News. This is confirmed because it has the verification tick next to it.

The filming of this video happens outdoors, almost like how TV reporters report back to the station during a newscast. The location, however, is unidentifiable as it seems to be a common street with noise from cars that are passing by. In this case, the presenter is placed a bit farther from the camera than the other videos. It is hard to tell if it was filmed with a phone in portrait format, or if it was filmed with a real camera and then cropped and centered to be posted on TikTok. In addition, this video is a long take without any cuts. Like video B, it also has title boxes with closed captions for the things the reporter says.

Following are more details about the videos used in this study:

Video A	**Author:** @sherifesahly
	Topic: "Incest" app in Iceland
	Duration: 35 seconds
	Date published: 10-11-2020
	Date retrieved: 03-12-2020
	Link: https://vm.tiktok.com/ZMJW8bnE7/
	Comment: Effect "Green screen" is used, presenter illustrates what he is talking about with pictures in the background. A sound is used, called "Classical Music"

Video B	**Author:** @diamond_dog74 **Topic:** Native Americans' height when Europeans first arrived **Duration:** 13 seconds **Date published:** 28-09-2020 **Date retrieved:** 03-12-2020 **Link:** https://vm.tiktok.com/ZMJW8G75R/ **Comment:** No effects or sounds are used
Video C	**Author:** @cbsnews **Topic:** Covid 19 antibodies found in blood donations from December 2019 in the US **Duration:** 30 seconds **Date published:** 02-12-2020 **Date retrieved:** 03-12-2020 **Link:** https://vm.tiktok.com/ZMJW89Jxj/ **Comment:** Verified account (has tick next to its name). No effect or sounds are used.

4.2 The survey

The first part of the survey presents questions about age, level of education, and frequency of use. These questions are important, not only because of the clear demographic distinctions, but as Andrew Flanagin and Miriam Metzger found, credibility judgments may be influenced by level of expertise, and time spent using the internet (2010, 107).

Next, participants are presented with a video from TikTok. The video can be watched once or as many times as they wish, however this is not stated in the instructions. The reason for this is to not encourage or discourage the number of times participants should watch the video (which may influence their judgement). This is also done to get a closer experience to watching TikTok videos on a smartphone, where users can do so as many times as they want (although on the application those videos play automatically in a loop).

Participants are then asked to give a credibility rating to the video and a detailed explanation for it. This is a critical part of the study, as this open-ended question will be carefully analyzed to find how people are processing these informative videos. Recurring themes, differences and/or similarities in people's reasonings will be recorded to get a sense of why they judge videos as more or less credible. Alongside gathering this qualitative-type data, other questions have been added to assess some elements that make up credibility in the contemporary media environment. Scholars have focused on the classification and measurement of credibility and many of its subsequent components in an online context. They propose that credibility can be divided into three dimensions: source credibility (presenter, not evidence), message credibility (information itself) and medium credibility (Metzger et al. 2003). This research will focus on the first two. Medium credibility will be left aside this time, as the current goal is not to compare how information is perceived on different platforms (like TikTok in contrast to YouTube video). The current research will focus solely on how people react to informative videos within the TikTok context and environment.

Source credibility itself is divided into trustworthiness and expertise. So, two questions have been added to the survey asking for a rating for these components. Traditional measures of trustworthiness and expertise usually involve measuring the scores of several scales, like safe-unsafe, just-unjust, kind-cruel, trained-untrained, among others (Berlo, Lemert, and Mertz 1969), (McCroskey and Teven 1999). However, for the purposes of this study, taking all those scales into account would not make much sense, as the risk of participants not completing the surveys may increase due to the large number of questions. Furthermore, while these questions would provide more accurate measurements of source credibility, the mechanisms behind why people rate videos in a certain way would not be explained, which diminishes the gains that asking all these questions may get.

In the case of message credibility, research has been much less developed. Metzger and Flanagin stated that credibility scales for online spaces should be developed based on information quality studies, rather than other more traditional types of measurements (Metzger et al. 2003). More recent studies have taken up this task and have come up with interesting results. For this survey, questions regarding message credibility will be based on research done by Appelman and Sundar (2015). They greatly simplify the process while still keeping it theoretically sound. Appelman and Sundar's study determines that by asking people to what

extent content is "accurate, authentic, and believable," message credibility can be determined. This specific question has been added to the survey.

The answers given by the participants will serve as points of cross reference amongst themselves. The close-ended questions and question requiring detailed explanations should provide an understanding for how participants assessed the informative value of the videos.

The structure of the survey is summarized in the following table:

Part 1	Background	- Age - Education - Frequency of use
Part 2	Overall credibility (for each video)	- Credibility rating - Explanation (open/ended)
Part 3	Specific elements of credibility (for each video)	- Source Credibility - Trustworthiness - Expertise - Message credibility - Accurate, authentic, and believable

4.3 Priming effect

In psychology, the priming effect refers to the influence that a stimulus can create in an individual's responses when presented with following stimuli. To obtain more reliable results, the order of the videos presented was randomized. This specific setting is not available in Google Forms, so a different approach was taken to ensure a mitigation of the priming effect. The original survey, which presented the videos in the order A-B-C, was duplicated five times. Each of these copies was assigned a different order for showing the videos to cover all the possibilities, these are: ACB, BAC, BCA, CAB, CBA. By getting a similar number of responses for each of these surveys, the same effect as of randomizing should be achieved. At the same time, this will allow for the observation of exactly how each order affects the credibility of the

videos. For example, video B may get a different credibility rating when presented first than when presented last.

4.4 Ethical Guidelines

The survey complies with the Internet research guidelines put forward by The National Committee for Research Ethics in the Social Sciences and the Humanities (NESH). Participants have been informed that it is a voluntary survey for people over 18 years of age. No sensitive or private information has been collected, such as addresses, names, gender, or emails.

4.5 Recruitment

The survey has been distributed on social media, primarily Facebook. First, a post was made on my private account, therefore it could only be seen by people I have friended on this SNS. Most of my friends are people of similar age (in their twenties) and are mostly located in the US and Europe.

To gather more responses, I also published the survey on Facebook groups that I was already a member of. These included a student housing group, two groups for University of Bergen's international students, and a group for expats in the city of Bergen. People in the student housing group are mostly Norwegian. In my personal experience, the international student groups on Facebook are formed from mostly European countries. Their age ranges between 19 to 30. Finally, the groups for expats in Bergen come from Spain, Poland, Eastern Europe, and the Middle East. People in this group seem to be older than the college age.

To get more responses, the surveys were also shared on Facebook groups that focus on students seeking participants for this exact purpose. These groups are open forums to post surveys, get responses, and in return fill out the surveys of other members. These groups are large with tens of thousands of members and constantly growing. They also have members from all over the world, especially Europe and Southeast Asia. Members of these groups work on their bachelor, Master, and PHD final papers, so their ages are likely over 21.
Finally, I also reached out for help to the heads of the Digital Culture program at the University of Bergen. They helped by sending out the link to students in the program. These are mostly Norwegian students of typical college age.

It is important to emphasize that this sample is by no means significant to draw general conclusions on this subject. Other groups of people within different cultural contexts and topics may have dissimilar ways to evaluate the information from the videos in the survey. The sample is being used for this master's thesis and is valid for what it intends to explore, however it is limited in its scope. In total there were 137 participants. These were distributed almost equally throughout all the orders in which the videos were presented.

Video Order	ABC	ACB	BAC	BCA	CAB	CBA
Number of survey takers	22	22	23	21	24	25

4.6 Demographics

Two questions of the survey aimed at looking into the participants demographic characteristics. As expected, due to the recruitment process, most of them were between 18 to 30 years of age, with at least undergraduate education.

Age: 18 to 24= 102; 25 to 30= 22; 31 to 40= 9; Over 41= 4
Education: Bachelor= 72; High school= 41; Master= 22; PHD = 2
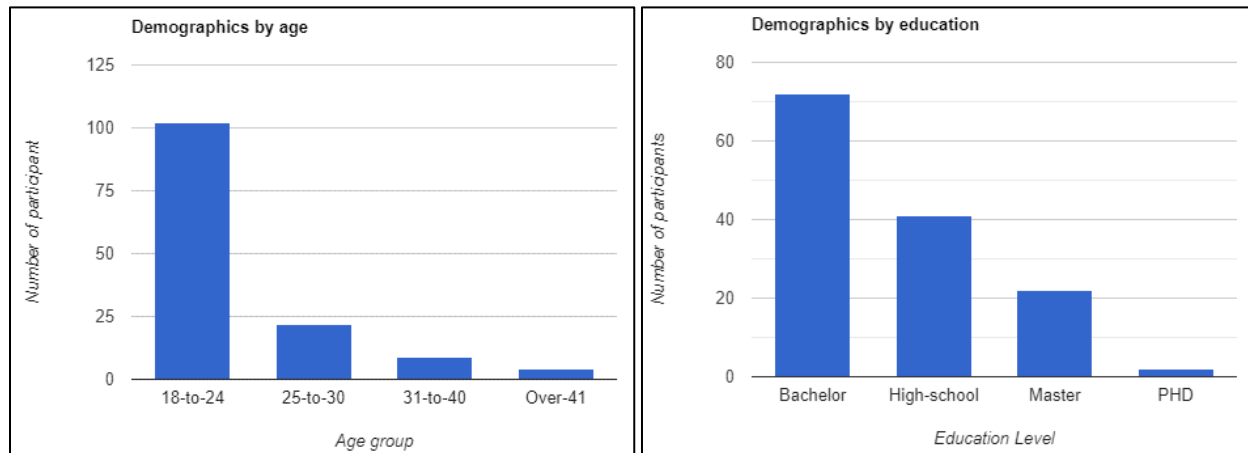
4.7 Data Analysis

The data that was received in this study is of both qualitative and quantitative nature. They are intended to complement each other in helping uncover possible mechanisms and processes that participants engage in when evaluating the TikTok videos.

First, the quantitative data was processed and organized under several categories. Statistical analyses were carried out to find the means, median, modes, and standard deviations. Also, t-tests were run to find specific responses that were significantly different when compared to one another. This was done for the whole recorded sample, as well as for specific portions of it. As explained earlier, the data were divided into groups according to video orders (ABC, ACB, BAC, BCA, CAB, CBA) and responses provided by the participants (age, education, frequency of use). For comparisons among the three videos, the Anova test was used. When looking at specific portions of the sample, the Welch's t-test was used. These different t-tests were employed because they either compare three or more sets of data (Anova) or just two at a time (Welch's t-tests). For both the Anova and Welch's t-tests, a significant p-value of less than 0.05 was the main factor to determine if the changes were significant among credibility scores.

The qualitative data were the responses obtained from the open-ended questions. Here, participants explained why a video was more or less credible in their own words. These responses were recorded in Google Forms, exported into a spreadsheet, and finally moved to NVivo in a local computer. NVivo is a software available for UiB students who want to carry out qualitative type of studies. This has been a great tool for coding the responses, making it much easier to find themes, similarities, and differences in how people view and evaluate the videos. The coding process led to identification and grouping of different themes which were consistently mentioned by the participants. As coding proceeded, it was evident that participants' responses fit very well with the dimensions of credibility presented by Metzger et al. (2003). The classifications will be defined and explained in more detail in the following chapter.

In addition, it is useful to mention that after coding the responses, the number of comments made do not match the total number of responses made by participants in the survey (which were 137), this is because in many cases one response contained in it parts that belonged to one or more themes.

The use of both quantitative and qualitative data obtained in the survey will help determine how people evaluated the videos. Observing the statistical analyses will give a clear view of where significant differences occur, while the textual responses will help clarify and explain the reasoning behind the differences in credibility evaluation scores.

5. Results
5.1 Quantitative results

This section will present the quantitative results, which gather the data from the close-ended questions. Scores have been analyzed as a whole and in different groupings to provide an insightful view on the differences of how TikTok videos are evaluated.

5.1.1 Video Order

As mentioned in the methodology section, surveys were separated into six different groups: ABC, ACB, BAC, BCA, CAB, and CBA. Each of these surveys had a similar number of participants, between 21 and 25. Calculating the results of all six surveys combined provided the study with what what observed in the results for the complete sample (see Appendix: 3); however, when comparing surveys based on the order in which videos were s how, it was found that credibility scores changed.

The 137 surveys were separated into three groups, each having between 44 and 49 respondents. They were grouped into surveys that started off by showing video A (ABC, ACB), video B (BAC, BCA), and finally starting with video C (CAB, CBA). The mean, median, mode, and standard deviations were calculated. The Welch's t-test was used, as these comparisons were only carried out between two groups at a time.

After reviewing the results, the biggest difference across all the scales happened with video C, which changed significantly when it was shown first and when it was not.

Video C **(Surveys starting with video A=44)**	Mean	Median	Mode	SD
Overall credibility	3.75	4	4	1.01443076
Presenter trustworthiness	3.795454545	4	4	1.090754922
Presenter expertise	3.136363636	3	3	1.304569948
Information quality	3.659090909	4	4	1.033017297

Video C **(Surveys starting with video B=44)**	Mean	Median	Mode	SD
Overall credibility	3.681818182	4	4	1.115904624
Presenter trustworthiness	3.772727273	4	4	1.008421201
Presenter expertise	2.886363636	3	3	1.333223216
Information quality	3.681818182	4	4	0.958989955

Video C **(Surveys starting with video C=49)**	Mean	Median	Mode	SD
Overall credibility	2.612244898	3	2	1.076574942
Presenter trustworthiness	3.102040816	3	3	1.045723393
Presenter expertise	1.87755102	2	2	0.857142857
Information quality	2.714285714	3	2	1.099242163

Video C **Welch's t-test**	P-value **(Comparing surveys that start with video A with surveys that start with video C)**
Overall credibility	0.000001007
Presenter trustworthiness	0.002429099
Presenter expertise	0.000000695
Information quality	0.000047554

Video C **Welch's t-test**	P-value **(Comparing surveys that start with video B with surveys that start with video C)**

Overall credibility	0.000009714
Presenter trustworthiness	0.002232224
Presenter expertise	0.000055420
Information quality	0.000017662

As the statistical analysis shows, video C's credibility scores were significantly boosted whenever it was not shown first. These changes occurred for all the scales (overall credibility, presenter trustworthiness, presenter expertise, and information quality)
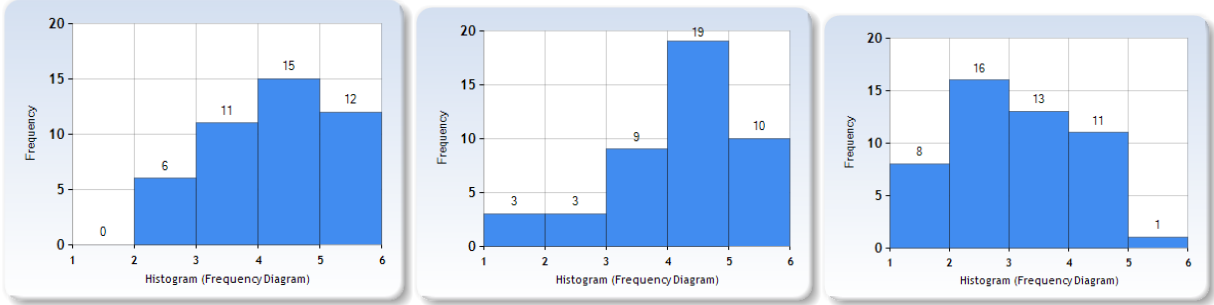
Histograms show distribution of overall credibility scores for video C, when surveys start with video A, B and C, respectively from left to right.

Another significant difference was noticed with surveys that started with video B, which also boosted the overall credibility score of video A, however the same effect did not occur with the rest of the video's credibility elements.

5.1.2 Revisiting overall credibility and its elements

After finding that the order of the videos can influence the scores given by participants, it was necessary to look back at the comparisons made between the three videos. This time a different approach was taken to select the best possible data to be studied. The complete sample of participants cannot be used, as over 60 percent of the responses that were provided could be subject to influence by showing one or two other videos beforehand. For instance, for surveys with the video order ABC, responses for videos B and C would not be good sources of data

because video A has already been shown first. To mitigate as much influence as possible in the results, the sample sizes were narrowed to compare untainted responses to each other. Thus, only the responses for video A, where video A was shown first (survey orders ABC and ACB), were taken into consideration, the same was done for video B (orders BAC and BCA) and C (orders CAB and CBA). "Untainted" in this context means as far as there is control within this study. Participants have several things that could influence their judgements, such as their own online activities that may have happened at the time of taking this survey.

To put it in another way, the videos will be compared to each other by using only the responses where each of them were seen first.

Video A (First seen only)	Mean	Median	Mode	SD
Overall credibility	2.340909091	2	2	1.033017297
Presenter trustworthiness	2.477272727	2	2	1.04522472
Presenter expertise	1.795454545	2	1	0.851252032
Information quality	2.568181818	2	2	1.065259599

Video B (First seen only)	Mean	Median	Mode	SD
Overall credibility	1.840909091	1.5	1	0.986965795
Presenter trustworthiness	2.568181818	3	3	1.086871492
Presenter expertise	1.818181818	2	1	0.921897116
Information quality	2.363636364	2	2	1.101603674

Video C (First seen only)	Mean	Median	Mode	SD
Overall credibility	2.612244898	3	2	1.076574942
Presenter trustworthiness	3.102040816	3	3	1.045723393
Presenter expertise	1.87755102	2	2	0.857142857
Information quality	2.714285714	3	2	1.099242163

An anova test was done to find out whether there were significant differences among the newly defined groups.

Anova test (First seen videos only)	P-value (Comparing A, B, C)
Overall credibility	0.001903291
Presenter trustworthiness	0.009780082
Presenter expertise	0.896043239
Information quality	0.302551668

As shown in the chart above, the results differ from the ones that use all the responses (see Appendix: 3). While the p-values for overall credibility and presenter trustworthiness remain markedly different, with less than 0.05, the presenter expertise and information quality tests do not show the same level of significance as they did comparing scores coming from the whole sample.

Further analyses comparing the videos two at a time with the Welch's t-test (as opposed to all three at once) confirmed that for presenter expertise and information quality, there is no clear differentiation between scores.

5.1.3 Frequency of usage

For this analysis, survey responses were divided into groups based on how often participants stated they used the application. A large portion of them (37%) responded to have never used the application; therefore, comparisons were made between this group against the others who had used TikTok to some extent in the past.

Frequency of Usage	Participants
Everyday	39 (28%)
3 to 4 days	14 (10%)
Once a week	11 (8%)
Rarely	22 (16%)
Never used it	51 (37%)

The first comparison was made between the group that had never used TikTok (made up of 51 respondents), against all the other groups combined (86). The same statistical analyses as in the previous sections were performed. The results showed significant changes, especially for video B.

Video B **(Never used TikTok=51)**	Mean	Median	Mode	SD
Overall credibility	1.666666667	1	1	0.972967968
Presenter trustworthiness	2.117647059	2	1	1.142752096
Presenter expertise	1.37254902	1	1	0.662141505
Information quality	1.823529412	2	1	0.994100243

Video B (All except never used TikTok=86)	Mean	Median	Mode	SD
Overall credibility	2.069767442	2	1	1.03799238
Presenter trustworthiness	2.569767442	3	3	1.068706724
Presenter expertise	1.941860465	2	1	0.998288549
Information quality	2.38372093	2	2	1.053493959

Video B Welch's t-test	P-value (Comparing "Never used it" group with the rest)
Overall credibility	0.024144578
Presenter trustworthiness	0.023956893
Presenter expertise	0.000101786
Information quality	0.002325331

There were significant differences in all the scales comparing video B from the group who had never used it and the rest of the sample. Survey participants who had never used TikTok gave video B lower credibility ratings than the rest of the groups combined. Furthermore, it is also important to note that the ratings for presenter expertise for videos A and C were also significantly different in this comparison (not illustrated in charts). The group who had never used TikTok gave both lower ratings than the rest.

Other tests provided similar results to the one above. This time the groups with participants who used it everyday (39) and who used it 3 to 4 days a week (14) were combined. This was done because they represent opposite characteristics to the group who had never used TikTok. In addition, the number of survey respondents would be almost the same, with 51 for those who had never used it, and 53 for the combination of every day users with 3-to-4-day users.

Video B (Everyday + 3 to 4 days=53)	Mean	Median	Mode	SD
Overall credibility	2.113207547	2	1	1.085930607
Presenter trustworthiness	2.471698113	3	3	1.15365262
Presenter expertise	1.886792453	2	1	1.068074784
Information quality	2.339622642	2	2	1.108418767

Video B Welch's t-test	P-value (Comparing "Never used it" group with "every day" and "3 to 4 day" users)
Overall credibility	0.029335373
Presenter trustworthiness	0.119017235
Presenter expertise	0.003928278
Information quality	0.013949704

As it can be seen on the charts, all except for the presenter's trustworthiness results show significant differences, with participants who had never used TikTok giving lower credibility scores than every day and 3-to-4-day-users.

There were other important results in this analysis coming from video A and C (not illustrated in charts). The presenter expertise score was significantly lower for video A with the group who had never used TikTok. Unlike the previous comparison, there is a significant difference in the score given to presenter trustworthiness for video C with the groups who had never used TikTok giving it a lower score.

So, in both cases, when the group of participants who had never used TikTok (51 participants) were compared in separate instances to everyone else (86 participants) and then to those who used the application the most (53 participants), significant differences in evaluation scores were found. Overall, results show video B was the video whose credibility ratings were reduced most and more consistently when comparing groups which had experience with TikTok as opposed to those who did not.

5.1.4 Age

As stated in the methodology chapter, most participants were in the age group of people between 18 to 24. With so many participants in the same group, it would be hard to draw conclusions when comparing them to the other groups, especially since some of them were very small (41+ was only 4 participants).

Age range	Participants
18 to 24	102 (74%)
25 to 30	22 (16%)
31 to 40	9 (7%)
41+	4 (3%

Despite this clear disparity, analyses were run for the 18 to 24 age group and all the rest of the age ranges combined into one group. Means, medians, modes, and standard deviations were calculated; nevertheless, the result of the t-test provided with no significant difference for any of the videos and their credibility scales.

5.1.5 Education

Something similar happened when comparing credibility ratings based on education level. Responses were classified into different groups: high school, bachelor, and master. There were only two participants who stated to be at the PHD level of education, and so they were not taken into consideration for being a too reduced of a sample portion.

Education level	Participants
High school	41 (30%)
Bachelor	72 (53%)
Master	22 (16%)
PHD	2 (1%)

These groups were paired against one another, comparing all their credibility scale ratings. There were no significant differences found in the large majority of these comparisons. Only in a couple of instances a p-value of less than 0.05 was found. One occurred when comparing the bachelor and high school groups (not shown in charts). In this instance the high school group rated the presenter of video C as less trustworthy than the bachelor group did. The second time occurred with video B (not shown in charts), where the master's group rated the presenter of video B as more trustworthy than the bachelor group did.

5.2 Qualitative results

Most of the responses to the open-ended question **"Explain why you think the video was more credible, less credible, or neither. Please try to be detailed"** fit with Metzger et al.'s (2003) classification of the elements of credibility: source credibility, message credibility and media credibility. Some participants made comments which fell under more than just one of these aspects; therefore, on multiple occasions comments were broken apart and placed under more than one of these elements. These three major categories (source, message and media) are explained in detail by Metzger et al.

5.2.1 Categories explained

Source credibility deals with the person who is communicating the message (which in this study have been referred to as the "presenter" of the videos). Source credibility is within itself composed of dimensions. These are trustworthiness, expertise, and dynamism or attractiveness. Trustworthiness has to do with how honest and well-meaning the source is. Expertise is about how knowledgeable and capable the source seems to be about the message

they are communicating. Finally, dynamism or attractiveness is about likeability, or the appeal that a source can have with the person who perceives it. According to Metzger et al., source has been the most studied element of credibility.

On the other hand, message credibility becomes more relevant than source credibility "when issue involvement, knowledge, and personal relevance are high," as well as when the message receiver does not have enough knowledge about who the source is (Metzger et al. 2003). Several factors may affect message credibility assessments. Message structure plays an important role, as organized or unorganized information can have positive or negative effects on credibility. Another factor has to do with message content, which is the quality of the information. In other words, it is about "a message's accuracy, comprehensiveness, currency, reliability, and validity" (Metzger et al. 2003). Message discrepancy is also detailed by Metzger et al. as a key aspect of message credibility. They define it as the "distance between the perceived position of the source and the pre-message position of the receiver ... Evaluations of credibility are higher when message discrepancy is low" (Metzger et al. 2003). This discrepancy makes people believe more in things that they are familiar with, while disregarding information that does not conform with their established beliefs. Finally, presentation and language style are other factors that increase or decrease message credibility. Tones that seem opinionated, for example, may lead to a lower the credibility of a message.

The last element that qualitative data has been categorized in, is media credibility. This element presents two aspects: technological and structural features. Technological features involve changes in how the media is consumed, a specific example provided by Metzger et al. are TV and newspapers. TV presents moving images and sound, with programs running on tight schedules, while newspapers are mostly text and still images in physical form (paper). Structural features refer to how the media is perceived as an industry. This point leans more towards the established reputation of the medium. Following the example above, TV (in the US) is perceived as more democratic and less biased than newspapers because it reaches large audiences and could be subjected to more criticism by the public if strong biases are noticed. Newspapers, on the other hand, are seen as more biased because they express opinions and interests of smaller groups of people for more niche audiences.

5.2.2 First and secondary responses

In addition to classifying the participant's responses based on credibility elements, further distinctions have been made based on the quantitative results of this study. Significant differences occurred when presenting videos in different orders, thus showing the presence of the priming effect. To get more accurate impressions of the videos by the participants, responses were classified into first and secondary.

First responses correspond to answers given by participants for the first video they were shown. For example, if a survey showed the videos in the order CBA, all the responses for video C would be considered first responses. These responses are not influenced by previous videos, nor questions on the survey (as participants do not know what to expect). Therefore, first responses should be better data to obtain.

Secondary responses are those that may have been affected by the priming effect. This thesis focuses on evaluation of information and credibility, not priming effect. So, the influence of the first video to the second, and then their combined effects on the third video have not been studied. Therefore, all the responses for the second and third video are considered as secondary responses. In the example above (surveys with a video order CBA) both responses for video B and video A would be classified as secondary responses. Moving forward, first responses will be the focus when analyzing and comparing qualitative data from this study.

5.2.3 Response classification examples

To better illustrate the classification that has been described, a list with some classified responses is presented below. First, the participant's comment (or partial comment) is shown in italics. Then in between parentheses comes the category in which it falls under. Examples of the varying comments have been given for all three videos.

Video A

-*"He presented his tiktok with evidence and elaborations of the app"*
(Message credibility - Evidence)

-"*The idea of the app sounds ridiculous! How can they upload all that personal biological data to the app?*"
(Message credibility - Discrepancy)

- "*It is clear that the individual in the video is just reading the script and regurgitating information that they picked up somewhere else on social media. The individual does not exude any sense of expertise or professionalism and borders on not even demonstrating recognition or understanding of his own words. He is a very weak public speaker.*"
(Source credibility - Expertise)

- "*It's an unverified account. Everyone can post what they want on the internet. Could be true. Could not be true.*"
(Media credibility - Structural features)

Video B

- "*no citations or facts…*"
(Message credibility - Evidence)

- "*...a very weak argument (good nutrition alone does not contribute to height, as that is determined by a mixture of hereditary/genetic and environmental factors).*"
(Message credibility - Discrepancy)

- "*...I also have no clue who this person is from watching this video alone, which makes the credibility even lower. What she said could be entirely true, but it could also have been some completely made up facts…*"
(Source credibility - Trustworthiness)

- "*It's from a girl on TikTok ... which is hardly extremely credible. It's not on a credible news show*"
(Media credibility - Structural features)

Video C

- *"The video is from cnn wich is a credible soruce"*
(Source credibility - Expertise, Trustworthiness)

- *"It was not credible because it did not give us any scources"*
(Message credibility - Evidence)

- *"Generally american news tend to spew the facts a bit, so one would have to do some research on the topic before one form their opinion."*
(Message credibility - Discrepancy)

- "*Videos on the internet are hard to trust"*
(Media credibility - Structural features)

- *"...The account is verified, as you can tell by the blue check-mark."*
(Media credibility - Technological features)

5.2.4 Distribution of responses

Next are charts for each of the videos showing the number of times participants' responses fell under each of the categories. It is important to note that the total amount of responses that were made in the survey and the total amount of comments classified under each category do not match. Many of the participants' comments were separated into parts which fit under different themes. The charts only consider first responses because they are the most meaningful and authentic impressions that were obtained during this research.

When it came to the message credibility category, it was clear that a distinction had to be made within it. Many of the participant's responses denoted specific aspects of this element. So, unlike the others, message credibility is further divided into the following: evidence, discrepancy, and presentation (these subcategories were already explained above, when discussing the main categories).

Video A (First responses)	Number of Comments
Source Credibility	9
Message Credibility	Evidence= 16 Discrepancy= 15 Presentation= 4 = 35
Media Credibility	6

Video B (First responses)	Number of Comments
Source Credibility	14
Message Credibility	Evidence= 18 Discrepancy= 5 Presentation= 4 =27
Media Credibility	8
Video C (First responses)	Number of Comments
Source Credibility	13
Message Credibility	Evidence= 10 Discrepancy= 7 Presentation= 4 I= 21
Media Credibility	17

For video A, most comments fell under the message credibility category. Video B also has most of its comments focusing on message credibility, specifically on the evidence aspect of it. For video C the comments were much more evenly distributed under the different categories.

5.2.5 Explaining qualitative evaluations made by the participants

In this section the comments for the three videos will be reviewed and explained in the context of the categories they have been placed under. Associations will be made regarding how participants evaluated the content, whether more credible or less credible.

Video A's textual evaluation
Source credibility
When it came to source credibility, comments in general showed a disapproval or uncertainty about the presenter. Comments such as "*he sounds like an idiot*" or "… "*it didn't seem professional*" show that participants did not have great confidence about the presenter.

Message credibility
Comments about the video's information seem to both evaluate it positively and negatively. For example, many of the comments simply claimed that there was a lack of evidence: "*No sources given,*" "*I would not believe a source without any references.*" On the other hand, there were some participants who thought the information's evidence was sufficient: "*He presented his tiktok with evidence and elaborations of the app,*" "*... the use of actual images of an app makes it more credible.*" Other participants regarded the information as credible or not based on their own experience and previous knowledge (message discrepancy). Positive comments seem to show an agreement between the position of the participant before receiving the information and after. This is illustrated by these comments*: "I have heard of this app before, so I assumed he was also correct", and "the only reason I gave the video any credibility at all is because I have received this information from other sources in the past."* On the same note, participants disregarded the information when it was not similar to their view of the world. *"I dispute the ability to trace back genealogy 1200 years with such precision,"* and *"It would be violating the rights/privacy of people if such apps exist"* are some examples which illustrate this occurrence. When it came to the presentation, all the comments suggested negativity towards video A. This can be seen in the following comments: *"unprofessional presentation," "too vague," "too fast."*

Media credibility

Comments that were related to media credibility referred to a range of different topics. One of them was the reputation that content has on the internet. A participant claimed that there was a possibility that the information could be fabricated; therefore, showing distrust or a level of uncertainty about the content. The participant wrote: *"a lot of those screenshots could be faked."* Other comments pointed directly at TikTok and social media platforms as being a main factor for how they evaluated the content. This is shown in these comments: *"The fact it's some random bloke on TikTok makes it less credible"*, and *"I don't trust social media or til timers (tiktokers) for information. It's just revamped vine."* A few participants touched upon technological features. They talked about a lack of verification of the account or how they could just easily look up the information elsewhere through an internet search.

Video B's textual evaluation
Source Credibility

Comments under this category showed a disapproval of the presenter. A large part of the remarks stated that they gave it a low credibility evaluation because they did not know who the person was: *"the video was posted by an anonymous person…," "... it was just a random person chatting," "I think the video is less credible because I don't know who this person is..."* Others claimed that she was biased or that she was sharing her opinions, and therefore not seeming trustworthy. There was, however, one comment which seemed more positive in its evaluation. *"I feel as though it was in the middle ground, as a native American herself I do partially belive what she I saying…,"* this may be more related to the attractiveness or dynamism aspect of source credibility, as the participant seems to find a commonality between them.

Message credibility

Like video A, a great part of the comments in message credibility point at a lack of evidence. They stated: *"I believe this is less credible as there are no sources or citations that can provide viewers more information," "there is no sources," "No academic source, but that's not to say it's not true."* Some participants both approved or disapproved the information, based on their own existing knowledge, showing low and high discrepancy. Some examples of that are: *"good nutrition alone does not contribute to height, as that is determined by a mixture of hereditary/genetic and environmental factors," and "I actually know that this fact is true so I may be biased."* When looking at the few comments regarding presentation style in this video, it

seems to have had a positive effect in credibility evaluations of those participants: *"good quality (+) but weird nick (-),"* *"She spoke in a calm manner and stated a reasonable fact."*

Media Credibility

Almost all the comments in this category were directed towards TikTok. Participants showed a lack of confidence in the information provided due to it being uploaded to this platform. This can be appreciated in the following comments: *"It's from a girl on TikTok ... which is hardly extremely credible,"* *"Because its just a tik tok not credible at all 12 seconds of someone talking means nothing,"* and *"the medium doesn't lend itself to credibility."*

Video C's textual evaluation
Source Credibility

Credibility in the source for video C was different from the other two videos. Participants focused on the source, not as just the person that spoke in the video, but rather the organization that seems to be behind him. Many pointed at the account name for basing their evaluations: *"Because the account was an news publisher,"* *"It's made by CBS, a major news organization."* Out of all of these, only one participant did not seem to pay attention to the news organization responsible for the video, but rather focused specifically on the person shown in the video: *"I didn't see the face of the reporter. I am not sure if he is really a reporter."*

Message credibility

When it came to quality of information, participants repeatedly mentioned a lack of evidence to back the statements that the reporter was making: *"He doesnt really point to any believable sources,"* *"No evidence shown just a report,"* *"… he has no one from red cross or cdc to back up his claim with him."* Some participants showed high discrepancy towards the content presented, thus decreasing how much they thought it was credible: *"Never heard anyone else talk about this. It just seems a little far-fetched,"* *"I haven't heard this before and i imagine it would have been bigger news if it was credible."* On presentation style, only one participant stated*: "Bad journalistic work, no objectivity in the claims, and vaguely sources. News presented in a "entertainment" perspective."* This would imply that the way the reporter conveyed the message lowered the credibility for this participant's specific case.

Media Credibility

For video C, participants made several types of remarks which were classified under media credibility. First, they spoke about TikTok and social media platforms in general as being a factor that decreases the videos credibility. Some examples of this occurrence are: *"Tik Tok makes it less credible to me, because in my mind this is an app used for entertainment rather than information"* and *"I think it's hard to really believe such news just based on social media. It can be quite easy to fake those videos or e.g. logos that are supposed to show credibility."* On the other hand, some features provided by the application, such as blue tick verification, were seen as a sign that the content could be trusted more. This is what participants said about this: *"The account is verified, as you can tell by the blue check-mark," "It's from cbs account and it's certified so I guess it's a real account."* In other cases, the fact that the video was originated from a renowned network made it less credible: *"Since it is on Tiktok I don´t really trust it, and also because it comes from amercians lol" "I just dont believe any news I see on the internet or tv or anywhere. I don't trust any news."*

6. Analysis

In this chapter, the qualitative and quantitative results of the surveys will be cross referenced to provide a better understanding of how participants appraised the informative qualities of the TikTok videos. There are major factors that seem to determine the credibility ratings. In addition, broader aspects also have to be taken into consideration for explaining some of the differences in evaluations when distinguishing participants based on different criteria. This chapter deals with an exploration of possible reasons for the different videos' evaluations, which may uncover some mechanisms for how the participants process informational content on TikTok.

6.1 Observed factors influencing credibility ratings

In many instances during this study, significant differences were found when comparing the ratings and textual responses among the three videos. Some specific factors seem to be strongly linked to higher and lower ratings. The combination of these factors seem to have led video B to be the least credible, C the most credible, and video A somewhere in the middle.

6.1.1 Where is the evidence?

By looking at textual responses that were obtained, there seems to be a strong suggestion that (a lack of) evidence played a big role in how participants evaluated the videos.

Video B was the least credible out of the three videos, while at the same time had the most comments talking about a lack of evidence. This happened even when it had been seen first in the survey, meaning there was no expectation for what the other videos could provide in terms of evidence. When looking at the video itself, it is quite clear the reason why this is the case. The person in the video speaks for a short amount of time (around 12 seconds) in which she makes a statement but does not offer further explanations. On the other hand, video, A and C provide longer arguments with more details about the topics they are speaking about. In the case of video A, the presenter speaks for about 35 seconds, explaining the existence of an application in Iceland and why there seems to be a use for it in that country. This video shows images in the background, which seem to show graphics about the app itself, as well as other images that look like landscapes of Iceland. In video C, the arguments are also longer, running for about 30 seconds, and while there are no images in the background, the presenter

specifically talks about the sources from where this information has originated. Overall, the presence of evidence in the videos seem to have had a strong connection with how people evaluated them, this directly relates to the length of the video as well, since longer explanations require videos to be longer.

6.1.2 I already know about it

While a lack of evidence may have affected the credibility of video B the most, another important factor became apparent with the other videos, namely message discrepancy. Out of the three videos, video A has the most comments under the message discrepancy category. Some of the participants had already heard about the information that was presented in the video, thus it was easier for them to give it a higher credibility rating. On the other hand, other participants questioned the credibility of the video because it was different from how they appreciated how the world would function (the information conflicted with their own established knowledge). Thus, leading to lower ratings. In both cases, discrepancy was a factor that heavily influenced the rating that was given to the video, and this affected Video A more significantly.

6.1.3 Who is the presenter?

There were comments about the presenter (or source) for all the videos. By looking at the specific responses and the presenters of the videos themselves, the reasons for the differences in credibility evaluations become clearer.

The comments about the presenters for videos A and B were very similar regarding the things participants said about them. Comments stated that these presenters were unknown, random, or just strangers. Furthermore, their qualifications were questioned, with some participants saying that these two were unprofessional. For the most part, these judgements led to lower ratings in the credibility scales.

On the other hand, the comments for video C's source credibility were quite different. Participants, in a miniscule amount, commented about the actual presenter of the video. They rather focused on the organization that seemed to be behind it. As it was stated earlier, participants seem to consider the organization as the source, with information being communicated through the reporter. Participants made this immediate connection, therefore

saying little about the person in the video and talking more about the "CBS." This known organization was an important factor for how people evaluated this video, usually leading to higher credibility evaluations.

6.1.4 Verification Tick

Video C had something else that the other videos did not. A verification badge. The blue tick or check mark has become a staple in social media as proof that an account has been put through a process that ensures it belongs to a largely recognized individual or organization (Twitter, n.d.) (Facebook, n.d.) (Google 2019). This symbol is most shown next to the name of the account in a place that could be easily visible for users. TikTok has a page dedicated to explaining what this symbol means for this application specifically:

> TikTok provides verified badges to help users make informed choices about the accounts they chose to follow. Our users come from all walks of life and the verified badge is a quick and clear way to let you know you are following the real deal, rather than a fake or fan account…TikTok's verified badge is an easy way for notable figures to let users know they're seeing authentic content, and it helps to build trust among high profile accounts and their followers. For celebrities, non-profits, or official brand pages, this badge builds an important layer of clarity with the TikTok community.
> (TikTok 2019)

This specific detail seems to have had a strong impact on the way participants evaluated the credibility of video C, leading to more positive evaluations for it.

6.1.5 Media aspects

Several points regarding media credibility affected the videos in different ways. TikTok and social media in general were regarded as platforms that could not be taken as a good source of information. There were many comments for all videos that pointed to this. A few gave a clue for why this was happening. Specifically, a couple of comments which link TikTok with being meant for entertainment, rather than with informational content.

TikTok not being a good platform for information seems to have affected videos A and B the most, while several comments for video C suggested it was different for this one. Many

acknowledged that TikTok was questionable, but because video C was coming from a recognized organization, it was easier to give it a higher credibility score.

All in all, the major factors observed above seem to have affected all three videos in varying degrees. For video B (the least credible video in the study), the major factor affecting its score was a lack of evidence. The video was short and did not elaborate on its premise. For video A, these factors played in its favor and against it. When it came to evidence, some said it was enough, however others said it lacked enough of it. The same occurred with message discrepancy, which saw some participants agreeing with the information (because they already knew about the subject) while others discredited it as it did not match with their view of reality. In the case of video C, there were more comments regarding source and media credibility. Participants recognized the organization behind the reporter, and for the most part, gave the video more positive ratings. Video C also had a visible verification badge that solidified that perception. In addition, this video provided long explanations and cited specific origin of the information that was being communicated (which although was not talked about much in the comments, also shows that there were not many complaints on the evidence provided).

The combination of these factors seems to have added up towards the credibility ratings that were explained in the quantitative section of the results chapter. The chart below summarizes the main factors observed and how they affected the credibility of the videos.

Video A	Video B	Video C
+/- Evidence +/- Discrepancy - Unknown person - TikTok/internet	- Evidence (lack of) - Unknown person - TikTok/internet	+ Evidence + Known organization + Verification, blue tick - TikTok/internet

Plus sign (+) signifies a factor that increased credibility ratings for that specific video
Minus sign (-) signifies a factor that decreased credibility ratings for that specific video

6.2 Paths towards evaluations

Looking at the significant differences in evaluations, the videos themselves, and the most important factors that may have influenced credibility ratings in this study, specific ways in which participants processed the information seem to be taking place.

Video's A and B are highly scrutinized in the quality of information they provide (unless participants already had a formed opinion on the subject). In other words, participants stated that a lack of evidence is what stirred their scores to the less credible side. This was much reduced for video C, meaning that there were not nearly as many comments scrutinizing the quality of information it provided. At the same time, participants claimed to know the organization behind the reporter and the information being provided in video C, leading to them giving it a higher credibility score.

Media structural aspects also played a role. Many participants suggested that, for all the three videos, TikTok, social media, and the Internet were not good sources of information. On the other hand, media feature aspects may have helped increase the credibility in the case of Video C. Visual elements in the application's UI, such as the blue tick, were seen as a positive indication and that the video would be more reliable.

There seems to be an interrelation among information (message credibility), presenter (source credibility), platform (media credibility), and established knowledge, all which play a role in the evaluation process. This interrelation seems to lead towards inclinations for focusing on some elements rather than the elements.

6.2.1Through the lens of the ELM

The differences in how participants focused on different aspects of the videos to make their evaluations can be explained with the use of the elaboration likelihood model (ELM). Developed by Richard E. Petty and John Cacioppo (1986), the ELM is an approach to persuasion which shows that people engage in two types of processes when looking at a topic at hand. This model "suggests that important variations in the nature of persuasion are a function of the likelihood that receivers will engage in elaboration of (that is, thinking about information relevant to the persuasive issue" (O'Keefe 2008). In other words, this means that

there are specific ways in which a receiver will look at information depending on several circumstances (a similar theory is called the Heuristics/systematic model, by Shelly Chaiken). "Central" and "peripheral" processes have been previously touched upon in the literature review for this research. Central processes occur when there are higher degrees of elaboration (more thinking or careful examination) regarding the content of a message. Peripheral processes happen when, on the contrary, there is a low level of elaborations. So, central processes require more thought, while peripheral ones are faster and rely on preestablished ways of action. In this study's context, specific characteristics of the content shown, combined with personal experiences of the participants are what determined the factors that affected evaluations.

In some cases, participants seem to have taken a "central route" type of process. According to the ELM, there are two factors that influence these types of persuasions. These are the strength of the message arguments, and the position of the message as opposed to the receiver (O'Keefe 2008). For video B the argument was short and did not provide enough evidence. As the ELM states, when high level of elaborations (careful examination) happens, and the quality of the argument is found to be poor, negative outcomes of the persuasion (or lower credibility) are likely to solidify. Video A, on the other hand, can be taken as an example for the other influencing factor, about the position of the message and the receiver. Many participants stated they knew about the subject of the message either being correct or not. So for some of them, the credibility was higher because the message about Iceland was similar to their own view, while for others it did not make sense. Through the ELM it can be observed why video B received lower scores and more comments regarding its evidence, and why video A received mixed scores in message discrepancy.

Peripheral processes can be observed more with video C. This route is characterized by the low elaborations or lack of careful examinations by the receiver of the message. Heuristics are the main theme when it comes to peripheral route type processes. This is because people use quick and predetermined decisions that have been formed through their past experiences. Daniel O'Keefe (2008) mentions some of the heuristics that come to play in low elaboration processes. These can include the credibility heuristic, liking for the communicator, and the consensus heuristic. The first two heuristics are closely connected to the presenter, and may have positively influenced evaluations of video C. The credibility heuristic means that participants of the study were "guided by the apparent expertise of the communicator" (O'Keefe 2008). Participants saw the messenger, not as specifically the man that was standing in front of

the camera, but him as being part of a known and established organization (CBS). This may have been further emphasized by the presence of the verification check mark.

The ELM further explains that evaluation processes that solely rely on either central or peripheral routes are not common. Both types of processes can operate at the same time and affect each other to different degrees. This can be observed several times throughout this study. For instance, one comment for video B refers to attributes of the presenter that have become significant factors that affected its credibility. The participant stated: *"I feel as though it was in the middle ground, as a native American herself I do partially believe what she I saying, however she gave no sources or proof of information."* In this case, the characteristic of the presenter being a Native American became a peripheral cue because it triggered the credibility heuristic. At the same time, the participant acknowledged that the lack of evidence, a high elaboration or central route process, was still too strong of a factor. Thus, the participant arrived at evaluating the content by weighing both central and peripheral processes and reaching a "middle ground". In this comment one can notice a use of both central and peripheral routes which affect the final evaluation in different degrees.

By exploring the main factors influencing credibility through the ELM, the evaluation processes that participants employed can be appreciated. For videos A and B many participants discussed the issue of evidence; therefore, showing that they resorted to central route processes to evaluate them. This means that participants scrutinized A and B more thoroughly, as a central route equates to thinking carefully about the message. On the other hand, to evaluate video C, participants seem to have used a peripheral route (quick shortcut decisions). This was probably due to the account name (CBS), the blue tick verification, and the professional presentation. All these specific characteristics likely triggered the credibility heuristic. With that said, there are many participants whose comments did not align specifically with one or the other elaboration routes exclusively. While the ELM explains about the presence of these two extremes (central and peripheral routes), both may be taking place simultaneously and at varying degrees. Finally, variations in the persuasion (the specific characteristics of the communication received) may be appreciated differently by each individual. Thus, leading these variations to become heuristic triggers for some people, while not for others. This would lead to different or even opposing evaluations of the same information, all depending on the circumstances of who the receiver and what the message themselves are.

6.2.2 Adoption of an innovation and credibility

There were clear differences in the quantitative portion of this study when looking at evaluations based on frequency of use. The "never used it" group provided evaluations with lower scores when compared to participants in the "every day," "3 to 4 days a week," "once a week," and "rarely" groups combined. The same happened when compared only to the "everyday" and "3 to 4 days a week" groups (considered the groups who spend the most time in the application). Out of the three videos, the major differences in the results happened with video B, for which participants who claimed to have never used TikTok gave lower ratings to more consistently.

At first, this part of the study was meant to measure credibility across different frequency usage patterns. However, due to sample sizes and how the study unfolded, the focus here was shifted to participants' who had previous exposure or non-exposure to TikTok. A large quantity of the participants said to have never used this application. So, to better analyze these results, the data has to be understood as a binary group of participants who either used TikTok in the past and those who had not. Making this distinction will allow the conversation surrounding the results to be clearer based on the peculiarities that occurred in the study.

For video B, participants who had used TikTok in the past gave significantly higher credibility scores than participants who had never used this application. Despite not finding other works that study TikTok in this matter, an explanation for this instance may be found by looking at the process of incorporating the use of new technologies or products into people's lives.

Participants who used TikTok before may have given video B a higher score because they were more familiar with the type of content that this application offers. They may understand the application in a way that the other participants could not grasp. This point can be analyzed from an innovation adoption perspective. There are several characteristics of a new product that can influence whether people will adopt it, these are: relative advantage, compatibility, complexity, trialability, observability (Rogers 1995). TikTok may be seen by some participants as a new way to communicate that is better because of features that other SNSs do not offer (relative advantage). This new platform could be more closely related to some of the participants own values and fulfill their needs, while for others it does not (compatibility). TikTok may also be easier to comprehend for some, while others may find it too complicated to use or understand (complexity). Some participants may have had the chance to play with this application and learn

what it is about (trialability). Finally, people who adopted TikTok may have been curious by either peers telling them about it, or they may have stumbled upon a TikTok video on another platform (observability). Considering all these different characteristics, it is possible that some of the participants in this study saw TikTok as a rather unusual platform for communicating information, thus making them reject more of the content that it presented.

People who did not use TikTok may be more uncertain about video B specifically, perhaps because they are not familiar with the content format on this platform. TikTok videos are generally recorded in a 9 by 16 aspect ratio and last only a few seconds. This can be quite different when compared to videos from other platforms, which are usually 16 by 9 and can last several minutes or hours (like YouTube). In addition, it is common practice on TikTok to take video with a smartphone's selfie camera. This leads to videos having a very informal feel to them. They are shaky and generally there is not much production value added to them. Both aspects may have influenced the evaluations of participants who are not familiar with the platform. They may have been reminded of other applications that look similar to TikTok, like Snapchat, or Facetime. These are not commonly seen as applications meant to communicate information, but rather have a casual chat with friends.

All things considered, it is possible that users with any exposure to TikTok were aware of how the application operates (what content looks like, conventions in its environment). Thus, this led them to give video B higher scores than participants who said never used it before. Many of the factors in the adoption of new technology may have had a part in this for this group of participants. They may have found video B to be too strange or informal especially when comparing it to other platforms (either being dissimilar to YouTube and similar to Snapchat). On the other hand, videos A and C may not have been as affected by this because they had stronger qualities when it came to more common ways of sharing information. These videos lasted longer, followed some conventions of traditional media, and had more production value. This is not to say that people who used TikTok in the past found video B to be the most believable (it was still the least credible out of the three videos for this group as well), but rather they were not as demanding from it as non-users were. Overall, this specific part of the analysis may suggest that previous experience with TikTok could lead to higher credibility of videos in some cases.

6.3 Indifferentiable presenter expertise and quality of Information scores

When the first response scores for the three videos were reviewed, they showed no significant difference regarding the presenter expertise and information quality. In other words, the study could not determine conclusive assessments made by the participants for those specific questions. This may have occurred because participants were shown presenters who they did not know. So, it may have been more difficult for them to make markedly evaluations about those elements.

There could also be a connection between presenter expertise and quality of information. Since expertise refers to how knowledgeable a person is on a specific topic. Thus, if participants did not know the level of expertise of the presenters, then the information coming from them was probably assessed similarly.

On the other hand, the overall and trustworthiness scores were markedly different probably because they did not necessarily rely on the participants knowing who the presenters of the videos were. The overall scores were meant to learn about the evaluation of the video as a whole, not asking participants to think about it in parts. While the trustworthiness score did request participants to think about the presenter alone, assessing whether to trust someone or not may be easier to figure out than knowing whether they are experts on a specific subject. Humans make these types of assessments daily. We come across new people and need to determine whether they can be trusted or not based on superficial cues based on our own experience.

Ultimately, no clear conclusions can be made about the expertise and information quality scores. While they do not show to be significantly differently from one another, it cannot be concluded that the participants thought about the videos being similar. Attempting to get a significant understanding of all the credibility elements, with their nuances, would probably require further research. In other words, having the questions regarding presenter expertise and information quality was likely a mistake in this study; however, it may serve as a lesson for works to come.

6.4 Data Incongruencies

Interesting observations were made in the data when looking at quantitative and qualitative responses on an individual basis. These cases showed conflicting positions given by the same participant, either among closed-ended scores or scores compared to the open-ended responses. Note that these cases were found in first responses, which means these are the judgements made by participants for the first video they saw in the survey (so these were not influenced by previous videos or expectations when filling out the survey). What was observed were higher scores for specific credibility elements than for the overall evaluation. These observations were not uncommon and were present in all the three videos.

For video B, a respondent gave a "1" for the overall credibility score, while for the specific credibility element scores the same participant gave a "3" for trustworthiness, "3" for expertise, and "3" for information quality. The overall credibility score was meant to measure the first impression of the video. This is supposed to be the most untainted and uninfluenced response; therefore, the most valuable. When the scores for specific elements are much higher than the general score, it becomes harder to explain how the dynamics of evaluating credibility function. This is what the same participant said in their textual response: *"I believe this is less credible as there are no sources or citations that can provide viewers more information. While it can be true, i refrain from accepting everything i see on social media until i see a reputable source of citation."* A lack of information quality is directly mentioned (no sources or citations), which should be represented by low "1" or "2" scores; however, a neutral "3" is given.

Another example can be seen with video A. This participant gave it a "1" for overall credibility, "4" for trustworthiness, "2" for expertise, and "3" in information quality. This contradiction among scores (credibility elements being higher than the overall score) became more intriguing when observing the textual response. This participant commented: *"Altough it's true, from a short tiktok video there are no credentials or sources whatsoever."* This shows a clear rejection of the video in the overall score and in the textual response. Nevertheless, the participant states that they know that the information presented true. This case of a participant giving a video a low score in credibility, while also saying it is true is quite confusing. This is different from what was explained before about message discrepancy. Even if the distance between the receiver of the message and the information is short (meaning the participant already knows and agrees on it), the participant still decided to purposefully give a negative score to the video's overall credibility.

Perhaps this is more related with the reputation of the application, showing that it might be a stronger aspect in that participants' mind than the information being true.

Something similar happened with video C. A participant gave it a "1" for overall credibility, "3" for trustworthiness, "1" for expertise, and "4" for information quality. This case is difficult to understand because the textual explanation given says: *"It was not credible because it did not give us any scources."* Here the complaint is exclusively about information quality, claiming that there were no sources. This conflicts with the information quality score given by the participant, which was 4, or almost as credible as it could get.

It is unclear why these conflicting scores and textual answers occur. They may have happened due to how the survey was formulated. First, an overall credibility score is asked after watching the video, then came the open-ended question for explaining that score, and finally the rest of quantitative questions for the other credibility elements are asked. As stated before, this was designed this way to obtain the first impressions of the video as untainted as possible. It is likely that when participants of the study had to stop and think about each specific aspect of the video (trustworthiness, expertise, and information quality) they thought about them more individually; thus, separating them from the whole context. Another possible reason for encountering incongruencies, may be because there was not a question for media credibility in this survey. Perhaps, this could have shown a clearer distinction between an overall credibility score and a score for credibility of the platform. As the second example above shows, despite the participant agreeing with the information presented, they rejected the video for being on TikTok. All in all, while many times all the credibility scores and textual responses pointed towards the same direction, in some instances these were found to be conflicting. The reason could be the way the survey was designed, which probably could not capture all nuances that may come with a research like this.

6.5 A possible problem with current credibility studies

The ELM's way of approaching information processing has been applied before for decades and seems to fit with informative messages on TikTok. While this theory works in explaining single instances of internal processes, external aspects introduced with the use of technology must be taken in consideration. These have been touched upon in the literature review section of this thesis (Sundar 2008) (Li and Suh 2015), however they have not been explored in TikTok's

context. For this application (and perhaps for most social media), credibility in information does not materialize randomly, but instead, it is continuously being tailored and perpetuated. The way this study was set up showed videos that participants had probably never seen before. They dealt with topics that participants probably did not know anything about (or even cared about) with presenters who they did not recognize. Under normal circumstances in the use of TikTok, this is very unlikely. As explained before, TikTok puts endless streams of content on its users' feeds, but these are not just any videos. These are pieces of content that the application recommends to the user based on preferences (that are either stated by the user or learned through behavior). Thus, by tailoring the experience of the user, the application may also perpetuate users' beliefs and evaluations criteria.

When I observed one of my friend's TikTok feeds, this became very apparent. A lot of her videos were about card reading, out of body experiences, and ghosts. All those videos were different from what would be shown in my personal "For You" page. If they would be randomly shown to me, I would immediately dismiss all the information they would present without thinking twice about it.

In that sense, another layer in the evaluation process of information should be established. One that does not only account for internal processes, but that includes the system around which a singular person receives information. The credibility studies, which this research has been based upon, focus on internal aspects of evaluation. Source and message credibility depend almost exclusively on the background and thought processes of the receiver of the message. For example, they look at heuristic triggers, social relations, visual appearance, impressions, and characteristics of speech and persuasion. Analyzing those aspects was probably sufficient to cover evaluation processes when the media was not interactive (like are TV, radio or newspapers). Those types of media did not constantly learn about how content on them was being watched, nor did they adapt to preferences in real time. Even with interactive technology widely available and social media platforms already in existence, evaluation of content or information online was still being researched based on only internal processes. Earlier in this research's literature review, several aspects of the credibility of information on sites like Twitter, Facebook, and Youtube were observed. These were solely based on a singular and internal perspective. For example, they talked about the bandwagon heuristic (whether more people subscribing, liking or sharing something would lead higher credibility), or appearance (more professionally edited videos would be more credible). Those studies did not take into account

how technology was acting as an outside agent which could influence credibility because they would simply show participants single random videos or posts. Something the current research also proceeded with. However, as it has been demonstrated now, platforms show streams of videos that are constantly tailored to a user's experience.

Evaluation and credibility studies should, then, focus on larger aspects that not only involve an isolated individual with a random piece of content. They should also investigate the characteristics and functionality of the platform from which users may be getting the information from. The way TikTok works may accentuate this issue, as unlike many of the previous SNSs, users of this platform do not need to subscribe, follow, like, or even tap on videos to get a stream content. TikTok's user experience is essentially different because much of the choices regarding preferences are handled in the background by the applications algorithm, not by the users themselves. This application works so well that, on my own experience, it is not hard to swipe through TikTok's videos for hours. This, being the reality of how information is transferred nowadays, brings new challenges for evaluation of information research, expanding its scope towards algorithms, code, UX, UI, privacy, and even corporate interests.

7. Summary and Conclusion

7.1 Summary

So, how do people appraise to what extent TikTok videos are informative? While the question itself evokes a sense of generalization, it is far more complicated than that. With no previous studies on this specific matter, this research was set out to identify the most prominent aspects in people's appraisal of informative content on this platform. While some of those aspects point directly at how individuals process information internally (possibly in a psychological and step-by-step manner), there are other ways that are less explicit and evident which may require a different way at looking at evaluation processes in the current digital era.

In this study there were observed mechanisms that appear to be general, because they seemed to be employed by all members of the sample. The ELM was applied to TikTok to describe several data points that came out of this study. Through it, a clear path of explaining the participant's scores was found. People may focus more intensely, take quick shortcuts, or both, when evaluating a piece of information. These evaluation processes were triggered by specific characteristics that appear in the videos and were influenced by the background of each participant. Through the ELM it was possible to observe and explain specific details of the videos and how they connected to the credibility scores and textual responses. Thus, it provided an efficient framework to understand the internal evaluation processes of participants (which seem to be general), as well as to show that credibility is, indeed, subjective.

People's familiarity or adoption of Tik Tok may have some influence on the judgments users and non-users may make for it. As it was shown by the differences in scores for video B, knowing the type of content that is produced for this application may increase its credibility. This aspect however was not too determinant, as for both users and non-users of TikTok, video B was still the lowest in credibility scores. Specific characteristics of the TikTok video format, like self-recording in portrait aspect ratio, short duration, and similarities to informal application, may all serve as triggers that push users to deem the content as less credible.

Knowing the presenter of the video was a big factor in this study. All the presenters of the videos were unknown for the participants, except for video C, for which the organization behind it was recognized. This makes sense, as TikTok puts the content creator right at the center of

the frame, becoming the biggest point of attention of the video. When it comes to weighing credibility of a source, having a presenter (or organization) that is recognized for decades of journalistic experience will make people more inclined to respond positively to it.

On presenter expertise and information quality, the current study provided no significant understanding for them. It is possible that participants did think of those elements as being different for the videos, despite scores showing no significance in that regard. Further studies should be designed to try to capture expertise and information quality characteristics better.

Visual elements in the UI may serve as triggers for people to base their evaluations on as well. There is the verification tick, which shows that an account belongs to recognized personalities and organizations. As seen in the study, this was a big factor that led many users leaning towards higher credibility. Visual cues on TikTok are likely intended for the audience to have more grounds to base their judgements on, thus directing them towards specific "less credible" or "more credible" evaluations.

Finally, after reviewing how TikTok functions and how people evaluate information, it may be time to update credibility studies to consider recommendation systems. People these days often do not get their information randomly, but instead it is assigned or recommended to them by the platform they are using. On TikTok this is very clear to see because the user does not need to subscribe, like or friend anyone to have their feed full of content.

7.2 Limitations

This research work has provided some valuable findings in understanding how the participants appraised the extent of Tiktok's informative content; however, there have been several limitations that need to be taken into consideration.

The sample of this study is too small and not diverse enough to draw general conclusions. There were only 137 respondents who, although may come from different regions around the world, could be too similar to one another. Most participants of this study were young adults who were college students, so they might often encounter situations in which they have to judge information more diligently. For example, they could be better trained or encouraged to look for better sources of information online at their universities. This may pose a problem, as other

kinds of people may not be used to looking deeper into the information they receive. Those who do not have higher education may not have the tools to analyze information at the same degree as current bachelor students. They may also understand TikTok in a completely different manner. Therefore, the results that came out of this research cannot be expected to be the same for everyone.

In addition, an important demographic group that was left out of this study were children and teenagers. They are arguably the biggest audience of TikTok. Although there were attempts to try to reach out to them and get permission from their parents and schools, it was unfeasible with Covid-19 restrictions that were in place. This was a big limitation because, had it not been there, the study could have taken a much different focus and direction. Children and teenagers would have been interesting groups to study because it is unclear how they may have evaluated the information they were presented with. They may not know many facts about the world yet, they may not have developed their own personalities and views, or simply may look at TikTok in a different light. All these factors could have led to different credibility scores if these groups would have taken part in this study.

Another limitation of this research is that there were no questions related to media credibility in the survey. This was a decision that was taken for two reasons. One was to not influence participant's responses, by for example asking "is TikTok credible?." The second one was because this study was not about comparing information received through different channels (e.g. TikTok vs TV vs YouTube). Finding a way to insert questions relating to media credibility could have given this study another layer for understanding general views about TikTok (functionality and reputation-wise). However, the media credibility issue did come up in the textual responses. These suggested that in the participants' eyes, TikTok, social media, and the internet were not credible places to get information.

Finally, there were no previous studies that I was able to find on the credibility or evaluation processes of TikTok content. This led to this research to be broad, trying to capture hints to determine what are the bigger aspects that may come into play in this matter. This may have taken away some focus from specific areas like TikTok subculture, the algorithm, or UX/UI, all of which would have given more clarity to some areas that have been discussed throughout this research.

7.3 Future research

This study served primarily as an initial dive into information evaluation of TikTok. This leaves many doors open for future studies regarding evaluation and credibility on this platform and other social media.

Future studies should focus on how younger generations evaluate TikTok content. As explained earlier, they are a large part of the audience on TikTok, so they may have different ways to approach information found on this application.

Given that UI elements have been identified as factors that influence evaluation processes (because they serve as triggers for peripheral route type of evaluations), an in-depth study should be carried out to test several ways in which they may affect users. Future research could focus on producing its own videos to manipulate variables, so responses could be measured and structured better. For instance, studies could test just how much influence the verification tick has on the viewer. This could be achieved by adding it or taking it away from the video when showing it to different participants. Similarly, warnings that pop up during a video could be also controlled, researchers could manipulate the style of writing, selection of words and more, to see how evaluations by participants may be affected.

User experience aspects of the application could also be explored much further. The scrolling or swiping of videos, combined with the autoplay feature, should be tested against the more traditional search and tap-to-play actions. Perhaps this could show that when given a choice, people may not watch every single video that the algorithm churns out; thus, reducing its influencing effects of credibility on a certain subject.

A study on the algorithm of TikTok-type applications should also provide more understanding on the subject. This could be designed to test the influence on the reality perception of participants. One way this may be executed is by developing a TikTok clone (copying the exact same UI features), but instead of using an algorithm to provide upcoming videos, these would be controlled by the researchers. Participants could be evaluated before and after the studies have occurred to get grasp of their views on different topics. Researchers could implant "informative" videos that suggest specific views about certain topics. By carrying out a study like this, it could

be possible to see whether participants change their views, become more radicalized, or simply reject this type of content.

7.4. Conclusion

Due to the fast development of online communications, social media have become spaces where the exchanges of messages between regular people have increased massively. As seen in chapter 2, TikTok can thrive in this environment because it provides a combination of tools, features, and algorithm which allow for interesting interactions among its users. People are open to showing their true selves, displaying their own bodies, personalities, and quirks to the public. While there is the possibility that these conversations could be seen as confusing or even meaningless, they have also shown to hold great impact when applied into specific scenarios. Therefore, understanding how information is understood by people taking part in such a dynamic network of interactions is necessary.

The studies of credibility that were reviewed in chapter three revealed that there is a lack of development regarding content that is user-generated and distributed by a recommendation system. The cases that were observed in those studies were isolated (either for websites, Twitter, Facebook and YouTube). This means that researchers provided the content that participants had to evaluate, disregarding the way information would be delivered in a real-life scenario. Theories such as the elaboration likelihood model, should then always be able to explain how people are evaluating information because they only look at internal processes in the human psychology. No matter who the presenter of the video is, or the type of information they present, everyone always has their default way of approaching information that is randomly presented to them. The current study was based on those same principles, so while it lacked the scope in regards of looking into information distributed by an algorithm, it served to make that exact realization.

We need to look at information processes differently because (at least for now) platforms continue to find ways to exploit our data and know a person in much deeper ways than we could realize ourselves. This was explained in the post-truth era discussion at the end of chapter 2. Not just the users can organize and create an impact from these platforms and to the real world, but the impact of the platforms can be used by smaller groups of individuals to benefit their own interests. It was after Brexit and the 2016 US election that Facebook and Google were put into

much higher levels of scrutiny because of their practices. Before then, they continued to build business models which would eventually be used to heavily influence delicate world issues. With that in mind, TikTok, which heavily relies in its recommendation system and user-behavior learning, should be carefully analyzed so similar scenarios do not repeat.

This study's goal was to explore how people appraise to what extent TikTok videos are informative, and this was accomplished that to a reasonable degree. While limited in the sample size of participants and having a broad overview of the issue, it was still possible to observe interesting dynamics on how participants approached the informational content that was shown. As explained earlier, these observations may be broad and not all-encompassing, but they may serve as good places to start when looking deeper into each of the aspects explored.

As technology moves forward, providing new affordances in human interaction experiences, the ways in which we study them should be adapted as well. Our communications today is most prominently running on ever-adjusting platforms which deliver all the information we receive. By gaining a better understanding of those invisible systems, humans may be able to make judgements based on their own processes, not on artificial and tailor-made realities.

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Appendix 1: The survey

Short-video content Survey | University of Bergen | Digital Culture Master's Program

This is a voluntary survey, part of a master's thesis in Digital Culture from the University of Bergen. No names, emails, or sentitive information will be requested. You have to be over 18 to participate.

You will be presented with three videos, we kindly ask that you watch them and answer the questions that will come afterwards.

The survey is short and should take only around 5 minutes.

We thank you for your contribution.
* Required

First tell us about yourself

1. What is your age? *

    Mark only one oval.

    ◯ 18 to 24

    ◯ 25 to 30

    ◯ 31 to 40

    ◯ 41+

2. What is your level of education? *

    Mark only one oval.

    ◯ Primary school

    ◯ High school

    ◯ Bachelor

    ◯ Master

    ◯ PHD

3. How often do you use the application TikTok? *

Mark only one oval.

◯ Every day

◯ 3 to 4 days a week

◯ Once a week

◯ Rarely

◯ Never used it

4. What do you use TikTok for? *

Check all that apply.

☐ Entertainment (comedy, series, memes, celebrities, challenges, dances, trends)

☐ Learn new things (tutorials, expert advice, science, history, interesting facts)

☐ Stay updated with the news

☐ I don't use it

Skip to question 5

Please watch the following video (Video A) :

http://youtube.com/watch?v=9EYxOdcSFUY
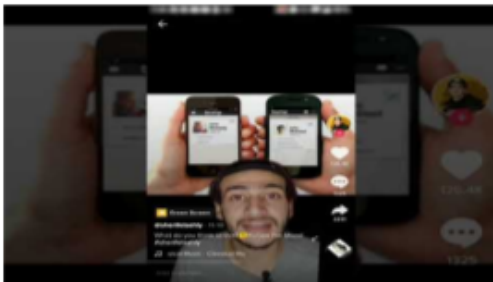
5. In your opinion, how credible was the video? (A) *

    Mark only one oval.

	1	2	3	4	5	
NOT CREDIBLE	◯	◯	◯	◯	◯	HIGHLY CREDIBLE

6. Explain why you think the video was more credible, less credible, or neither. Please try to be detailed. (A) *

    _____

    _____

    _____

    _____

    _____

7. Does the PRESENTER of the video seem to be trustworthy? (A) *

    Mark only one oval.

	1	2	3	4	5	
COMPLETELY DISAGREE	◯	◯	◯	◯	◯	COMPLETELY AGREE

8. Does the PRESENTER of the video seem to be an expert? (A) *

    Mark only one oval.

	1	2	3	4	5	
COMPLETELY DISAGREE	◯	◯	◯	◯	◯	COMPLETELY AGREE

9. Does the INFORMATION in the video seem accurate, authentic and believable? (A) *

Mark only one oval.

	1	2	3	4	5	
COMPLETELY DISAGREE	⬭	⬭	⬭	⬭	⬭	COMPLETELY AGREE

Skip to question 10

Please watch the following video (Video B) :

http://youtube.com/watch?v=z2ARB-rB20I
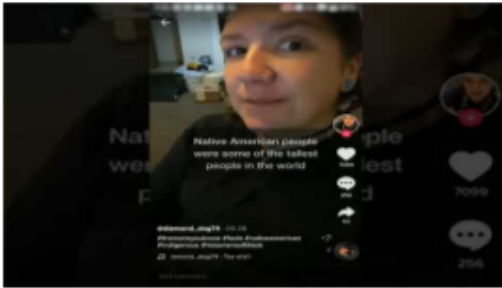
10. In your opinion, how credible was the video? (B) *

Mark only one oval.

	1	2	3	4	5	
NOT CREDIBLE	⬭	⬭	⬭	⬭	⬭	HIGHLY CREDIBLE

11. Explain why you think the video was more credible, less credible, or neither. Please try to be detailed. (B) *

_____

_____

_____

_____

_____

12. Does the PRESENTER of the video seem to be trustworthy? (B) *

Mark only one oval.

	1	2	3	4	5	
COMPLETELY DISAGREE	◯	◯	◯	◯	◯	COMPLETELY AGREE

13. Does the PRESENTER of the video seem to be an expert? (B) *

Mark only one oval.

	1	2	3	4	5	
COMPLETELY DISAGREE	◯	◯	◯	◯	◯	COMPLETELY AGREE

14. Does the INFORMATION in the video seem accurate, authentic and believable? (B) *

Mark only one oval.

	1	2	3	4	5	
COMPLETELY DISAGREE	◯	◯	◯	◯	◯	COMPLETELY AGREE

Skip to question 15

Please watch the following video (Video C) :

http://youtube.com/watch?v=CkHmuWk5Y7Y

15. In your opinion, how credible was the video? (C) *

   Mark only one oval.

	1	2	3	4	5	
NOT CREDIBLE	◯	◯	◯	◯	◯	HIGHLY CREDIBLE

16. Explain why you think the video was more credible, less credible, or neither. Please try to be detailed. (C) *

   _____

   _____

   _____

   _____

   _____

17. Does the PRESENTER of the video seem to be trustworthy? (C) *

   Mark only one oval.

	1	2	3	4	5	
COMPLETELY DISAGREE	◯	◯	◯	◯	◯	COMPLETELY AGREE

18. Does the PRESENTER of the video seem to be an expert? (C) *

Mark only one oval.

	1	2	3	4	5	
COMPLETELY DISAGREE	◯	◯	◯	◯	◯	COMPLETELY AGREE

19. Does the INFORMATION in the video seem accurate, authentic and believable? (C) *

Mark only one oval.

	1	2	3	4	5	
COMPLETELY DISAGREE	◯	◯	◯	◯	◯	COMPLETELY AGREE

Appendix 2: Complete data sets from closed-ended questions

In your opinion, how credible was the video? (A)	In your opinion, how credible was the video? (B)	In your opinion, how credible was the video? (C)
2	1	5
2	2	5
4	3	5
2	2	3
2	2	4
4	2	5
4	1	2
5	4	4
1	3	5
3	2	4
1	1	3
1	1	4
2	1	4
2	1	4
3	5	4
1	4	4
2	3	5
2	3	3
4	1	5
2	1	3
1	1	4
2	3	5
3	1	4
2	2	3
1	2	3
4	1	2
2	2	3
2	2	3
2	2	4
2	3	3
2	1	2
2	2	4
3	2	4
2	2	5
3	1	2
3	2	4
2	1	2
1	1	3
2	3	5
1	1	3
2	3	2
2	2	4
4	1	5

4	3	5
4	2	5
1	1	5
3	2	2
2	3	3
1	2	4
4	3	4
4	1	4
3	4	4
5	1	4
3	4	5
4	1	4
4	1	3
2	3	5
4	1	5
4	1	5
3	3	5
3	3	4
4	3	5
3	1	5
2	1	1
5	2	5
4	1	4
3	1	4
4	4	2
3	1	4
4	1	4
5	2	4
3	2	4
2	1	3
2	1	1
4	1	3
1	2	3
3	1	4
2	1	1
3	2	3
3	3	4
1	1	4
3	2	3
3	2	3
3	1	4
3	1	2
3	1	3
3	3	4
3	3	4
4	1	4
3	2	4
2	2	2
1	1	2

4	1	2
1	1	1
4	4	1
3	3	5
1	1	1
1	1	3
3	1	3
1	4	2
3	1	4
1	4	3
3	1	1
2	2	4
2	3	3
2	1	3
3	2	4
3	1	2
3	3	1
3	3	3
2	1	2
2	1	2
3	2	4
4	3	3
1	1	1
3	1	2
2	1	4
1	2	3
2	2	3
3	2	2
3	3	3
2	4	4
4	1	2
1	4	2
3	2	2
2	4	3
2	1	2
3	3	3
3	1	4
4	1	1
4	2	2
2	4	2
4	1	4
4	2	3
1	1	1
1	1	4
5	1	2

Does the PRESENTER of the video seem to be trustworthy? (A)	Does the PRESENTER of the video seem to be trustworthy? (B)	Does the PRESENTER of the video seem to be trustworthy? (C)
3	1	5
3	3	5
3	4	5
1	2	1
3	3	4
4	2	4
3	2	5
5	4	3
2	4	5
2	1	4
1	1	3
2	1	4
2	1	4
2	1	4
5	4	2
2	4	4
2	3	4
1	2	2
2	2	5
1	3	3
1	1	4
1	4	5
2	2	4
2	3	4
2	1	4
3	1	3
2	2	4
2	3	4
3	1	4
3	3	3
2	1	2
4	3	5
4	3	4
2	2	5
2	1	1
3	3	5
1	2	2
4	1	4
4	4	5
2	1	4
3	3	3
2	2	4
3	1	3
3	3	5
4	2	4

2	3	5
3	1	4
3	4	4
1	1	4
4	4	3
3	3	4
3	4	3
3	3	4
2	4	5
4	3	3
3	2	2
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4	4	5
1	3	5
2	1	1
4	3	5
4	3	5
2	1	3
4	4	3
2	1	3
3	1	5
4	2	4
3	2	4
2	3	3
2	2	3
3	1	2
1	3	4
3	2	4
1	3	2
1	2	4
2	3	4
1	4	5
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3	3	3
3	3	3
2	1	3
2	1	3
2	3	3
2	3	4
3	4	3
4	3	3
1	1	2
1	1	3
3	2	3

2	1	3
4	4	3
3	3	5
1	1	3
2	1	3
2	1	5
1	4	1
3	2	4
1	4	3
1	1	1
2	2	3
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4	3	4
2	4	2
3	1	2
4	4	4
3	2	4
3	2	4
3	3	4
2	4	2
4	3	1
2	4	4
3	1	4
4	2	3
2	1	1
2	3	5
5	2	2

Does the PRESENTER of the video seem to be an expert? (A)	Does the PRESENTER of the video seem to be an expert? (B)	Does the PRESENTER of the video seem to be an expert? (C)
2	1	5
2	1	4
3	3	5
1	1	1
3	3	4
3	1	5
1	1	4
2	4	1
1	3	5
2	1	3
1	1	3
2	1	3
1	1	3
1	1	3
2	5	2
2	3	4
1	2	4
2	4	1
2	1	5
1	2	2
1	1	4
1	1	2
1	2	2
2	2	3
1	1	4
2	1	2
2	1	3
2	2	3
1	1	3
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3	3	4
4	2	3
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1	1	1
2	1	3
1	2	3
2	1	4
2	2	2
1	2	4
3	1	1
4	2	5
2	2	5
1	3	5

1	1	5
1	2	1
1	1	3
3	4	2
2	3	3
1	3	4
1	1	4
2	3	5
2	2	3
2	1	1
1	2	3
5	1	5
2	1	3
4	2	5
3	3	3
4	5	5
2	2	5
1	1	1
3	1	4
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3	1	2
2	1	3
5	2	3
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3	2	1
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2	2	3
1	1	3
2	1	4
3	2	3
1	2	2
2	1	1
1	1	3
2	2	3
2	2	3
2	1	3
2	3	2
1	1	1
1	1	2
1	2	1
1	1	1
2	2	2

2	3	4
1	1	1
1	1	2
1	1	1
1	4	1
2	2	2
1	1	1
1	1	1
2	2	3
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1	2	1
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2	2	3
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2	2	4
3	1	2
1	3	2
2	1	1
4	4	3
1	1	3
3	2	2
3	1	3
1	3	2
3	2	1
1	2	2
2	1	1
3	1	2
2	1	1
1	1	2
1	1	1

Does the INFORMATION in the video seem accurate, authentic and believable? (A)	Does the INFORMATION in the video seem accurate, authentic and believable? (B)	Does the INFORMATION in the video seem accurate, authentic and believable? (C)
4	1	5
2	3	4
4	3	5
2	2	3
3	3	4
4	2	4
4	1	3
4	4	3
2	2	4
2	1	3
1	1	3
2	1	4
2	1	4
3	2	4
4	4	3
2	4	4
2	3	5
2	2	1
3	2	5
4	1	3
1	1	4
1	3	5
3	3	3
3	3	4
1	2	5
4	1	2
1	1	3
1	1	3
2	2	4
2	3	2
2	1	2
2	2	3
3	3	4
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4	2	5
1	3	4
3	1	4
3	4	5
2	1	4
2	3	2
2	3	3
4	1	4
4	2	5

3	2	5
1	3	5
1	1	2
2	3	4
1	2	4
4	3	4
4	2	4
3	4	4
4	2	4
1	4	5
4	2	4
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5	1	5
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4	5	5
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4	5	3
3	2	3
3	1	5
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4	1	3
1	2	2
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1	3	3
2	2	4
3	3	3
3	3	4
3	1	3
4	3	3
3	3	3
2	3	4
4	1	4
3	2	2
3	2	3
1	1	2

5	2	2
2	1	4
3	4	2
3	3	5
1	1	3
1	1	2
4	1	5
1	4	1
3	2	4
1	4	2
4	1	1
2	2	4
2	2	3
3	2	3
2	2	3
3	3	2
4	3	2
3	3	3
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4	1	3
4	2	4
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2	2	2
1	1	1
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2	2	2
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3	3	2
1	2	4
3	2	2
2	4	2
3	2	2
3	4	3
4	1	5
3	2	3
3	2	4
4	4	4
5	1	1
2	5	2
4	1	4
4	2	3
2	2	1
1	2	3
5	1	2

Appendix 3: Quantitative results from the complete data sets

These results account for the complete sample of participants without any distinction, meaning that no specific groups are being looked at specifically or filtered (meaning they do not consider the priming effect due to video order in surveys). The results this section correspond to how each video was rated in comparison to each other. In other words, these results found whether each video was rated similarly or differently from the others. The significance of these results is later analyzed with t-tests.

Video A	Mean	Median	Mode	SD
Overall credibility	2.649635036	3	3	1.09538632
Presenter trustworthiness	2.562043796	2	2	1.070055756
Presenter expertise	1.788321168	2	1	0.910967948
Information quality	2.737226277	3	3	1.13286514

Video B	Mean	Median	Mode	SD
Overall credibility	1.919708029	2	1	1.029408698
Presenter trustworthiness	2.401459854	2	3	1.114475965
Presenter expertise	1.729927007	1	1	0.927549346
Information quality	2.175182482	2	2	1.063414383

Video C	Mean	Median	Mode	SD
Overall credibility	3.321167883	3	4	1.187770443
Presenter trustworthiness	3.540145985	4	4	1.09150866

| Presenter expertise | 2.605839416 | 2 | 3 | 1.291133019 |
| Information quality | 3.328467153 | 3 | 4 | 1.125307076 |

Subsequent anova tests of each of the items presented above (overall credibility, presenter trustworthiness, presenter expertise and information quality) were run to find whether differences among them would be statistically significant. This type of test compares the scores of a specific question from the three groups simultaneously and provides a p-value.

| Anova test	P-value (Comparing A, B, C)
Overall credibility	7.01504E-22
Presenter trustworthiness	6.75869E-18
Presenter expertise	6.75869E-18
Information quality	6.75869E-18

All of the anova results gave a p-value of less than 0.05, showing that there is statistical significance in the differences of the three groups.
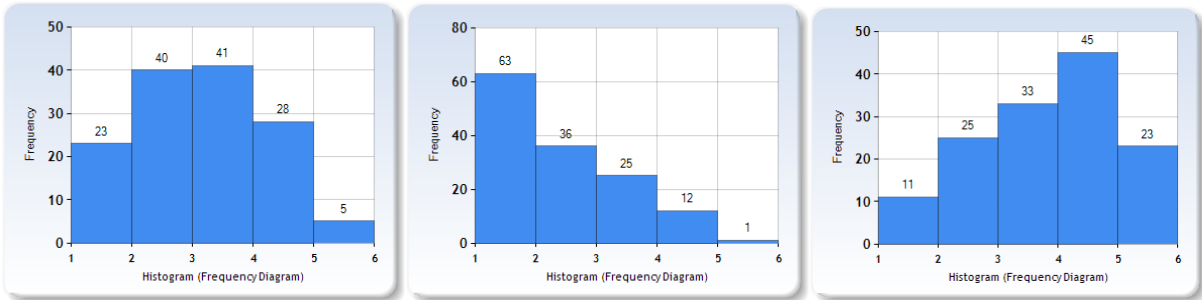
Histograms show distribution of overall credibility scores (question number 1 in the survey) for videos A, B and C respectively.

Using the data from the whole sample, participants rated video A as more neutral, B was rated the least credible, and C was the most credible of the three. Similar results were seen for the

specific credibility elements, except for the presenter expertise scores, where all videos were rated as less credible, including C.
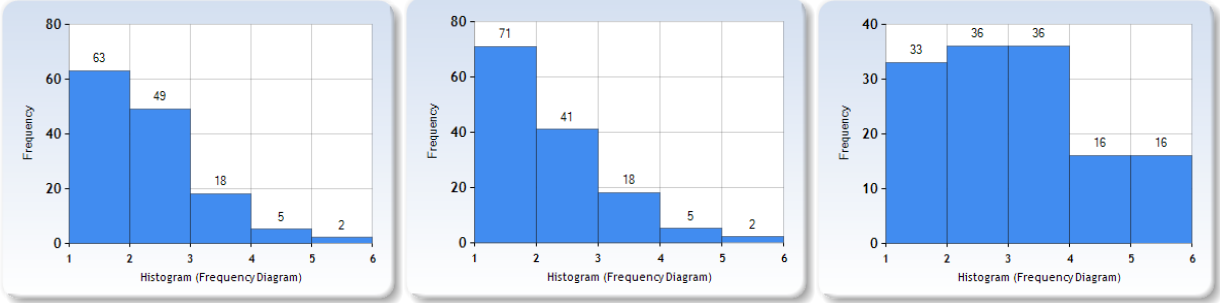
Histograms show distribution of presenter expertise scores for videos A, B and C respectively.

Appendix 4: Coding process for qualitative data

2	Video A Responses	137
3	First Responses (1 – 43)	0
4	Message	0
5	Evidence	16
6	Discrepancy	15
7	Presentation – Speech	4
8	Source	9
9	Media	6
10	Secondary responses (44 – 136)	0
11	Source	10
12	Message	0
13	Evidence	37
14	Discrepancy	32
15	Presentation – Speech	6
16	Media	9
17	Video B Responses	137
18	First Responses (43 – 86)	0
19	Message	0
20	Evidence	18
21	Discrepancy	5
22	Presentation	4
23	Source	14
24	Media	8
25	Secondary Responses (1 – 42 --- 87 – 135)	0
26	Source	38
27	Message	0
28	Evidence	33
29	Discrepancy	16
30	Presentation	5
31	Media	6
32	Video C Responses	137
33	First Responses (86 – 134)	0
34	Source	13
35	Message	1
36	Evidence	10
37	Discrepancy	7
38	Presentation	4
39	Media	17
40	Secondary Responses (1-85)	0
41	Message	0
42	Evidence	14
43	Discrepancy	14
44	Presentation	9
45	Source	40
46	Media	31
47		