

Credibility for and Engagement with Outlets Sharing Climate Change News:

A Quantitative Research of Young People in Sweden

Angelica Olsson

Master Thesis Series in Environmental Studies and Sustainability Science,
No 2022:033

A thesis submitted in partial fulfillment of the requirements of Lund University
International Master's Programme in Environmental Studies and Sustainability Science
(30hp/credits)



LUCSUS

Lund University Centre for
Sustainability Studies



LUND
UNIVERSITY

**Credibility for and Engagement with Outlets Sharing Climate
Change News:**

A Quantitative Research of Young People in Sweden

Angelica Olsson

A thesis submitted in partial fulfillment of the requirements of Lund University International Master's
Programme in Environmental Studies and Sustainability Science

Submitted May 9, 2022

Supervisor: Maja Essebo, LUCSUS, Lund University

Abstract

How civil society perceives climate change communication by outlets is key for sustainable development. Being predicted to get largely impacted due to climate change and having a great influence on future sustainability outcomes, young people are an important group to focus on in the field of perception and climate change communication. Therefore, this research aims to determine where young people (aged 12-16) take part in climate change news, and which of these outlets young people perceive as credible. Further, the Source Credibility Theory will be used to determine influencing factors for both outlet credibility and outlet engagement. The results show that News on TV, Documentaries, Teachers, and Daily/online newspapers are both perceived as the most credible outlets, and considered as some of the most common outlets for news about climate change. However, more research is needed for a deeper and developed understanding of the topic.

Keywords: climate change communication, credibility, perception, engagement, young people, source credibility theory

Word count: 10,848

Acknowledgements

This thesis could not have come about without the support of several people. First and foremost, I am so grateful for all the principals, teachers and students from Tunaskolan, Barsebäcks Montessoriskola, Højaskolan, Kryddgårdsskolan, Vannarödsskolan, Orkelljunga Högstadium, Hermodsdalsskolan, Prästamossekskolan and Jens Billeskolan, who help me collect all the data of this research. Without your contribution, the investigation would not have been possible.

Secondly, I want to share how grateful I am for the support that my supervisor Maja Essebo has given me, whose clear guidance has left me with few question marks behind. I would also like to thank Johanna, who has taken the time to give lots of advice on how I can look at my own work with a different point of view. Further, my thanks goes to both of you, Maja and Johanna, for mentally supporting me during our supervisor meetings when my self-confidence has waned.

Thank you Viveka, for supporting me with feedback and endless pep-talks. Thank you for listening and being there when all I did was to rant about the process.

And thank you Andréé, my partner, for supporting me with lots of understanding and patience, and for helping me stay calm during this research process.

Table of Contents

| | |
|---|-----------|
| 1 Introduction | 1 |
| 1.1 Aim and research questions | 1 |
| 1.2 Thesis rationale | 2 |
| 1.3 Relevance for Sustainability Science | 2 |
| 1.4 Thesis scope and limitations | 3 |
| 1.5 Thesis outline | 4 |
| 2 Background | 4 |
| 2.1 Young people and attitudes to Climate Change | 4 |
| 2.2 Climate change - the ungraspable topic | 5 |
| 2.3 Credibility and perception of climate change | 5 |
| 2.4 The perception of different news outlets among young people | 6 |
| 2.5 Patterns over the engagement with news | 7 |
| 2.6 The engagement with news outlet among young people | 7 |
| 2.7 Planned and random engagement with news | 8 |
| 2.8 Explanatory factors for outlet engagement | 9 |
| 3 Theoretical framework | 10 |
| 3.1 Source Credibility Theory | 10 |
| 3.2 Conceptual framework for Source Credibility Theory | 11 |
| 4 Methodological approach | 13 |
| 4.1 Research design | 13 |

| | |
|---|-----------|
| 4.3 Why a survey? | 14 |
| 4.3 Research Quality Criteria | 15 |
| 4.4 Data collection: Participants | 15 |
| 4.5 Data collection: Pre-survey | 16 |
| 4.6 Data collection: Main survey | 16 |
| 4.5 Ethical considerations | 18 |
| 5 Results | 18 |
| 5.1 What outlets sharing climate change news do young people find credible? | 19 |
| 5.2 What outlets are considered to be the most common outlets for climate change news? | 21 |
| 5.3 What are the main influencing factors for outlet credibility and engagement? | 22 |
| 5.4 How frequently are the outlets engaged with? | 23 |
| 6 Discussion | 25 |
| 6.1 Answering the overarching aim of the thesis | 25 |
| 6.2 Outlet engagement frequency | 27 |
| 7 Conclusion | 29 |
| Bibliography | 30 |
| Appendix 1 | 40 |
| Appendix 2 | 41 |

Figure Content

Figure 1. Conceptual Framework - Source Credibility Theory13

Figure 2. Results of perceived credibility for different outlets20

Figure 3. Results of how common different outlets are for climate change news22

Figure 4. Influencing factors for outlet credibility and engagement including the 5 dimensions.....23

Figure 5. Outlet engagement frequency25

List of abbreviations

- LC** Less Credible

- MC** More Credible

- NC** Not Credible

- RQ** Research Question

- SCT** Source Credibility Theory

- VC** Very Credible

1 Introduction

Within the climate-related discourse, the evidential source tends to be assumed as the major factor for people to believe in the information presented (Asplund, 2018), but not very often is research focusing on how climate change news is actually perceived by civil society (Kempton, 2020). Within the landscape of information, the public can be seen as solely an audience for climate change information (Asplund, 2018). However, they should not be seen as passive and inactive receivers of messages (Hall, 1980; McCuail, 2010). Conversely, all information used in communication appeals to different levels by the audience, depending on the extent to which it corresponds with the audience's worldview (Snow & Benford, 1988). Consequently, the interpretation of climate change information by the public continues to (re)form the information (Asplund, 2018). Several studies within climate change communication research focuses on audience perceptions, attitudes, and beliefs concerning climate change (Wibeck et al., 2007). This is a subject that has been researched vigorously since the 1990s (Wibeck et al., 2007; Moser, 2016). However, few climate change communication studies have thoroughly focused on what credibility matters for climate change communication processes (Asplund, 2018). The research done so far has noted the significance of credibility for effective and successful climate change communication (Asplund, 2018), and sustainability outcomes (Benevento, 2022).

Further, even though future generations are predicted to get largely impacted, due to climate change, a major part of the academic literature which investigates perceptions of climate change news relates to adults or young adults (Lee, et al. 2020; Nygren et al., 2019). Both younger children and young people (defined as 12-16 years old in this research), are the future leaders, researchers and decision-makers (Benevento, 2022). Either as laypeople or in occupational roles they will have great influence in the future (Benevento, 2022). Climate change is one of the greatest threats that humanity is facing today (Ojala, 2012a). Since this issue is intertwined with the global production and consumption, beyond political and technical progress, it is crucial to get young people involved in the attempts to achieve an ecologically sustainable society. Additionally, young people are the ones most likely to suffer from the negative consequences of climate change, strengthening the argument why this group is particularly important to include in societal discussion about climate change communication (Ojala, 2012a).

Further information about the research topic will be introduced in the background chapter. Before that, this introduction will continue by presenting the aim and research questions of this thesis, following with thesis rationale, the relevance of this research for sustainability science, and thesis scope and limitations.

1.1 Aim and research questions

The overarching aim of this research is to determine where young people (aged 12-16) take part in climate change news, and which of these outlets young people perceive as credible. Further, this overarching aim is translated into the three following research questions:

- What outlets sharing climate change news do young people find credible and why?
- What outlets are considered as most common for climate change news and why?
- How frequently are the outlets interacted with?

The three research questions will be answered in the results, whereas the results will be used in the discussion to answer the overarching aim of this thesis.

1.2 Thesis rationale

With this study I intend to contribute to the academic field of credibility and climate change communication related to young people (12-16 year old). Academic research within the links of perception and young people is not as developed as research in the area of younger children (6-12 years old), young adults (17-30), and adults (30<). This does not mean that young people within research can be included within these other age categories. Research about young people has shown how complex and even more individual minds of young people can be compared to younger children or adults (Alerby, 2000). According to Ojala (2012b), stress and other psychological implications of well-being due to climate change have been recognised among young people in Sweden as young as 12 years old, which indicates an awareness about climate change from this age. Furthermore, with the increase of technical ownership of cellphones, computers etc. from this age on, the individualisation of news engagement likely increases (SOU 2016:30). Why the age range reaches specifically from 12 to 16 in this research is due to the Swedish school system, where upper

compulsory school students normally can be between 12 and up to 16 years old. With this research, I hope to fill a gap within sustainability science, by focusing on perceived credibility for different climate change news outlets, related to young people.

1.3 Relevance for Sustainability Science

Meanwhile this thesis is built on the concrete Source Credibility Theory, it is focusing specifically on perceived credibility for climate change news outlets among young people. This positions this research in the broad field of sustainability science, that strives to understand the crucial nature of interactions between society and the natural world (Kates et al., 2001). Within the field of sustainability science, credibility is a topic that has received particularly low attention (Kempton, 2020). Sustainability science is, however, a transdisciplinary (Lang et al., 2012) and solution oriented research field that appraises actual engagement between scientists and social actors outside of the walls of academia (Miller et al., 2014). According to Imlawi et al. (2015), and Peifer & Meisinger (2021), high-credibility sources are an important means for engagement, and effectiveness of strategic communication (Hunt & Wald, 2018). This includes the likelihood of generating desired environmental friendly shifts in target behaviour and attitudes (Hunt & Wald, 2018). Therefore, one can say that credibility is important for sustainability science as well. Further, as being in a unique position of facing the reality of climate change as future leaders, decision-makers, and laypeople (Benevento, 2022), young people are perhaps the generation to be best-placed to determine the long-term societal response to climate change. It is therefore of utmost importance in knowing where young people are engaging with news (Corner et al., 2015).

1.4 Thesis scope and limitations

The scope of this thesis includes results based on two surveys, conducted with high school students from different schools in the county of Skåne, Sweden. One survey included 34 participants, and the other survey included 336 participants, aged 12-16. The results are only based on responses from participants in Skåne county, in southern Sweden. The findings of this research do not therefore claim to be comprehensive. However, the research overview addresses some research with both a Swedish and international perspective, with mostly young people in focus, but also some with a focus on adults.

To study and measure engagement of news outlets based on data gathered through a survey is far from unproblematic, and can be considered as a limitation. When there is a grey zone of different media outlets, it is not always easy to answer questions about where and how one takes part in news. For instance, the news on the Swedish news programme SVT Nyheter (Swedish national public state-controlled television broadcaster), can both be seen on traditional TV or on optional digital platforms, in live broadcast or afterwards, but also as news in its entirety or as an individual feature. The data of this survey can therefore show results that are separated from the natural reality.

1.5 Thesis outline

So far, this thesis has presented a short introduction into the topic and issue, following with research aim and questions, the intended research contribution of this thesis, relevance for sustainability science, and the thesis scope and limitations. Hereafter, the background chapter will go deeper into previous research, specifically focusing on what has been concluded about young people related to climate change, news engagement, and credibility for different news outlets. The theoretical chapter will present the Source Credibility Theory and the 5 dimensions, following with a description of the whole thesis process in the methodology chapter. Hereafter, results will present data gathered from the main survey while also answering the research questions of this thesis. Further on, the results will be discussed in relation to previous research in order to determine outlet credibility and outlet engagement among young people to be able to fulfill the overarching aim of this thesis. Lastly, the main findings will be presented in the conclusion, together with interesting deviations found in this research, reflections of the process, recommendations for future research, and knowledge contributed to the field of sustainability science.

2 Background

This chapter will present previous research on young people's attitudes to climate change, before briefly introducing the complexity of climate change as a topic. Hereafter, credibility as a scientific concept will be presented, following with previous research on news outlets and how credible they have been perceived by young people. Further, there will be a focus on what previous research tells

us about both patterns for engagement with news, what news outlets young people normally engage with, and explanatory factors for outlet engagement.

2.1 Young people and attitudes to Climate Change

Several studies show a concern for climate change among younger generations. According to research in Europe, 12-25 year olds express either commensurable or higher levels of interest and concern about climate change than older age groups, although the concern for climate change, just as in the general population, is seldom the top priority (Corner et al., 2015). Studies in Austria, Switzerland, and Germany have found that 76% of respondents perceived climate change as a very, or fairly, big problem, and to widen the scope, further studies conducted in Oman (Ambusaidi et al., 2012), India (Chhokar et al., 2011) and the United States (Wachholz et al., 2014) have shown that 12-25 year olds feel slightly higher levels of concern compared to older age groups. Australian research shows that anxiety and foreboding is a strong theme within this age range about a future that cannot be nor easily controlled or predicted. Here, climate change and the environment was the major cause for concern, associated with feelings of stress, anxiety and despair (Strazdins & Skeat, 2011). Research conducted in Sweden shows that climate change is explicitly recognised as a stressing factor, with psychological implications of the well-being of children as young as 12 years old (Ojala, 2012b).

2.2 Climate change - the ungraspable topic

Compared to other issues climate change is a quiet topic in some ways, as the climate in its past, current and future state and developments are not always easy to remark at first hand, or even grasp at all (Schäfer, 2015). When talking about 'climate', the term refers to weather indicators, such as wind, precipitation and temperatures, and to speak of the term, these indicators have to be described and monitored on large scales of time and space. Spatially spoken, the term 'climate' can refer to descriptions for entire countries, continents and the whole world. Timely spoken, the World Meteorological Organisation, for instance, suggests to speak of 'climate' when there are 30 years of weather averages to be presented (Schäfer, 2015). This dimension of scales lie far beyond each and every individual's biographical and life-world horizons. The main anthropogenic cause for climate change, greenhouse gas emissions, are by some considered to be invisible with consequences perhaps not happening here and now in the global north. This can make climate change be perceived as even more complicated and hard to understand (Schäfer, 2015).

2.3 Credibility and perception of climate change

The public perception about climate change has therefore been, and continues to be, polarised, where the propagation of fake news in media outlets can be a potential cause (Samantray & Pin, 2019). The social effects from climate change, and its measurements to mitigate them are complex, debated, and sometimes hard to understand (Schäfer, 2015), and with climate change communication, the receiver can have a hard time making sense of, and knowing what is right and wrong among all the climate related messages out there. Words like *CO₂*, *carbon*, and *climate* can be seen on all kinds of media outlets, and governments and companies are talking about *climate positivity*, *climate neutrality*, and *net-zero emissions* (Seignette, 2021). As Schäfer (2015) states, the most important part of climate politics today involves a reduction of greenhouse gas emissions in developed countries, but that is in particular constituting a political process that is very much far removed from people's life-worlds. In situations like action of climate change, where united beliefs can push necessary collective steps in one direction, polarisation can lead towards socially undesired actions (Samantray & Pin, 2019), further leading to a remaining polarised public understanding of climate change (Moore et al., 2019). What people know about them is based on media communication, but also other kinds of communication such as interpersonal one's (Schäfer, 2015). However, the division of beliefs is not only affected by the nature of users' tendencies like homophony within climate change communication, but also due to the nature of the information itself (Samantray & Pin, 2019).

2.4 The perception of different news outlets among young people

Comparing different news outlets such as TV, radio, newspapers, blogs, social media, and online newspapers, previous research indicates that young people have shown the highest levels of credibility for news on TV, following with news in newspapers. News on social media have appeared to have the lowest levels of credibility (Andersson, 2021). Media outlets such as documentaries have during the past decades faced a decreased level of faith in the credibility of images, as people are more aware of the history of manipulative images, and further the technological possibilities that are available in generating and creating images (Pollak, 2008). However, cameras in general have so far maintained their reputation as infallible eyes, whereas the moving image can still be considered as one of the most powerful and strongest instruments of communication for creating confessedly authentic imprints of realities (Deacon et al., 1999). Furthermore, it is also stated that the expectations to learn something when watching a documentary will guide the perceptions of the

news presented, making the audience more open minded and susceptible towards the content (Pollak, 2008).

Regarding interpersonal outlets, Corner et al (2015) has identified both peers, parents, and teachers as highly credible messengers for climate change news. Teachers have been said to be perceived as credible in most cases, where one reason is that they have positioned themselves in the “body of knowledge” (Zheng, 2021. p. 2). The credibility of a teacher has shown to improve student motivation, to encourage them to learn cognitively and effectively, besides from other aspects of learning (Zheng, 2021). However, according to Schäfer (2015), television, newspapers, and the internet are to be more important news outlets than Interpersonal communication, where the interpersonal news are further considered as less credible than traditional news outlets (Schäfer, 2015).

2.5 Patterns over the engagement with news

How people in general engage with different news outlets is highly dependent on habits, but there are both habitual (planned) and instrumental (random) media behaviour, whereas most people have both kinds of habits for the engagement with news (Rubin, 1984). A major part of people have their special routines and habits that give order and structure to their daily life, and here the engagement with news is also included. It can for instance mean that some people habitually read the morning paper every morning for breakfast, or watch the same news programme every night at 9pm, and further scroll through the Facebook feed as the last thing to do before going to bed (Statens medieråd, 2019). With the increase of ownership of media technology, such as cellphones, individualisation of the engagement with news, as well as instrumental behaviour, can increase (Statens medieråd, 2019). When using one's own technological device, the search for news is directed towards the personal interests, or adapted to the needs of the individual at the moment (SOU 2016:30). Young people of today are normally provided with their own smartphones, and can be assumed to have a more instrumental engagement with news compared to the older generations, although the habitual engagement with news does not necessarily have to cease (Statens medieråd, 2019).

2.6 The engagement with news outlet among young people

Previous data collections presented by Statens medieråd (Swedish authority and knowledge center for children's and young people's media use (2019)) show that about 40% of the children in Sweden start to take part in news when they are in the age range of 5-8 years old. During this time, the TV is the main channel for news, and before the teenage years, TV is the most commonly used to access news, with only 10% in the age of 9-12 not watching news on TV (Statens medieråd, 2019). As the children get older, tablets, computers and cellphones become much more important (Nygren & Brounéus, 2018). According to previous research, this development in age also leads to increased engagement with news, as young people use more media outlets for their news engagement (Statens medieråd, 2019). The total proportion of young people using media for news aged 9-12 is 63%, while 71% among the 13-16 years old, and 83% among the age of 17-18 (Statens medieråd, 2019). Although reports and research on news in digital media outlets show that traditional news outlets, namely newspapers, still have a strong position in the media landscape of Sweden (Andersson, 2021; Wadbring & Ödmark, 2014), the engagement with news over cellphones increases while the engagement with newspapers seems to decrease a bit in all ages (Statens medieråd, 2019). Young people mostly reach for digital media when accessing news (Nygren et al., 2019), but it is worth mentioning that the access of news through a computer, tablet, or cell phone to a large extent means that the news are found through Instagram, Youtube, Snapchat and Facebook. Rarely, this means that the news are found on sites for morning papers, Twitter or at a website for a TV (Ohlsson, 2021). Although news may perhaps not be the most common category of information that young people in Sweden have in their digital communication (Nygren et al., 2019), previous research shows that young people do engage with social media outlets to retrieve news more often than other age groups (Andersson, 2021), where 70-80% of young people have reported that they engage with news regularly (Nygren et al., 2019).

2.7 Planned and random engagement with news

Further, the use of news can be understood as both planned or random. The planned use of news is often intentional, where people actively choose their news for the moment through habits and routines (Statens medieråd, 2019). On the contrary, the random use of news happens when news is spreading even to the ones who are not interested, called *the trap effect*. For instance, it can happen when someone unintentionally sees the news when waiting for a programme to start, or remain seated with the family after the programme has ended (Aalberg et al., 2013; Schoenbach & Lauf, 2002). Furthermore, researchers believe that television's ability to capture viewers who would not

otherwise choose news programs has decreased, as media use is increasingly done individually on digital platforms, where social media is part of the daily media repertoire (Aalberg et al., 2013). The overall consequence of the change in the media landscape is said to be a reduced probability of unintentional, random exposure to news and unintentional learning (Strömbäck, 2015). At the same time, there are other researchers who believe that the unintentional and random news consumption may increase, or has already increased, with the increased use of social media (Amaral & Silveira, 2018; Jervelycke Belfrage, 2016; Boczkowski et al., 2017). For instance, an increased rate of news-sharing between friends and family on Instagram and Facebook can with great probability be a reason that random news consumption may increase (Hermida et al., 2012). Due to this, the engagement with news could even be considered to be more of a social activity (Statens medieråd, 2019). Several studies show that young news users appreciate random engagement with news, by receiving news shared by friends and family, as it may lead to an increased range of knowledge and perspective about something they otherwise would not have learned or thought about (Boczkowski et al., 2017). The “sharing” and random use of news has become a central part of the experience of news, and some researchers have stated that the social surrounding of people has partly become the main news editor (Hermida et al., 2012).

In the past, news media have had the role as gatekeepers, but are in the present day more and more set aside as people prefer news recommended and shared by friends, rather than from established news outlets and journalists (Statens medieråd, 2019). Meanwhile, there are studies showing that young people have several ways to receive news, and that they perhaps prefer to receive news both planned and randomly, depending on what kinds of news it is (Madden et al., 2017; Young, 2015). Conversely to Hermida et al. (2012) and Statens medieråd (2019), Schäfer (2015), argue that mass media on TV, in daily newspapers and on the internet, independently if the use of news are planned or random, are more important than the interpersonal communication.

2.8 Explanatory factors for outlet engagement

Why different people engage with different kinds of news outlets, and why some people take part in more news than others can be explained by the frameworks of application and graphics research related to media, within McCuail’s (2010) Mass Communication Theory. The primary factor is that people have different needs that the media can help to meet, whereupon people choose different media and different content depending on what needs they have. These theoretical perspectives and

research traditions were formulated in contrast to previous research where the audience was considered to be passive recipients. Instead, the audience's active choices have been emphasised, and gradually it has developed into more refined models of the connections between the audience's needs and problems on one hand, and the choice of media on the other. The needs and problems the individual has are said to be shaped by both the societal structural level, as well as the individual (McCuail, 2010). Thus, how society is organised, including its media system, and the psychological, social needs and problems that characterise the individual's life situation (McCuail, 2010). Where in life a person is, and where and when the person grew up during their formative years will have an affect on their approach to the media, depending on what the media system looks like during that time period (Statens medieråd, 2019). However, as Westlund & Weibull (2013) stresses, there are always risks in categorising story groups according to some common characteristics as it can hide more than it explains. For instance, the existing technology and media system nevertheless sets the frame for what is possible to take part of (Strömbäck et al., 2013).

3 Theoretical framework

In this chapter, a brief introduction of the source credibility theory will be presented. This follows with an introduction of the conceptual framework, including the 5 dimensions of source credibility theory.

3.1 Source Credibility Theory

The Source Credibility Theory (SCT) explains how communicator's so-called persuasiveness is being affected by the perceived credibility of the outlet of the communication (Hovland & Weiss, 1951; Berlo et al., 1969). Propounded by Hovland et al. (1953), the SCT states that people, or receivers, are more likely to be persuaded when the outlet is perceived as credible (Hu, 2015). The perceived credibility is said to be one of the most important factors for effectively persuading message receivers (McCroskey, 1966; Baudhin & Davis, 1972). Regardless of format, the credibility of all communication has been found to be strongly influenced by the perceived credibility of the outlet of that information (Lowry et al., 2014). Within communication, source credibility is further considered as one of the most important factors that has differentially affected people's behavioural intentions, attitude, and

therefore affected people's behaviour eventually (Hu, 2015). This underlines the importance of credibility research within climate change communication.

When people do not find outlets credible, the communication results have shown to not be as effective as expected (Hu, 2015). Engaging with news has been noted as key for political and democratic engagement, democracy in general (Boulianne, 2016; Nygren et al., 2019), citizenship and civic awareness, especially for young people as it may be a starting point for a generation of future active citizens and decision makers (Boulianne, 2016; Kruike-meier & Shehata, 2017), empowering both individuals and society (Nygren et al., 2019). However, the sharing of news further is not prominent in this study.

3.2 Conceptual framework for Source Credibility Theory

As being studied in communication, political science, psychology, and other literatures, the credibility of messages is overall defined as a collection of features of messages that makes the audience set value to the message content, or the senders, in relation to the information mediated (Rouner, 2008). However, McCroskey (1966) set more focus on the audience as he has defined sources credibility as the perceiver's attitude towards a source. McCroskey and Jenson (1975) have stated that one of the most recurring conclusions drawn from previous research relating to effects of communication, is that what the receiver of the information brings to the communication situation, for instance preconceived notions, are much more crucial for communication impact than anything in the communication outlet itself. Credibility as a term will be approached in this research through the 5 dimensions of SCT, which are competence, composure, character, sociability, and extroversion, described below:

Competence

That someone or something is regarded to have the quality of being competent, or being based on competence, refers to a certain amount of knowledge, ability, skill (Delamare Le Deist & Winterton, 2005), expertise, or judgement ("Competence", n.d). For instance, a person can be considered to have a lot of knowledge within a certain topic, or have a certain amount of working experience, making that person's thoughts and opinions about a topic or perspective specifically valid or reliable

(Delamare Le Deist & Winterton, 2005). Competence as a dimension was firstly formulated within SCT by Hovland et al. (1953) as two dimensions: trustworthiness and expertise.

Composure

The dimension of composure relates to if someone, or something, is perceived as calm, sane, or relaxed ("Composure", n.d.). Composure can be further understood through the term self-possession, which means that someone has control of one's own emotions or reactions and can further stay rational even in stressful or difficult situations ("Self-possession", n.d.).

Character

Character relates to if an outlet is perceived as kind and having a sense of compassion for others (McCroskey, 1966). The dimension has also been referred to as the measurement of goodwill, which refers to the intention towards the receiver (McCroskey & Teven, 1999).

Sociability

Sociability relates to how someone or something is being perceived as sociable. For instance it can be perceived as friendly, encouraging or gracious as the person shows interest in interacting with the surrounding environment ("Sociability", n.d.).

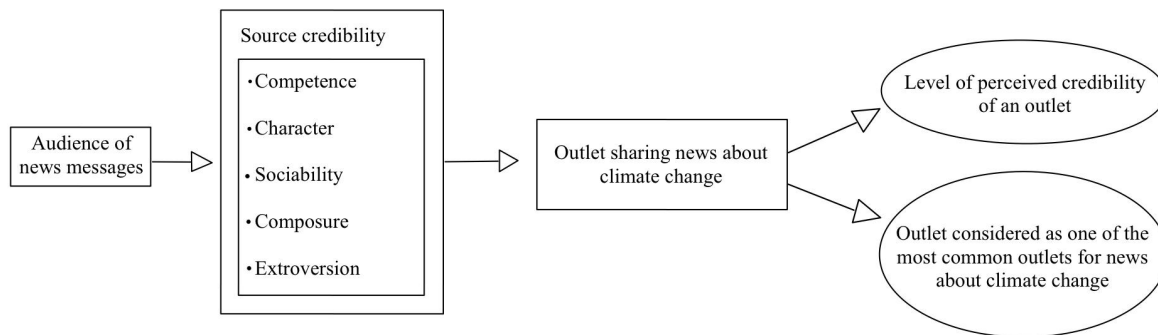
Extroversion

Extroversion can relate to if an outlet is considered to be either talkative, bold, and sometimes even aggressive in their way of being and interacting with others ("Extroversion", n.d.). Further, extroversion has been defined as a personality or nature that focuses on feelings of joy associating with others (Korzaan & Boswell, 2008).

What to consider here, is that *character* and *sociability* have been argued to be one single dimension, as they could seem quite similar. However, research by McCroskey and Jenson (1975) suggests that it is presumably better to treat them as two dimensions, rather than one ("character-sociability"), as they are separate. The independence of these two dimensions are said to cause little or no difficulty, since the worst that could happen is that two perfectly correlated scores would be obtained (McCroskey & Jenson, 1975).

Figure 1

Conceptual framework - Source credibility theory



Note: The figure is inspired by research about 5 dimensions of SCT by McCroskey & Jenson (1975), shown as influencing factors for perceived credibility and engagement with outlets sharing climate change news. (Own creation)

These 5 dimensions were formulated by McCroskey & Jenson (1975) as an answer to the major part of source credibility research that continued to assume that this occurrences to be an “unidimensional perception” with “artless measurements” (McCroskey & Jenson, 1975, p. 169), although laboratory research within the field already had coherently found source image to be an “multidimensional perception” (McCroskey & Jenson, 1975, p. 169). According to McCroskey and Jenson (1975), the so-called artless measurements could for instance be by asking non-in-depth questions when gathering data about source credibility, which the 5 dimensions could help to overcome. By working with these dimensions of SCT in this research, underlying causes of outlet credibility and outlet engagement among young people will hopefully be able to be investigated. As Figure 1 shows, the 5 dimensions of SCT is considered as an intermediate stage between the audience of news messages, and the outlets sharing climate change news.

4 Methodological approach

In this chapter, the methodological process will be explained in detail, including the positioning of the research, research strategy, the quality criteria, and procedure of the surveys.

4.1 Research design

The research is positioned in critical realism, where the reality or ontology in the research is seen as a social condition, being separated from human knowledge and beliefs (Bryman, 2015). A critical realist research accepts the reality of the social world in the matter of discourses and social structures. The philosophy acknowledges that both the results from the survey, and the researcher's position is influenced by subjective perspectives, based on world views, education and cultural experiences (Bryman, 2015). In consonance with this, it needs to be recognised that the results of this research are not the objective truth or reality, and further that the interpretations of the researcher shape the outcome of the research. However, the process of interpretation is crucial for possible underlying orders to be discovered (Walliman, 2006).

The focus of the research will be to determine where young people take part in climate change news, and which of these outlets young people perceive as credible. The SCT was considered as an interesting and complementary framework to answer the overarching aim of this research. To counteract non-in-depth questions in data collection, the 5 dimensions were implemented in two of the survey questions, as concrete alternatives for influenced factors for perceived credibility for, and engagement with, the outlets. By using the 5 dimensions of the SCT, the “what” and “how” can be investigated by studying the two independent variables, which are commonly used outlets for climate change news, and the perceived credibility of these outlets in young people.

Outlet definition

Previous research on source credibility has mostly been conducted within the context of public speech, which in general has focused on interpersonal communication. With multimedia rising in the recent half century, research has extended its focus on media credibility as well (Hu, 2015). This research will include both interpersonal, media, commercial media, and social media outlets into this investigation. Media outlets is an overall definition for different kinds of (mass) media which publishes news stories (“Media Outlet”, n.d.). However, news stories can also be shared through interpersonal communication between two or more individuals, performed to coordinate behavior, thinking, or action between the communication partners (Podschuweit, 2017). Therefore, the term outlet will be used in this paper as an overall term when referring to different kinds of news outlets included in this research, from both mass media, social media, media, commercial media and

interpersonal communication. Independently if it is about interpersonal or media credibility, McCroskey (1966) have defined sources credibility as the perceiver's attitude towards a source.

4.3 Why a survey?

The data used in the results have been collected with an empirical cross-sectional survey, to make inferences about a population of interest at one point of time (Lavrakas, 2008). As the study was conducted with underage participants (12-16 year olds) the most efficient way to gather data was considered to be by contacting high schools, where the principals and teachers could decide whether it was possible for the students to participate in the surveys or not. A survey can be time efficient for the researcher, as it does not require the researcher to be on site to collect the data in person. Further, a survey can be a good option for data collection in this particular case, as the teachers themselves only have to give the survey-link to their student, whereupon the students can carry out the survey on their own (Nygren et al., 2019). As the survey was conducted during school hours, the survey was designed with few and repeating questions, to make it as easy and quick as possible to carry out both of the surveys (see Appendix 1 & 2). As the aim of this research is to establish statistics, surveys are considered as a good tool to collect information systematically from a sample of respondents in order to generate quantifiable information about the matter of investigation (Schubotz, 2019).

4.3 Research Quality Criteria

Quantitative studies function on the condition in terms of an objective reality, through maintaining the researcher as neutral as possible and avoiding human bias when possible (Kwadwo Antwi & Kasim, 2015). In line with critical realism, I acknowledge that this research is formed by subjective truths (Bryman, 2015). The participants were encouraged to answer through their own perception of reality, and my own interpretation when discussing the results though a perspective being shaped by my worldview, and educational and cultural norms. However, concerning the data collection, a standardised survey was utilized with questions based on a pre-survey, ensuring valid and reliable results. Further, with the means of the questionnaires conducted online, the researcher could not influence the respondents while answering the survey. Additionally, the definition of participants, and the great involvement in the survey, supports generalisable results. As the process of investigation is explained and described in detail in this research, it allows replication by others.

4.4 Data collection: Participants

The research is based on results gathered, using two surveys conducted in the county of Skåne, south Sweden. Both of the surveys were sent out to high school students with the help of principals and teachers. In December 2021, the pre-survey was carried out in high schools of Lund Municipality, including 34 participants. Other high schools outside of Lund Municipality were not included for the first survey, as it was a question of time management. This pre-survey aimed to gain insight into what outlets young people receive climate change news from, and as inspiration when creating the main survey later on. The main survey was sent out to about 160 high schools in the county of Skåne, resulting in 336 participants. The main survey included questions related to the RQs to this study, and aimed to gather data for answering the overarching aim of this research. As a question of time management, and the great amount of high school students within the geographical area, the county of Skåne was considered as a sampling field big enough for data collection to create generalisable results.

4.5 Data collection: Pre-survey

The pre-survey aimed to guide and inspire when creating the main survey. It asked one question; “In what different categories [of media] do you take part in information and news about climate change?” [*I vilka olika kategorier [av medier] tar du del av information och nyheter om klimatförändringar?*], after which 5 categories were presented:

1. “Social media”, including Instagram, Facebook, Tiktok, Snapchat and Twitter.
2. “Internet”, including Youtube, “within a blog post”, online news paper, “as a commercial in your e-mail”, and “at a website”.
3. “Television”, including “news on television”, “commercial on television”, “within a documentary”, “within a movie/series/TV-programme”.
4. “Newspaper”, including daily [Swedish] news paper, subscription magazine, “commercial in the mailbox”, and “information sheet from an organisation”.
5. “Socially”, including friends, family, and teachers.

All the different categories included an option so either press “none of the above mentioned alternatives”, and “other”, where they could also specify another option.

After receiving the answers for the pre-survey, the idea was to include outlets in the main survey that more than 10% of the participants voted for within that specific section (see Appendix 1 to see results). Methodological mistakes were unintentionally made, as Tiktok (with 52,94% of the votes), and Twitter (with 11,76% of the votes) were not included, while Facebook (received 5,88% votes) was included in the main survey. Further, in order to counteract confusion, two other outlets (“a blog post” and “website”) were not included as they were considered to be too similar to some of the already included outlets. Further on, Online newspapers were merged together with Daily newspaper (“Daily/online newspaper”), as they both could refer to the same newspaper company, and therefore the exact same news. Specified outlets in the “other”-option were “International newspapers” [Internationella nyhetstidningar], “websites” [webbsidor], and Sydsvenskan (Swedish newspaper), and the website Reddit. These examples were not included in the main survey as they either fit in with another already included option, or did not receive more than 10% of the votes.

4.6 Data collection: Main survey

The main survey included 18 questions. Question 1-14 aimed to answer which of the different outlets that the participants found credible (see Appendix 3 for the outlook). The answering options were created in the form of a 4 point likert scale, for the participants to address whether they found each and every outlet presented in the survey as Not Credible, Less Credible, More Credible, or Very Credible, to put a label on each and every alternative. The questions was; “Please, indicate how credible you find the following media outlet on a scale of 1 (Not Credible), 2 (Less Credible), 3 (More Credible), or 4 (Very Credible):” [*Vänligen ange hur trovärdig du finner nedanstående mediekanal på en skala från 1 (Inte Trovärdig), 2 (Mindre Trovärdig), 3 (Mer Trovärdig), eller 4 (Mycket Trovärdig):*], where the options were Instagram, Facebook, Snapchat, Youtube, news on TV, commercial on TV, documentary, within a movie/TV-programme, [Swedish] daily news papers/online news papers, commercial in the mailbox, information sheet from an organisation, friends, family and teachers.

Based on the 5 dimensions by McCroskey & Jenson (1975), question 15 was formulated and aimed to create an understanding of the perceived credibility answer for in question 1-14. The question was; “Based on the outlets and sources you feel More or Much credibility for, please fill in what your feeling depends on:” [*Utifrån de kanaler och källor du känner Mer eller Mycket trovärdighet för, vänligen fyll i vad din känsla beror på:*]. To further get an understanding of what are the most

common outlets for climate change news, question 16 asked; “Which of the alternatives do you see as your main outlet (which you use often) for receiving news about climate change?” [*Vilka av alternativen ser du som dina huvudsakliga källor (som du använder ofta) till nyheter om klimatförändringar?*]. The participants were given the option to choose as many alternatives as they liked to.

To get an understanding of why the participants considered some of the outlets as the most common outlets for climate change news, question 17 was structured with the same options as question 15, but with the question: “According to the channels and sources that you have denounced as your main source for news about climate change, please enter what this depends on:” [*Utifrån de kanaler och källor du anger som dina huvudsakliga källor, vänligen fyll i vad det beror på:*].

Question 18 went: “How often do you get in contact with the different alternatives?” [*Hur ofta kommer du i kontakt med de olika alternativen?*]. This question aimed to answer how frequently the participants engage with the different outlets. All the already mentioned alternatives were presented again, and the participants could fill in whether they engage with the outlet daily, a couple of times per week, one time per week, a couple of times per month, or less often/never.

The idea was to make all the questions in the main survey mandatory to answer. However, due to a methodological mistake, question 15 (327 answers) and 17 (322 answers) were made optional.

4.5 Ethical considerations

In order to prevent any of the participants from being harmed, a number of ethical concerns were taken into consideration regarding the informed consent process, confidentiality, and harm and benefit. Although the abilities of young people should not be underestimated, consent practices are based on the assumption that their capacity of decision-making is not equivalent to adults’. As Felzmann (2009) stresses, research with underaged participants has to meet legal and ethical requirements of obtaining assent from a legally recognised surrogate decision-maker. Therefore, high schools were considered to be a good way of involving the participants. Both principals, teachers, but also the students themselves, were asked to participate, and therefore also had the possibility to refrain from participating. Regarding both of the surveys conducted, the principals and teachers were informed about this master thesis research, what the topic in overall was about and the aim of the

survey from the very beginning. Further, a brief summary of the topic was introduced in the beginning of the surveys (see Appendix 2 for example). In both the email and the survey information, it was clarified that the participants would be anonymous. The survey did not either ask for age, gender, or to what school the participants belonged. However, if nothing else was said, the school's name would be mentioned in the acknowledgements of this paper. As the survey was carried out individually, there was nothing with the survey that would expose the answers of the participants.

Regarding possible harm for the participants, ethical acceptability of any research depends on a positive risk-benefit ratio. In research conducted with underaged participants, it is required that the possible psychological and social risks to participate are no more than minimal (Felzmann, 2009). For instance, topics such as mental illness, drug use or sexual activity can be sensitive and potentially upsetting (although research also state that underaged should not be overprotected and withheld from these topics as well). This research does not process these kinds of topics, nor the survey.

5 Results

This chapter includes a presentation of the results from the main survey of the research, whereas the RQs will be answered:

- What outlets sharing climate change news do young people find credible and why?
- What outlets are considered as most common for climate change news and why?
- How frequently are the outlets interacted with?

In total, 336 upper compulsory school students resident in Skåne county answered part of, or the whole main survey. First, the results showing perceived credibility for different outlets are presented, followed by outlets considered as main sources for news about climate change. Further, influencing factors for credibility and engagement with outlets are presented. Lastly, results showing the frequency of outlet-use are presented. All figures presented in the results section are created by the author with data from the main survey.

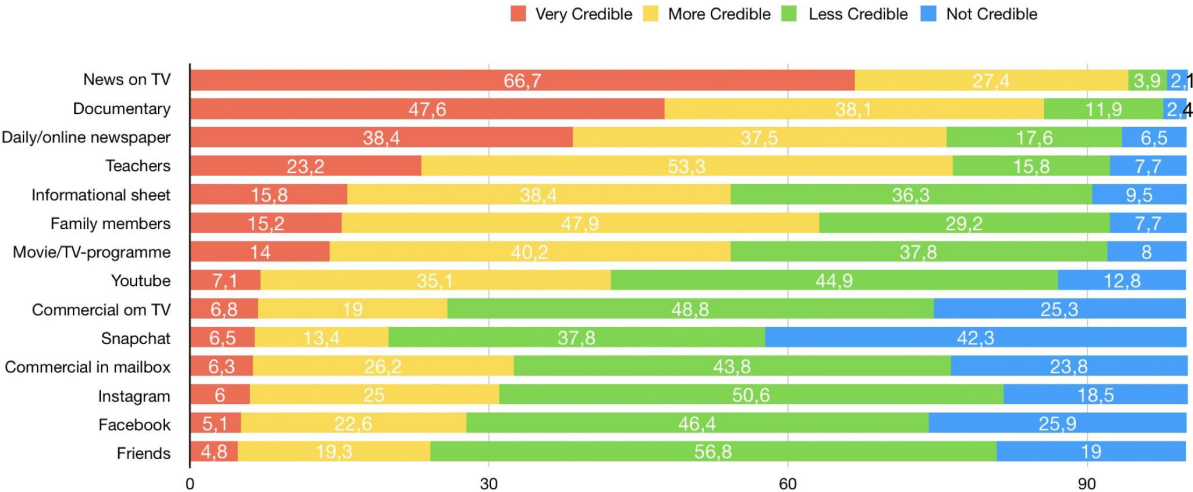
5.1 What outlets sharing climate change news do young people find credible?

This section aims to answer what climate change news outlets young people find credible or not. The most interesting findings are presented in 3 categories including outlets perceived as most credible, more credible and less/least credible. If an outlet received the most votes on being Very Credible (VC), it is counted as one of the most credible outlets. If an outlet received the most votes on being More Credible (MC), it is counted as one of the more credible outlets. Lastly, if an outlet received the most votes on being either Less Credible (LC) or Not Credible (NC), the outlet is considered as one of the less/least credible outlets.

Most credible outlets

The findings (Figure 2) show that there is a great difference in perceived credibility between the different outlets. In general, traditional outlets for climate change news such as News on TV and Daily/online newspaper are perceived as the most credible outlets, but also a media outlet such as Documentary is seen as one of the most credible outlets. News on TV was by far seen as the most credible outlet for news about climate change, as more than 60% of the participants answered that the outlet is perceived as VC. Only 6% in total answered that they find News on TV either LC or NC.

Figure 2
Results of perceived credibility for different outlets



Note: The percentage of young people perceiving the different outlets as Very Credible, More Credible, Less Credible, or Not Credible. Data from the main survey, conducted with 336 upper compulsory school students.

More credible outlets

According to the survey, more participants answered that they perceive Teachers as MC (53,3%), rather than VC (23,2%). However, note that Teachers are seen as VC or MC by more participants in total than Daily/online newspaper, although a larger amount of participants perceive Daily/online newspaper as VC compared to Teachers. Information sheets, Family members and Movie/TV-programmes are perceived as some of the more credible outlets. All three had an adjacent number of participants answering that they perceive the outlets VC, but Information sheets was seen as the most credible outlet out of these three when only looking at the category of VC. However, Family members are seen as VC and MC by more participants than Information sheets and Movies/TV-Programmes. Further, there are almost equal amounts of participants perceiving Information sheet and Move/TV-Programmes as LC, as there are participants perceiving them as MC.

Less/least credible outlets

Note that after Movie/TV-programme, the perceived credibility level decreases drastically. It can be seen that the amount of participants perceiving Youtube and the rest of the outlets as VC are decreasing for every outlet presented. However, the amount of participants perceiving the outlets as MC, LC or NC interestingly varies a lot. Friends is perceived as one of the least credible outlets with only 4,8% of the participants perceiving the outlet as VC. Friends also received the highest votes for being LC (56,8%). Interestingly, more participants perceive Snapchat as VC (6,5%) than there are participants perceiving Friends as VC. However, note that Snapchat has by far the highest votes for being NC (42,2%).

The difference within the categories of news outlets

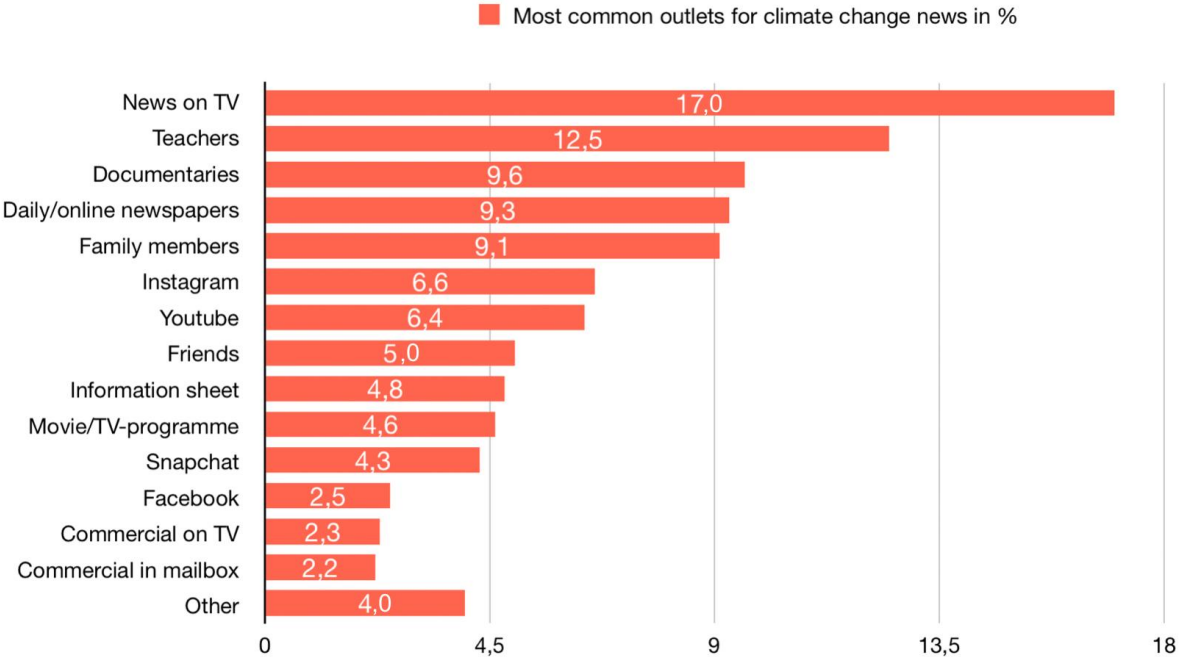
The perceived credibility for interpersonal outlets such as Teachers, Family members, and Friends differ to a large extent, while the traditional media outlets (News on TV and Daily/online newspaper) in general are perceived as the most credible outlets. Between the media outlets Documentary and Movie/TV-programme the perceived credibility differs, although they are both considered as some of the most credible or more credible outlets for climate change news. Commercial media outlets (Information sheets included) differ in perceived credibility, where Commercial on TV and Commercial in mailbox are perceived as less credible, while Informational sheet is considered as more credible. According to the survey, social media outlets are in general perceived to be less or least credible.

5.2 What outlets are considered to be the most common outlets for climate change news?

With a certain distance between each other, both News on TV and Teachers are considered as some of the most common outlets for news about climate change. As figure 3 presents, 17,0% of the participants consider News on TV to be one of their most common outlets, whereas Teachers is considered by 12,5% of the participants to be one of their most common outlets for climate change news. Documentaries, Daily/online newspapers and Family members are following outlets to be considered as some of the more common outlets of climate change news. Interestingly, Instagram is seen as one of the most common outlets for news about climate change among the social media outlets, although it is perceived as one of the least credible outlets. Additionally, Friends is considered as one of the more common outlets for news about climate change, which shows an important difference from figure 2, where Friends is perceived as the very least credible outlet for news about climate change. Commercial media outlets such as Commercial on TV and in mailbox are seen as some of the least common outlets by the participants.

Figure 3

Results of how common different outlets are for climate change news



Note: The % show how many participants consider the outlet to be one of their most common outlets for climate change news. The participants could choose more than one alternative, with 1581 answers in total. Hence the percentage is based on 1581 as 100%. Data from the main survey, conducted with 336 upper compulsory school students.

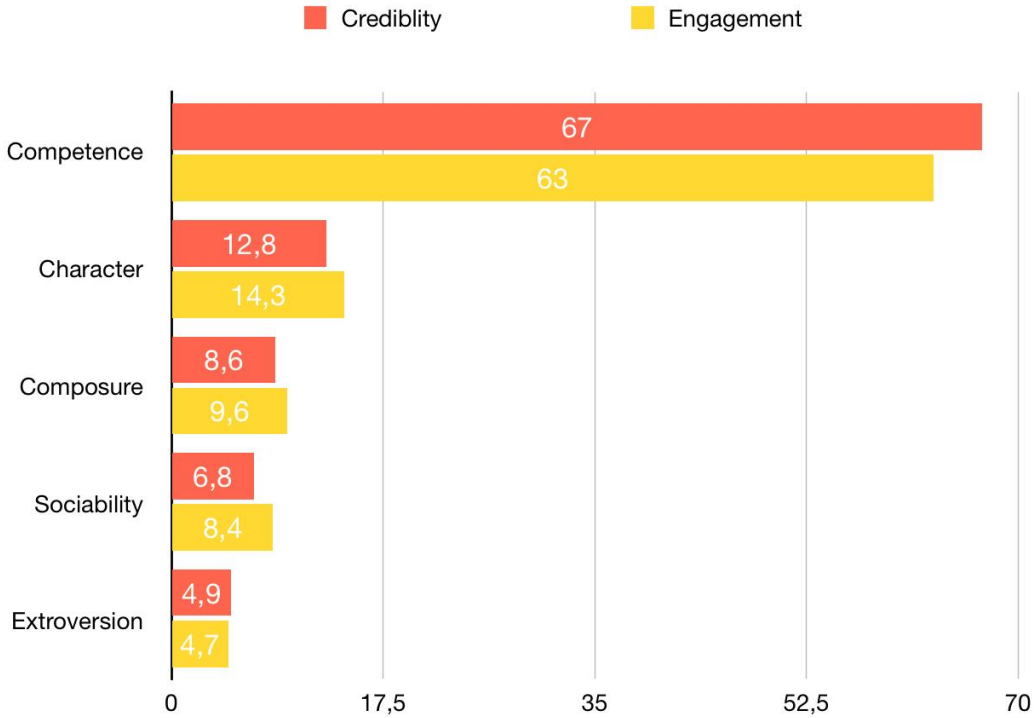
Other outlets mentioned by the participants themselves as some of their common outlets for climate change news was Tiktok, Twitter, Lilla Aktuellt (News on TV for children), Google, Twitch, SVT Nyheter (streaming service), Fox News, BBC News, Discord, Flashback, magazines and books, politicians and scientists, and environmental activists.

5.3 What are the main influencing factors for outlet credibility and engagement?

Out of 336 participants in total, 327 of them answered the question of influencing factors for outlet credibility, and 322 participants answered the questions about influencing factors for engagement. The results in figure 4 show that competence is distinctly considered as the most influential factor on perceived credibility and engagement with climate change news outlets. However, results show that competence is considered to be a slightly more influential factor for credibility (67% out of 327), than for engagement (63% out of 322).

Figure 4

Influencing factors for outlet credibility and engagement including the 5 dimensions



Note: Influencing factors for outlet credibility and outlet engagement among young people, using the 5 dimensions of SCT by McCroskey & Jenson (1975). Data from the main survey, with 327 answers for influencing factors for credibility, and 322 answers for influencing factors for engagement.

Character, composure, sociability, and extroversion are considered as influencing factors by young people to a lower degree. With a very small difference, the same pattern as with competence was seen concerning extroversion (4,9% for credibility, and 4,7% for engagement). Opposite, both character, composure, and sociability were slightly more influential factors for engagement, than for credibility.

5.4 How frequently are the outlets engaged with?

The results in Figure 5 show that social media outlets such as Snapchat, Instagram, and Youtube are used most frequently among all the different kinds of outlets. News on TV is the most frequently used traditional media outlet as 17,8% engage with it every day, whereas another 37,5% engage with it a couple of times per week. Out of the interpersonal outlets, Family members are the outlet most participants engage with every day (11,3%). However, the results of the engagement frequency with Family members shows a statistical variation, where all the participants are quite evenly divided up between engaging with the outlet every day, to less often or never.

As with Friends, the statistical variation of division between the participants can be seen with Commercials on TV, Daily/online newspapers, Friends, and Teachers as well. Some of the outlets that are least engaged with are according to the results Facebook, Commercial in mailbox, and Information Sheets. There are more participants engaging with these outlets less often or never, than participants (in total) who are using the outlets a couple of times per month, or more often.

Figure 5

Outlet engagement frequency

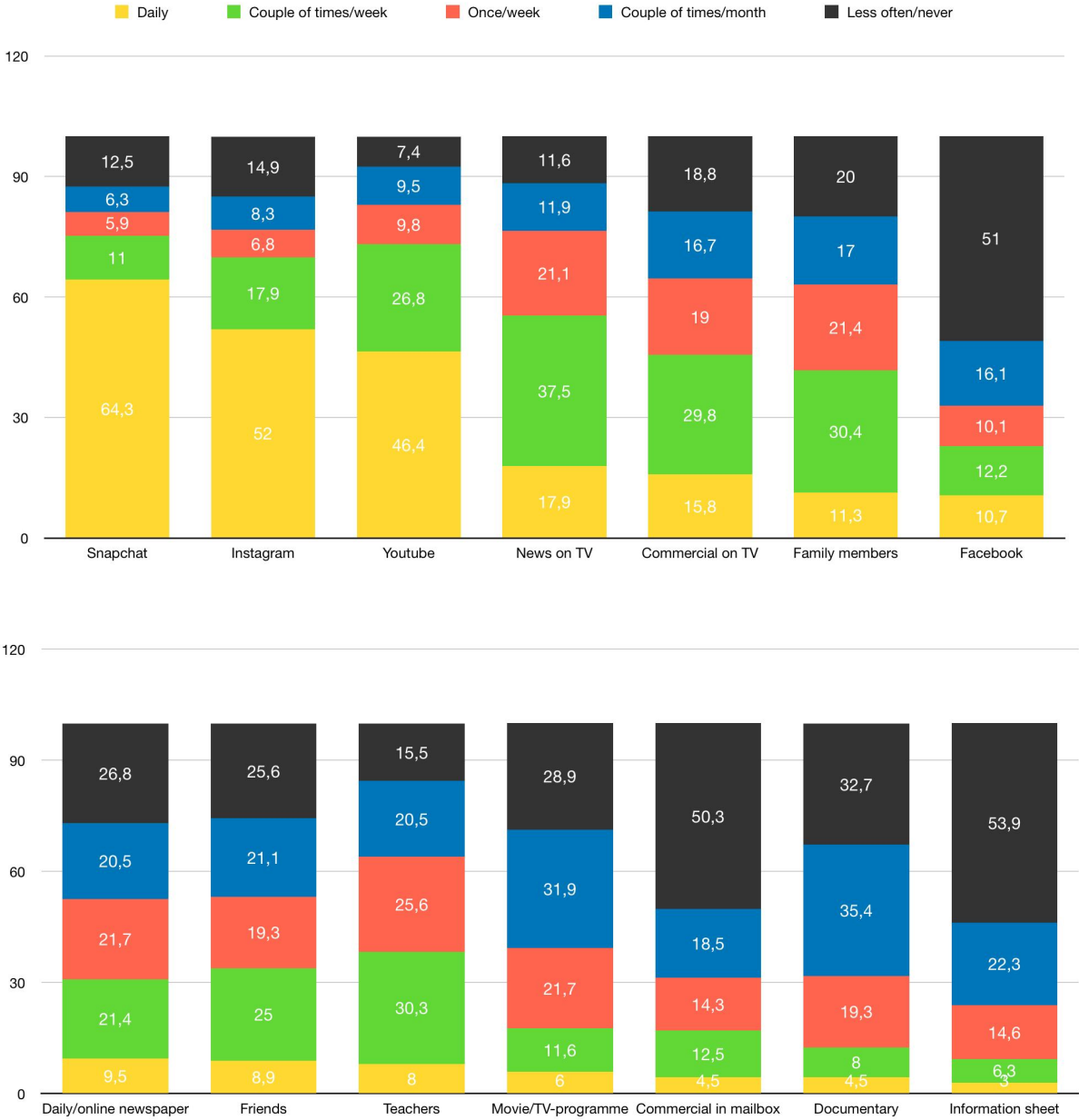


Figure 5. Young people's frequency in engaging with the different outlets, shown in categories of Daily, Couple of times per week, Once per week, Couple of times per month, and Less often/never. Data gathered from the main survey, with 336 participants.

6 Discussion

In this section the findings will be explained and evaluated. This will further on be related to previous research and the overarching aim of this thesis.

To determine where people perceive climate change news credible is key for change and future sustainability outcomes (Benevento, 2022; Kempton, 2020; Nygren et al., 2019). Young people have specifically been stated as an important group to focus on in such research (Benevento, 2022; Lee, et al. 2020; Nygren et al., 2019; Ojala, 2012a). Where young people actually engage with climate change news can further be considered as important for sustainability outcomes (Hunt & Wald, 2018), and sustainability science itself (Imlawi et al., 2015; Lang et al., 2012; Miller et al., 2014). Therefore, the overarching aim of this thesis focused on determining at what outlets young people take part in climate change news, and which of these outlets young people perceive as credible. Research of how climate change news is perceived by civil society have so far mostly focused on the evidence source (Asplund, 2018), or outer factors such as age and life circle (Westlund & Weibull, 2013). This has been said to increase a risk of categorisation, that hides more information than it explains (Westlund & Weibull, 2013). The 5 dimensions of source credibility theory was therefore considered as a complementary element to undergo the risk of categorisation, and further as an interesting tool to investigate factors for outlet credibility and outlet engagement.

6.1 Answering the overarching aim of the thesis

As stated in the introduction chapter, the overarching aim of this thesis is to determine where young people take part in climate change news, and which of these outlets young people perceive as credible. Starting off with the outlets considered as common for climate change news, the results indicate that News on TV is one of the most common outlets for engagement with climate change news among the participants. News engagement through TV is stated in previous research to be common among younger children (Statens medieråd, 2019), but for young people (aged 12-16) previous research indicates that news is mostly engaged with through cell phones and tablets (Nygren & Brounéus, 2018). On cell phones and tablets, the most common outlets for news are rarely sites for TV news channels or newspapers, but social media outlets such as Instagram, Youtube, and Facebook (Ohlsson, 2021). This shows a deviation in the results of this study compared to previous research, since the social media outlets included in this research do not seem to be very common outlets for

climate change news, meanwhile Daily/online newspapers are considered as some of the most common outlets for climate change news (see Figure 3). Furthermore, News on TV was also considered as the most credible outlet. According to previous research, traditional news outlets such as news on TV and Daily newspapers have been found more credible by young people (Statens medieråd, 2019; Nygren et al., 2019), which the results of this research strengthen. This could indicate that young people actually engage with the news outlets they find credible, and that News on TV is one good outlet to inform the younger generations about climate change news.

Further, Teachers is considered as one of the most common outlets for climate change news, and is also considered to be one of the more credible outlets for news about climate change among the participants, after Daily/online newspapers. As Zheng (2021) states, teachers can be seen as the embodied form of knowledge, which further can be interpreted to be directly linked to the top influential dimension for both credibility and engagement, which is competence. This suggests that teachers would be perceived as very credible, but according to the results in this study, a higher number of the participants perceives the outlet as More Credible, rather than Very Credible. This sympathises with what Schäfer (2015) also stresses, that interpersonal outlets such as teachers are not as important outlets for climate change news as the traditional news outlets, according to the participants of this research. Documentaries is also considered as one of the more common outlets for news about climate change, and is further the second most credible outlet according to the participants which is also strengthened by Pollak (2008) and Deacon et al. (1999).

The results indicate that Instagram is one of the more common outlets for climate change news among the participants, and is further the most common outlet for climate change news among the social media outlets. However, Instagram is meanwhile considered as one of the least credible outlets for news about climate change. Friends was also considered as the least credible outlet, but is, however, also stated as one of the more common outlets for news about climate change among the participants. By taking the most influencing factors for outlet credibility and outlet engagement into account, the results do not indicate that competence actually leads to both outlet credibility and outlet engagement (as shown in figure 1), as the data from question 15 and 17 in the main survey suggests. If competence would be the influencing factor for both outlet credibility and outlet engagement, both Instagram and Friends as news outlets would either be perceived as more credible than they are, or be considered not as common outlets for climate change news as they are now.

6.2 Outlet engagement frequency

Due to deviating results from question 18 about engagement frequency of the various outlets (Figure 4), this result will be discussed in this section together with data indicating most common outlets for climate change news. As the results exhibit in figure 4, competence seems to be the distinct factor for outlet engagement. However, when asking the participants about how frequently they engage with the outlets overall, the data shows quite a difference compared to outlets seen as some of the most common outlets for climate change news. Here, News on TV is not the top outlet in engagement frequency and has a significantly lower engagement frequency than the top three outlets, which are the social media outlets Snapchat, Instagram and Youtube. Documentary is the one of the outlets with absolute lowest engagement frequency among the participants.

It should be emphasised that the higher engagement frequency for social media outlets is not considered as very surprising in this research. As mentioned before, young people have been stated to engage more with social media outlets rather than with traditional outlets, even when searching for news (Ohlsson, 2021). Social media outlets are after all platforms where people can socialise with friends and family. These outlets allow two-way communication for both receiving and sharing information, compared to traditional news outlets that allow the communication to only go on-way. However, it is interesting that traditional outlets such as News on TV and Documentaries are both found very credible, and considered as the overall most common outlets for climate change news, although the participants do not engage with them that often. Since the results differ a bit for common outlets for climate change news and outlet frequency, it can be interpreted that young people actually do not engage with climate change news so frequently. If they would engage with climate change news more frequently, perhaps the results of some of the most common outlets and outlet frequency would be more similar to each other. However, as the report by Ohlsson (2021) stresses, the increased use of cellphones and tablets does not simply mean that young people do not engage with news at all. Research shows that they still can engage with news on social media outlets such as Facebook, Instagram and Youtube (Ohlsson, 2021), but since these social media outlets are not considered as some of the most common outlets for climate change news, it can be interpreted so that they perhaps engage with other news, but not with climate change news.

This is a problem as it suggests that young people today do not interfere with the information that most likely will have an impact on their individual behaviour, and their attitudes towards the urging climate. According to previous research, it will also have an impact on future leadership, policy

making, research, which in turn will have an impact on sustainability outcomes (Benevento, 2022). However, young people are in a period of life that is formulated as complex (Alerby, 2000), and the concern for climate change is seldom the top priority (Corner et al., 2015). Therefore, it is perhaps optimistic to believe that young people will change their habits of outlet engagement for the sake of climate change news. A possible strategy to increase their engagement with climate change news could be to bring credible climate change news to the outlets they engage with the most. News on TV, Daily/online newspapers, Documentaries and Teachers are all of them considered as the most credible outlets in this research, and further some of the most common outlets for news about climate change. One can say that a TV news channel like SVT (Swedish news channel) or a daily newspaper such as Dagens Nyheter (Swedish daily newspaper) can be used within the social media outlets to contribute to credible climate change news on the outlets young people engage with according to the results in this research. However, this is a question of what young people choose to engage with within the social media outlets, as they can choose what accounts to follow on Instagram or channels to subscribe to on Youtube. As the participants of this study do not seem to engage with News on TV or Daily/online newspapers that frequently, it is perhaps not likely that they choose to follow these sources for information on Instagram or Youtube either. Therefore, climate change news that originates from a credible outlet, such as a TV news channel or daily newspaper, is likely not the solution alone to bring more credible climate change news to young people through social media outlets either.

What can be considered then if we have News on TV, Documentaries, Teachers and Daily/online newspapers that are both perceived as very credible by the participants, and considered as some of the most common outlets for climate change news, although they are not engaged with as frequently compared to social media outlets? As previously mentioned, climate change is seldom the top priority among young people (Corner et al., 2015). Perhaps this is where we have to change strategy, and focus more on what young people prioritise in life to be able to see more similar results between what outlets young people consider as most common outlets for climate change news, and what outlets they engage with more frequently. Can credible climate change news be presented within a context that young people prioritise? For instance, what if credible climate change news would be shared together with other information related to dreams or desires young people perhaps have in life. For instance, when a young person gets closer to adulthood, perhaps there is a growing desire to be able to obtain a driving licence, or to travel the world. What if commercials or news relating to these desires or dreams also point out that they will not be possible to experience if the urging climate is not more prioritised?

7 Conclusion

According to the results, outlets such as News on TV, Documentaries, Teachers and Daily/online newspapers are both considered as some of the most common outlets for news about climate change, and are further perceived as the most credible outlets for news about climate change news. The major influencing factor for both outlet credibility, and engagement with outlets sharing climate change news is competence, stating that knowledge, expertise and reliability impacts the participants the most in their behavior and reasoning related to climate change news outlets. However, as deviations were found in the results of outlet credibility and outlet engagement related to the 5 dimensions of SCT, it is not clear that competence actually influences the both variables according to the results in figure 3. However, some of the more interesting findings of this study is that there is such a difference in results between outlet engagement frequency in general, and what outlets that are considered as some of the most common outlets for climate change news among the participants. One reason can be a lack of engagement between the participants and climate change news specifically. This is based on previous research that states that young people do engage with news frequently, although they engage with news on social media outlets. If these news would also be about climate change, the data would perhaps show more similar results in outlet engagement frequency, and the most common outlets for climate change news.

This study focuses on both outlet credibility and outlet engagement among young people, within the field of climate change communication. The topic needs further research. This paper only touches very few areas in the field, out of many, that have yet to be discovered. A deviation was found in this research between the outlets considered as some of the most common outlets for climate change news, and the outlet engagement frequency. As a response to this, further research can for instance determine the influencing factors for the outlet engagement frequency as well, by using the 5 dimensions of SCT again. Further, this research did not focus on correlations between variables. It would for instance be interesting to see whether outlet credibility and outlet engagement influences one another, and also whether both these variables influence young people into action. The action can be in the form of sharing climate change news, or making other daily choices.

In the end of the discussion, it was mentioned that prioritisation among young people can be one influencing factor for what they choose to engage with. No previous research was included about this in the background, except that young people do not tend to see climate change as their top priority (Corner et al., 2015). Further research about what young people prioritise, and how/if this can have

an impact on climate change news engagement would be interesting, and is also needed before any statements can be drawn from the discussion in this paper. With some thoughts on future research, this research has, however, contributed with insights into where young people engage with climate change news, and also where young people find climate change news the most credible. As problematised in the discussion, the results indicate that the participants of this research do not engage with climate change news so often. The results from this study, together with future research, can lead to a deeper understanding of how to increase young people's engagement with climate change news specifically. As a final recommendation for future research, this where to set the continuing focus.

Bibliography

- Aalberg, T., Blekesaune, A., & Elvestad, E. (2013). Media choice and informed democracy: Toward increasing news consumption gaps in Europe? *Politics [The International Journal of Press]*, 18(3), 281–303.
<https://doi.org/10.1177/1940161213485990>
- Alerby, A. (2000). A Way of Visualising Children's and Young People's Thoughts about the Environment: A study of drawings, *Environmental Education Research*, 6(3), pp. 205-222.
<https://doi.org/10.1080/13504620050076713>
- Amaral, I., & Silveira, P. (2018). Young people and their practices of access and consumption of news in social media. *INTED2018 Proceedings*, 3500-3506. <https://doi.org/10.21125/inted.2018.0675>
- Ambusaidi, A., Boyes, E., Stanisstreet, M., & Taylor, N. (2012). Omani students' views about global warming: beliefs about actions and willingness to act. *International Research in Geographical and Environmental Education*, 21(1), 21–39. <https://doi.org/10.1080/10382046.2012.639154>
- Andersson, Y. (2021). *Ungar & medier 2021* [Kids & media 2021].
https://www.statensmedierad.se/download/18.57e3b0a17a75fbf0654916e/1632377641632/Ungar%20och%20medier%202021_anpassad.pdf. Statens medieråd.

- Asplund, T. (2018). Communicating Climate Science: A Matter of Credibility - Swedish Farmers' Perceptions of Climate-Change Information. *The International Journal of Climate Change: Impacts and Responses*, Vol 10(1). <https://doi.org/10.18848/1835-7156/CGP>
- Baudhin, S., & Davis, M. (1972). Scales for the Measurement of Ethos: Another Attempt. *Speech Monographs*, 39, 296-301. doi:10.1080/03637757209375769
- Benevento, S. V. (2022). Communicating climate change risk to children: A thematic analysis of children's literature. *Early Childhood Education Journal*. <https://doi.org/10.1007/s10643-021-01294-y>
- Berlo, D. K., Lemert, J. B., & Mertz, R. J. (1969). Dimensions for evaluating the acceptability of message sources. *Public Opinion Quarterly*, 33(4), 563. <https://doi.org/10.1086/267745>
- Boczkowski, P., Mitchelstein, E., & Matassi, M. (2017). Incidental news: How young people consume news on social media. *Proceedings of the 50th Hawaii International Conference on System Sciences (2017)*.
- Boulianne, S. (2016). Online news, civic awareness, and engagement in civic and political life. *New Media & Society*, 18(9), 1840–1856. <https://doi.org/10.1177/1461444815616222>
- Bryman, A. (2015). *Social Research Methods* (5th ed.). Oxford University Press.
- Chhokar, K., Dua, S., Taylor, N., Boyes, E., & Stanisstreet, M. (2011). Indian secondary students' views about global warming: Beliefs about the usefulness of actions and willingness to act. *International Journal of Science and Mathematics Education*, 9(5), 1167–1188. <https://doi.org/10.1007/s10763-010-9254-z>
- Competence. (n.d.). In *Merriam-Webster.com*. Retrieved 29 April 2022, from <https://www.merriam-webster.com/dictionary/competence>

Composure. (n.d.). In *Merriam-Webster.com*. Retrieved 29 April 2022, from <https://www.merriam-webster.com/dictionary/composure#synonyms>

Corner, A., Roberts, O., Chiari, S., Völler, S., Mayrhuber, E. S., Mandl, S., & Monson, K. (2015). How do young people engage with climate change? The role of knowledge, values, message framing, and trusted communicators: Engaging young people with climate change. *Wiley Interdisciplinary Reviews. Climate Change*, 6(5), 523–534. <https://doi.org/10.1002/wcc.353>

Deacon, D. H., Golding, P., Pickering, M., & Murdock, G. (1999). *Researching communications: A practical guide to methods in media and cultural analysis*. Hodder Arnold.

Delamare Le Deist, F., & Winterton, J. (2005). What Is Competence?, *Human Resource Development International*, 8(1), 27-46, <https://doi.org/10.1080/1367886042000338227>

Extroversion. (n.d.). In *Merriam-Webster.com*. Retrieved 29 April 2022, from <https://www.merriam-webster.com/dictionary/extroversion>

Felzmann, H. (2009). Ethical issues in school-based research. *Research Ethics*, 5(3), 104–109. <https://doi.org/10.1177/174701610900500304>

Hall, S. (1980). Encoding/Decoding. In Stuart Hall, Dorothy Hobson, Andrew Love, and Paul Wills (Ed.), *Culture, Media and Language* (pp. 128–138). Hutchinson.

Hermida, A., Fletcher, F., Korell, D., & Logan, D. (2012). SHARE, LIKE, RECOMMEND: Decoding the social media news consumer. *Journalism Studies*, 13(5–6), 815–824. <https://doi.org/10.1080/1461670x.2012.664430>

Hovland, C. I., & Weiss, W. (1951). The influence of source credibility on communication effectiveness. *Public Opinion Quarterly*, 15(4), 635. <https://doi.org/10.1086/266350>

Hovland, C., Janis, I., & Kelley, H. (1953). *Communication and Persuasion*. New Haven, GT: Yale University Press.

Hu, X. (2015). *Assessing Source Credibility on Social Media - An Electronic Word-Of-Mouth Communication Perspective* [Doctoral dissertation, Graduate Collage of Bowling Green State University].
https://etd.ohiolink.edu/apexprod/rws_etd/send_file/send?accession=bgsu1427826970&disposition=attachment (Retrieved 9 March 2022)

Hunt, K. P., & Wald, D. M. (2018). The impact of source credibility on scientific skepticism of climate change and genetically modified foods: Findings from the general social survey. In Kathleen P. Hunt (Ed.), *Understanding the Role of Trust and Credibility in Science Communication*.
<https://doi.org/10.31274/sciencecommunication-181114-13>

Imlawi, J., Gregg, D., & Karimi, J. (2015). Student engagement in course-based social networks: The impact of instructor credibility and use of communication. *Computers & Education*, 88, 84–96.
<https://doi.org/10.1016/j.compedu.2015.04.015>

Jervelycke Belfrage, M. (2016). *Både slumpmässig och planerad. Ungas nyhetskonsumtion i sociala medier* (Arbetsrapport 74) [Both random and planned. Young people's news consumption on social media]. Göteborgs Universitet.
https://medarbetarportalen.gu.se/digitalAssets/1578/1578878_nr-74-b--de-slumpm--ssig-och-planerad-hela-rapporten-korrigerad.pdf

Kates, R. W., Clark, W. C., Corell, R., Hall, J. M., Jaeger, C. C., Lowe, I., McCarthy, J. J., Schellnhuber, H. J., Bolin, B., Dickson, N. M., Faucheux, S., Gallopin, G. C., Grübler, A., Huntley, B., Jäger, J., Jodha, N. S., Kasperson, R. E., Mabogunje, A., Matson, P., ... Svedlin, U. (2001). Environment and development. Sustainability science. *Science (New York, N.Y.)*, 292(5517), 641–642.
<https://doi.org/10.1126/science.1059386>

- Kempton, S-D. (2020). Racialized Reporting: Newspaper Coverage of Hurricane Harvey vs. Hurricane Maria, *Journal of the International Environmental Communication Association*, Vol 14(3), 403-415.
<https://doi.org/10.1080/17524032.2019.1680409>
- Korzaan, M. L., & Boswell, K. T. (2008). The Influence of Personality Traits and Information Privacy Concerns on Behavioral Intentions. *Journal of Computer Information Systems*, 48(4), 15-46.
<https://doi.org/10.1080/08874417.2008.11646031>
- Kruikemeier, S., & Shehata, A. (2017). News media use and political engagement among adolescents: An analysis of virtuous circles using panel data. *Political Communication*, 34(2), 221–242.
<https://doi.org/10.1080/10584609.2016.1174760>
- Kwadwo Antwi, S., & Kasim, H. (2015). Qualitative and Quantitative Research Paradigms in Business Research: A Philosophical Reflection. *European Journal of Business and Management*, 7(3), 217-225.
- Lang, D. J., Wiek, A., Bergmann, M., Stauffacher, M., Martens, P., Moll, P., Swilling, M., & Thomas, C. J. (2012). Transdisciplinary research in sustainability science: practice, principles, and challenges. *Sustainability Science*, 7(S1), 25–43. <https://doi.org/10.1007/s11625-011-0149-x>
- Lavrakas, P. J. (2008). Cross-sectional survey design. In Paul J. Lavrakas (Ed.), *Encyclopedia of survey research methods* (pp. 173–173). SAGE Publications. <https://dx.doi.org/10.4135/9781412963947.n120>
- Lee, K., Gjersoe, N., O’Neill, S., & Barnett, J. (2020). Youth perceptions of climate change: A narrative synthesis. *Wiley Interdisciplinary Reviews. Climate Change*, 11(3). <https://doi.org/10.1002/wcc.641>
- Lowry, P. B., Wilson, D. W., & Haig, W. L. (2014). A picture is worth a thousand words: Source credibility theory applied to logo and website design for heightened credibility and consumer trust. *International Journal of Human-Computer Interaction*, 30(1), 63–93.
<https://doi.org/10.1080/10447318.2013.839899>

- Madden, M., Lenhart, A., & Fontaine, C. (2017). *How youth navigate the news landscape*.
https://datasociety.net/wp-content/uploads/2020/02/Topos_KF_2017-02-22_Youth-News-Report_V4.pdf
- McCroskey, J. C. (1966). Scales for the measurement of ethos. *Speech Monographs*, 33(1), 65–72.
<https://doi.org/10.1080/03637756609375482>
- McCroskey, J. C., & Jenson, T. A. (1975). Image of Mass Media News Sources. *Journal of Broadcasting*, 19(2), 169-180.
- McCroskey, J. C., & Teven, J. J. (1999). Goodwill: A reexamination of the construct and its measurement. *Communication Monographs*, 66(1), 90–103. <https://doi.org/10.1080/03637759909376464>
- McCuaill, D. (2010). *McQuail's Mass Communication Theory* (6th ed.). SAGE Publications.
- Media outlet. (n.d.). In *MacMillan Dictionary*. Retrieved 18 April 2022, from
<https://www.macmillandictionary.com/dictionary/british/media-outlet>
- Miller, T. R., Wiek, A., Sarewitz, D., Robinson, J., Olsson, L., Kriebel, D., & Loorbach, D. (2014). The future of sustainability science: a solutions-oriented research agenda. *Sustainability Science*, 9(2), 239–246.
<https://doi.org/10.1007/s11625-013-0224-6>
- Moore F. C., Obradovich N, Lehner F, Baylis P. (2019).f Rapidly declining remark- ability of temperature anomalies may obscure public perception of climate change. *Proc Natl Acad Sci* 116(11):4905–4910
- Moser, S. C. (2016). Reflections on climate change communication research and practice in the second decade of the 21st century: what more is there to say?: Climate change communication research and practice. *Wiley Interdisciplinary Reviews. Climate Change*, 7(3), 345–369.
<https://doi.org/10.1002/wcc.403>

Ohlsson, J. (2021). *Mediebarometern 2020*. Nordicom, Göteborgs universitet.

<https://doi.org/10.48335/9789188855497>

Nygren, T., & Brounéus, F. (2018). *Forskarfredag 2017 Nyhetsvärderaren*. Slutrapport. VA-Rapport 2018:2

Nygren, T., Brounéus, F., & Svensson, G. (2019). Diversity and credibility in young people's news feeds: A foundation for teaching and learning citizenship in a digital era, *Journal of Social Science Education*, 18(2), pp. 87-109. <https://doi.org/10.4119/jsse-917>

Ojala, M. (2012a). Hope and climate change: the importance of hope for environmental engagement among young people. *Environmental Education Research*, 18(5), 625–642.

<https://doi.org/10.1080/13504622.2011.637157>

Ojala, M. (2012b). How do children cope with global climate change? Coping strategies, engagement, and well-being. *Journal of Environmental Psychology*, 32(3), 225–233.

<https://doi.org/10.1016/j.jenvp.2012.02.004>

Peifer, J. T., & Meisinger, J. (2021). The value of explaining the process: How journalistic transparency and perceptions of news media importance can (sometimes) foster message credibility and engagement intentions. *Journalism & Mass Communication Quarterly*, 98(3), 828–853.

<https://doi.org/10.1177/10776990211012953>

Podschuweit, N. (2017). Interpersonal Communication: Media Influence on. In *The International Encyclopedia of Media Effects* (pp. 1–12). Wiley.

<https://doi.org/10.1002/9781118783764.wbieme0137>

Pollak, A. (2008). Analyzing TV Documentaries. In R. W. & Krzyżanowski (Ed.), *Qualitative Discourse Analysis in the Social Sciences* (pp. 77–95). Macmillan International Higher Education.

- Rouner, D. (2008). Credibility of Content. In *The International Encyclopedia of Communication*. John Wiley & Sons, Ltd.
- Rubin, A. M. (1984). Ritualized and instrumental television viewing. *The Journal of Communication*, 34(3), 67–77. <https://doi.org/10.1111/j.1460-2466.1984.tb02174.x>
- Samantray, A., & Pin, P. (2019). Credibility of climate change denial in social media. *Palgrave Communications*, 5(1). <https://doi.org/10.1057/s41599-019-0344-4>
- Schoenbach, K., & Lauf, E. (2002). The “trap” effect of television and its competitors. *Communication Research*, 29(5), 564–583. <https://doi.org/10.1177/009365002236195>
- Schubotz, D. (2019). *Participatory research: Why and how to involve people in research*. SAGE Publications.
- Schäfer, M. S. (2015). Climate change and the media. In *International Encyclopedia of the Social & Behavioral Sciences* (pp. 853–859). Elsevier.
- Seignette, E. (2021, August 2). *The story of (un)credible sustainability communication in 2021*. SUSTAINABLE BRAND INDEX. <https://www.sb-index.com/blog/2021/8/2/credibility-sustainability-communication>
- Self-possession. (n.d.). In *Merriam-Webster.com*. Retrieved 29 April 2022, from <https://www.merriam-webster.com/dictionary/self-possession>
- Snow, D. A., & Benford, R. D. (1988). Ideology, Frame Resonance, and Participant Mobilization. *International Social Movement Research*, 1(1), 197-218.
- Sociability. (n.d.). In the *Cambridge Dictionary*. Retrieved 29 April 2022, from <https://dictionary.cambridge.org/dictionary/english/sociability>

SOU 2016:30. *Människorna, medierna & marknaden: Medieutredningens forskningsantologi om en demokrati i förändring* [News habits in a changing media landscape: The Media Inquiry's research anthology on a changing democracy]. Forskningsantologi av Medieutredningen.
https://www.regeringen.se/contentassets/a54e03720c7b4b9eb3f227e8ca32d72b/manniskorna_med_ierna_marknaden_SOU_2016_30

Statens medieråd, (2019). *Nyhetens behag: Svenska barns och ungdomars nyhetsanvändning* [The pleasure of the news: Swedish children's and young people's news use].
<https://www.statensmedierad.se/download/18.1ecd0017633a0d66661da/1607513230910/Nyhetens%20behag%20Svenska%20barns%20och%20ungdomars%20nyhetsanv%C3%A4ndning.pdf>

Strazdins, L., & Skeat, H. (2011). *Weathering the future: Climate change, children and young people, and decision making*. Australian Research Alliance for Children & Youth.
https://www.researchgate.net/profile/Lyndall-Strazdins/publication/265182433_Weathering_the_future_Climate_change_children_and_young_people_and_decision_making/links/55e650008aebdc0f58bb2ee/Weathering-the-future-Climate-change-children-and-young-people-and-decision-making.pdf?origin=publication_detail

Strömbäck, J. (2015). *Demokratin och det förändrade medielandskapet. Mot ökade kunskapsklyftor och deltagandeklyftor?* (SOU 2015:96.) [Democracy and the changing media landscape. Towards increased knowledge gaps and participation gaps?]. Demokratiutredningen.
https://www.researchgate.net/profile/Jesper-Stroembaeck/publication/286932479_Demokratin_och_det_forandrade_medielandskapet_Mot_okade_kunskapsklyftor_och_deltagandeklyftor/links/567117b008aececf554ef3f/Demokratin-och-det-foeraendrade-medielandskapet-Mot-oekade-kunskapsklyftor-och-deltagandeklyftor.pdf?origin=publication_detail

Strömbäck, J., Djerf-Pierre, M., & Shehata, A. (2013). The dynamics of political interest and news media consumption: A longitudinal perspective. *International Journal of Public Opinion Research*, 25(4), 414–435. <https://doi.org/10.1093/ijpor/eds018>

- Wachholz, S., Artz, N., & Chene, D. (2014). Warming to the idea: university students' knowledge and attitudes about climate change. *International Journal of Sustainability in Higher Education*, 15(2), 128–141. <https://doi.org/10.1108/ijshe-03-2012-0025>
- Wadbring, I., & Ödmark, S. (2014). *Delad glädje är dubbel glädje? En studie om nyhetsdelning i sociala medier* [Shared happiness is double happiness? A study on news sharing in social media]. DEMICOM Mittuniversitetet. <https://www.diva-portal.org/smash/get/diva2:749978/FULLTEXT01.pdf>
- Walliman, N. (2006). *Social Research Methods*. SAGE Publications, Ltd.
- Westlund, O., & Weibull, L. (2013). Generation, life course and news media use in Sweden 1986–2011. *Northern Lights Film and Media Studies Yearbook*, 11(1), 147–173. https://doi.org/10.1386/nl.11.1.147_1
- Wibeck, V., Dahlgren, M. A., & Öberg, G. (2007). Learning in focus groups: An analytical dimension for enhancing focus group research. *Qualitative Research: QR*, 7(2), 249–267. <https://doi.org/10.1177/1468794107076023>
- Young, E. (2015). *How Millennials get news: Inside the habits of America's first digital generation*. The Media Insight Project, AP, NOTC at the University of Chicago, American Press Institute. <https://apnorc.org/wp-content/uploads/2020/02/Millennials-Report-FINAL.pdf>
- Zheng, J. (2021). A functional review of research on clarity, immediacy, and credibility of teachers and their impacts on motivation and engagement of students. *Frontiers in Psychology*, 12, 712419. <https://doi.org/10.3389/fpsyg.2021.712419>


Appendix 1

Pre-survey question example

Information and news about climate change

In which different categories do you take part in information and news about climate change?

Please tick those options

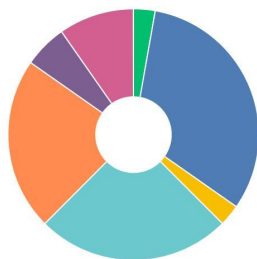
* 1. Social medias  0

- Instagram
- Snapchat
- Facebook
- Twitter
- Tiktok
- Annan (var god ange)
-
- None of the above options

“Annan (var god ange)” = other (please specify)

Pre-survey answers

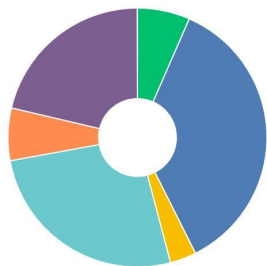
1. Sociala medier



Besvarade: 34 Överhoppade: 0

| | | |
|---------------------------------|--------|----|
| Inget av ovanstående alternativ | 5,88% | 2 |
| Instagram | 67,65% | 23 |
| Facebook | 5,88% | 2 |
| Tiktok | 52,94% | 18 |
| Snapchat | 47,06% | 16 |
| Twitter | 11,76% | 4 |
| Annat (vänligen specificera) | 20,59% | 7 |

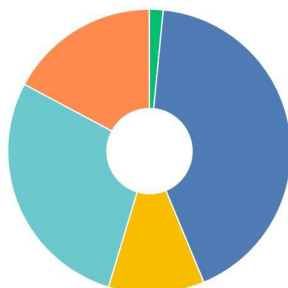
2. Internet



Besvarade: 34 Överhoppade: 0

| | | |
|---------------------------------|--------|----|
| Inget av ovanstående alternativ | 11,76% | 4 |
| Youtube | 64,71% | 22 |
| I en bloggpost | 5,88% | 2 |
| Onlinetidning | 47,06% | 16 |
| Som reklam i din mail | 11,76% | 4 |
| En hemsida | 38,24% | 13 |
| Annat (vänligen specificera) | | 0 |

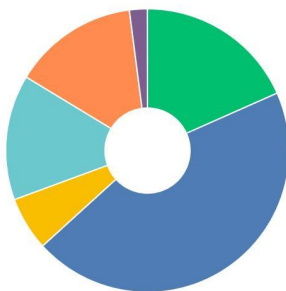
3. TV



Besvarade: 34 Överhoppade: 0

| | | |
|---------------------------------|--------|----|
| Inget av ovanstående alternativ | 2,94% | 1 |
| Nyheter på TV | 79,41% | 27 |
| Reklam på TV | 20,59% | 7 |
| I en dokumentär | 52,94% | 18 |
| I en film/serie/TV-program | 32,35% | 11 |
| Annat (vänligen specificera) | 0% | 0 |

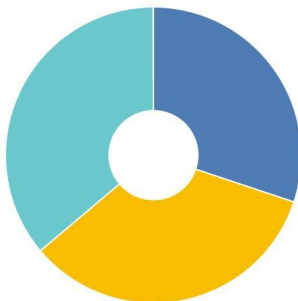
4. Tidning



Besvarade: 34 Överhoppade: 0

| | | |
|--|--------|----|
| Inget av ovanstående alternativ | 26,47% | 9 |
| Dagstidning (exempelvis Aftonbladet, Expressen, Dagens Nyheter m.m.) | 64,71% | 22 |
| Prenumerationstidning | 8,82% | 3 |
| Reklam i brevlådan | 20,59% | 7 |
| Informationsblad från en organisation | 20,59% | 7 |
| Annat (vänligen specificera) | 2,94% | 1 |

5. Socialt



Besvarade: 34 Överhoppade: 0

| | | |
|---------------------------------|--------|----|
| Inget av ovanstående alternativ | 0% | 0 |
| Från vänner | 73,53% | 25 |
| Från familjemedlemmar | 82,35% | 28 |
| Lärare | 88,24% | 30 |
| Annat (vänligen specificera) | 0% | 0 |

Appendix 2

Main survey questions

Credibility for news about climate change among young people

Hello!

This survey aim to collect data for my master's thesis at Lund University.

The main question in the survey is: Can different media channels and sources affect the credibility of a climate-related news item?

For example: Maybe a news item about climate change feels more true if you hear about it via a certain channel or source, than if you read about it via another channel or source.

You who respond to the survey will be completely anonymous.

Thank you for helping me gather answers.

/Angelica Olsson

Questions 1-14

1. Please indicate how credible you find the following media channel on a scale of 1 (Not Credible), 2 (Less Credible), 3 (More Credible), or 4 (Very Credible): Instagram *

| | | | | | |
|--------------|-----------------------|-----------------------|-----------------------|-----------------------|---------------|
| | 1 | 2 | 3 | 4 | |
| Not Credible | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Very Credible |

2. Facebook *

| | | | | | |
|--------------|-----------------------|-----------------------|-----------------------|-----------------------|---------------|
| | 1 | 2 | 3 | 4 | |
| Not Credible | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Very Credible |

15. Based on the channels and sources you feel more or a much credibility for, please fill in what your feeling depends to:

- Competence (e.g. what is said by a channel or source is grounded in knowledge, skill or reliability)
- Character (e.g. the channel or source gives a sense of goodness, compassion or selflessness)
- Sociability (e.g. the channel or source gives a sense of kindness, encouragement or graciousness)
- Composure (e.g. the channel or source is perceived as calm, sane, relaxed or confident)
- Social behavior (e.g., the channel or source gives a feeling of being aggressive, forward-thinking, or talkati...

16. Which of the options do you see as your main sources (which you use frequently) for news ^{*} about climate change? You can select several options.

- Instagram
- Facebook
- Snapchat
- Youtube
- News on TV
- Commercial on TV
- Documentary (which includes news and information about climate change)
- Movie/TV-programme (which includes news and information about climate change)
- Daily/online newspaper (for instance Aftonbladet, Expressen, Dagens Nyheter, Sydsvenskan etc.))
- Commercial in mailbox
- Information sheet from an organisation

- Friends who share news or information about climate change
- Family members who share news or information about climate change
- Teachers who share news or information about climate change
- Non of the above mentioned options
- Annat ...

17. Based on the channels and sources you have cited as your main sources (which you often use) for news on climate change, please fill in what it depends on:

- Competence (e.g. what is said by a channel or source is grounded in knowledge, skill or reliability)
- Character (e.g. the channel or source gives a sense of goodness, compassion or selflessness)
- Sociability (e.g. the channel or source gives a sense of kindness, encouragement or graciousness)
- Composure (e.g. the channel or source is perceived as calm, sane, relaxed or confident)
- Social behavior (e.g., the channel or source gives a feeling of being aggressive, forward-thinking, or talkati...



18. How often do you get in contact with the different alternatives? You can choose several options. *

| | Daily | A couple of tim... | Once a week | A couple of tim... | Less often/never |
|--------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Instagram | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Facebook | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Snapchat | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Youtube | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| News on TV | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Commercial on... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Documentary (...) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Movie/TV-progr... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Daily/online ne... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Commercial in ... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Information sh... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Friends who sh... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Family member... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Teachers who s... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |