

**Experiences of Climate Change in Countries of the Global South - a Reflexive Thematic  
Analysis of Online Climate Stories**

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### **Abstract**

Climate change is an issue that affects many people worldwide. Still, especially the people of the global South are particularly affected by the natural disasters that accompany it, which has consequences for their lives. Since people from the global South are particularly vulnerable to climate change and face different social, ecological and political challenges than people from Western countries, it is important to study their experience with climate change to gain a deeper understanding of it. Therefore, this study, answered the question of how people from the global South experience climate change told in online climate stories. The Reflexive Thematic Analysis of 31 climate stories from the website [climatestories.org](http://climatestories.org) of people from the global South resulted in seven themes and one sub-theme showing their experiences of climate change. The themes of “emotion-evoking”, “required action” and “perceptible changes” were the most common but also the most linked to other themes. Those themes showed that people from the global South described their experiences with climate change in an emotional experiential and agentic way by expressing their emotions, their senses such as seeing or feeling climate change and their actions that could or should be done either collectively, individually or by external forces. These insights added to the qualitative studies about climate change, especially around studies conducted in the global South. As this study was conducted with stories from a pro-environmental forum, future research should investigate the experiences of people from the global South based on stories from forums with sceptic, neutral or mixed attitudes towards climate change.

*Keywords:* experiences, climate change, global South, online climate stories, reflexive thematic analysis

## **Experiences of Climate Change in Countries of the Global South – a Reflexive Thematic Analysis of Online Climate Stories**

Climate change is one of the most important issues affecting people around the world. In particular, the effects of climate change are being felt more and more acutely around the world due to extreme weather conditions (IPCC, 2022). Continents in the global South<sup>1</sup> like Africa are especially affected by droughts, floods, and heat waves, resulting in lower food production and fewer jobs, as well as health problems (Zielinski et al., 2022). The vulnerability of people from the global South to these events means that they became food scarce or adapt in such a way that they had to restrict certain goods, e.g., things they need for daily life or have to borrow certain goods (Habib et al., 2022). Since people from the global South are particularly vulnerable to climate change and must deal with the given conditions, it is important to explore their experiences with climate change in more detail.

In research, different factors have been found that influence the experience of climate change, such as closeness to natural disasters. One study by Nerlich and Jaspal (2014) has been revealed that depending on the proximity to natural disasters, experiences concerning climate change may turn out differently and may also be given a different meaning. Looking at pictures of natural disasters from a foreign country created a sense that the people living there are used to such disasters and are more resilient. While looking at pictures depicting a person from their own country indicates a sense that climate change is close and something alarming (Nerlich & Jaspal, 2014). Moreover, it has been found that how individuals experience and interpret their emotions related to climate depends on the demographic context and the associated social and cultural norms (Iniguez-Gallardo et al., 2021). Subsequently, people from different countries and social groups may give different interpretations to these emotions.

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<sup>1</sup> In this work, the global South refers primarily to middle and low-income countries of the world which are burdened by additional factors apart from climate change.

The experience and expressions of emotions related to climate change is a frequently discussed topic in qualitative research. Concerning this, one-well studied positive emotion related to climate change is hope. Hope has often been associated with the idea that climate change can be mitigated (Wang et al., 2018). Thereby positive emotions such as hope are often related to be the cause or consequence of climate action, showing that engaging in climate can lead to the experience of positive emotions but also the experience of positive emotions can lead to climate actions (Schneider et al., 2021). In contrast, negative emotions like fear, concern, anxiety, worry, grief or guilt have been described in relation to various aspects such as the experience of fear about the future or future generations (Ágoston et al., 2022; Iniguez-Gallardo et al., 2021; Wang et al., 2018). Also, negative feelings about losses of loved ones or disturbing changes because of climate change have been expressed. In addition to the contexts in which negative emotions were expressed, people also described negative emotions as something they can or must manage (Ágoston et al., 2022). In doing so, they have identified ways for dealing with these emotions through various coping mechanisms, such as taking action, acceptance or optimism (Ágoston et al., 2022). In addition to this, a study by Kleres and Wettergren (2017) has been found that the emotion of fear was reported as motivating people to take action against climate change. This indicates that people experience various emotions in relation to climate change.

In the context of climate change, one qualitative research by Toivonen (2022) investigated the role of climate agency, which describes the ability and capacity to act against climate change. It was found that people discursively expressed their climate agency differently. On the one hand, some individuals who talked about climate action expressed scepticism and were critical about their ability and capacity to act on climate change to make a difference. On the other hand, some reported that together they could do something about climate change (Toivonen, 2022). In summary, there are various ways on how people construct climate agency in relation to climate change.

Other qualitative research had also taken place on pro-environmental behaviour relating to climate change. Reported experiences regarding pro-environmental behaviour were mainly the responsibility on the part of the individual but also of external powers for climate change, the engagement in private activities rather than in public activist groups, and also an important need for education on climate change (Ayalon et al. 2022). This shows that described experiences regarding pro-environmental behaviour are broadly diversified by taking responsibility for causing climate change either by individuals or external forces but also to mitigate climate change on individual and private levels or collective and public levels. Furthermore, another study has been shown that people who did individual actions to mitigate climate change expressed doubts about the effectiveness of their individual actions and thus stopped their actions, which showed that individual pro-environmental behaviour might be experienced as ineffective (Kenis & Mathijs, 2014).

Contrasting to that, qualitative studies have also been conducted about climate scepticism. People who are sceptical about climate change reported being concerned about the evidence of climate change, doubting the expertise of climate scientists and doubting man-made climate change (Capstick & Pidgeon, 2022). In this context, also resistance has been reported towards people who actively lecture one to act individually because they feel blamed or critically questioned official campaigns who tried to convince them (Kenis & Mathijs, 2014). This shows that people are also critical of climate change or promotion to mitigate climate change and could therefore report different experiences with climate change than, for example, people who are involved in pro-environmental behaviour.

It is noticeable that existing research mainly focused on experiences like pro-environmental behaviour, climate scepticism, or emotions of individuals from Western countries (e.g., Agoston et al., 2022; Capstick & Pidgeon, 2022; Kenis & Mathijs, 2014; Schneider et al., 2021), neglecting the parts of the globe such as the global South which are more heavily affected by the changing climate (Zielinski et al., 2022). Therefore, it is relevant

to focus on the experiences of individuals in the global South and research how they experience climate change and what it means to them, especially because they are faced with social, ecological and political challenges such as diseases, poverty, or conflicts (Mahali et al., 2018).

Prevailing qualitative studies in the global South were mainly concerned with the impact of weather conditions and natural disasters, what that means for the people who live there and how they adapt to it (e.g., Dube et al., 2021; Habib et al., 2022; Lindvall et al., 2020). People from Pakistan showed to be vulnerable to unpredictable weather events, which means for them that due to climatic changes productivity and family incomes are reduced, and they experience food shortages (Habib et al., 2022). It was also reported that people adapted to climate change, which means they had to reduce food consumption, borrow items from others, buy cheaper goods, or do repetitive planting of food (Dube et al., 2021; Habib et al., 2022). But also, the perception of climate change was studied in the global South. Results of a study in communities in South Africa revealed that perception of climate change depends on the education levels of the people, as higher educated people showed a more differentiated perception than people with lower education, by having a more nuanced view on the causes and consequences of climate change but also on how to mitigate it (Schäfer et al., 2020). This indicates that also the educational level can create different experiences of perception of climate change. Another thing that became prominent when searching for qualitative studies concerning climate change in the global South was that most of the studies were conducted in one single country of the global South and thus not including countries in the global South as a whole (e.g., Habib et al., 2022; Nayna Schwerdtle et al., 2021; Schäfer et al., 2020).

The climate change evidence studied so far has been mainly based on interviews, surveys, and focus groups. Another less explored data source is freely available data from the Internet, whereby the Internet especially became an important source in recent years to gain information about climate change (Taddicken, 2013). One form of information on the Internet

is people's own stories, which are posted on social media platforms, blogs or websites. Specifically, by analysing personal stories, it is possible to understand how people make sense of events and happenings around them (Berry, 2001).

On the Internet, people share their stories and lives because of the possibility to develop relationships, receive social validation, present themselves, give a sense of introspection due to self-clarification and influence others' views on certain topics (Lee et al., 2013). Present themselves thereby refers to revealing private information, whereby self-clarification means that people share their private information to understand their own feelings and situation (Lee et al., 2013). On social media platforms, people tend to share their stories with like-minded people as a study by Williams et al. (2015) has been shown. There, users who write about climate change on Twitter were classified and it was found that people are mainly divided into sceptic and activist groups. As Twitter seems to be over-represented in research conducted with data from social media platforms, there is a need for research on other social media platforms, which have more individual communities (Pearce et al., 2018).

Therefore, to extend previous qualitative research on experiences on climate change of individuals from the global South, this paper aims to provide findings from thematically analysing online climate stories from the website [climatestoriesproject.org](http://climatestoriesproject.org), which is a forum where people can share their personal stories about climate change in the form of video or audio recordings. This will provide a deeper insight into the experiences of people from the global South with climate change but also into the way how they make sense of it, and thus contribute to the understudied field of qualitative research on climate change in the global South based on online data. Further, it also enables research to compare how experiences with climate change of people from Western countries, that are already well-studied, differ from countries in the global South. Lastly, as most of the studies from the global South are conducted in a specific country, this study will give insights into the experience in the global

South combined of several countries. Hence, the present study will analyse the online climate stories considering the research question:

*RQ: What kind of experiences in climate change can be found in online climate stories told by people of countries from the global South?*

## **Methods**

### **Design**

I conducted qualitative research because it enables to get a deeper understanding of the experience of people of the global South on climate change and explores people's attitudes, behaviours and experiences (Sofaer, 2002). Therefore, I selected online climate stories from the website [climatestories.org](http://climatestories.org), which were told by people from the global South and analysed this data using a Reflexive Thematic Analysis (Braun & Clarke, 2012). As all the data is from the forum [climatestoriesproject.org](http://climatestoriesproject.org), which is a freely accessible website, it was not possible to ask for consent to use the data in the study. However, to maintain confidentiality and privacy, all names in the study were anonymised. In addition, this study was approved by the BMS Ethics Committee of the University of Twente.

### **Procedure**

To analyse the experiences of people from the global South and explore how they experience climate change and what it means to them, I decided to search on the Internet with terms like "climate stories" "climate forums", "climate blogs" "global South" or "non-Western countries" to find a suitable website with climate stories of people from the global South. On the Internet, there were several websites with climate stories, but most of them had a rich number of stories from Western countries and less about the global South. Finally, I found a website called [climatestoriesproject.org](http://climatestoriesproject.org), which is a forum where people can share their personal stories about climate change in the form of videos or audios. I chose this website as there were also many stories from the global South, categorised in the different



continents of the world. There I selected all stories from people who were currently living in countries from the global South resulting in a final set of 31 audios and videos.

### **Material**

Within those 31 videos and audios, people from countries of the global South, mostly students of environmental science and people already involved in climate change as activists, talked about their experiences with climate change in their country and their actions and ideas to fight climate change. To share stories on the website, people had some questions as inspiration namely “What is your name and where do you live? What in your local environment or community is special to you?”, “How does climate change threaten people and places that you care about?”, “Describe the moment when you realised that climate change was affecting your life. How did you feel?”, “Describe your emotional responses to climate change as you think about yourself, your family, and your community.”, and “Describe your vision for your community and your conviction to contribute to a positive way forward through the climate crisis.”.

The stories were between one and eight minutes long and were told by people from different countries, namely Tanzania, Malawi, Senegal, Mali, Nigeria, Niger, Brazil, India, Costa Rica, and Cuba. The people appeared that they were between 18 and 70 years old in the videos and pictures but the age of the people was not specified and therefore only estimated. 18 of those people were male and 13 of them were female. Most of the audios and videos were in English. 13 of them were in either Swahili, Spanish, Portuguese, or Indian but were already translated into English by the website.

### **Data analysis**

To find meaning-making patterns in the described experiences with climate change of people from the global South, I used the six steps of a Reflexive Thematic Analysis based on Braun and Clarke (2012) to analyse the online climate stories. A Reflexive Thematic Analysis aims to identify and give insights into the meanings people create when they make sense of

their experiences with climate change (Braun & Clarke, 2012). Thereby, Reflexive Thematic Analysis is a way of identifying and working out the commonalities in the way a topic is spoken or written about, is easily accessible and can be done without a theoretical framework (Terry et al. 2017).

As a first step, I familiarised myself with the data set, so I started listening to all the audios and videos to see what the people are saying about their experiences with climate change considering my research question. After I had a rough idea of the content, I started transcribing the English audios and videos to be able to analyse them further. During the transcription process, some listening comprehension problems arose, which meant that in the whole data set consisting of 21 pages of transcribed text, 24 words were incomprehensible for me due to bad quality audio or pronunciation of the person speaking and I omitted them in the final transcriptions.

As a second step, I coded the transcripts concerning the research question. As this paper is not based on a theoretical framework, I conducted inductive coding. Inductive coding, also called open coding, means that I derived the codes from the data itself without any code book or theoretical framework. I analysed the data with an experiential orientation because I wanted to explore the meanings and experiences expressed in the data. To analyse the data, I transferred the transcripts to Atlas.ti. Within Atlas.ti, I started with the first transcript by reading and labelling meaningful data extracts where people were saying something about their experience with climate change. For example, if someone talked about what he/she is individually doing to act against climate change I coded it as “I can personally contribute to fight climate change”. The extracts assigned to the respective codes vary from one sentence up to a whole paragraph consisting of up to ten sentences. After coding the first extract I moved on to the next one to see if the same code would apply or not. Either I generated a new code or, if a previous code was suitable, I used it. I continued in this way until all the transcripts were coded, which resulted in 96 codes. The next step was to go

through all the codes again and see if any were very similar and could be grouped, thus reducing the number of my codes. For example, “observable changes in nature”, “observable changes in animal population” and “something that can be observed” were grouped into a more general code “Observable changes in my environment”. This way I continued checking the codes again against the excerpts sometimes creating new codes. Finally, I ended up with 29 codes.

Within the third step, I generate themes out of the codes by grouping the codes into themes and subthemes. Thereby I looked at which codes contain similar meaning-making patterns and can be grouped into a larger theme answering the research question. Thereby every generated theme consisted of more than one code. Out of the codes, only three codes could not be grouped into any theme as they were not showing any meaning-making pattern. Therefore, I deleted them in this process.

After that, I reviewed the themes against the coded extracts and the whole data set to see if the themes are fitting. There I also revised some themes in such a way that I added or deleted some extracts so that they are coherent and answer the research question. In this stage, I also created a new subtheme within the theme of “Requiring action”, namely “Climate change as a concept to learn about”, as I recognised that the extracts and codes relating to this new subtheme had slightly different meaning to those in the overarching theme and therefore proving not well aligned. So, in the end, all themes were coherent and fitted to the codes and the excerpts, which led me to seven themes and one sub-theme.

In the fifth step, I defined and named the (sub)themes by summing up the essence of the themes (Braun & Clarke, 2012). I did this by reading through the excerpts, codes and themes and thereby generated names and definitions for each theme that captures the essence. Lastly, I put the eight (sub)themes together in a table sorting them by frequency, which does not indicate the importance of the theme for the research question. To ensure reliability and

validity, the research process was discussed with supervisors, which means that this was regularly monitored and adjusted.

## Results

The results show seven themes and one sub-theme of experiences of climate change from countries in the global South and their relations to each other. As Table 1 shows, the most central themes of the online climate stories were “perceptible changes”, “requiring action” with its sub-theme “a concept to learn about”, “a threat to life”, “emotion-evoking”, “humans are responsible for it”, “adapting one’s behaviour to survive climate change”, and “having an impact on the future”. In the following, the themes will be presented in the same order as in the table with the exception that the sub-theme of “a concept to learn about” will be presented under the related theme “requiring action”.

**Table 1**

*Representation of the Themes ordered by the Frequency of Occurrence in the Stories, their Definitions, Associated Codes, and Frequencies of the Themes.*

Themes	Definition	Codes	N
CC is experienced as...			
Perceptible changes.	Perceiving climate changes by observing, hearing or feeling changes in the environment or weather.	<ul style="list-style-type: none"> <li>- Observable changes in the environment</li> <li>- Noticeable reduction of resources</li> <li>- Noticeable changes in the environment</li> <li>- CC experienced as a change in weather patterns</li> <li>- I can feel temperature changes</li> </ul>	64

Requiring action.	The need that something must be done to fight CC.	<ul style="list-style-type: none"> <li>- I can personally contribute to the fight against</li> <li>- CC as something we can fight</li> <li>- Government should act against</li> <li>- Humans can fight against</li> <li>- Fight together as a world</li> </ul>	41
A threat to life.	All kinds of consequences related to CC that created a threat on the quality of life of other people or themselves.	<ul style="list-style-type: none"> <li>- Life-threatening</li> <li>- Negative impact on the lives of residents</li> <li>- The destruction of goods</li> </ul>	28
Emotion-evoking.	All kinds of expressed emotions relating to the consequences and future regarding CC ranging from positive to negative.	<ul style="list-style-type: none"> <li>- Negative emotions</li> <li>- Positive emotions</li> <li>- Hope for change in future</li> <li>- Ambivalent feelings</li> </ul>	26
A concept to learn about.	CC motivates to study and is something to educate others about and to learn about.	<ul style="list-style-type: none"> <li>- CC is something to learn about</li> <li>- A motivator to study</li> <li>- Not everyone knows about</li> </ul>	19
Humans are responsible for it.	Indicating that the CC is made through actions by humans or by themselves and therefore are responsible for it.	<ul style="list-style-type: none"> <li>- Human-made</li> <li>- We created CC</li> </ul>	16
Adapting ones behaviour to survive CC.	Adapting and changing their behaviour and habits to the current	<ul style="list-style-type: none"> <li>- Impact on behaviour</li> <li>- People adapt to CC</li> </ul>	16

	conditions given by the CC.		
Having an impact on the future.	CC impacts future generations and gives challenges.	- Affecting future generations - Challenge for the future	7

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*Note.* CC=Climate change; N= Frequency of the themes

### **Climate Change is experienced as perceptible changes**

Within this theme, people spoke about how they can perceive the changes in climate. People mostly described that they could observe or see changes in the environment but also in the weather right at the moment or over a longer period. Concerning the changes in the weather they often described that they could feel intense temperatures, like heat or the sun.

A woman from India described in the excerpt below how she feels about the weather changes.

*I feel that the temperature has really changed. If it is cold, it is extremely cold. And in Mundi last two months in January and in February as witnessed lots of snow. But you guys must be knowing, there was so heavy snowfall Yukamand area. I have that video with me and we started from Mundi and just reacted in this area near Kadingi it was snow over on the both sides of the rural. And we never saw so much of snow, everyone in Mundi knows here it never felt so much of the snow, this was really surprising"<sup>2</sup>*

Here the woman shared that she could feel the changes in the weather. In doing so, she described the uniqueness of this experience by mentioning a phenomenon that occurred in a specific time frame, here in January and February. This was common in other stories as well, as most people had specific examples such as floods or heat that they can feel or see and experience the changes in this way. Here she also expressed the exaggeration of the changes by using the word “extremely”, which shows that it was not a small change that she was

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<sup>2</sup> For understandable reading, the text has been grammatically changed by the author of this paper.

feeling. This also became evident in the sentence “we never saw so much of snow” which describes a new weather pattern that they have never before and that is a unique experience. Here it can also be seen that she attributed the feelings to herself but the observations to a group of people because she changed her expressions from “I feel” to “we never saw”. Who was meant by the group was not elaborated on but could be everyone living in her area. In this example, the weather changes were also described with the emotion “surprising” which shows the unexpectedness of the perceived weather changes. She also generalised her personal experience to other people’s experiences by saying “everyone in Mundi knows here it never felt so much of the snow”.

The following second example told by a man from India shows another often described commonality in the stories in terms of perceived changes.

*"Earlier it used to snow a lot but over the years it has declined but this year has been good. There was a river that used to have a lot of orchards along it. I used to pick apples from the trees there but now there are no longer apples there. Now there are no apples, they have moved to higher altitudes."*

As can be seen in this excerpt many people in this theme contrasted the way things used to be with the situation they are in now, using formulations like “used to be” or “unusual”. In terms of change, this means that people are reminded of memories, habits and phenomena that were normal to them at the time and to which they have become accustomed. These were then contrasted with life today. In this example, the contrast is shown by the fact that things to which people have become accustomed are described in terms of time "earlier" and the word "now" is compared with the present time. The described discrepancy between earlier and today represents the observed or felt changes in the environment or the weather.

### **Climate Change is experienced as requiring action**

In this theme, people described their experiences with climate change as something that requires action. Most people described themselves as being agentic, by either

demonstrating the possibility or the compulsion to act. Three distinct types of actions were identified. Some described it as a collective action so that people should and could work together to mitigate climate change, either naming specific actions or simply sensing that the actions should be taken together. In other stories, people also mentioned that, as individuals, they can do something about climate change displaying a clear possibility to mitigate climate change. Lastly, people also talked about the fact that external forces such as the government should take action to tackle climate change.

The following excerpt illustrates how a man from India described a collective fight against climate change.

*"I frequently interact with many NGOs<sup>3</sup> working in the same direction, and we organise events like plantations on the occasions like world unwarming day where it is very good to see peoples taking active participation in the programme. Finally, we need to acquire more sustainable techniques like solar power and do something from our side and not just waiting for the government to take action."*

Here the speaker used the word “we” and “from our side” in relation to concrete actions that were done or could be done, which was common in this theme. In this theme it has often not been specified who is meant by the “we”, but in this story he referred to the “we” as Non-Governmental Organisations, including himself, and contrasted them with the government, creating a distinction between us and them. The distinction between the two groups is underlined by the fact that he said that the organisations are going in the same direction as him and are actively taking concrete actions, whereas they must wait for the government to take general action and thus in a way criticised the government. With the expression that he liked to see people taking action, he described this experience with positive emotions, like joy.

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<sup>3</sup> NGOs = Non-Governmental Organisations



In contrast, in the following excerpt, a woman from Niger talked about her individual contributions to fighting climate change.

*"Personally, each day when I leave home, I switch off the lights and disconnect appliances. I am always considering the energy consumption of each appliance we have at home. And I am reading same actions when I buy a new appliance. As for garbage and plastic waste I will not throw them everywhere. Even when I am on move, I keep them on me until the site of a trash. I am also keeping informed about the latest news on climate change and energy sustainability. I hope that this stance of practice will make out more comfortable with less extra events."*

In this example, this woman described a thorough approach to tackle climate change because she named specific things to reduce her impact, like turning off lights or waste disposal. Additionally, she also described the systematic nature in which she did these tasks as she said she did it “each day”, “always”, or “even on the move”. This way she mentioned her individual contributions to fight climate change as thoughtful actions on a frequent basis. These described frequent, thoughtful and individual actions were presented as a source of hope in climate change but also confidence about the future. Similar sources of hope concerning actions were also presented in the theme of “emotion-evoking” but not in such a methodical and frequent way.

Below, the example of a man from Tanzania shows how he expressed that authorities like the government should act against climate change.

*"Now, I see that the professional systems aren't doing enough follow-up. Why can't people be hired to do the activity of planting trees and taking care of them by watering all of them? Or the central governments in villages, estates, etc. should manage them."*

He named the “professional system” but is not indicating further which system he exactly means. However, he claimed that they did not do enough follow-up actions. By using the question “Why can't people be hired to do the activity of planting trees and taking care of

them by watering all of them?” he proposes a concrete action that could be done but addresses the responsibility to higher powers, as “people should be hired”. In contrast to collective and individual action, which addresses voluntary work, he proposes hiring workers to fight climate change. He also expressed his frustration about climate change actions because he claims beforehand that the system is not doing enough and then presents what he considers to be a simple solution in the form of a rhetorical question. This kind of reproach and frustration has also been common in other stories where people hand over the fight against climate change to higher authorities.

### *Climate Change is experienced as a concept to learn about*

Within this sub-theme of required action, people talked about climate change as something to learn about to find a solution or to fight against climate change. In this theme, descriptions of learning about climate change through different media, by asking family, friends and community members but also through university courses were common. But in the first line the people highlighted in their stories the need to understand what climate change is about. Additionally, they emphasised that it is important to educate uninformed people because their experiences described in the stories that not everyone knows about or is aware of climate change.

In the excerpt, a man from India expressed his thoughts about how people just need to be educated about how to stop climate change and save resources to create a positive future.

*"And I think the solution to this problem is pretty much simple. Besides planting trees, we also have to educate people and their children about conservation of water, and I think that is much enough to restore the groundwater qualities and antiquities of Kundi Bhandara. To create a positive future as I said earlier educating people to your neighbours, or society or community is the first thing one could physically do to create a better future."*

As common in this sub-theme, education is connected to a positive future and solution, showing that education is one thing to do to act against climate change. This man presented

education as a simple solution to the complex problem of climate change, which raises the question of how aware he is of the complexity of the climate problem. He also expressed the importance of education or raising awareness in climate change as it is "the first thing you could do" and thus also gives a clue where to start in the actions against climate change. However, he did not indicate why this first step is important and how exactly it will affect the future. He only mentioned that it helps water conservation and quality but only education about it does not directly improve water quality or the future. Using the word "one" within this phrase does not target any specific person, but it displays that everyone can carry out this action individually. Through the enumeration of "neighbours, or society or community" he listed already gave an indication of which people could be educated, showing his concrete impressions on which people might need some education.

### **Climate Change is experienced as a threat to life**

In this theme, people described that climate change is a threat to other people's life but also to their own life. In concrete terms, this means that they themselves or others have been affected by famine, diseases, loss of community members, and destruction of property and buildings due to floods, heavy rainfalls, intense temperatures or droughts. As a result, they described that other people have no homes, children cannot go to school or that they suffer from famine.

In the following excerpt, a man from Malawi talked about how climate change negatively impacted his own life but also the life of others.

*"I received heavy rains which resulted in dangerous floods, destroying our crops, properties and even the lives of some committee members. This was very different from the previous rains with floods which were familiar to human beings because they never destroyed any properties or lives."<sup>4</sup>*

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<sup>4</sup> For understandable reading, the text has been grammatically changed by the author of this paper.

Through the use of the words “I” or “our”, which includes the man himself he described that he personally also experience these negative effects of climate change, which was common among this theme. He also shared the threats to life in terms of inclusion within a community. In this way, he extended the personal experience of the danger to life to an us and “committee members”. Other people did mention their families, community members or people around them as well which shows that many also paid attention to the effects on their environment. This excerpt also showed a particularity, as the man compared the negative effects with earlier times highlighting differences of the impacts by using totalitarian words like "very" and "never". Thus, also he presented an increase in the threats to their life's. As a further example, a man from Niger described the threat to life from climate change even to the extent that it has caused people to migrate to other countries where they seem to have a better life. In this example, he also expressed his negative emotions regarding the life-threatening experiences like the rains and floods by describing these with words like “dangerous”. By using such emotional words, the extent of the threat to life became even clearer.

### **Climate Change is experienced as emotion-evoking**

In this theme, the participants presented their experiences with climate change as emotion-evoking. Overall, the theme of emotion-evoking was connected to all the other themes, showing the emotional way in which the people from the global South are experiencing climate change. In their climate stories people told about their experiences with climate change in an emotional way, expressing their hope and fear about it. The most common negative emotions described were fear, sadness, hopelessness, worry and uncertainty, which were related to changes in the environment that already took place or to the outlook on the future. A positive emotion that was most commonly talked about is hope related to changes that will lead to a better future and to ways that could mitigate climate change. Especially people who expressed that they could do something to mitigate climate

change talked hopefully about the future. Ambivalent emotions were also displayed meaning that people experience for example hope and fear for the future at the same time.

In the example below the negative emotions associated with climate change and especially hopelessness regarding the future is displayed by a man from India.

*"Wholesale of Amla<sup>5</sup> used to be our family business. But due to the air pub issue, we shut down our wholesale business. It is a very tormenting experience but at the same time, I feel helpless that there's no other option for me to function in society. Yes, I'm fearful of the future, fearful of the consequences and the worst part is indirectly I am participating in this system that is deteriorating our planet."*

In this example, emotions were all described as individual experiences, through using the word "I" whereas in some other stories people described negative emotions as a collective experience by relating them to a "we". He especially talked about emotions such as helplessness and fear in relation to the future and his future role in society, which was also characteristic of other people's stories. One special thing he mentioned in his story are his negative emotions towards the fact that he is also part of the causes of climate change. So, he admitted that he is part of "this system", which could be an allusion to the capitalist system because of its references to business.

In contrast, this example of a woman from Brazil shows her hope and positivity that the future and the climate crisis will be better.

*"And I believe that there exists some way to confront the greenhouse gas and the pollution in general and of course with the community help the planet will be healthier again."<sup>6</sup>*

One special thing about this extract is that the woman was not directly naming a positive emotion or the emotion of hope. Through her words of "believe" and "of course" in

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<sup>5</sup> Amla, also known as Indian gooseberry, is a fruit grown and sold all over India and the world in the form of sweets and medicines.

<sup>6</sup> For understandable reading, the text has been grammatically changed by the author of this paper.

the context of confronting the climate crisis and improving the earth's climate, she indirectly conveys emotions of strong hope and conviction that something good can still happen for the future. That was different from other people who also clearly named the word hope as such. By mentioning that there is "some way to confront the greenhouse gas" she did not explicitly state what her hope was based on, as she did not clearly say in what way the greenhouse gas could be addressed. She linked a part of her hope for a better future to "the community help" but also there she did not elaborate on how the community gave her hope. By naming the greenhouse gas and pollution together, which are two different terms related to climate change, it also raises the question of how clear she is about the mechanics of climate change and how much she knows about them. In this excerpt it became clear again that emotions are linked to the theme of "having an impact on the future", e.g., when she talked about the future by using the future tense "will".

### **Climate Change is experienced as humans are responsible for it**

In this theme, people expressed their experiences with climate change as humans are responsible for it. It was either described in such a way that "we" created and are responsible for it, which included humans but also the person telling the story itself. In other stories, the speakers expressed human responsibility for climate change more indirectly through words like deforestation, meaning that people cleared forested land.

In the excerpt below a man from Tanzania spoke about how humans contributed to climate change and what consequences it has.

*"Climate change is due to the destruction of forests and careless farming near river banks etc., which causes erosion, which is eroded to rivers and puts a lot of mud such that trees and leaves do not grow well."*

By saying climate change is "due to destruction of forests and careless farming near river banks etc." he implied that humans are responsible for climate change, as both destruction of forests and careless farming are human activities. These words are exemplary

for this theme, as many other people also mentioned things that are human-made. A peculiarity in this example is that he expressed that the changes in nature caused by humans have been made “careless”. With this expression comes a certain reproach, because he accuses them of not being more careful with nature. Other people who spoke about human-made climate change either offered no judgement or implied that human action is wrong. Since he did not name any specific groups that are responsible, he generalises that it was the humans who are responsible for climate change. He also displayed that he not only knows about the causes of climate change for which humans are responsible but also about the possible consequences for which humans are responsible through their actions.

### **Climate Change is experienced as adapting one’s behaviour to survive climate change**

The next theme that was found in the online stories about climate change is that people experience climate change as adapting one’s behaviour to survive climate change. People described that they and others either already have adapted to the conditions climate change is serving or changed their behaviour according to it. Especially in relation to farming an adapting behaviour was described in the form of different foods that were planted at different times of the year or fertilisers were used to grow their seeds. People also said that climate change influenced their behaviour by describing things they were doing before are no longer possible to do, like going out at certain times because of intense temperatures.

In the following excerpt, a man from Nigeria talked about how people had to change their behaviour because of a flood in the town.

*"This terrifying event disrupted economic activities of the dwellers as many business owners were handicapped and unable to carry out daily transactions for weeks. Also, those working at the other side of the river but residing at (city name) have to take a longer route to work."*

In this example, the man reported both that people had to adapt in such a way that limited some behaviours, such as transactions and that they adapted to climate change by

changing behaviours, such as taking longer distances to work. Both types of described adaptations were common in this theme. Here, adaption to climate change was also described by the term “handicapped” meaning that people were limited in their ability to do something. One thing that has not been mentioned here is that others have also mentioned that certain activities are “now no longer possible”, and in that way they had adapted in such a way that they simply stopped doing these things without indicating an alternative. He also gave a duration for this limitation, as he described that transactions were limited "for weeks", showing the severe impact of the disaster. This impression is supported by his emotional expression of experience, saying that it was “terrifying”.

### **Climate Change is experienced as having an impact on the future**

This theme contains the descriptions that the people experienced climate change as having an impact on the future. They described their experience that climate change is affecting future generations but also that climate change provides challenges for the future. In more detail, people told in their stories that future generations will still need the earth’s resources but that future generations will not experience some of the things they experienced. The mentioned challenges for the future are the prevention of water erosion, desertification and deforestation, as they already saw these things as one of the drivers of climate change.

In this excerpt, a woman from India explained her concerns about what impact climate change might have on future generations.

*"Today I feel concerned or rather afraid about the fact that our future generation might not be able to see the beauty of nature. They are unable to experience the pure pollution-free surroundings that I experienced as a child. Of course, if they will not connect to nature, then they will also be unable to be sympathetic towards the natural resources like we do."*<sup>7</sup>

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<sup>7</sup> For understandable reading, the text has been grammatically changed by the author of this paper.



A common characteristic that other people also expressed was their concern that future generations or their children may not be able to experience things they have experienced. In this excerpt the woman not only shared her concern about future generations but also described it more emotionally because she was already “afraid”. She gave an estimation about the future because she drew a comparison between her experiences and the expected experiences of the future generation, which was also common in this theme. Even though people cannot know what the future will look like, they described it in such a way that future generations will no longer have many of the things they had in the past or that the future will be worse than their lives.

Unlike this excerpt, in a few other stories, the people talked about challenges for the future that affect the whole country and not just future generations, such as desertification, water erosion or deforestation. By naming the challenges, they show that they know what the possible challenges could be. The term “challenge” implies that they consider it a difficult and demanding task, with the possibility of failure but also of success. But like in this excerpt they also made a negatively framed suggestion for the future.

### **Discussion**

In this paper, 31 climate stories in the form of audios and videos from the website [climatestoriesproject.org](http://climatestoriesproject.org) were analysed using Reflexive Thematic Analysis to see how people from the global South experience climate change. As a result, seven themes, and one sub-theme emerged. Overall, the results show a variety of different experiences of people from the global South. While the themes of “emotion-evoking” and “perceptible changes” ran through many of the stories and were closely linked to many of the other themes such as “having an impact on the future” which is a theme that was mentioned in fewer stories. Many people also reported that something can still be done about climate change, either collectively, individually, through governments, or primarily through learning about climate change. In summary, many people experienced climate change in an emotional but also experiential way,

but a variety of individual differences have also been reported such as if they feel more hopeful or fearful about the future or what required action looks like for them. In the following, the themes will be discussed in the light of the contexts and existing literature whereby the themes of “emotion-evoking”, “requiring action” and its sub-theme “a concept to learn about” and “perceptible changes” are discussed in more detail.

The experience of emotions in connection with climate change was one of the most prominent things mentioned in the stories. In general, “emotion-evoking” is a theme which is related to many of the other themes, showing that the described climate change experiences were strongly linked to emotions. Overall, most negative mentioned emotions in the online stories were connected to the consequences and the future of climate change, but also to “a threat to life”. Previous research on emotions in relation to climate change also investigated negative emotions in relation to climate change. Thereby one common form of negative emotion mentioned in climate change research is climate-anxiety or eco-anxiety which could be emotions such as fear, shame, guilt or hopelessness in relation to distress about climate change (Ojala et al., 2021). Like the study by Àgoston et al. (2022) the negative emotional description of the future, dangers for life or concern for future generations was also found in the current study.

In contrast, positive emotions, such as hope, were also named, often in connection with actions against climate change. Interestingly, people who named concrete actions that they are taking or in which they are participating and saw the possibility of doing something against climate change talked hopefully about the future. This goes in line with research which has been shown that positive emotions such as hope are often related to climate change engagement either as a cause or consequence of those engagements (Schneider et al., 2021). Bury and colleagues (2020) showed that hope is strongest when success is possible but not likely, especially when individuals are personally invested in the outcome, which may explain

why hope was expressed primarily in the context of concrete and active participation in actions and the certainty of a possibility to reduce climate change.

Next, the theme of “requiring action” reveals that people talk about three distinct types of climate action namely collective, individual, and from authorities. Regarding the individual actions to approach climate change, one interesting finding is that people spoke about concrete actions on how they are tackling climate change on a frequent basis. Some described pro-environmental habits that they have incorporated into their everyday life, such as turning off lights. Recent research in the field of habits and climate change by Verplanken and Whitmarsh (2021) has also dealt with this topic. Based on their study, it was shown that climate change-relevant behaviour is influenced by habits, both proactive and harmful. Habits from the past can be so ingrained in a person that it prevents pro-environmental behaviour. It depends on the motivation of each individual. As soon as a behaviour becomes an identity, proactive behaviour becomes stable (Verplanken & Whitmarsh, 2021). This would also be true for the people who have already described their everyday pro-environmental behaviours and who have actively addressed climate change, which shows that pro-environmental behaviour became part of their identity.

In contrast, “required action” by the government was described in such a way that they are responsible to mitigate climate change and not the people themselves. This handing over of actions to be done by external powers was also found in a study by Sanderson & Galway, (2021) which found that people with more power, as well as politics and government, have the responsibility to take the initiative to do something. The actions needed by the government have also been mentioned in other research, especially against the background that they have better expertise in dealing with difficult issues (Mirsaeidi et al., 2017).

Studies researching risk perception or climate scepticism showed that people also lack the urgency to act because they might not be personally or emotionally involved, be sceptic or have limited knowledge about climate change (e.g. Capstick & Pidgeon, 2014; Gifford, 2011;

Leiserowitz, 2005). Instead, people in the current story exclusively displayed themselves, or other parties being responsible for taking action, as agentic. This could be due to the reason that the climate stories were from a pro-environmental website, where like-minded people share their stories (Williams et al., 2015). Because the [climatestoriesproject.org](http://climatestoriesproject.org) forum position is proactive in the fight against climate change, it brings together many people who have the same view or are already climate activists. Especially because the forum invites people to share stories from this perspective, this could be an explanation for why so many people displayed themselves as being agentic. In a previous study, it was found that forum editors actively decided to include or exclude dissidents (Edwards, 2013). Therefore, it could also be that the editors of the forum might have filtered the uploaded stories in a way that fits into their proactive view to confront climate change or because it might deliver a certain message.

Within the sub-theme of “a concept to learn about”, people told that the first step of action should be to educate people or to learn about climate change, which was described as something that can be done individually as well. The importance of educating people about climate change to mitigate it was also explored by Anderson (2012). There it has been said that the content of education should be such that people identify the causes of climate change and learn what should be changed. Relating to the current study, they also mentioned sometimes what the contents of education should be, such as water conservation but did not indicate a clear education plan. Furthermore, people in the current study stated that individuals can also educate people and learn about whereas in the paper by Anderson (2012) the education sector was considered responsible.

Another much-discussed theme in the climate stories was that climate change was described as “perceptible changes”. Interestingly in the current study, people stated that they can see, observe or feel changes in their environment or the weather, meaning that they can actually witness climate change. A study by Niles and Mueller (2016) researching the

farmers' perception of climate change in Africa also found that some farmers talked about how they can feel a change in temperatures and in rainfall patterns, which is relatively consistent with the actual statistical values and thus suggests that people can perceive climate change. One possible explanation for the perceived changes is that a higher degree of place attachment is associated with a stronger perception of environmental change and degradation (Kyle et al., 2004).

A link between the two themes of “requiring action” and “perceptible changes” has not been evident in this study but was evident in other studies. It has been found that people who perceive climate change have an increased willingness to mitigate climate change. (Broomell et al., 2015). Additionally, Reser et al. (2014) showed that perceived experiences with climate change influence risk perception, acceptance and adaptation, which also shows a possible link between “perceptible changes” and “adapting one’s behaviour to survive” which was also not evident in the current study. This could also be due to the fact that the people in the stories did not link these things, because they generally talked about the visible changes and sometimes at the end it was noted what could be changed.

In this study, limitations must also be considered. One limitation could be that connections between themes may have escaped me in my analysis that were seen in other studies, such as between perceptible changes and adapting one's behaviour to survive. Moreover, since the climate stories come from a pro-environmental oriented website, these results cannot be generalised to the entire global South. This could be due to the fact that the website is proactive to confront climate change, which means that the climate stories and reported experiences are only from people who are like-minded. As a study by Williams et al. (2015) shows, people of the same mindset about climate change usually group together on certain platforms and communicate within their like-minded community. Experiences from people who are neutral or sceptical about climate change are therefore not included. Therefore, a suggestion for future research is to investigate people’s experience with climate change from

the global South on the basis of forums that share a neutral, sceptical or mixed attitude on climate change. Another suggestion could also be to compare the experiences of people from proactive websites and those on more climate-sceptical websites to research differences and commonalities in their meaning-making patterns.

Additionally, what also needs to be considered is that most of the people did not talk in their native language. It could be that through the translation or use of another language that is not familiar to them, meanings may have been lost or may have come across differently. As I am a student from Western Europe who is only conversant in English and German, the search was naturally limited to English or German and therefore no native-speaking reports from people from the global South could be used. Therefore, a suggestion for future research could be to work with a multilingual team to analyse stories in the original language.

In conclusion, the results of this study show a variety of themes of described experiences with climate change in the global South, and their relation. People from the global South described their experiences in the stories in a pro-environmental manner, showing their high awareness for climate change in an emotional, experiential, and agentic way. Experiences with climate change were often described in an emotional way, mostly related to fear or hope. But they also described it in an experiential way, saying that they can observe, feel, and witness changes in environment and weather, which often also impacted their behaviour and lives. The theme of requiring action revealed that overall, they presented themselves as agentic with the individual difference that some people describe their habits as part of identity to mitigate climate change while others attributed the action to external forces. As the study is based on online stories from a pro-environmental forum, a recommendation for future research is to research the experiences of people from the global South with climate change based on forums that are more climate sceptical or neutral.

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