

Pro-Environmental Social Media Influencers strike on #fridaysforfuture

An exploratory study of communicated narratives on Instagram
to tackle climate actions

Student Name: Lena Heuel

Student Number: 546310

Supervisor: Radhika Mittal

Master Media Studies - Media & Business
Erasmus School of History, Culture and Communication
Erasmus University Rotterdam

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Abstract and Keywords

Planet earth's temperature is still on the rise and the world needs to wake up because: Change is coming, whether they like it or not. The young girl Greta Thunberg from Sweden struck for the climate, together with 4 million people from all over the world, for a whole week in September 2019. Her intentions are clear: reminding global leaders of the necessity to adapt and mitigate the system to become environmentally friendly.

Yet, the 'Fridays for future strike' is not only addressed to global leaders, but also to society. The majority of the world's population, people under 25 years old, do not support a pro-environmental attitude. Pessimism, negativity and a hopeless scenario define the picture that young Europeans see in a changing climate of the world. Therefore, questions arise, whether young people are able to change their perception so that a predicted dangerous temperature change could be prevented?

(Social) media plays a crucial role to represent the public's opinion. Social Media Influencers (SMIs) have become the new journalists and gain popularity by their virtual followers. Since social media sites became part of young people's everyday life, which role do SMIs play in communicating climate change appropriately? More precisely, this research explores the communicated narratives during the time of a proven example (Fridays for future), to ultimately answer the question: How did selected Instagram influencer accounts communicate a pro-environmental attitude to young people in Europe?

Three purposively selected Instagram influencer accounts provided the data to identify dominant underlying patterns, expressed in communicated narratives. 90 captions and 60 visuals in total build the foundation for the conducted content analysis. Four overarching categories and 11 sub-themes, based on a profound thematic and visual analysis, allowed an in-depth understanding of communicated climate actions.

Ultimately, this research shows that Instagram influencers contribute by their focus on an emotional and personal representation of climate actions. Human imperfections, vulnerability and eco-anxiety were communicated openly, to approach the user with empathy and authenticity. In doing so, collective climate activism as well as an individual responsible consumption and production behavior become apparent as a best-practice example. Furthermore, this research identified topics that are crucial but either missing or reported on a low level. The findings show fossil fuels, defined as the largest contributor to global warming, could be further explained to tackle efficient climate actions from a long-term perspective. Finally, Instagram allows the transmission of clear messaging if visuals and texts are aligned coherently.

KEYWORDS: *Climate Change, Fridays for future, Climate Actions, Social Media Influencers, Instagram*

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Preface

Well, that has been kind of a ride, with emotional ups and downs, not to mention the special circumstances of COVID 19. At the beginning, my clear intentions focused on plastic pollution and how Instagram influencers raise attention on climate change. Whilst preparing my proposal and reading through literature more intensively, I realized how much more there is to know and talk about. I was doubting my topic, went back and forth, totally confused about my actual goals. Although I've written an academic research like this before, I totally underestimated the required time and energy to conduct an in-depth analysis. The deadlines, given by university, helped a lot to stay focused. Overall, I've learned a lot on time and project management.

Having that said, I am more than grateful to have written my master thesis under the supervision of Radhika Mittal. Without her empathy and steady support during the quarantine times, I would have felt overwhelmed and lost. I knew I lost track of my initial schedule, but with her encouraging words and loving expressions, I felt I am on the right track. I believed in myself, my strengths and skills. Her idea of a working buddy system, worked quite well:

I can't thank Chloé Schwizgebel enough. We encouraged and supported each other over the last weeks and month – mentally, spiritually and even physically by going for a run on a regular basis. With her by my side, the thesis developed substantially by every bits and pieces. Little coffee breaks at Croos, cooking sessions or some movie nights allowed us to restore some energy in order to stay motivated. I am so proud of what we've accomplished together.

Moreover, I am fortunate enough to live together with Leila Razel and Clara Lockwald. I think it's truly important to have a productive work environment, in which everyone respects each other's schedules. Thanks, Clara, for all those prep-talks so that I never stop believing in myself. Thanks, Leila, for your supportive words, pure presence, all the delicious dishes you served me (!) and overall company in this emotional rollercoaster. Additionally, I'd like to thank all my friends and family who have contributed to my emotional mastery, to be able to conduct this master thesis. I am so grateful that they have always been there for me.

Enjoy the reading.

1 Introduction

1.1 Context setting

The planet's natural environment is changing rapidly. Given the economic growth and industrialization, climate change has been introduced by human activities without any doubt (U.S. Senate, 1988). The current situation of global warming was mainly introduced by human activities in the mid 20th century (NASA, 2020). NASA reports extreme environmental changes, like melting poles that lose 413 gigatons ice sheets per year and have led to a rise in sea level of nearly 178mm over the past 100 years (NASA, 2020). Alarming events like intense rainfalls that led to flooding (e.g. California in 2017) or devastating fires (e.g. Australia in 2019) ask for immediate action. Political ignorance has directed the whole world into deleterious environmental change (Rockström, et al., 2009).

For several years, the primary political solution is presented as climate mitigation, meaning energy efficiency (e.g. renewable energy) and reduction of greenhouse gases that are released to the atmosphere (NASA, 2020). Fossil fuels, like coal, oil and natural gas supply about 80 percent of the world's energy (Nunez, 2019). Despite electricity and heat, the primary source of fossil fuel consumption comes from the transportation sector (EPA, n.d.). Burning fossil fuels releases toxic greenhouse gases that influence the ozone layer, hence, foster the causality of global warming (Nunez, 2019). Therefore, agreements like the Kyoto Protocol in 2005, including 17 Sustainable Development Goals have been invented by the UN. In 2016 the Paris Agreement was entered into force (UN, n.d.). Precisely, scientists have agreed on a maximum temperature increase of 2 degree Celsius, compared to the pre-industrial age (UN, 2015) in order to prevent the worst. Although those protocols are important for international financial aid, questions arise if those mitigation goals are realistic to achieve.

Compared to ten years ago, the overall political awareness increased, yet, concrete actions on a personal, national or global level are not yet realized (Doyle, 2016). Therefore, climate adaptation has to be considered; meaning adjustments in the natural and human system as a response to current or expected climate stimuli. By doing so, environmental exploitation and harm would be moderated (McCarthy, Canziani, Leary, Dokken, & White, 2001).

Given that, industrialized countries have to take the responsibility for their historical impact. Developing countries are affected the most by a changed climate, although those countries contribute the least to greenhouse gas emissions (McCarthy, Canziani, Leary, Dokken, & White, 2001). The topic's complexity, spatial distance of each country and temporal distance doesn't simplify finding a common ground (Jagers, et al., 2019). Nevertheless, environmental movements like "Fridays For Future" (Fridays For Future, FFF, 2020) or global protocols like the Montreal protocol (global agreement to protect the ozone layer) (US Department of State, 2019) are proven examples for collective actions upon committed goals.

Greta Thunberg, a 17-year-old girl from Stockholm, who accelerated the public debate about climate change, has become a role model for the public. She states the question why the media are

barely talking about this climate ‘emergency’ (Hazan, 2019). “If burning fossil fuels was so bad that it threatened our very existence, how could we just continue like before?” (Thunberg, 2019). With her invented school strikes, quitting school on Fridays to protest in front of the Swedish parliament in August 2018 (Alvinus & Holmberg, 2020), she reached 228 countries participating in at least one of the now 86.000 strikes that have taken place so far (Fridays For Future, FFF, 2020).

1.2 Conceptual Background

As media coverage sets the agenda for public debate (Wahl-Jorgensen, 2019), climate actions have also been represented in the online sphere: Greta Thunberg has a reasonable followership on social media, meaning 10.3 million followers on Instagram (Thunberg, 2020), 2.9 million on Facebook (Thunberg, 2020) and 4 million on Twitter (Thunberg, 2020c). Since a third of the world’s population uses social media (Clement, 2020), social networking platforms potentially increase collective actions. The mass media play an important role, to shape and impact the climate discussions and policies, as well as public perception of environment, technology and risks in various issues (Weingart, 2000). Journalism and public perception also shape climate policy actions and decisions and vice versa (Boykoff & Roberts, 2007).

From a historical perspective, climate change was initially articulated in the news media in the 1930s. Since 1950 as well as later in the 1980s, human activities and their technological developments (industrialization) were claimed as the main reason for global warming (U.S. Senate, 1988). Also, Kaempffert said that “every century man is increasing the carbon dioxide content of the atmosphere by 30 percent – that is at the rate of 1.1 Celsius in a century.” (Kaempffert, 1956, p. 191). Yet, the solutions stated by the politics are still on a low scale.

Interactions between climate science, policy, media and the public are complex and more dynamic. But if more people become aware of the environmental emergency, chances of collective pro-environmental actions increase. It requires communicating climate change in ways that are “temporally, spatially and socially meaningful and relevant” (Doyle, 2016, p. 8) so that the reasons for even large scale (inconvenient) actions are understood and pursued. However, representation of climate change in the media - mitigation and adaptation - takes place in the larger context and differs based on political, cultural, regional, national or economical drivers. Each factor is crucial to form the public’s perception.

Social media offer a platform not just to share information. Since its invention in 1978 users have been more active creators of content than receivers of information (Shao, 2008). Pro-environmental behavior (or sustainable behavior), defined as a reduction of one’s negative impact that an action can have on the environment (Kollmuss & Agyeman, 2002), is promoted by several users online. Live videos and photos demonstrate a sustainable lifestyle and polarize environmental issues (e.g. plastic pollution, water pollution, fires in forests) (Kaur & Chahal, 2018) to increase global awareness. Environmental organizations like the World Wildlife Fund (WWF) for instance facilitate

content interaction and engagement via social media, meaning ‘liking’, ‘sharing’ or ‘commenting’ on their videos on YouTube (Kaur & Chahal, 2018).

Accordingly, this thesis explores the following research question: How did selected Instagram influencer accounts communicate a pro-environmental attitude to young people in Europe? A whole week was committed to strike for an environmentally friendly future, from the 20th until the 27th (Brightest, 2019). Which narratives were communicated to foster a pro-environmental attitude? The following sub questions are addressed: How did selected Instagram influencers communicate climate actions? Which underlying patterns were transferred?

1.3 Relevance

As media coverage sets the agenda for public debate (Wahl-Jorgensen, 2019), the representation of climate change on social media affects emotions and perception of virtual readers (Anderson, 2017). Several articles examine the impact of Twitter considering climate activism (e.g., Segerberg & Bennett, 2011) or Facebook (e.g., Boulianne, 2015), however, the link between Instagram and news representations is not yet made academically. Instagram displays a higher engagement rate in comparison to other social networking sites (SNSs) (Ahmed, 2017). This percentage is even greater considering Instagram influencers (Vorhaus, 2018). However, by my understanding, there has been little research on how social media can be used for learning or teaching to increase awareness on climate change so that people take action upon a pro-environmental attitude.

Therefore, this research paper evaluates the gap between Instagram influencers and their communicated narratives considering climate actions, directed to young people in Europe. The timeframe of Fridays for Future (FFF) is chosen as it was claimed to be the largest climate strike in history so far (Laville & Watts, 2019). Throughout those strike events, one can analyze and understand the communicated patterns from a different angle.

The social relevance, in turn, relates to the increasing number of social media users. Worldwide the number grew from almost 1 billion in 2010 to around 2,6 billion in 2018 (Clement, 2019) and currently consists of 3,8 billion people (Kemp, 2020), almost half of the world's population (Worldometer, 2020). Using social media and analyzing the role of social media influencers in relation to a pro-environmental attitude contributes to society in a bigger picture. Climate change and required actions to prevent delirious temperature changes, could then be tackled.

The practical relevance of this thesis can come from a better understanding of how to manage the pessimistic perspective of young people and environmental threats as an SMI. It may provide the comfort to know what to focus on (managing content) as well as it allows a better structure to support a pro-environmental attitude by communicating coherently with texts and visuals on Instagram.

1.4 Structure Thesis

This thesis has started with an introduction to the research, including a description of the context in which the phenomena have appeared, a description of the conceptual background, and the research question. The first chapter now will elaborate on different theoretical backgrounds. To start with, the perception of climate change throughout the younger population (18- 25 years old) will be introduced in chapter 2.1, followed by an examination on how climate change is communicated in (social) media (chapter 2.2). The potential of social media but also the role of an influencer on this specific topic to sustainability and pro-environmental attitude is explained in chapter 2.3., before the last theoretical chapter defines the communication strategies that have been used by influencer marketing practices in the past (chapter 2.4). Since social media posts were defined as the analyzed research units, chapter 3 explains the method of content analysis. More concrete, thematic analysis and visual analysis create the framework for the conducted research which is explained in detail in chapter 3.1 (Justification and Research Design), 3.2 (Sampling Method and Composition), 3.3 (Operationalization) and 3.4 (Data Analysis). Following this, the results section will give an overview of the revealed themes and categories. Finally, in chapter 5 a discussion of the findings will connect them to previous literature, answer the research question, before this research's contribution to the academic world is stated. After all, limitations and suggestions for further research are included in chapter 5.

2 Theoretical Framework

The theoretical framework will provide a brief introduction to the main concepts of this research which are: perception of climate change amongst young people, (social) media and climate change, the role of Instagram influencers and how a pro-environmental attitude can be communicated efficiently, by storytelling or story-acting? This chapter aims to outline a substantial and explicit background of the key concepts to form the research foundation.

2.1 Perception of Climate Change amongst young people

Climate change is the most serious challenge the world is facing in the current era. As stated in the previous chapter and also by the Paris Agreement of 2015, several countries are committed to limit global warming to below 2°Celsius in order to prevent an environmental crisis. Yet, temperature is still rising as the Intergovernmental Panel on Climate Change (IPCC) stated in one of their reports in October 2018 (IPCC, 2018) – 0.2°C per decade. Consequently, without large-scale international collective actions the predicted future for 2060 would describe irreversible climate changes (EU, 2019).

Thus, awareness of the topic and the urge to act is widespread but limited. One of the largest movements in history were the Friday's for future strikes in September 2019. For instance, on the 20th September roughly four million protesters gathered together whereas on the 27th of September, around 2 million people demonstrated worldwide (Bartlett, 2019). Arguably, since the majority of the world's population is under 25 (Worldometer, 2020) most of the world's inhabitants need to face a future with drastic change in climate. They aim to change and protest against it by participating in those strikes for example. Young people will be the future leaders of society which is why it's important to include this group of people in the social debate about climate change, both mitigation as well as adaptation.

When talking about young people, this research paper refers to people between 18 and 25 years old. The perception of climate change depends on a person's origin (European Commission, 2019). This research concentrates on Europe as they claim themselves to be a leader in climate actions, considering countries like Sweden in which half of the population (50%) thinks climate change is the single most serious problem the world is facing right now (European Commission, 2019). Yet, countries like Bulgaria (10%) or Rumania (11%) don't see climate change as an important topic to discuss.

Although young people know about the seriousness and urgency to take actions on global warming, they barely adapt their lifestyle (64%) compared to the age group over 40 (57%) (European Commission, 2019). Small-scale actions like reducing electricity consumption, switching to public transport or reducing the amount of plastic waste are more likely to be implemented in a person's lifestyle than large scale inconveniences. For instance, 75% of young people try to reduce their waste and increase recycling whereas just 37% try to search for alternatives to their car or consider their carbon footprint by planning holidays (12%) (European Commission, 2019). Consequently, the

transportation sector isn't prioritized even though its greenhouse gas emissions describe the largest contributor to climate change (EPA, n.d.). Four countries in Europe do consider the carbon footprint though, since half of the respondents commit themselves to use environmentally-friendly alternatives to their private car on a regular basis: Sweden (65%), the Netherlands (63%), Germany (56%) and Denmark (50%) (European Commission, 2019). The most common adaptation is the reduction of waste and regular separation for recycling; exceptions are Rumania (33%) and Bulgaria (30%) (EU, 2019). Although northern European countries are less vulnerable to climate change than southern countries (McCarthy, Canziani, Leary, Dokken, & White, 2001), they seem to be more involved in climate actions than the south.

Hopelessness, worry, and pessimism succeeded in young peoples' perception of climate change. The predicted future causes more despair than that any adaption would make a difference (Hicks & Holden, 2007). Considering Snyder et al. (2001) and his theory about hope, the emotional connection to a positive future arises when a positive outcome is realistic to be reached. Hope is related to a strong cognitive dimension (Ojala, 2011) and gives energy for actions even in scenarios of uncertainty, like the global warming predictions for instance (Courville & Piper, 2004). Hence, transferring hope through motivational messages online, could reveal social engagement. Nevertheless, research shows that additional knowledge about climate change increase negative emotions and pessimism. A German study demonstrates that one-third is interested in climate change. Yet, two-third doubt human existence in the future (Albert, Hurrelmann, & Quenzel, 2010).

Studies proved that the public perceives climate change as less important compared to concerns about poverty, hunger and lack of drinking water (European Commission, 2019). Climate change continues to be a low priority topic, even though the overall importance has increased over the years (11 percent points since 2017) (European Commission, 2019). This might be due to its incalculable and unpredictable existence and effects (Beck, 1992) so that people don't know how to respond to global warming in their everyday life. People don't see the climate changing (Doyle, 2016), thus, don't understand its effects.

Various literature connects the perception of climate change to personal values (Corner, et al., 2015; Lucas, 2018; Whitmarsh, 2011), as values have an impact on the actual behavior (Roccas & Sagiv, 2017). People act upon their beliefs and values, consciously or subconsciously which is why the social context in which individuals create their values, plays a crucial role in communicating climate change mitigation or adaptation (Corner, et al., 2015). Various discourses about the existence and causes of climate change compete in the public sphere, including denial, doubt or apathy (Ereaut & Segnit, 2006; O'Neill, Boykoff, Day, & Niemeyer, 2013). In order to achieve an ecologically sustainable society, it is necessary to include the public considering production and consumption behavior. How the media in general and specifically social media is contributing in that sense will be elaborated on in the following chapter.

2.2 (Social) Media and Climate Change

In general, the media have an important responsibility to share information and opinions about science or technology for citizens. Public perceptions and attitudes are strongly influenced by those representations (Corbett, 2004). Thus, it's the media that connects people's private life with the public. As this research aims to tackle communicated narratives on social media, a person's perception of climate change needs to be understood. Hence, media representations become relevant for examination.

First of all, the production of media news is influenced by several aspects that need to be reflected on before analyzing communicated messages. The media coverage of climate change (mitigation as well as adaptation) is not a simple collection of facts, produced by journalists (or content creators). It's rather a non-linear interplay between journalistic norms and values, policy actors, scientists and the public (Boykoff & Roberts, 2007). Tight deadlines, pursuit of profit, direct or indirect competition, the degree of horizontal, vertical integration or conglomeration, the interest of collaborations or also editorial preferences can influence the creation of media content. Possibly, it limits the content creator to communicate a full range of information (tight schedule) so that he or she just focus on one source of information (Dunwoody, 1986). Furthermore, it could influence the comprehension and communication of complex topics like climate change (Weingart, 2000).

Mediated news stories are then a selection of some aspects of a perceived reality (by the journalist, politician or individual) that is made more salient in a communicated message. Entman (1993) calls it framing which basically describes the necessity to always include the context from which a message is transmitted. Eventually, the construction of meaning and discourse reveal themselves through structural components (Olausson, 2009). The transferred messages influence the public's opinion, shaping commonsense assumptions, thus, draw boundaries between what's accepted and what is not (Croteau, 2014).

With the digital age and technological developments, journalists are no longer the gatekeepers of the so called 'public sphere' defined by Habermas in 1964 (Hohendahl & Russian, 1974). Boundaries are blurred and every citizen has access guaranteed if an internet access is provided (Bloch, 2005). This study concentrates on Europe where social networking sites (SNS) (Boyd & Ellison, 2008), have become a part of people's everyday life. The online sphere extends traditional mass media not just spatially, also temporally and socially (Doyle, 2016). Yet, the question is if this extension changes the public's opinion and perception of climate change, meaning climate mitigation and adaptation.

Globally, Facebook leads in popularity of social networks, with approximately 2,4 billion active users in January 2020 (Clement, 2020). Instagram is ranked as the sixth largest global networking site, containing one billion monthly active users (Clement, 2020). By not just focusing on those numbers, social media are one of the fastest growing scopes in the media history. It took almost 30 years for electricity, 25 years for telephones but just five years for tablet devices to reach a 10

percent adoption rate (McGrath, 2013). The social media platform Twitter achieved its billionth tweet in just over three years. Although the popularity of a social networking site can shift just overnight, these statistics demonstrate how present social media are in modern-day society.

By definition, social media are online tools on which users can share content, opinions, perspectives and insights. Another definition conceptualizes social media as “forms of electronic communication (as websites for social networking and microblogging) through which users create online communities to share information, ideas, personal messages, and other content (as videos)” (Merriam-Webster, n.d.). Basically, social media are an obvious platform for discursive practices, since it invites “fans and other consumers to actively participate to create and circulate content, and to interact and collaborate (Fuchs, 2014).

Referring to the previous chapter, European citizens seem to feel weakly informed, skeptical, and disempowered when it comes to agency on complex issues like climate change (Lorenzoni, Nicholson-Cole, & Whitmarsh, 2007; Lorenzoni & Pidgeon, 2006; Moser, 2010). Therefore, environmental communication through mass media is tremendously important to consolidate the context and values, as well as demonstrate various possibilities of action, globally but also locally (Nerb & Spada, 2001). Consequently, the concept of collectivism would foster individual awareness (Fuhrer, Kaiser, & Maggi, 1995), as pro-environmental attitudes constitute social representations, which are related to common knowledge (Stamm, F., & Reybolds, 2000). Therefore, collective frames (Olausson, 2009) as well as societal values increase the likelihood of a sustainable attitude, based on people’s further information-seeking behavior (Arlt, Hoppe, & Wolling, 2011). Climate change needs to be understood as a concern for the present rather than a distant future (Doyle, 2016).

Although sharing pro-environmental information assumingly improves the knowledge towards climate change, some studies highlight the weak relationship between education and an actual shift towards environmentally responsible behavior (MacKenzie-Mohr, 2000). Notably, Nolan et al. (2008) found a higher influence of peer recommendations and actions than of information shared by official organizations or higher authorities (Moser, 2010). People tend to do what others do, preferably people they like and people who they connect to on a more intimate level (Cialdini, 1984), which is why influencers became an important part of the information sharing paradigm.

Taking the stated school strike ‘Fridays for future’ as an example, people act collectively, guided by someone they trust (here: Greta Thunberg) which was fostered via social media so that it gained worldwide 86.000 people participating in those strikes so far (Fridays For Future, FFF, 2020). Greta Thunberg started demonstrating in Sweden in August 2018 with the sign “Skolstrejk for Klimatet” (school strike for climate) (Biography.com, 2019). Soon she gained awareness, became an internationally recognized climate activist and took part at the United Nations Climate Change Conference (Alvinus & Holmberg, 2020). Whereas the revolution took place offline (Gladwell, 2010), the importance of participation was transmitted through messages on social media. Greta

admits: “without social media, I don’t think it would have worked.” (Tait, 2019), but also claims that not everyone who follows her on social media is also engaging in climate activism (Tait, 2019).

Strictly speaking, social media allows the user to participate in climate actions online which breaks the boundaries of making a physical effort to participate. In this way, the relevance of social movements, not just for society but also politicians, might increase such as other movements like #metoo or #blacklivesmatter did (Brünker, Deitelhoff, & Mirbabaie, 2019). Social media allows marginalized people to make their voice heard, thus, to raise awareness on topics that traditional media chose not to report on (Tait, 2019).

Generally, Greta Thunberg demonstrated a proven best-practice example for climate activism on social media platforms. After the climate strikes in September 2019, Instagram posts were increasingly related to climate change. One research examined a hashtag analysis of idealized words (e.g. #howdareyou #climatestrike #schoolstrike4climate) that proved an overall raise in attention on climate change (Alexeeva, 2019). It shows why sharing pro-environmental information on those platforms towards a more sustainable world, is able to change a person’s perception, interpretation and knowledge of climate change (Tait, 2019) to finally take it into action in the offline world. Information is embedded into context so that the frame of interaction is understood.

By the same token, media tends to exhort citizens to participate in pro-environmental actions, like recycling waste or reducing the personal carbon footprint by using less energy or water at home (Barr, Shaw, & Gilg, 2011). Despite that, there is little consensus on what a sustainable lifestyle incorporates specifically, thus, generates confusion in people’s mind. Some authors focus on organic food (Smith & Graetz, 2006), others encounter lower consumption behavior towards a more peaceful and slower life (Soper, 2008). Apart from these uncertain definitions, the debate continues on whether living sustainable is a mainstream concept.

In the following section Social Media Influencers (SMIs) and their role in communicating a pro-environmental attitude is described, evaluating the importance of communicated narratives, embedded in a social context.

2.3 Role of the Instagram Influencer

Social Media offers every person the ability to express their voice and opinion publicly which makes it an ideal tool for electronic word of mouth (eWOM) (Boyd & Ellison, 2008; Jansen, Zhang, Sobel, & Chowdury, 2009; Knoll, 2016). Facilitating the personal opinion, sharing any positive or negative statement about a product, service or social norm via the internet, has become a credible and trusted form of marketing. eWOM encourages consumers to share their opinions with other consumers (Glucksmann, 2017). Individuals who take on exactly this role of sharing their opinion with other users on social media are commonly known as Social Media Influencers (SMIs).

Influencers are content creators who have accumulated a reliable base of followers. Sustainability or environmentally friendly influencers are still in the minority, since the most visible

influencers emerge from the food industry, travelling, fashion or photography scope (Forsey, 2019). Yet, influencers range from a few thousand followers to celebrities with several million fans. Literature describes the former as micro- or macro-influencers, with less than 5,000 followers (Wissman, 2018) whereas the latter often attract a vast audience (over 5,000 followers) and are considered as international celebrities or mega influencers (Gräve, 2019). By blogging, vlogging or creating short-form content, they allow their followers an insight into their personal, individual, everyday life, including their experiences and opinions (De Veirman, Cauberghe, & Hudders, 2017). Research by Svensson and Johansson (2018) has found, people consider social media influencers trustworthy, have an audience reach and dialogue generation higher than celebrities.

Digital social media encompass various platforms considering major networks such as Facebook, YouTube, Instagram, and Twitter. Since Facebook is the most popular social media platform, it is mostly used but has a focus on sponsored social ads rather than influencer content creation which is more present on Instagram and YouTube (Clement, 2020). Instagram's feature developments like (live) stories (2016) and Instagram Television, IGTV, in June 2018 (Instagram, A quick walk through our history as a company, 2019), enable the user to interact directly and on a personal level. Thus, influencers earn high credibility and trust by sharing their lifestyle openly with consumers (Buyer, 2016) which is what makes the phenomenon successful.

People tend to agree with those they like and trust (Chaiken, 1987) and are more suspicious towards the mainstream media (Corner, et al., 2015). Hence, influencers have the unique chance to target niche audiences that have been unreachable until now since traditional media were mostly reaching out to the mass audiences (Ledbetter, 2015). Accordingly, statistics have shown, 40% of people on social media have made purchases as a direct result of seeing an influencer's post. In the US the percentage is even higher – 70% (GeneXus, 2018). People replace the authoritative heft of traditional institutions with the surging wisdom of crowds (Madden & Fox, 2006) and see influencers more as a friend instead of a marketing promoter. That is why 75% of marketers use influencer marketing nowadays (Augure, 2015).

Hence, in times of global warming, climate adaptation and mitigation, the communication of a sustainable attitude becomes increasingly important. That is why formed communities of practice on social networking sites promote environmental knowledge (Singh, 2011). But Boyd and Ellison (2008) point out, digital networks are mostly used to facilitate and deepening existing connections and relationships which correlates with a higher engagement rate for micro-influencers (9,6%), compared to celebrities (3.3%). The larger the audience the weaker the connection between content creator and follower (Shoenthal, 2019). Yet, the more people talk about a sustainable lifestyle the more niche audiences are articulated and the higher the chances of pro-environmental engagement (or participating in climate strikes).

Influencers lead by example for those who 'follow' them. In the words of Bandura, "in the social learning system, new patterns of behavior can be acquired through direct experience or by

observing the behaviors of others (Bandura, 1977). Consequently, consumers develop hypothesis about the types of behavior which might work, based on the received informative feedback. Eventually, those thoughts might guide for further actions in the future. By observing examples through social media, people are more likely to be inspired and adopt a (pro-environmental) behavior, demonstrated by the influencer. Furthermore, distant topics like climate change become more concrete to the human mind (Marx, et al., 2007). For instance, the influencer can publish a recipe for a healthy vegan meal or report reusable sustainable products like a coffee cup. This might inspire the audience to incorporate the recipe or buy the coffee cup.

The main task for influencers is to handle their dual role as a marketer but also as a community member and friend who not just bases their advices on what they get paid for but on their personal opinion (Audrezet & Charry, 2019). Sponsored content has to be explained as users judge the influencer based on their authenticity and credibility (Audrezet & Charry, 2019). Since eWOM is based on an authentic and honest recommendation, the influencer could lack in credibility if their recommendation of sustainable products or services isn't aligned with their communicated values in the past (Ibarra, 2015).

Since 2017, the Federal Trade Commission (FTC) has invited influencers and companies to disclose brand relationships which eventually led to more trust by showing transparency and authenticity, simply by adding a hashtag #ad or mentioning "paid partnership" (Audrezet & Charry, 2019). Furthermore, it reveals expertise and competence. Looking at the number of followers, celebrity influencers may have a higher reach and thus a bigger speaking platform, but micro influencers lead in the engagement metric. Consequently, they have a deeper tie with their follower and so they have a larger influence than celebrity influencers (Shoenthal, 2019). Authenticity is based on actions and words that are in accordance with the person's personality, their coherence between feelings and vocal expressions as well as value-based choices (Ibarra, 2015). Several organizations, brands or companies see potential in influencer marketing to promote their product or service, since influencers are seen as the ultimate platform to enable meaningful relationships with their customers. Influencer marketing is effective because people want to belong to a social group (Langner, Hennigs, & Wiedmann, 2013).

Moreover, people are more likely to adapt a lifestyle or pro-environmental habits as long as it is in accordance with environmental norms in society. People try to avoid negative connotations of environmentalism (e.g. being perceived as hippies) (Shirani, Butler, Henwood, K. Parkhill, & Pidgeon, 2015). Black and Cherrier (2010) argue that fear of being seen as outsiders restricts the likelihood of some behavior adaptations. Similarly, Anderson (2017) encourages to communicate sustainable communities as important 'encounter spaces' that offer alternative vital opportunities to engage in sustainable actions; not as an escape from the mainstream but more as an alternative. Nevertheless, what is being considered as normal or desirable, varies across social groups.

The eco-influencer domain is still small, with only a few celebrity characters. Greta Thunberg is just one of them, using social media less as a marketing tool but more to get people active offline, in real life. Following the example of Gladwell (2010), Greta Thunberg embodies exactly what he said: “the revolution will not be tweeted” (Gladwell, 2010). Questions arise how climate change has to be communicated to get people interacting with the content and taking actions offline. How to make the shift of storytelling to story-acting? A story and message are more credibly brought to life through actions, rather than meaningless statements.

2.4 Storytelling or Story-acting? Grasping for attention.

Taking the previously evaluated perception of climate change amongst young people into account, climate change is perceived as rather negative and hopeless. Furthermore, taking the possibilities of social media and influencers into account, as well as their potential to change a user’s understanding of climate change, the following chapter concentrates on proven strategies to accomplish pro-environmental behavior.

Role models like Greta Thunberg describe an opportunity to increase awareness on sustainable behavior online and offline. However, questions arise how feasible social media is in that sense. As mentioned in previous chapters climate change is an abstract concept for most people. Social media might bring climate change closer to individuals since opinion leaders (or influencers) show their personal involvement. Personalization offers the opportunity to make a distant topic like climate change more concrete to people’s mind (Marx, et al., 2007). Whereas trustworthiness, consistency, endorsement and authenticity build the foundation of the willingness to start adapting accordingly (Metzger, Flanagin, & Medders, 2010).

Engagement and participation are crucial requirements to increase a post’s viewability. The visibility of a post (on Instagram) is controlled by the algorithm, a computer-generated formula that generates some output or categories based on given information from a user’s online activity (Gillespie, 2015). Yet, some people just lurk on content instead of engaging with it (Kushner, 2016), 2019). Lurkers don’t participate in media content. Nielsen (2006) states that 90 percent of users lurk while nine percent contribute occasionally and only one percent participates a lot. Hereby, every user but also the algorithm and every platform designer are actors in this ‘game of visibility’. In order to be seen one has to play by the system’s rules (Van Dijk, 2013), meaning foster engagement (e.g., likes, comments and shares). Research has proven that proximity, controversy and negativity trigger participation of the audience, whereas facticity and power decrease participation (Spyridou, 2018). Posts that address an alternative opinion in contrast to dominant opinions (e.g., Greta addresses the governmental ignorance towards climate change) mobilize the user. Entertainment and ego-driven motivators are key drivers in this context (Spyridou, 2018).

Additionally, it depends on how huge the investment presumably will be, it depends on how much effort a person has to invest. Is the required task asking for skills, a person has never developed

before (e.g. writing a review or sharing sustainable habits), the chances of participation are less likely to be included in daily routines (Picone, et al., 2019). Consequently, small acts of engagement (SAOE) encourage people to participate, as it simply is a click on a like button and affordable for nearly everyone. If the required task is aligned with available skills of the user, chances of participation are higher (Picone, et al., 2019). So, the social context and the analysis of individual experiences is an essential factor to boost participation.

Considering social context, digital storytelling is a proven strategy to transfer a message in a meaningful way as the world around us gets more and more mediatized (Couldry & Hepp, 2013). A commonly shared presumption is that human experiences are not merely facts, but stories in which events are selected and organized for a particular audience. An authentic story helps to build trust and loyalty (Chaudhri & Kaul, 2017). The idea is to create a story that adds value and overcomes obstacles to appeal to the reader or user. In most cases, the narrative is supported by a bundle of different multimedia elements such as images, videos or audio. Although the concrete definition of digital storytelling differs depending on the purpose, the overall main characteristic is engagement and emotional involvement (Chaudhri & Kaul, 2017). A good story, always includes some interactive elements, facilitates role-play and is deeply immersive.

So, the more a user resonates with the communicated narratives, the more likely he or she participates and engage with the content. Thus, the likelihood of understanding and learning increases. (Informal) Learning is an active process that is defined as a participatory and collaborative process, driven by interest (Jenkins, 2006). However, following the theory of connectivism this research assumes possibilities in attitude change, as long as the developed perspectives overlap with established perspectives of peers in their network (Kop & Hill, 2008). Accordingly, this research aims to elaborate on the communicated narratives and how (small-scale) actions are encouraged by the pro-environmental Influencer. The concrete research design, Influencer accounts and following analysis are further explained in the next chapter.

3. Methodology

This research paper applies an interpretative approach to examine the way in which pro-environmental SMIs communicate a sustainable attitude on Instagram. Instagram is mainly based on visuals born by the idea to share high-quality pictures by the use of filters (Instagram, 2019). In the following paragraphs, the methodology will be outlined as follows: research method and its justification (what method will be used to gain data and why?), data collection (how are the research units collected, defined and recognized?), data gathering (which data units are revealed and how many?) and data analysis (how will the data be processed and analyzed?).

3.1 Justification and Research Design

To be able to understand the communicated representations of climate change adaptation and mitigation online, this research applies qualitative practices. Within media studies qualitative research is used to understand the context, traditions, the meaning of words, ideas or concepts (Brennen, 2017). Qualitative research tools translate the world in its natural setting into a series of representations, based on the meanings people bring to them (Flick, 2007) which makes it feasible in order to understand the communicated narratives of SMIs.

The interpretative approach is what makes it different to quantitative research methods that are based on facts and numbers, to conclude if a statement or assumption is significantly true or false. Qualitative research is looking for ways to explain the ‘how’ of the world, which words have been used, which photograph, which setting to transmit a message. ‘How much’ would be gathered with quantitative research. Since the amount of data is irrelevant for the stated research question, to reveal patterns of communicated narratives, quantitative research would not be feasible, especially not to do research on a complex concept like perceptions in the climate change space.

There are overall three different perspectives in qualitative research: theoretical positions (symbolic interactionism, phenomenology), data collection methods (semi-structured or narrative interviews and procedures of coding and content analysis are dominant) and methods of interpretation (theoretical coding, content analysis, narrative analysis, hermeneutic methods) (Flick, 2007). Boeijs (2009) classifies the different approaches into five, meaning ethnography, narrative, phenomenological, grounded theory and case study. However, none of those qualitative research tools can be seen as unified approaches to the world. Yet, those tools help to understand parts of the world that show people, institutions as well as interactions are included in the creation of their realities. Qualitative research assumes that people have an active role in the meaning-making process (Flick, 2007; Boeijs, 2009) which makes it indeed applicable to understand and reconstruct patterns or themes behind communicated narratives on Instagram.

Simultaneously, that correlates with the main critics and negative aspects about qualitative research. Not only the individuals or communicated narratives are part of the meaning-making process, but also the researcher him- or herself. The personal cultural background, including present

norms, values and regularities, has a certain influence on the process (Hall, 1997). Yet, to counter this, the researcher has tried to be as neutral as possible.

This study used a non-experimental research design. The social media platform Instagram is the foundation of the purposeful sampled data from three different accounts. Instagram provides the researcher with essential elements, like persistency, accessibility (free access as accounts are publicly visible by default), replicability (posts can be saved without asking the user for permission) and searchability (filtered by account, place or hashtag) (Leastadius, 2018).

This research is of qualitative nature which means that representativeness, validity and reliability are not the main focus. Rather, this research focuses on complexity and tries to get micro insights; to get a clearer understanding and detailed insights of complex perceptions of communicated messages via Instagram posts of pro-environmental Influencers.

Ultimately, to answer the research question, a content analysis of Instagram content reveals various patterns considering climate adaptation by evaluating the communicated narratives of Influencer accounts inductively. Like various authors underline, content analysis does not just analyze a concrete post itself but allows to link written, verbal or visual results to the context in which they were produced (Downe-Wambolt, 1992; Krippendorff, 2004). It allows the researcher to understand the latent and context-related meaning (Schreier, 2012). With this method, it is possible to detect several levels of interpretation to find patterns and reduce the variety of sense-making (Schreier, 2012). Content analysis does not only include data collection (Schreier, 2012), but is related to the context of the data production. Finally, it is a useful research tool since it is case-oriented. The method discovers global meaning and produces saturation.

However, sub-methods like thematic analysis and semiotic analysis have been chosen to extract a more precise interpretation. Semiotic Analysis was chosen to analyze the visuals, meaning the posts' images. This method was highly influenced by the Swiss linguist Saussure who saw the meaning making process in the smallest unit in societies, defined as signs. Accordingly, images and photographs (form) associate a specific idea or concept in each person's head (Hall, 1997). Saussure called the form 'signifier' and the concept 'signified' (Hall, 1997).

Notably, the researcher's subjectivity is impacting the analysis to some extent, since humans interpret everything within their social context (Hall, 1997). As described in previous chapters, the recommendation and information of peers have a larger influence on young people than public news (Goldsmith & Clark, 2008; Metzger, Flanagin, & Medders, 2010) which means the context plays a crucial role, thus, justifies the methods more precisely. A comparison of those different posts will then allow a deeper understanding of similarities or variations (e.g. narratives amongst all three accounts or setting, salience or picture characteristics).

By collecting a reasonable amount of data, enough data is provided to answer the research question profoundly. The focus is limited to the sender messages, meaning the SMI, since their communication strategies around the 'Fridays for future' strikes are of interest. The question is how

social media influencers represent a pro-environmental attitude how it differs to the media coverage that has been introduced in the theory chapter. The narratives but also visual narratives play an important role in how climate change is firstly perceived by the public but also how climate adaptation and sustainable habits will be implemented.

3.2 Sampling Method and Composition

To identify dominant themes and opinions expressed on the sampled influencer accounts, the defined research design has been applied on purposefully selected Instagram posts and videos. Since Instagram has a wide range of data, meaning pictures, captions, comments, hashtags, videos and emojis, it offers a good reason to choose it for research. Instagram encourages its users to capture what may have been important in their life (Leastadius, 2018) which is facilitated in best practice by their users; an enormous number of posts are available. Moreover, the previously defined target group of theoretical interest to this research paper (18 – 25 years old Europeans) engages the most on Instagram, compared to other SNSs.

In qualitative research sampling isn't always formalized as it is in quantitative research. However, the most common data collection strategy is around a concept of purpose. Flick (2007) argues that it is a way of managing diversity so that the variation in the sample can be captured to a controlled extent. Generally, sampling is not just limited to scraping the Instagram posts from each account but also choosing the most illustrative, convincing and confirming ones for the representative analysis later on (Flick, 2007).

So, in order to scrap a representative dataset, a keyword search has been conducted initially. Keywords are labeled with a hashtag on Instagram, integrated as a hyperlink to ensure a convenient and feasible search function. However, since this research paper seeks to evaluate peer recommendations and their potential to add meaning to climate adaptation, the keyword search was critical. Most of the sampled posts using a hashtag word have been created by larger institutions and organizations (e.g., Greenpeace) which wouldn't fit this research's intention (Social Media Influencers).

Consequently, by searching for a ranking on Google, the list of 'Top Climate Activists on Instagram' (Izea, 2019) provided different influencers to be evaluated. Yet, just two have been chosen from this website (Greta Thunberg and Lizzie Carr). The justification of Greta Thunberg has been explained thoroughly in the previous chapters (classified as critical, typical, intensive case) (Flick, 2011). Lizzie Carr is from the UK, a climate activist, speaker, writer but also founder of Plastic Patrol which is an organization committed to clean up the planet (Plastic Patrol, 2020). So, Lizzie combines the image of a huge organization (related to Greta Thunberg) but also shares her personal background on her individual Instagram account which is why she finds justification as a middle 'man' in this research paper. Despite the other two accounts, she focuses on the planet's plastic pollution on which she grounds her reasons for a sustainable lifestyle.

The third Instagram account (@thegreenmonki) was selected by the algorithm of Instagram. Instagram suggests similar accounts once a person follows a new account. To assure some level of variation the last account of Chloé Mikolajczak, has been chosen since she incorporates what a micro-influencer is defined by. Chloé is a French sustainability consultant, climate activist and committed to communicating climate change and environmental issues linked to consumption habits to as many people as possible (TGSP, 2020). For that reason she founded 'The Green Seeds Project' and fosters young people to take action upon a pro-environmental attitude.

To sum up, one public, celebrity-influencer (Greta Thunberg), one well-known Macro-influencer (@lizzie_outside) and one micro-influencer (@thegreenmonki) describe the three different accounts from which the mentioned posts were conducted. As stated in previous chapters, the definition of macro and micro influencers is related to the number of followers; thus, one account turns into a macro influencer by 100,000 followers and more (White, 2019).

3.3 Operationalization and Data Analysis

One research unit hereby describes one post consisting of a picture and the caption. To gain a reasonable dataset, 30 Instagram posts from each influencer account have been collected. To scrape the data the tool 4K Stogram was used which is a free program to download Instagram multimedia as well as metadata, including text captions (plus datetime). However, neither comments or the number of likes nor views are collected.

The time frame varies upon the three different accounts since each account published a different amount of posts around the 'Fridays for future' strike week in September 2019 that lasted from 20th until 27th. Each account has one essential post which directly refers to the strike. This post has been used as an anchor point. That means 15 posts that have been published before and after this anchor point have created the overall dataset per account. The number of analyzed visuals has been limited to 20 pictures per account since some postings consist of more than one visual. Additionally, for the sake of diversity and coherence, repetitive pictures (e.g. a crowd of people striking on the street) or unrelated pictures (e.g. festival picture) have been eliminated. Therefore, 60 visuals and 90 text-based narratives have been analyzed in total. Considering the protection of personal data, this research made use of alteration, depersonalization and consent if there is risk of harming a user's privacy (Highfield & Leaver, 2014; Moreno, 2013). Moreover, to limit the researcher's influence on scraping the data, a new Instagram account was created (@leni_research).

3.4.1 Thematic Analysis

Thematic analysis as a sub-method of content analysis provided an in-depth view on the text-based dataset. It was useful to look at recurring ideas and patterns in the content published by the individual. Therefore, a thematic analysis across the sampled data enabled the researcher to determine key themes throughout which global warming is tackled. The main question to answer was: how do

texts organize thoughts via themes? As Schreier (2012) mentioned, “the coding frame is the heart of the research”. It is therefore crucial that qualitative research uses a coding frame that illustrates the richness of the data collected. Consequently, the correct identification of the concepts that needed to be analyzed led to a completed and inclusive coding frame.

The process of coding has been inductive, whereby the themes were generated from the data following the coding steps of open, axial and selective coding (Boeije, 2009). Yet, these overall three steps were complemented by the six phases of how to conduct a thematic analysis, introduced by Braun and Clarke (2006), since they provide a more detailed instruction: Familiarizing oneself with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, producing the report.

Stage	Analytical activities	Output
1. Familiarising yourself with your data	<ul style="list-style-type: none"> • Creating tables • Reading and re-reading the data • Noting down the initial ideas 	<ul style="list-style-type: none"> • 12.109 words in scraped captions (3 influencers) • 15 initial ideas for the codes • 7 ideas for the themes
2. Generating initial codes	<ul style="list-style-type: none"> • Coding interesting features • Collating data relevant to code 	<ul style="list-style-type: none"> • 365 codes altogether; between 22 and 50 codes per influencer with an average of 36
3. Searching for themes	<ul style="list-style-type: none"> • Collating codes into potential themes • Gathering all data relevant to each potential theme 	<ul style="list-style-type: none"> • 305 codes altogether; between 20 and 45 codes per interviewee with an average of 32 • mind maps with approx. 5 main themes + 16 sub-themes
4. Reviewing themes	<ul style="list-style-type: none"> • Checking if themes work in relation to the coded extracts • Generating a thematic map of the analysis 	<ul style="list-style-type: none"> • 4 main themes • A mind map with 43 sub-themes + 47 sub-sub-themes
5. Defining and naming themes	<ul style="list-style-type: none"> • Refine the specifics of each theme • Generating clear definition and names for each theme 	<ul style="list-style-type: none"> • 4 main themes • Table with 4 main themes and 11 sub-themes, with overlapping areas
6. Producing the report	<ul style="list-style-type: none"> • Selecting vivid and compelling extract examples • Analysing the selected extracts • Relating back to the research question and literature • Producing an academic report of the analysis 	<ul style="list-style-type: none"> • Results section • Discussion and conclusion section

Table 1: The stages of the analytical process of the data analysis, based on Braun and Clarke (2006).

Eventually, by getting familiar with the data and rereading the captions, initial ideas were noted based on first impressions. Then, the data was secondly broken down into several open codes, concepts and descriptions, revealed from relevant elements in the captions and hashtags. Next, for axial coding, the initial ideas and open codes were clustered into more specific categories that describe the data. Here the coding was focused on the identification of recurring topics and patterns from the open codes (Braun & Clarke, 2006), which reflect the influencers’ identity and communicated values.

Particularly, by noticing the different themes and evaluating them in a mind-map, the communicated topics and identity became more present and supported the next step. The axial codes were classified within overarching selective codes. In this sense, the axial codes refer to supporting themes within the defined core.

Reviewing the codes, re-reading the material and defining the axial and selective codes required profound awareness, time and attention of the researcher. Codes got deleted, revised, differently framed before a totally new category has been extracted. The further ahead in the coding process the more insights were revealed and the more ideas came up. A mind-map for each account, but also one overarching mind-map for all accounts, supported the process to get clear about the final categories.

Eventually, further research on initially unfamiliar topics (e.g. statistics on renewable energy) but also reviewing the 17 sustainable development goals (SDGs) (United Nations, n.d.) has helped in defining the themes and codes deductively. Yet, most of the codes developed inductively, by reviewing the influencer accounts during the analysis. After all, the coding frame provided a thorough foundation to answer the research question.

3.4.2 Semiotic Analysis

Analyzing visuals is a way of seeing the world through the eyes of the influencer and what could have a meaning for this specific person so that he or she publishes it on social media (Flick, 2007). Also, one of the strengths of visual analysis lies in the open-ended nature of the inquiry since images can offer a vast range of interpretations (Banks, 2018).

This research intends to extract those meaning making concepts that help to organize the world into categories and themes. Given that, the attached attitude and perception of communicated patterns of the pro-environmental Instagram accounts have been discovered. More precisely, the steps of denotation (descriptive level) and connotation (semantics) of objects, settings and the salience offered a deeper insight on how meaning is facilitated (Barthes, 1973). So, the underlying patterns were developed by asking questions like: Who and what is represented here? (e.g. a picture of a house denotes a house) and “what ideas and values are communicated through what is represented, and through the way in which it is represented?” (Machin & Mayr, 2012) (e.g. a crowd of people, lifting up signs ‘There is no planet b’ connotes a strike). Every picture transferred a discourse that was classified into patterns by involving the context.

Eventually, meaning was established through dialogue and modified by interactions with other people which is why those different elements were analyzed individually but also in comparison. What an image connotes depends on established connotators that transfer a clear message which the user will understand (consciously or subconsciously). For instance, considering the colors, cultural signals or center of attention of a visual, allowed a clear understanding of transferred narratives.

At the end one overarching coding frame (extracted from thematic and visual analysis) (included in Appendix) defined the findings and conclusion chapter, by reviewing major questions as: What does this theme mean? What are the implications of this theme? Why do influencers talk about this theme in this particular way? What is the overall story to those different themes? (Braun & Clarke, 2006). The following chapter will explain the revealed findings in more detail.

4. Results

4.1 Introduction

In the following paragraphs the revealed findings will be outlined and clustered by overarching categories as follows:

- Ignoring the problem (ignoring global commitments, wildlife damage, denying that change is coming),
- Climate actions (climate justice, collectivism),
- Individual responsible consumption and production (sustainable living, leading by example)
- Open communication and awareness (authenticity, knowledge is power, emotional narratives).

Here the meaning and essential questions are reflected on to reveal communicated narratives in the given context. These questions include: What does this theme mean? What are the implications of this theme? Why do influencers talk about this theme in this particular way and time? What is the overall story to these different themes? (Braun & Clarke, 2006).

Furthermore, the findings are correlated with the initial theory and literature of chapter two. By referring back to the perception of climate change amongst young people, a more thorough interpretation of climate awareness, skepticism and pro-environmental actions was possible. As stated before, it is necessary to always include the context from which a message (or post) is transmitted. The chosen Instagram accounts allowed a diverse analysis in that sense, including different angles and backgrounds. As the influencer connected the offline and online world coherently the analysis revealed in-depth understandings on how to communicate climate actions on Instagram accounts. Finally, considering the communication style and related characteristics that were used to communicate a pro-environmental attitude around the 'Fridays for future' strike has allowed an in-depth interpretation of the material.

4.2 Ignoring the Problem

The perception of political ignorance is represented on all three influencer accounts. A strong aversion to political systems became apparent, based on facts and statistics that underline the political ignorance towards climate change. All three influencers inform about environmental problems that still exist even after several years or create awareness around missed goals that the whole world agreed on (e.g. Paris Agreements). Not just the captions, but also the visuals underline distrust and anger, the young generation holds against the political systems, paired with a missing responsibility. Protests, activism and obvious requests from the society (e.g. strikes or public speeches) seem to be ignored. The three accounts display this ignorance all in their own way and perception, one concentrates more

on fossil fuels whereas the other one concentrates on plastic pollution. However, they make overall aware of the current status and draw a rather negative picture on political leaders.

4.2.1 Ignoring global commitments

The Paris Agreement conducted in 2015 (UN, 2015) sets clear requirements in order to tackle the climate breakdown: keeping the earth's temperature lower than the pre-industrial age, reducing carbon emissions and investing in climate adaption and mitigation inventions (UN, 2015). The three Instagram accounts chosen for this research all come from developed countries (Sweden, UK and Belgium) in which society is already highly aware of the climate breakdown (European Commission, 2019) and which steps are necessary to adapt and mitigate accordingly. Also, Chloé mentioned it briefly: *'We already know how to tackle the climate and ecological crisis'* (Chloé, 2019/10/26).

It became apparent that each account reinforces climate facts and figures that seem to increase their overall concerns on how the politics deal with a changing climate. For instance, Chloé raises attention on the governmental money investments that have to be shifted by politicians and investors. According to her post, Europe alone spends 55 billion dollars for fossil fuels every year although the double would need to be invested in renewable energy in overall 15 years (Chloé, 2019/10/26). So, the influencer makes clear how globally committed goals (here: the Paris Agreement) seem to be ignored based on this calculation. Likewise, her post of 10th of September 2019 refers to money investments which are wrongly positioned in her eyes:

\$50 BILLION. That's the amount of investments made by oil and gas companies that are incompatible with fighting climate breakdown according to @carbontracker that were made since 2018. Despite talking regularly about the Paris Agreement and how to deal with the climate crisis, all major oil company are investing in the short term in non-Paris compliant projects.

Moreover, the influencer Chloé articulates her global and collective involvement as she talks about the predicted vulnerability of southern countries that are less developed so that missing technological resources limit their capabilities to handle global warming (Chloé, 2019/10/10). Her account alone gasps attention on the largest contributor of climate change: carbon emissions. Most of her posts include statistics so that the topic becomes more feasible. It delivers a clear message that everyone can understand, as figures are commonly understood as truth indicators. Clearly, the stated statistics cast a negative light on political climate agency, which correlates with the perception of young Europeans, evaluated by the European Commission (European Commission, 2019).

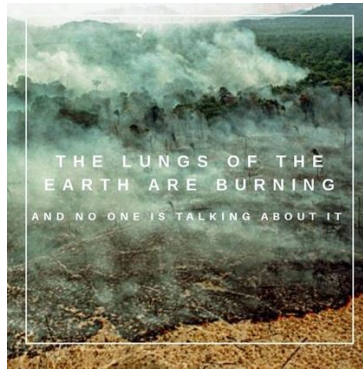
Compared with Lizzie, she bases her perception of political ignorance on personal stories, either related to her personal ample scope (fighting plastic pollution) or related to her emotional state. For instance, she uses an expression of art by referring to song lyrics of Bob Dylan ('The times they

are changin’) to question global agency to make a global change (Lizzie, 2019/09/29). The song was written in 1964, unrelated to climate change, but is still up to date and tackles the problem: not taking actions. In a similar way Greta expresses the perceived (political) ignorance by emotional sentences that clearly communicate her (and the young generation’s) despair: e.g. *‘You are failing us. [...] The eyes of all future generations are upon you. And if you choose to fail us I say we will never forgive you.’* (Greta, 2019/09/23). So, she clearly threatens global leaders to better work on a better future for the young generation. Additionally, her quote makes aware of political liars that are now unmasked by the young generation. Therefore, the politics appear as the enemy or boundary, considering the achievement of global pro-environmental goals.

4.2.2 (Wild-)Life and Nature damage

Lizzie and Chloé also draw on the ignorance towards obvious natural changes, in wildlife and biodiversity that are mainly introduced due to human activities. Climate Change and its natural consequences are clearly and directly communicated which appear as obvious alarming signs for climate actions. Visual and text elements make aware of environmental problems, embedded in a social context. For instance, Lizzie demonstrates a strong connection with nature (calls herself Lizzie_outside on Instagram) and conceptualizes the environmental impact on wildlife population with statistics that proof a decrease of 60% in the past five years, referring the wildlife population in the UK, her home country (Lizzie, 2019/10/07). Due to *‘farming, pollution from fertiliser, manure and plastic as well as the continued destruction of habitats for houses and invasive species creating more imbalance in our eco systems’* (Lizzie, 2019/10/07). Her concerns about missing political agency is supported by the ‘state of nature’ report: *‘no significant improvements’* (Lizzie, 2019/10/07). So, scientifically proven papers support her message and manifest the overall problem.

Another example of Chloé’s Instagram account refers to the fires in the Amazon rainforest in 2019: *‘Data shows that deforestation in the Amazon has surged since Brazil’s new president Bolsonaro has taken office (278% increase in July 2019 compared to July 2018) and so have wildfires because of his compleasant policies towards loggers, farmers and exploitation of natural resources’* (Chloé, 2019/08/22). Again, political leaders are claimed to be responsible for the exploitation of natural resources. The information is embedded into facts about the rainforest and its importance for human existence, as 20% of the world’s oxygen and 10% of its diversity is based on this biological center. So, Chloé draws the line between nature and its necessity for human life so that the effects of climate change are clearly understood and seen.



Visual 1: Chloé, 2019/08/22

The posted visual that Chloé integrated for this topic aligns perfectly with the caption. It demonstrates the large fires in the rainforest in mostly gray and black colors, covering almost the whole rainforest so that the viewer needs to look twice in order to identify the objects. The colors symbolize a dramatic scenery and darkness as it does a lot of harm to the nature. Additionally, the picture is covered by a quote ‘*The lungs of the earth are burning. And no one is talking about it*’ (Chloé, 2019/08/22) which is directly positioned in the middle, overlapping the smog. The second sentence is a bit smaller than the first which is related to the importance it is given to by the public. Chloé had to learn about the rainforest disaster via social media, since none of the media channels was reporting on it. In that sense she emphasizes with social media characteristics (fast-paced) and even encourages each user to keep on sharing news to foster human rights like free speech. The fires can’t be denied but the public is acting small (as the size of the text symbolizes). In the lower right corner of the picture, it even seems as if the fire is still spreading. It might relate to the urgency to act now, as Greta communicates more intensively.

4.2.3 Tackle Plastic Pollution

This sub-theme mainly emerged from Lizzies account since her focus lays on global plastic pollution. She limits her climate actions mostly to the reduction of single use plastic. In that sense, a sustainable attitude is correlated with zero waste policies. Considering political agency, her posts raise attention to forgotten trash in the sea. On her account it becomes apparent that she claims the political systems to hide uncomfortable issues as if they would say: Out of sight, out of mind. Accordingly, in her post of 08th of August, she judges the gatekeepers by their ignorance behavior towards plastic pollution:

“ [...] rather than invest and improve, we do the equivalent of covering our eyes and sticking our fingers in our ears and ship it off to less privileged countries like India, Malaysia and China who don’t even have the waste infrastructure to manage their own” (Lizzie, 2019/08/08).

It reflects her perception of global leaders who seem to act immaturely and ignorantly even though they are supposed to lead. By demonstrating her concerns about less privileged countries she makes aware of plastic pollution as a global topic.

On one hand, she sees the efforts or actions that have been made (e.g. recycling labels on each can) but also explains the ignorance or lie on the other hand. For instance, in August 2019 she holds up plastic cans demonstrative in front of the camera. Based on the labels she tries to draw back on their existence in the ocean: the oldest supposed to be from the 1950s (Lizzie, 2019/08/18). So, although it supposed to be recyclable the trash still exists in the ocean. To demonstrate how an ocean filled up with plastic would look like, she positions herself in front of the sea imitation, constructed by the brand sky, which is filled up with plastic bottles surrounding a gigantic whale fin (Lizzie, 2019/10/16). It refers back to Wildlife damage (referring to the whale fin), but also demonstrates human contributions to it.

Eventually, her account does not only address politics from an ignorant attitude. She also addresses society in general which seems to fail substantially in adapting a sustainable attitude from Lizzie's point of view:

“Households around the country are confused about what item goes in what colour bin - that recycling symbol is a waste of space. But don't bother asking anyone for advice - it's different in every postcode. Heaven forbid we apply some common sense and standardise our household recycling so people understand it better (and recycling rates improve), so manufacturers can plan and conduct an accurate lifecycle analysis and any waste we produce can actually get recycled (though I'd rather we innovated more so “waste” no longer existed!). I don't trust the system”

The problem does not only have to be tackled by “the system” (Lizzie, 2019/10/16), she also reflects on a missing curiosity of society which barely pays attention to a recycling symbol. So, Lizzie asks for clarity and a little more attention to both large scale (recycle instead of hiding) and small scale (e.g. individual trash separation) level.

4.2.4 Denying that ‘change is coming’

Overall, each Influencer monitors how global leaders stay in denial of the climate breakdown. Chloé used a striking example of the environmental movement ‘extinction rebellion’ which protested peacefully, without adding any harm, yet, were punished with violence by the government. Without any plausible reason activists were attacked with pepper spray and water cannons (Chloé, 2019/10/14). Hereby, Chloé makes her point clear, informs about the situation fact-based, but also includes her negative emotions which is likely to trigger engagement (Spyridou, 2018). Entertainment and ego-driven content provoke attention, thus, engagement (e.g. commenting, liking, sharing).

One visual of Greta Thunberg's Instagram account facilitates the political ignorance very well, as a quote from her speech is monitored on the side of the UN building in New York, symbolizing what it is: a side note.



Visual 2: Greta, 2019/09/22

The text was projected in the night when it was dark and most of the people in New York were sleeping. Yet, Greta calls everyone to wake up: *'And so I ask you to please wake up and make the changes required possible'* (Greta, 2019/09/22). Asking for the public and government to start acting upon committed goals that are required for a positive change. But not just the government expose denial towards climate breakdown, Lizzie also claims society in general, as Greta Thunberg had to face critics of being a hypocrite, a fraud or Nazi (Lizzie, 2019/09/26). She says: *'All I see are the climate deniers in fight mode'* (Lizzie, 2019/09/26). But as Greta says throughout all of her posts *'change is coming, whether you like it or not'* (Greta, 2019/09/23).

After all, each influencer account raises awareness of political ignorance as a foundation so that the necessity to take action and engage towards an eco-driven attitude is understood. Informing about the status quo and (in some cases) missing agency of the government, builds the foundation of climate actions. Based on emotions or facts, the reality of climate breakdown is communicated in narratives but also in pictures so that the user's perception of climate change becomes clearer and more understood so that the likelihood of young people adapting their lifestyle would increase (Shirani, Butler, Henwood, K. Parkhill, & Pidgeon, 2015).

4.3 Collective Climate Actions

Climate change asks for collective actions upon a common goal. Politics need to take immediate actions to prevent the worst. So, each influencer account addresses several solutions an individual could take part in. The two main sub-themes are climate activism (e.g. strikes) and collectivism which differ - but also complement each other. Clearly, the user is approached by the appeal to join a larger group, in order to make a change for the future. Greta Thunberg uses her

Instagram account mainly for promoting activism and her school strike series, whereas Lizzie and Chloé inform their audience, based on facts and emotions. By the same token, Greta and Lizzie create social movements offline (climate strikes and ocean clean ups) whereas Chloé rather participates and raises awareness online. Each account uses a different approach.

4.3.1 Climate Justice – Activism works

On a larger scale, the main focus lays on climate strikes, especially on the FFF strikes that took place in September 2019 (Fridays For Future, FFF, 2020). Each account mentioned the strike dates on their accounts to encourage their followers to participate. Words like “*see you on the streets*” (e.g. Lizzie, 2019/09/26) almost deliver an impression of a scheduled appointment as one would arrange with a friend. Pictures of a crowd, demonstrating in front of parliaments and political constitutions draw attention (e.g. visual 3, in front of the statue of victory in Germany):



Visual 3, Greta, 2019/09/25

Several posts highlight the amount of people who joined those strikes. It transfers a sense of importance. If thousands of people group up to take a stand in the political system, a person (or user) is likely to pay attention. Each influencer refers to a person’s feeling of belonging to a social group (Ostrom, 2010). In this context, the word ‘solidarity’ appeared on two of the three influencer accounts (Chloé, 2019/09/05; Lizzie, 2019/09/20) which emphasizes on the collective and supportive character a social movement has. Furthermore, Chloé informs the user about the reasons for climate activism as climate change has to be understood (Doyle, 2016). She says:

“You know why it's so important to join? Because the current way our society work is inherently linked to climate change and without a radical political approach and legislative framework (such as the Green New Deal for instance) we will not be able to remain in the temperature rise humanity can handle 🌍🔥 Many companies have already expressed their support to the strike and will let their employees march that day” (Chloé, 2019/09/05).

On a long-term scale, a sustainable attitude starts for Chloé with voting: for advocates and for people and parties with a strong environmental agenda (Chloé, 2019/10/26). Her call for action is clearly transmitted and underlined by capital letters: *‘Join a movement or a protest and fight for system change as these are decisions taken at the highest level of power. We need to tell these guys that we KNOW AND WE WANT CHANGE’* (Chloé, 2019/09/10). Describing it from a collective perspective does include the reader already which increases the likelihood to feel addressed.

In contrast to Chloé, who shares a lot of fact-based knowledge online but also participates in strikes offline, Greta and Lizzie mainly lead social movements that people can take part in. Yet, they deliver the message that climate activism doesn’t need to be in a big crowd. Both, Greta and Lizzie started alone, Greta with her sign ‘Skolstrejk for Klimatet’ in front of the parliament in Sweden, Lizzie with her paddleboat on the Hudson River in New York, both with a strong message: to fight for the planet. So then, both accounts encourage the user to take a stand, even if it means to start alone (Lizzie, 2019/10/17). Both accounts transfer the message that it’s not about themselves, but rather about the message that needs to be delivered. They encourage people to take action upon a sustainable system, even alone, as eventually people will follow the example: *I was entirely alone and didn’t know anyone, but I needed to start somewhere. A year on and this weekend I returned to paddle with more than 70 people all uniting in the fight against single use plastic* (Lizzie, 2019/09/23). For instance, one visual from Greta’s account embodies this subject quite well:



Visual 4, Greta, 2019/09/21

Greta herself is small and barely recognizable. Yet, she stands on a stage, in front of a microphone alone, the focus lays on the crowd in front of the stage, highlighted by the sun and surrounded by large trees. It appears as a symbol for the FFF strikes: Greta who initially started the climate strikes still remains in the spotlight but rather small and less centered, since the crowd becomes the center of attention. Her pink dress underlines a sense of innocence and rather side-role in those strikes.

Another aspect that has to be highlighted in this context is the proven efficiency of climate activism that is grounded on conversations with global leaders. Since both accounts stay true to their

mission and seem to work consistently towards their goals, their message was listened to by global gatekeepers. Given the background where both girls come from and where they started, it takes away the distance between the user (or ‘basic’ inhabitant) and global leaders (politicians or large organizations). Greta as well as Lizzie have had the opportunity to share their knowledge with (global) political leaders:

‘I spent yesterday with Plasticus the whale at @skynews hatching plans. In fact, over the last few months I’ve had meetings with @defrauk, @dfid_uk, @greengreatbritain and other governmental departments as well as global FMCG brands to talk about my work to eliminate single use plastic through Plastic Patrol’ (Lizzie, 2019/10/16).

‘On my way to Capitol Hill. At 10h we’ll testify at The House Committee on Foreign Affairs. At 12h I will support Our Children’s Trust at the Supreme Court. Then at 17h ET I will address Members of Congress in the Ways & Means Committee Hearing Room’ (Greta, 2019/09/18).

Both quotes certainly prove that activism works. This would also refer back to the stated theory on people’s perception of climate actions. Chances to change the overall negative motivation towards a pro-environmental lifestyle (European Commission, 2019) increase, as a positive outcome is communicated: the message has been heard and seen by global leaders who can actually make a change.

4.3.2 Collectivism

Furthermore, the more people join those strikes the more likely it constitutes social representations, thus, positive connotations of environmentalism (Stamm, F., & Reybolds, 2000). The more people talk and act upon a pro-environmental lifestyle the more likely it becomes mainly accepted which then will be perceived as ‘normal’. Each influencer account embodies collectivism by emphasizing on that, the power of the group instead of promoting only themselves. They thrive by the power of the crowd as they talk positively about it: *‘together we change the world’* (Greta, 2019/09/20) or *‘massive congrats to all the rebels’* (Chloé, 2019/10/14). This is also demonstrated in several visuals. Pictures of a crowd of people striking outside on public places in front of parliaments (e.g. Greece) (Greta, 2019/09/20), in front of statues that symbolize revolutions (e.g. King Albert in Brussels) (Chloé, 2019/20/14) or with sceneries in the background that are globally well-known (e.g. Hudson River) (2019/09/23).

Encouraged by those positive examples upon a pro-environmental change, each account supports like-minded people so that the community grows. So, they make their audience aware of already existing groups and emphasize on the positive impacts one group can have. For instance,

Chloé expresses her enthusiasm on positive examples like Patagonia, who ‘won UN Champions of the Earth award for their sustainability commitments’ (Chloé, 2019/09/24) and is happy about Greta Thunbergs’ efforts so that 4 million people came together to strike for the future but also about every person who made those initiatives possible (Chloé, 2019/09/24). Greta herself grouped up with 12 other young activists to sign a complaint against five nations and their inactions in the climate crisis to set another clear message for global leaders and society (Greta, 2019/09/24). The picture posted for this specific occasion symbolizes collectivism but also diversity since young people with different skin colors came together (visual 5). Everyone stands together in a group, raising their hands as a symbol of victory. Greta just raises one arm into the air, possibly to express both: victory but also failure since nations like the USA and China haven’t signed the complaint (Greta, 2019/09/24). She doesn’t look happy. However, it doesn’t look as if she would give up, as she often mentions often in her captions: we draw the line right here, and ‘Change is coming, whether you like it or not’ (Greta, 2019/09/23). This is another example that uncovers the inabilities of political leaders to act upon committed goals which is why the importance of collective climate actions is encouraged. As it includes criticism upon global leaders, the likelihood of increased engagement and awareness is given (Spyridou, 2018).



Visual 5: Greta, 2019/09/24

Greta leads the collective social movement by empowering quotes on her Instagram account. For instance, taking the start of the global strikes as an example she passes the lead to the Pacific, where the sun rises first and consequently refers to a collective character. She reminds the user that the whole world has to deal with climate change. She says: ‘Soon the sun will rise on Friday the 20th of September 2019. Good luck Australia, The Philippines, Japan and all the Pacific Island nations. You go first! Now lead the way! Happy striking!’ (Greta, 2019/09/19) and underlines this post with a picture of the world in which the sun is about to show up. It reminds the activists for which reason they strike: the planet and its wellbeing. ‘Everyone is welcome, everyone is needed’ (Greta, 2019/09/18), to block the streets (e.g. to Battery Park in NY) (Greta, 2019/09/20) so that the leaders finally get aware of the emergency call. As she said: ‘Right here, right now, is where we draw the line’ (Greta, 2019/09/23). The society, the community, the crowd sets the requirements and leads.

Greta encourages the crowd online by showing up, posting pictures of herself striking on the street. She symbolizes just the tool but encourages the society and each individual to take climate

actions. Thus, in order to change the system climate actions have to be incorporated in both, the public but also in personal life of every individual person.

4.4 Individual Responsible Consumption and Production

Since the problem of climate breakdown is perceived as politically ignored and broadly hopelessly realized amongst young people (European Commission, 2019), the influencers take responsibility towards an eco-friendly attitude and future. As Chloé said: *'We don't need to wait for policy makers to begin'* (Chloé, 2019/09/26). The three influencer accounts demonstrate options: getting involved in activism, joining movements, voting for advocates but also adapting to a responsible consumption and production behavior. While Greta's main focus is based on the promotion of climate activism and strikes, Lizzie and Chloé demonstrate and teach about a sustainable lifestyle; including responsible food consumption, zero waste awareness, fair fashion and a sustainable travel behavior. Furthermore, the promotion of sustainable brands underlines those sustainable lifestyle patterns.

4.4.1 Sustainable living – how to consume?

Chloé for instance, often facilitates sustainability in combination with carbon emissions so that the reasons for adapting to a pro-environmental lifestyle are based on rational thinking and understanding the facts that everyone could research on by themselves. For instance, when talking about food waste she emphasizes on the benefits of a plant-based diet:

Animal farming, including feestock (production of food for the said animals) takes up 83% of the world's agricultural land but delivers only 18% of our calories. Meanwhile, a plant based diet cuts the use of land by 76% reducing as such considerably the emissions of GHG and allowing some of this land to be used for reforestation or restoration projects that can absorb CO2 (Chloé, 2019/08/11).

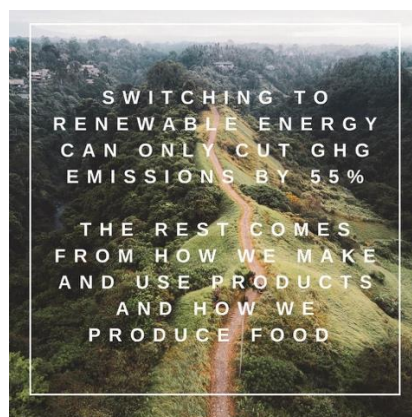
As carbon emissions are the main and largest contributor to climate change, she tackles an important contributor that could be limited by the choices that each individual makes on a daily basis. Her message is extended by the choice of visuals that are fully defined by vegetables (e.g. corn or squash). Those pictures gather attention due to its colorful pallet and therefore communicate positivity, joy and a sense of freshness (e.g. Visual 6):



Visual 6: Chloé, 2019/10/07

Responsible production - do I really need to buy new?

In a different post she reflects on renewable energy which is publicly perceived as a step forward although it has to be seen in the larger picture. For instance, Chloé made aware of the fact that renewable energy can only cut 55% of the greenhouse gases. The other 45% are dependent on our consumption and production behavior (Chloé, 2019/09/26). However, instead of leaving her followers with a negative outlook behind she offers solutions and positively communicate the responsibility that everyone takes in that sense. For instance, she mentions that repairing, reusing and sharing what we already have is already positively influencing the planet since the society produces less and reduces the exploitation of natural resources. Further recommendations are building strong communities and working less so that there is room for self-sufficiency (Chloé, 2019/09/26). The visual that comes along with this caption includes a long track on top of a hill, in a natural habitat, with a lot of green (visual 7). However, the track leads into a smoggy and gray outlook (equals exploitation of resources), one side of the track is in the shadow whilst the other one is sunny which could symbolize that the track due to the climate crisis (with solutions like renewable energy), has its sunny sides but also includes shades that have to be included by walking along the way.



Visual 7: Chloé, 2019/09/26

4.4.2 Leading by example – sustainability as the new normal

Both accounts, Lizzie and Chloé, express the message that there are always options to choose from. Whether it is the way a person chooses to travel (e.g. *‘there is always adventure, closer than you think’* (Lizzie, 2019/09/18)), the decision on fashion products (e.g. Chloé talks *‘about the state of fashion and why we need transparency was a massive proud moment’* (Chloé, 2019/10/06)) or if it’s the number of products a person consumes. Basically, the overall concept is to lead by example, to show everyone that living sustainably and adapting to a pro-environmental lifestyle, without adding harm to the planet, is easy and possible to be included in daily routines.

For instance, Lizzie, collecting plastic wherever she goes, illustrates that she didn’t change her initial plans but still makes a difference in small steps. This message reoccurs throughout her posts: you don’t have to be perfect; you can’t do everything, but you always have a chance to do at least something. For instance, on 20th September she organized a huge movement of ocean clean-up and asked for support from her audience as everyone would be able to contribute:

‘ [...] whether you’re walking the dog, going on a picnic with a date, taking the kids to the park or planning a ramble through the woods, you can still be part of our efforts and help us reach the 250k target just by using your phone’ (Lizzie, 2019/09/20).

The stated examples are realistic occasions, a ‘normal’ person in the north-western world would engage in on a Friday afternoon. Thus, she offers solutions that everyone could identify with.

As collectivism encourages people to work together in a group to motivate each other, the chosen influencer accounts adapt to this principle by working together with other brands which support an environmentally friendly lifestyle. For instance, Lizzie shares positive opinion on a pair of yoga pants which is made of 17 recycled bottles (Lizzie, 2019/09/25). Adding to that, Chloé recommends dishwashing liquid that is replacing the alcohol ingredient *‘what remains after brewing non-alcoholic beer so that what was once considered waste is now considered an asset’* (Chloé, 2019/10/23). So, the influencer offers sustainable brands and companies to make a responsible consumption and production attitude more feasible.

Finally, the following category is exactly about that, how the influencers communicate specifically and what difference it makes. Comparing them with each other already reveals some underlying patterns, but also linking it to previously stated literature allows deeper understanding of efficient communication strategies.

4.5 Open Communication and Awareness

Since authenticity and personal opinions were highly appreciated, each user and each individual account was opening up about their personal emotions towards climate change, the political interaction, their mental health, how they deal with criticism and what nature or environment actually means for them. The influencers respond with empathy towards the negative impression and hopeless future that young people perceive when facing climate breakdown. Since the three women, chosen for the analysis, are part of the younger population in Europe, their perspective correlate with the statistics that have been evaluated by the European union (European Commission, 2019).

4.5.1 Authentic communication

As Greta is the only public influencer who gained a lot of awareness in the news, her Instagram account appears rather planned than randomly organized, compared to the other two accounts. The captions and also pictures are perfectly aligned so that the message is clearly transmitted without any distractions. By analyzing the posts every published unit seems to be well planned so that nothing could be wrongly understood. Looking at the visuals, Greta wears a pink shirt or dress in more than one visual of her Instagram account. Pink symbolizes on the one hand the little girl that she is, but also on the other hand inner peace and harmony which refers to an idea of hope and positive outcome that she intends to create. Additionally, her hair is most of the time braided to a pigtail which creates a strong association with her as an idol of climate change. Moreover, she is consistent in her representations, shows up in her true self, no matter if she is talking to global leaders (e.g. United Nation Assembly on 23rd September in 2019), when she strikes in the street or when she is sailing on the boat. Overall, she communicates honestly and openly whilst staying authentic to herself. Eventually the user will trust her messages.

Furthermore, commonly used words or hashtags that reoccur in several posts generate a community character that reinforces the transmitted narratives. For instance, Greta uses words like 'us', 'we' or 'together we can change the world' so that a sense of belonging is passed on. Talking of a crowd and a group of people shifts the awareness and perception of an Instagram post. The reader or user will judge the post differently whether only one person is speaking for her- or himself or if it's a group of people. The hashtag and wording 'change is coming' was used by all of the accounts which clearly symbolize the sympathy each one has with Greta Thunberg and what she stands for (Lizzie, 2019/09/26; Chloé, 2019/08/23 and 2019/10/14). Adapting words from Greta isn't incorporating less credibility or lacking a reasonable opinion, it rather increases the bonding and interrelation towards the same goal. Authentic support and kindness towards likeminded people build trust and credibility (Metzger, Flanagin, & Medders, 2010).

Moreover, Chloé emphasizes with vegans or vegetarians as she puts herself in the same position, being faced with prejudices that vegans often have to deal with (MacInnis, 2017). By doing so, she creates a strong tie and increases trust which overall encourages the person to listen and pay

attention. For instance, in her post from 28th August she talks about the connection between tofu (or soy) and the environmental impact on the animal agricultural industry. By reflecting on both sides, that soy on one hand increases deforestation in developing countries and is mostly used for animal food in Europe but also explaining the non-harmful, local production of soy in Europe, commands attention of a vegan person (plant-based diet) but also non-vegan:

“[...]3. Soy contributes to deforestation. According to Greenpeace, soy is one of the raw material imported by Europe with the highest risk of deforestation. That's because over a million of square meters of land are used for soy production notably in the Amazon and the Cerrado, two of the world's regions with the most biodiversity.


4. Which means that chances of the soy imported in the EU for animal consumption being genetically modified and linked to deforestation is pretty damn high!

5. On the contrary, most of the soy used for human consumption in the EU (for tofu or soy milk for instance) is produced "locally" (within the EU) and does not cause deforestation.”
(Chloé, 2019/08/28).

Although, she clearly states her position at the end, by asking: ‘*So, how about some tofu for your next meal?*’ (Chloé, 2019/08/28) which could create distance towards non-vegan followers, she increases the likelihood to have an impact on people’s perception of an eco-driven attitude.

4.5.2 Knowledge is power

Chloé takes her role as an online journalist serious and does not only provide information or advice when she gets paid for it (Alvinus & Holmberg, 2020) but seems to care about the users’ take-away. Her posts mostly include fact-based information, not just about positive scenarios but also about the fires in the amazon rainforest. Adding to that, she also learned about the rainforest fires via social media (Chloé, 2019/08/22) which might explain why she aligns her role as an influencer accordingly. In her own words, she says ‘*knowledge is the first step towards power and action*’ (Chloé, 2019/08/22) and underlines the necessity to understand the problem in order to take action. Greta takes it for granted and says ‘[...] *the young people are starting to understand your betrayal*’ (Greta, 2019/09/23), since ‘*the world is waking up*’ (Greta, 2019/09/23). Consequently, the user might be triggered to conduct further research by him- or herself, in case the message is not understood.

Also, by asking the audience for their types of interests Chloé wants the user to think about sustainability, framed by her stated categories: ‘*What would you like to see more of on this page? Content related to policy, news, fashion, activism, food, dogs () , something else?’* (Chloé, 2019/10/05). The visual she has chosen for that post is underlining her open question. She lays against a bike-railing, shoulders back, she opens up her chest which signals an open perception. Additionally, she holds a red purse in her left hand that she could have eliminated in the picture as it seems to

require effort to hold. Yet, the color red refers to control and power. The purse looks like an envelope which refers back to her caption, asking for feedback which could be seen as kind of a mail (visual 8).



Visual 8: Chloé, 2019/10/05

4.5.3 Let's talk emotions.

Overall, an essential contributor to a strong bond and connection to the follower or user, refers to an open, emotional or vulnerable communication. This sub-theme pays attention to intimate and personal experiences that conceptualize a sustainable attitude under the pressure of society. It transfers the message that a responsible behavior and attitude is not always easy. Each influencer struggles sometimes which shows human imperfections and an honest communication. Political ignorance, the future outlook and criticism were stated reasons that let the influencer communicate their vulnerability. For instance, Chloé is questioning to impact of giving birth to a child considering the negative impact of a newborn on greenhouse gases, due to the planet's overpopulation (Chloé, 2019/09/28). A controversial opinion which would yet, trigger people's attention (Metzger, Flanagan, & Medders, 2010) and engagement with an environmentally friendly future.

Greta communicates her vulnerability by talking openly about her Asperger syndrome. She opens up a platform for criticism on a very personal level (Greta, 2019/09/01):

'I'm not public about my diagnosis to "hide" behind it, but because I know many ignorant people still see it as an "illness", or something negative. And believe me, my diagnosis has limited me before. Before I started school striking I had no energy, no friends and I didn't speak to anyone. I just sat alone at home, with an eating disorder.'

Yet, she is still smiling. The visual that comes along with this caption, displays Greta on the boat, in the foreground, looking back with a smile (visual 9).



Visual 9: Greta, 2019/09/01

She didn't turn the back on her past, but she can move on and see the positivity in it which might encourage people to follow her example. Her drive to change the world keeps her motivated as she also mentions in her caption: *'All of that is gone now, since I have found a meaning, in a world that sometimes seems meaningless to so many people. #aspiepower #neurodiverse #npf'* (Greta, 2019/09/01). Another post is about the criticism she often receives on her public representations. Interpreting the objects and setting, she keeps her positive attitude despite the criticism (looking against the sun), as she is encouraged by the activist (word 'unity' in the background) (visual 10) (Greta, 2019/09/25).



Visual 10: Greta, 2019/09/25

Lizzie talks about a dangerous experience on the ocean when she got caught by a storm and almost collapsed afterwards, asking herself why she is putting herself in so much danger (Lizzie, 2019/09/15):

'The storm came in quickly and unexpectedly. One moment it was blazing sunshine, the next a dark cloud surrounded me and as rain pelted down I knew trouble was coming. [...] I kept my head down and paddled hard and fast. Every time the thunder ripped through the sky I looked up to see where the lighting struck around me. It was close and it was unpredictable. The wind was whipping the rain against my skin and the choppy water made it sluggish. My arms were burning and my heart was racing but I paddled on.'

Each example openly communicates how passionate they are about the topic so that they put themselves out on this public platform, despite all the criticism and pain it creates. In the long run, the user will acknowledge it since authenticity always conquers (Madden & Fox, 2006).

Accordingly, Lizzie emphasizes on the fact that nobody is perfect and that nobody should judge themselves too much. In one of her visuals she is describing herself as an eco-hypocrite (and also her followers). *'If you are vegan but still take flights, If you live zero waste but still drive, if you cycle everywhere but still single used plastic – that's okay'* (Lizzie, 2019/11/01). So, it is not about being perfect and doing everything at once. Everyone has good and bad days, good and bad decisions. Being imperfect is sometimes a superpower, as Greta Thunberg says in relation to her syndrome: *'I have Asperger's syndrome and that means I'm sometimes a bit different from the norm. And - given the right circumstances - being different is a superpower'* (Greta, 2019/09/01).

All in all, all three influencers inform the audience about the importance of climate actions by framing climate change from a fact-based, visual or emotional approach. Established connotators (Machin & Mayr, 2012) reveal a clear and direct message. Incorporating those four categories, the following chapter is going to summarize it, reflect on limitations, elaborates on theoretical and practical implications before finishing with an overall conclusion.

5. Discussion and Conclusion

The previous chapters have functioned as a funnel towards answering the overall research question. The findings have shown that each account contributes to a pro-environmental attitude, either from a rather personal and emotional state or from a fact-based perspective. Collectivism plays a crucial role which is delivered by visuals (a crowd striking on the street or in the ocean, collecting plastic) but also by linguistic elements that sometimes include a whole generation (e.g. Greta on the 23rd or September: *the eyes of all future generations are upon you*). Highlighting collective climate actions whilst communicating openly and authentic about their individual lifestyle demonstrates a pro-environmental attitude feasible and applicable. The influencer acts as a best-practice example. However, underlying emotions like eco-anxiety or vulnerability show imperfections, thus, allow a stronger connection between the influencer and the user.

In this final chapter, the focus is broadened again. It will be discussed what the findings and results mean in general and how they relate to broader tendencies by comparing them with each other but also with the findings of the theoretical framework. As it is the case with all academic qualitative research, this discussion and conclusion chapter also includes the implications or contributions (both theoretical and practical), limitations, and some suggestions for further research.

5.1 Comparison with the literature

In sum, all previously theoretically explained concepts were drawn on. The perception of climate change amongst young people, the representation of climate change on social media, the role of influencers and how they contribute to a better understanding, but also in what sense storytelling makes a difference towards climate actions. Thus, the findings broadly concur with the literature which allowed precise interpretations and definitions of the concepts. Generally speaking, the descriptions in the theoretical framework and the findings of this study correspond. However, there are fundamental differences that can be outlined. Both the resemblances and differences will be outlined to get an insight understanding of the concepts, topics, and relations between the phenomena.

5.1.1 Perception of Climate Change

By projecting the current situation and what actions upon climate mitigation and adaptation have been undertaken by the government so far are correlated with the perception of climate change amongst young people. As it was stated in the theoretical background, young people tend to see climate change as connected to a pessimistic and hopeless image of the future (Albert, Hurrelmann, & Quenzel, 2010) which is influencing their attitude towards a pro-environmental attitude. Beck (1992) explains it with the incalculable and unpredictable existence as well as effects of a changing climate.

Considering that influencer on SNSs encourage the audience by reflecting on things to be happy about (e.g. 4 million people striking for the future in September 2019) or a committed brand

like Patagonia which is making efforts towards their sustainable goals (Chloé, 2019/09/24) might influence the perception of young people. Literature has proven that motivational messages result in an increase of social engagement (Courville & Piper, 2004) which would positively influence a pro-environmental attitude.

However, it has also been proven by previous studies that more knowledge and information about climate change increased negative emotions and pessimism (Albert, Hurrelmann, & Quenzel, 2010). In this dataset, users got confronted with the political ignorance towards climate change and global agreements which would even enhance the pessimistic attitude. Yet, each influencer pays attention to that by drawing a circle towards empowerment and collectivism. Although they share information that could enforce the negativity towards a political inactivity, the message is always wrapped with encouraging words (e.g. ‘change is coming whether they like it or not’) or symbols (e.g. activists in front of the victory statue in Berlin).

Furthermore, influencers build on the foundation that young people already know about the seriousness of climate change and support their audience in showing them options on how to take action. As stated before, only 64% barely adapt their lifestyle, as they only consider a reduction of waste but barely think about their carbon footprint by commuting or planning vacations (European Commission, 2019). Therefore, influencers show different alternatives on how to take responsibility and which benefits occur from it, also supported by aligned visuals that serve the message (e.g. positive colors). By firstly explaining the impact of carbon emissions on the planet and secondly sharing alternatives (e.g. riding the bike or spending vacation locally in front of the own door), the likelihood to tackle climate actions increases. It became apparent that the combination of facts, solutions and implementing in the daily routine indeed allows the user to see the bigger picture.

5.1.2 Social Media and Climate Change

In general, media takes the responsibility to inform accurately about topics that the society should know about. Additionally, media also has an impact on activism and undertaken actions upon that shared information. Reviewing the dataset and the initially stated literature (McGrath, 2013), social media benefits from its fast-paced nature and its implementation in daily life (in the north western world). Nowadays, social networking sites are integrated in daily routines which allows the influencer to enter in a person’s private life (in a broader sense).

The chosen influencers lead by example and show their audience small scale actions that a user can easily adapt to (e.g. consuming less and locally). Moreover, offline large-scale actions (e.g. joining a strike) are communicated as an alternative option for climate mitigation in order to demonstrate available possibilities. In the same way as the theoretical framework highlighted before, people don’t see the climate changing, thus, don’t know how to adapt. Yet, the shared information on the chosen influencer accounts make sure that climate change causes nor its existence won’t be denied anymore (O’Neill, Boykoff, Day, & Niemeyer, 2013).

Social Media truly allows a persistent and consistent share of information, as it is not limited by editorial guidelines, journalistic norms or values nor by (horizontal or vertical) integrations or conglomerations (Boykoff & Roberts, 2007). Although the influencers conglomerate or collaborate with brands and companies, the influencer is more or less driven by self-defined rules and deadlines. Moreover, they don't just communicate on that specific product or service, they mostly embed it in the broader context which allows the user to gain a deeper understanding. The context always sets the frame of the perceived reality (Entman, 1993). Thus, the influencer combines information with a salient message. For instance, by sharing information about recycled pair of yoga pants, the influencer applies the product to daily practices, sets it into context and presents the product within a 'normal' life.

Each influencer operates within a specific category (here: climate change). People follow those accounts, based on their interests. To widen the audience, each influencer asks for feedback and reflects on that. For instance, Greta encourages her audience to "*share this information*" (Greta, 2019/09/19). So, by encouraging and motivational quotes, the audience and the width plus awareness of climate change would be enforced. Boundaries are blurred and each user can become a content creator (Bloch, 2005). Accordingly, some accounts call for actions online, to trigger further engagement with the topic.

Considering the climate for future strikes in September specifically, it became apparent that all accounts published a post related to climate actions before the actual strikes started. Some did it in advance (Chloé), whereas the other account just posted one picture a day before or even within the week itself. However, by setting the strikes into context and explaining why it would be important to participate, the meaning is set which will eventually boost the likelihood towards a pro-environmental attitude. The revolution takes place offline, but the online sphere extends traditional mass media specially, temporally and socially (Doyle, 2016). Each account widens the awareness on their platform, but also encourages to take part in activism or to vote for advocates.

5.1.3 Role of the Instagram Influencer

The influencers have to find the balance between their two roles as a marketer but also as a community member and friend who presents some authentic and honest information (Audrezet & Charry, 2019). By reviewing the findings, it became apparent that the influencer mainly acts as an intensifier for the audience spreading the word publicly in representation for society. The narratives are less self-centered, but rather reflecting on the collective. They serve the larger picture and support each other (or likeminded people).

Clearly, by looking at the number of followers, they all have a different speaking platform, thus, variations in their reach. Interestingly, the strong tie between the influencer and the user didn't differ too much, although the research from Shoenthal (2019) stated the opposite: celebrity accounts have a weaker tie to their audience. Yet, the strong recognition Greta earned on her social media

account is mainly based on her offline activities. Each account has different projects that they follow apart from social media that consequently contribute to their online presence.

As the influencer is seen more as a friend than a marketer, each one of them also shares examples out of their daily routines, either supported by captions or visuals. Authenticity has been apparent, since the influencer openly shared their positive and negative opinion about a product, service or social norm which indeed presented a coherence between feelings as well as value-based choices (Ibarra, 2015). The more the user corresponds with the transmitted narrative, the more likely he or she will be engaged towards a pro-environmental attitude (Glucksmann, 2017). Broadly speaking, the influencer lead by example and transfer the message to the public. Literature has proven that there is a lot of confusion on what a sustainable lifestyle actually incorporates. Organic food but also minimizing consumption are stated examples that have become apparent in the dataset as well.

Each example expresses social acceptance, as a group of people supports the related message. Thus, environmental habits would have a chance to become a norm in society. As stated in the theoretical framework, people try to avoid negative connotations of environmentalism (Shirani, Butler, Henwood, K. Parkhill, & Pidgeon, 2015) which correlates with the fear of being seen as an outsider. However, the selected influencers demonstrate social acceptance (e.g. visual of people striking) and openly communicate benefits but also struggles of a pro-environmental attitude (e.g. Chloé 28/08/2019). Arguably, it concurs with the following category on how the message is transmitted since followers preferably value honesty and authenticity.

5.1.4 Storytelling /-acting

As already became apparent in the theoretical framework, storytelling follows the idea of adding value and overcoming obstacles by sharing a story, supported by multimedia elements like images, videos or audio. The stated findings added value towards a pro-environmental attitude by different aspects. For example, sharing an emotional story, a topic that has had a more personal context than a fact-based or rational background, is one way to engage the followers towards a specific topic (here: sustainable attitude). While the overall message still refers to climate breakdown and how it affects the planet, the influencers' personal experience attaches a deeper meaning to the topic. By the same token, Marx et al. (2007) have described how personalization offers the opportunity to make a distant topic like climate change more concrete to people's mind.

The idea of trustworthiness is incorporated by an open and honest communication. The chosen influencers are very different people, although they all committed themselves to fight for the well-being of the planet. While one was approaching trustworthiness by showing vulnerability, emotions and feeling, the other one was rather formal throughout the whole dataset. Consistency, endorsement and authenticity build the foundation of willingness to start adapting towards a sustainable lifestyle (Metzger, Flanagin, & Medders, 2010).

In terms of acting upon the story (e.g. participation and engagement) one study of Picone et al. (2019) found that it depends on how much effort and investment presumably has to be incorporated to fulfill the required task. They say, the smaller the act the more likely the engagement. The chosen influencers for this research also offered small acts of engagement, like asking for responsible food consumption (e.g. locally planted) but also for large-scale actions as in joining a movement. Those larger actions that have been asked for were supported by the concept of collectivism which draws on solidarity and the feeling of belonging to a larger group (Ostrom, 2010).

Evaluated by Kaul and Chaudhri (2017), a good story always includes some interactive elements, facilitate role-play and is deeply immersive. Reviewing the dataset, a role-play has been given in some cases as it was a conversation either between the influencer and global leaders or two influencers in one picture. Interaction has been triggered with questions to the audience.

Each influencer approached the user from a different emotional state. Whereas Greta presents herself rather angry towards the political system, Lizzie shows empathy towards humans' imperfection and Chloé acts upon facts and solid knowledge. Each approach tells its own story. The study of Spyridou (2018) found that proximity, controversy and ego-driven narratives are seen as a reason to interact – which was mainly manifested by Greta Thunberg showing her disgust towards ignorant politicians directly throughout her visuals (e.g. during her speech 'how dare you') or texts. Posts that address an alternative opinion in contrast to dominant opinions mobilize the user.

5.2 Connection between the themes

5.2.1 Broader connections

In the broader process of conceptualizing and tackling a pro-environmental attitude on Instagram, three connections between the themes are important to be pointed out. First of all, not all influencers are equal. Although an influencer is a collective identity, the people within this defined group differ significantly. There is some overlap, as discussed in the previous chapters, but they also have a different mindset, character, struggles, tensions, problems, and way to communicate climate breakdown. For example, Chloé is highly fact oriented while Lizzie cares more about her mental health. The messages are all filtered, based on how the influencer perceives their reality (Entman, 1993).

Secondly, each category contributes to the other. Reviewing the rather fact-based posts, it delivered an impression of rather traditional press narratives that are grounded on numbers and (almost) objective information. On Instagram, it became apparent that fact-based information is still projected, yet, wrapped with an open, direct and honest opinion of the individual. Thus, the context is set but also allows interaction since social media is not limited to any gatekeepers of the public sphere. Consequently, climate actions are articulated, either by those online interactions that are triggered by the communicated narrative but also by collectivism (supported by visualizations). Influencers cooperate with brands or likeminded individuals in their scope of interest, sharing positive

emotions towards examples that express a responsible and eco-friendly consumption and production. Broadly speaking, a pro-environmental attitude is defined by all the different categories: fact-based information, emotional and open communication to draw attention before stating the available solutions that are internalized by the influencer.

Finally, zooming out to the comparison between the online and offline world, one essential connection became apparent. One main characteristic of social media is its fast-paced identity which aligns with climate change and its development. Extreme and alarming environmental events like intensive rainfalls or devastating fires (e.g. the amazon rainforest fires) can be shared online, immediately. Every person becomes a content-creator and is able to share the information without fulfilling journalistic norms (despite general settings of Instagram and Facebook that block inappropriate content). In that sense, it became apparent that each influencer increases awareness towards a broad audience (might include a hashtag as a multiplier) and allows community building online which then encourages activism (online or offline) and pro-environmental awareness to solve the negative climate perception (European Commission, 2019).

Comparing the themes to each other and critically analyzing them, they appear to differ as well as concur in some respects. What all themes agreed on was the presentation of climate change as an urgent topic to act on now. However, some of the outlined themes are not limited to the climate breakdown specifically. For example, in the theme of open communication and awareness, the second-order themes of mental health and vulnerability apply also to personal development. The same applies to the sub-theme collectivism; not only climate justice benefits from a group of people that is committed to reform the norm, also other topics that ask for justice (e.g. racism) use activism and collectivism for the greater good. In sum, the themes are interrelated. Yet, it has to be agreed on the fact that how they solve, conceptualize, tackle, perceive and learn from tensions in society upon a specific topic can be applied to multiple situations, contexts and themes. This research has focused on the frame of responsible climate actions but the learnings can be used more widely.

5.2.2 Timeline

What does differ is the timeline of the themes. It is difficult to draw up a detailed timeline since climate change is an ongoing process and the influencers were expressing personal events and experiences throughout the conducted timeframe. Therefore, the period when the four themes apply differs.

For example, climate actions are communicated throughout the whole timeframe although mostly presented by Greta Thunberg's account. Lizzie and Chloé started reporting about activism and specifically about the FFF strike from the beginning or mid of September. So, the category climate activism became rather apparent in the month of the actual strikes, in September 2019.

The political ignorance towards globally committed goals, (wild-)life and nature damage, plastic pollution or sustainable production methods has always been displayed in the influencer's

communication - although Greta barely shares background information on that. It might be beneficial, yet, unnecessary in her case particularly as her intentions are clearly communicated in the press and public representations.

Having and upholding a specific authenticity and open communication is always important but is especially important in combination with a responsible consumption and production behavior. For example, being ethical and compassionate has always been included in the communicated narratives – but considering a change in a person’s mindset or lifestyle, it has become even more important, since people feel approached by authentic and honest opinions of their peers rather than by mainstream media (Corner, et al., 2015). By the same token, offering flexible and diverse solutions has always been important given the differences within a social group (needs, feelings, conditions & context).

5.3 Theoretical Implications

The results of this research have shown that influencers conceptualize climate change either by collectivism and climate actions or by a clear problem statement whilst communicating authentically and honestly. Zooming out of the detailed and complex analysis that this research entails the findings are always multifaceted and context dependent. For instance, how the climate breakdown and its different facets are expressed varies amongst literature and amongst the influencer accounts. An important side note has to be taken into account though, since each influencer perceives their reality differently, based on the given cultural and social background. Therefore, the shared content has a fixed frame from which those individuals operate.

Taking the findings and comparisons to the literature into account, this research contributes to our understanding of climate change narratives on social media communicated from an individual, personal perspectives of the younger generation and its contribution to the perception of the climate crisis on four significant ways. First of all, this research has shed a light on the similarities and differences between an influencer and a traditional journalist who works for the mass media. Whilst the journalist frames climate change with facts and figures based on openly accessible references, the influencer approaches climate change from a personal and experience-based state. The shared information is rather biased, emotionally framed or strongly controversial than objective. While the journalist is impacted by norms and values, policies, deadlines, profit pursuits or indirect competition, the influencer can decide on her- or himself which pro-environmental narratives are shared. He or she filters the news and delivers environmental information, criticism but also accomplishments, from a personal point of view. Yet, the influencer also takes the media’s responsibility to inform appropriately about a complex topic like climate change. Given that, the current study revealed a rather pessimistic and controversially communicated picture towards political actions and current environmental events which would increase the negative and hopeless number towards a sustainable future. However, social media influencers also become motivational leaders through their positive lifestyle examples on a daily basis and encourage climate activism based on texts and visuals.

Secondly, and intertwined is the fact that this research revealed the connection between climate change and everyday practices. The mentioned awareness but confusion amongst the young generation that climate change entails (European Commission, 2019), is narrowed down by the influencer. In this research it became apparent how young people could adopt or mitigate their lifestyle such as eating plant based or limit single use plastic on a daily basis, by following the influencers' example. Since social media plays a crucial role for European young adults (Boyd & Ellison, 2008), Instagram is likely to make climate change more apparent to each person's daily life. Climate change had long been ignored, although the media reported on its seriousness (Boykoff & Roberts, 2007). Yet, society couldn't realize its presence. Supported by multimedia data, Instagram makes climate change visible. Thus, climate change becomes apparent in everyday duties (e.g. dishwashing or grocery shopping).

Thirdly, focusing on authenticity and direct communication, climate justice has been communicated as exhaustive, infecting mental health. Previous literature has already pointed out the importance of authenticity in order to create a deeper tie between the influencer and the follower (Audrezet & Charry, 2019). The results of this research added to that a notion of vulnerability. Given the topic's complexity, influencers openly communicate their vulnerability and eco-anxiety towards climate breakdown. Climate change is contextualized as it would be too big to handle, thus, hopeless. In the current research, influencers present themselves as weak and imperfect, whereas previous research rather defines them as (opinion) leaders. The stated influencers struggled to do the public's expectations justice (e.g. by fulfilling every sustainable criterion there might be). But, since Instagram is a rather discursive platform on which everyone becomes a content creator, the crowd supports each other.

Given that, finally, climate change appears as a collective topic, that every individual and every country is part of. Whether it is a picture that portrays a group of people demonstrating or whether it is the overarching support of the Fridays for future strikes – climate change doesn't only concern Greta Thunberg or global leaders. Thus, SMIs create the community which supports each other to achieve the same (sustainable) goals. Sustainability thus, becomes a new norm, collectively accepted. Although the long-term effects on an individual's attitude has yet to be researched, this study has contributed to media scholarship by choosing a modern topic and analyzing a very specific tool of digital media platforms.

5.4 Practical Contributions

Apart from a theoretical purpose, this research has social and practical relevance as well. As expected, Instagram has been used in its advantage, meaning the combination of visuals and texts to increase a pro-environmental attitude. For example, having 4 million people striking for the climate displayed in several visuals on social media, supported by symbols as the victory statue in Berlin or phrases like 'change is coming, whether you like it or not' would have been less likely to be achieved

by traditional media. This research has given an insight into an influencer's potential in communicating climate change, closer to people's everyday life. Eco-driven influencers can use this knowledge to tackle climate change in a meaningful way.

In the practical relevance, it was expected that this research would reveal missing themes and topics that would have been relevant in order to tackle the understanding of climate breakdown amongst young people in Europe. Although there were missing topics (e.g. electricity or heating production and consumption) the main take-away relates back to the way a message was transmitted and which task is asked for. In this research it became apparent that only if a person is trusted and perceived as a credible source a change towards a pro-environmental attitude is rather likely. The message has to be understood and accepted in order to consider a climate action (e.g. activism, voting or sustainable attitude). So, even though the consumption of fossil fuels has the largest impact on the climate and was only incorporated by one of the three influencers (Chloé), a user needs to be approached on his or her individual cosmos. Knowing that, the practical implication for an influencer is to make the climate action approachable, accepted and understood; combining fact-based information, contextualized by the personal opinion before offering small scale actions.

Another practical implication concerns the rise in local activism and local (food) consumption and production. Intertwined with the previous topic, the sentence 'think globally, act locally' gains a new meaning. The support of local activists, local stores and local parties, towards the same goals globally (e.g. related to the Paris Agreement) would strengthen the intercontinental bond (since the whole world has to deal with climate change) and create a new normal. The more people join the movement, the more it gets accepted globally. Yet, the action has to be reached easily.

Moreover, each account could learn something from one another. For instance, Greta's account could spark from a few more background information on why she is doing what she is doing, Chloé could share more emotional insights to make the information and offered solutions more authentic whilst Lizzie would benefit from fact-based information. Practically, since the consumer might be a bit overwhelmed by the different environmentally friendly options to choose from, especially Chloé's account would benefit from a focus topic to make it more feasible. Especially with a complex topic like climate change that has so many layers, her account would profit from an expertise topic, approached and connected to different perspectives. For instance, the problem of carbon emissions could be communicated from the political perspective, from the perspective of a whole society (collective) or what it means for each individual.

5.5 Limitations

As it is the case with all academic research, this study is also questioned on its reliability as a result of limitations of methodology and the researcher. Considering the methodological limitations, the chosen influencer accounts lack in diversity. First of all, each account is owned by a girl, although gender diversity could provide different insights. Nevertheless, the theoretical framework also didn't

differentiate between genders which would need to be revised accordingly. Secondly, each of the girls come from an European country that is already aware of the seriousness of climate change. It could have revealed beneficial insights whether the overall perception of the country has an influence on communicated narratives by the SMI. Consequently, the sampling method could have been improved, even though representativeness is not the main goal of qualitative research (Flick, 2007).

Elaborating on that, the sample size could have been larger in terms of the number of influencers, hence, minimized in the number of postings per account. This reflection has been revealed from the coding process, since only after 10 postings, the first saturation occurred. So, by minimizing the posts per account, but increasing the number of influencers, more themes and underlying patterns of a pro-environmental attitude could have been extracted so that the final conclusion becomes more credible.

After all, only one of the three influencers communicates in her mother tongue (Lizzie) which might have an influence on the online representation of climate awareness. However, since Greta has a status of a celebrity influencer, she might be supported by a professional communication manager.

Considering limitations of the researcher, there are three main aspects to be named. First of all, every individual is framed by their cultural and social background. Referring to Entman (1993) my perceived reality is also influencing my interpretations of symbols, signs, objects or linguistic elements. Unconsciously, this might have influenced the results. Drawn on that, secondly, English is not my first language and might have influenced the representation and interpretation of this research. After all, given the situation of COVID19, correlated mental breakdowns, have constrained the time available to examine the research problem over a longer period of time.

5.6 Suggestions for Further Research

This research mainly focuses on the narratives that were created by the account owner in the first place. Investigating on the perception on climate change of young people in Europe, further research could explore the impact of communicated narratives on an actual shift in people's mindset. In this context, comments and likes would play a crucial role as well as evaluating the engagement rate per post. Since engagement increases the algorithm on Instagram, hence, the likelihood of an increased reach, questions arise how the influencer keeps the balance between his two roles as a marketer and friend. Yet, this would further imply a quantitative survey to prove an influence of X on Y (Babbie, 2011).

Moreover, a second suggestion is research, focusing on Instagram stories and Instagram Television (IGTV) which are video-based materials. Video formats have been proven to be more engaging than pictures. Considering climate breakdown and the initially criticized invisibility, videos could bring the topic even closer to each person. Instagram stories enable the influencer to interact directly and live on a rather personal level. Previous research did mention that influencers earn credibility and trust by sharing their lifestyle openly with consumers (Buyer, 2016). Further research

would reveal tools and practices which improve the overall communication on climate breakdown. Also, in this case, the addition of a quantitative survey would allow a deeper understanding of each user's perception.

5.7 Conclusion

This study shows that the way of how climate change is communicated amongst pro-environmental Instagram accounts is mainly based on the personal perception of this specific individual. The seriousness of climate breakdown is clear and directly communicated, only allowing a few narratives to erupt the environmental content frame. A focused and narrowed down communication offers the young Europeans a pallet of solutions on how to take action upon climate change. Motivational narratives, from a personal and honest state of mind, build the context of trust and credibility. A collectively created online community drives towards committed goals and creates hope in a seemingly hopeless future scenario. Let us take this research as an example on how social media can contribute towards climate actions and an overall pro-environmental attitude.

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Appendix

A. Coding Tree

Containing first a second order observations/concepts with dimensions/themes):

Initial Codes (First order observations)	Axial Codes (Second Order: abstract patterns + categories)	Selective Codes (Theoretical abstraction)
C, 26/10/19: we know how to act but act ignorant in terms of what to invest in	Ignoring global commitments	Ignoring the problem
C, 10/10/19: countries most responsible for climate breakdown should take responsibility and go carbon neutral fast and providing appropriate financial support + transfer clean technology to those most affected		
C, 10/09/19: 50Billions as the amount of investment made by oil and gas companies that were made since 2018 (incompatible with fighting climate breakdown)		
C, 10/09/19: what to do when seeing crazy sums of money and policy schemes between lobbyists and policy makers		
C, 28/09/19: Emissions are still rising, forests are burning, oceans are dying and millions of people, animals and plants are already suffering		
C, 22/08/19: Brazilian rainforest burns for 16 days in a row - 20% of the world's oxygen	(Wild-)Life and Nature damage	
L, 05/10/19: average wildlife populations have DROPPED by an average of SIXY PERCENT in the last FIFTY YEARS - averaging a 12% decrease every single year - due to plastic pollution & continued destruction of habitats and homes		
L: Plastic in the ocean, demonstrated by pictures, holding it into the camera or supported by figures (sky)		
L, 16/09/19: US as the main contributor to single used plastic	Tackle Plastic Pollution	
L, 09/08/19: Waste is a worldwide problem throughout the entire food supply chain. 1/3 of food made for our consumption is wasted and once it ends up in landfill and rots , it produces methane, a greenhouse gas about 30 times more potent than the poster child of heat trapping gas, carbon dioxide		
L: Investing in moon exhibitions but getting plastic pollution just out of sight, to less privileged countries like India, Malaysia and China who don't even have the waste infrastructure to manage their own		

L, 18/08/19: manufacturers are still allowed to churn out millions single use products every day		
L, 18/08/2019: waste in the ocean from decades ago		
G, but all general: Change is coming weather they like it or not	Denying that change is coming	
C,22/08/19: amazon rainforest is devastating		
C, 14/10/19: using violence to dismiss any claims going against their agenda		
G, 2019/09/23: microphone not in the right angle for her body height		
L, 26/09/19: Seeing so much hate and vitriol towards @gretathunberg online recently - everything from calling her brainwashed, a hypocrite, a fraud and a nazi - and all I see is the climate deniers in fight mode...		
C, 11/08/19: Food waste. If food waste were a country, it would be the third biggest emitter of green house gases in the world. And this happens at every stage of a product from production to our very own plates.	sustainable living (food consumption)	responsible consumption and production
C: promoting veggies, zero waste, seasonal (squash season, eating plants safes the planet)		
C, 26/08/19: explaining the connection between soy and tofu plantations/ production and deforestation which is not the case in Europe		
L, 25/10/19: beach cleaning as a more normal lifestyle	sustainable living (no waste)	
L: collecting trash or supporting via app as a normal, easy duty to include in daily life		
L: supporting her messages by pictures in nature or in front of the ocean/lake, in accordance to her messages	sustainable production (natural setting)	
L, 18/08/2019: it's so easy to overlook what's on your doorstep when we plan trips .. there is always adventure, closer than you think, you just have to go out and find it	sustainable living (travel)	
C, 06/10/19: Belgium is definitely not in the lead when it comes to sustainability as a whole and especially sustainable fashion so being invited to talk about the state of fashion and why we need transparency was a massive proud moment!	sustainable living (fashion)	
L, 27/10/19: whenever you eat less meat, get a reusable water bottle, drink you coffee in, switch your energy provider to renewables, you don't have to do it all and you don't have to be perfect	sustainable living (several options)	

<p>L, 20/10/19: True sustainability means slowing down, making do, repairing, borrowing, sharing or just going without altogether. If we do buy new, there are sustainable alternatives available, but this shouldn't be our default</p>			
<p>Adopt regenerative agricultural practices that absorb carbon and restore soil health, Protect and replant forests Invest in renewable energy options to replace fossil fuels, Reduce food waste and promote a healthy plant based local diet Invest in women and girls around the world</p>			
<p>L, 13/08/19: Don't try to be perfect. Instead, try your best. Cutting down on your plastic consumption, reducing your carbon footprint and making sustainable choices can be hard</p>			
<p>L, 25/09/19: Yoga, I don't practice nearly enough but always feel utterly reenergized when I do, I'm also pretty grateful for the rise of sustainable innovations in fashion, like these rust camo @.. yoga pants made from 17 recycled plastic bottles</p>	<p>sustainable brands (reuse, zero waste)</p>		
<p>L, 09/08/19: to avoid waste, buy sustainable (cooperation), refills, unpacked coffee beans, flowers + plants are plastic free, refill even for wine and beer</p>			
<p>C, 23/10/19: dishwashing liquid Too Good To Waste"! The alcohol usually found in conventional products is replaced by what remains after brewing non-alcoholic beer so that what was once considered waste is now considered an asset! ♻️</p>			
<p>C, 22/08/19: social media informs more than the public/traditional news (rainforest example)</p>	<p>vulnerability / eco-anxiety</p>	<p>open communication and awareness</p>	
<p>L, 05/09/19: I get anxious about a lot of things and I've introduced countless coping mechanisms to help. But when I think about the gravity of the climate crisis an enormous wave of panic engulfs me and I'm left feeling totally overwhelmed. 😞 To know that WE ARE THE ONLY GENERATION IN HISTORY who can reverse the effects of climate change should give me some hope - but it terrifies me. he despair, the sadness, the anger, the fear and the blind panic we fall into thinking about the state of our planet and what's to come if proper measures aren't taken.</p>			
<p>C, 28/09/19: not having a child because of overpopulation, feeling put in settings that she doesn't want to be at, trying to reduce the impact,</p>			

L, 15/09/19: landed on a floating pontoon after being caught in the middle of horrendous thunderstorm on the Hudson River; (storytelling)	Vulnerability	
C, 28/09/19: Studies show, having one less child is the most impactful choice an individual could make since overpopulation is killing the planet		
G, 01/09/19: Before I started school striking I had no energy, no friends and I didn't speak to anyone. I just sat alone at home, with an eating disorder. All of that is gone now, since I have found a meaning, in a world that sometimes seems meaningless to so many people.		
G, 23/09/19: "Right here, right now is where we draw the line. The world is waking up. And change is coming, whether you like it or not."	vulnerability / anger	
#howdareyou		
G, 25/09/19: I honestly don't understand why adults would choose to spend their time mocking and threatening teenagers and children for promoting science, when they could do something good instead. I guess they must simply feel so threatened by us.	humans imperfections	
G, 01/09/19: I have Asperger's syndrome and that means I'm sometimes a bit different from the norm. And - given the right circumstances - being different is a superpower.		
L, 26/09/19: I've had a couple of nasty messages this week - people who have totally misunderstood my cause / intentions / purpose and it's really upset me. True, I need a thicker skin but people also need to accept that #freedomofspeech is not a way to validate bullying.	Knowledge is power	
G, 01/09/19: Being different is not an illness and the current, best available science is not opinions - it's facts		
L, 17/10/19: In an age where fake news, photoshopping, social validity and political propaganda rule the world, being authentic is more important now than it's ever been		
C, & G: stay informed, read books, gain knowledge so that nobody can fool us		
G: drawing a scenario of hope and victory (sculpture in Berlin for instance; but also Greta speaking to global leaders and gatekeepers)	trust	

consistent in communication (Greta wears the same clothes on most of the pictures, uses the same hashtags)		Yellow background
G, 19/09/19: "You must do the impossible. Because giving up can never ever be an option."		
Greta sharing her schedule with important parties openly so that everyone is part of it, representing her message which takes the seriousness and brings those politicians more close; takes the distance away & communicates hope /trust	Open communication Authenticity	
L, 29/09/19: same problems as it was in the 1960s, and nothing really changed (Bob Dylan lyrics)	authenticity	
C, 26/10/19; 10/10/19: voting for people with a strong environmental agenda is essential. But it does not stop there! They need to be held accountable too throughout their term. And this is where civil disobedience comes in!	Climate Justice	Climate Actions
G: Persistent and consistent repetition of the same aspects 'Change is coming'; 'you are not going to betray us', 'young generation is grouping up'		
G: counting weeks of strikes shows persistency and urgency		
G, XX: This is such a crucial day, world leaders are gathering at the UN in New York to decide on our future. The eyes of the world will be upon them.		
C, 10/09/20: Join a movement or a protest and fight for system change as these are decisions taken at the highest level of power. We need to tell these guys that we KNOW AND WE WANT CHANGE		
L, 16/10/19: I spent yesterday with Plasticus the whale at @skynews hatching plans. In fact, over the last few months I've had meetings with @defrauk, @dfid_uk, @greengreatbritain and other governmental departments as well as global FMCG brands to talk about my work to eliminate single use plastic through Plastic Patrol.	Activism	

<p>L, 23/09/2019: Last September I paddleboarded the Hudson River to highlight plastic pollution in America. I was entirely alone and didn't know anyone but I needed to start somewhere. [📷] [📷] A year on and this weekend I returned to paddle with more than 70 people all uniting in the fight against single use plastic. [📷] And whilst we paddled en mass through New York, there were more than 130 other @plastic_patrol clean ups taking place across 39 countries globally with thousands more people supporting the cause</p>		
<p>G: communicating that activism works, demonstrating what was achieved so far >> gaining certificates or accomplishing awards/ meetings shows that the activists at least are heard</p>		
<p>Several images, displaying a crowd striking, on all three accounts; chloé participates instead of arranging it</p>		
<p>G, 24/09/19: Greta + 13 other young activists filed a legal complaint against 5 nations over the climate crisis through the UN Convention on the Rights of the Child. These 5 nations are the largest emitters that have ratified the convention. (China, USA, Saudi Arabia, Russia etc have not.)</p>		
<p>Everyone: Change is coming weather they like it or not</p>		
<p>G, 19/09/19: It's early morning in the Pacific. Soon the sun will rise on Friday the 20th of September 2019. Good luck Australia, The Philippines, Japan and all the Pacific Island nations . You go first! Now lead the way! Happy striking!</p>		
<p>G: wording: us, we have some bad news (community character, supported by same values)</p>	Collectivism	
<p>Over 4 million on #ClimateStrike today. In 163 countries. And counting... Thank you all!!</p>		
<p>L, 26/09/19: supporting Greta, despite all the hate she gets: She's achieved more in a year to force the issue of climate change than global leaders have in the last 30. You may not like her, you may not agree with her approach - but there's no denying she has inspired a generation (if not several) to feel empowered and drive forward an issue on an unprecedented scale.</p>		
<p>G, 20/09/19: But it's beyond huge everywhere!!!! In every city. Every town. This picture is Athens, Greece. Together we are changing the world. #fridaysforfuture #climatestrike</p>		

<p>G: Pointing out the internationality of the topic, the width and awareness of every country (even developing); no matter where they are coming from, no matter which nationality, the globe as one unity</p>		
<p>L, 20/09/19: I'm exhausted, but I'm SO EXCITED! Tomorrow is the BIGGEST day yet for @plastic_patrol. 100s of clean ups are happening in over 15 countries 🌍 all over the world in just one day.</p>		
<p>C, 24/09/19: 4 million people marched for #globalstrikeforclimate 2. @patagonia won UN Champions of the Earth award for their sustainability commitments 3. @gretathunberg And 15 other young climate activists are suing 5 countries for their inaction in the face of climate change in the hope of making a precedent 4. @extinctionrebellion week is starting on October 7th for a global movement of rebellion 5. Ethiopia planted 353 million trees in 24h earlier this month 6. The first ever climate telethon in Denmark raised \$2,6 million for new forests 🌳</p>		
<p>G: Spread the word! Let's do this!! #fridaysforfuture #climatestrike #schoolstrike4climate G: Share this information and see you in the streets</p>		
<p>G, 23/09/19: My full speech in United Nations General Assembly. #howdareyou</p>		
<p>G, 17/09/19: Yesterday the movement #FridaysForFuture received the @amnesty International's Ambassador of Conscience Award. We are so incredibly honoured by this! Activism works. So act! See you on the streets 20-27th of September. #ClimateStrike #schoolstrike4climate</p>	<p>Spread the message</p>	
<p>G, 18/09/19: On my way to Capitol Hill. At 10h we'll testify at The House Committee on Foreign Affairs. At 12h I will support Our Children's Trust at the Supreme Court. Then at 17h ET I will address Members of Congress in the Ways & Means Committee Hearing Room. #UniteBehindTheScience</p>		

<p>L, 20/09/19: My heart was bursting with love, hope and happiness as I marched the climate strike in New York today with thousands more all standing in solidarity against climate breakdown. People were angry, people were passionate and people were motivated.</p>		
<p>L, 16/09/19: I'll be heading to New York to leading up to the UN Climate Summit next week. As part of plans I'm coordinating a mass paddle on the Hudson River on 21st Sept to draw attention to the issue of plastic pollution in the US. As one of the world's biggest consumers of single use plastic, it affects everyone - we're all connected by the same waters and there's still a long way to go.</p>		
<p>C, 16/08/19: Ironic quote: Environmentalism is an invention by far leftists and former communists to take down democracy and capitalism</p>		

Figure 2: Coding Tree as a final step to prepare the analysis

Thematic analysis in detail

After downloading the program 4K Strogram, individual tables were generated to get more familiar with the data (step 1). Initial ideas have been noted in bullet points, directly in the created Excel table (step 2) and in mind-maps per account, as the following screenshot demonstrates:

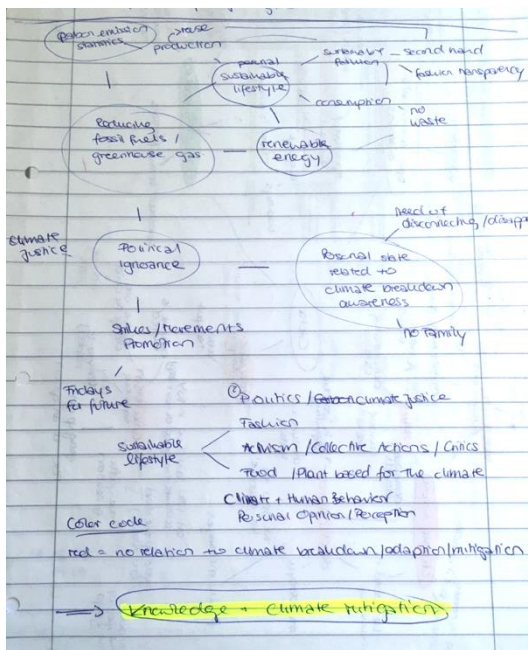


Figure 3: Step 2 in the thematic analysis: coding interesting features for Chloés account.

The last two steps have been incorporated with the coding frame (figure 2) and by writing up the results and discussion chapters. The report of the analysis was produced by re-reading the full thematic and semiotic analysis and the transcripts in order to select compelling extract examples. At all times, it was essential to link it back to the research questions(s).