

**Riding the Climate Wave on Reddit: A Study of the Emotional Landscape
of Climate Change on Reddit**

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Abstract

This study investigates how individuals discursively construct their emotions about climate change and how they engage in emotional discourse within the online community in the subreddit r/sustainability on Reddit. By adopting a discourse analytical and constructionist standpoint, a diverse range of emotional responses within six broader emotional discourses have been observed. These are *the Discourse of Personal Engagement and Emotional Variability*, *the Discourse of Perceived Irreparability and Lack of Control*, *the Discourse of Criticism and Discontent*, *the Discourse of Structural Critique and Shared Responsibility*, *the Discourse of Empowered Action and Optimistic Outlook*, and *the Discourse of Dismissiveness and Trivialisation*. The results illustrate that the commentators on Reddit most frequently constructed feelings of hopelessness within the *Discourse of Perceived Irreparability and Lack of Control*, whereas emotional detachment within the *Discourse of Dismissiveness and Trivialisation* was not as prevalent in the data. The findings reflect the multifaceted and complex nature of climate emotions and the way in which these are constructed within the online discourse on Reddit. Moreover, commentators construct their climate emotions based on personal views and experiences related to the climate crisis. In conclusion, the constructed climate emotions in this study are predominantly negative, and they are often individualising as they are most frequently about the individual's own feelings and not about them as part of a collective community. In this way, this research highlights the necessity for specific interventions designed to stimulate collective engagement and emotional resilience in tackling this global climate emergency.

Keywords: climate emotions, climate change, discourse analysis, Reddit, social media

Riding the Climate Wave on Reddit: A Study of the Emotional Landscape of Climate Change on Reddit

Climate change (CC) is a global challenge of unprecedented scale and complexity, with widespread impacts on our environment, societies, and economies (Clayton, 2020; Fritze et al., 2008; Hayes & Poland, 2018). Specifically, extreme weather events, such as increased temperatures, have been associated with reduced positive emotion (Keller et al., 2005; Knapp et al., 2015), increased negative emotion (Denissen et al., 2008; Keller et al., 2005) as well as an overall increase in psychological distress (Ding et al., 2016). In fact, a recent survey incorporating 19 countries around the globe found that a median of 75% of the respondents in these countries considered climate change to be a severe threat to their well-being (Poushter et al., 2022).

This global and life-threatening nature of climate change naturally fostered the emergence of much discourse around the topic (Etkin & Ho, 2007). Research illustrates that individuals feel the need to discuss their thoughts, beliefs, and personal experiences, as the climate crisis poses a threat to their primary human needs in the future, such as access to food, clean water, air, and shelter (IPCC, 2022; Lawrance et al., 2022). Nonetheless, it should be noted that not all individuals engaging in CC discourse feel threatened or concerned by CC and its impacts. These individuals may include climate change denialists or sceptics who perceive the climate crisis to be exaggerated, or completely deny the scientific reality of anthropogenic global warming (Bloomfield & Tillery, 2018; Harvey et al., 2017).

With the rise of social media, the discourse around climate change has moved to the online sphere and has become more widespread than ever before (Harvey et al., 2017; Treen et al., 2020). In particular, social media ascertains to be the place nowadays where individuals discuss their emotional responses to climate change most frequently (Mavrodieva et al., 2019). This is because the internet offers an open and public space for individuals to discuss and share their perspectives (anonymously) on various matters, including on global challenges such as CC (Kahn-Harris, 2021). For this reason, a need arises to explore social media platforms to understand how individuals construct their understanding about the climate crisis and their feelings about it, while interacting with others on social media. To do so, I will adopt a social constructionist and discourse analytical viewpoint that aids in understanding how individuals shape, negotiate and construct their understanding and feelings about specific phenomena, such as CC, in interaction with each other

(Calliari, 2016; Gill, 2000; Potter, 2004; Potter & Wetherell, 1987). Key characteristics of discourse analysis include, most importantly, the focus on language and how language is employed to construct meaning (Komulainen et al., 2019). Hence, this thesis aims at looking at the language individuals use in CC online discourse on social media to understand how these individuals discursively shape and construct their personal emotions about CC in interaction with each other.

Climate emotions

In general, Verplanken and Roy (2013) argue that global warming has aroused stronger emotional responses than any other environmental issue since the highly debated topic of nuclear energy. These emotions about climate change are often referred to as climate emotions. In this thesis, I define climate emotions along the lines of Pihkala (2022) as:

affective phenomena which are significantly related to the climate crisis, even though there may be many kinds of factors influencing people's emotions at a certain moment - such as the general situation in one's life, one's temperament, daily events, social dynamics and climate change impacts. (p.1)

Overall, strong emotional responses about CC are considered to be a part of an appropriate and rational response based on the scientific evidence available on the topic, and allow for adaptive and healthy coping with these emotional responses (Clayton, 2020; Hurley et al., 2022; Verplanken & Roy, 2013). However, research also emphasises that some negative emotions, such as hopelessness and worry, can lead to prolonged stress and obstruct this way of healthy and adaptive coping (Lawrance et al., 2022; Mosquera & Jylhä, 2022). As such, studying the emotions that individuals construct in online discourse aids in generating a more comprehensive understanding about how these complex emotional experiences are formed and negotiated actively through language when discussing climate change online.

A recent literature review suggests that there is still a limited understanding of the diverse range of emotions that climate change can evoke, particularly from the viewpoint of qualitative research (Koder et al., 2023). To be more precise, climate emotions may encompass a wider range of feelings than those that have been researched previously. This is why the in-depth study of climate emotions in the context of social media, in particular, may offer unique insights into the

emotional landscape of CC to explore emotions that have received little or no attention at all until now (Pihkala, 2022).

In relation to this, some researchers may refer to the emotional responses triggered by CC as *eco-emotions* (Lawrance et al., 2022; Ojala et al., 2021; Seth et al., 2023), whereas other researchers prefer to use the term *climate emotions* (Hyry, 2021; Mosquera & Jylhä, 2022; Pihkala, 2022; Sangervo et al., 2022). Such a distinction in conceptualisation exemplifies how researchers may explore the same emotional experiences on CC, while using different language or jargon to formulate their findings. Consequently, this variation in the conceptualisation of climate emotions presents a challenge when trying to gather comprehensive information on the topic, as there is currently no standardised terminology in research used to describe emotional experiences individuals have to the climate crisis. Thus, adopting a constructionist viewpoint in this study allows for a more in-depth, language-centred and bottom-up analysis of the multiple nuanced ways in which emotional responses to the climate crisis are constructed in climate change discourse on social media.

In the case of climate emotions, current research tends to focus heavily on climate anxiety or eco-anxiety as a dominant emotional response to the issue (Brügger et al., 2015; Clayton, 2020; Pihkala, 2019; Pihkala, 2020; Pihkala, 2022; Sangervo et al., 2022). While anxiety is undoubtedly a critical emotional response to the threat of climate change, it is imperative to acknowledge that the emotional landscape of climate change is much broader and more complex than anxiety alone (Mosquera & Jylhä, 2022; Weintrobe, 2021). Such a narrow conceptualisation of climate emotions may limit our ability to fully understand how emotions shape public discourse and responses to climate change.

Apart from the research on climate anxiety, there is limited research on other climate emotions. One study exploring climate change worry, or “the worry, and accompanying stress, associated with current and predicted damage, loss and destruction from climate change”, illustrated that levels of worry were increased in individuals experiencing the impacts of CC directly (Ojala et al., 2021, p. 37). Moreover, other studies showed that individuals may experience feelings of anger and frustration due to what they perceive as a lack of action by governments and leading corporations to address the climate crisis (Lawrance et al., 2022; Lorenzoni et al., 2007).

More recently, one specific positive emotion has been put in the focus of the research, and that is hope (Ettinger et al., 2021; Huber, 2022; Li & Monroe, 2019; Mosquera & Jylhä, 2022). The

research on hope as a positive emotion to CC is still in dissensus as, on the one hand, hope has been shown to be important in order to feel able to deal with the climate crisis (Mosquera & Jylhä, 2022). On the other hand, there is some concern that it may also hinder an individual's ability to appropriately understand the magnitude of the crisis and, therefore, obstruct them to undertake mitigating collective action (Hornsey & Fielding, 2016; Extinction Rebellion, n.d.).

Interestingly, sometimes individuals do not experience one specific emotion, and instead experience conflicting emotions in relation to CC, also referred to as ‘affective dilemmas’ (Mosquera & Jylhä, 2022, p. 358). In these affective dilemmas, one may enjoy the increasingly warmer days in the summertime while also worrying about the meaning of this increased temperature for the environment (Mosquera & Jylhä, 2022). In this way, these conflicting emotions and values can create or enhance a sense of psychological distress within the individual (Latkin et al., 2022; Lawrance et al., 2022). As a result, it is important to recognise that climate change emotions may not easily be divided into simple categories such as black and white. Instead, they reflect the complex nature of the problem, the deeply personal involvement of the issue and its potential consequences for the planet and our current way of life. Thus, recognising the complex nature of climate emotion sets the foundation for the exploration of how these emotions manifest and are communicated on social media platforms.

Influencing Factors of Climate Emotions

Climate emotions are shaped by various factors, such as personal experiences, cultural beliefs, exposure to media representations, and through discourse about the topic (Myers et al., 2012; O’Neill & Nicholson-Cole, 2009). Skewed media representations have been listed as a key determinant responsible for the division of climate change beliefs, as they wield significant influence in shaping an individual’s perception of the associated risk, thereby also affecting their emotions towards the issue (Clayton, 2020; Villanueva, 2021). Typically, the media’s reports on climate change are driven by specific extreme events rather than providing consistent coverage of the issue, which ultimately leads to increased coverage of natural disasters, new devastating research insights, and changes in government policies (Villanueva, 2021). This increased coverage of climate change in the media, specifically, has been proven to be correlated with an increase in public concern about the topic (Carmichael & Brulle, 2018; Sampei & Aoyagi-Usui, 2009). Moreover, the media frequently employs dystopic or apocalyptic imagery to depict the future as

uncertain, hopeless, and catastrophic (Huber, 2022). Arguably, these presentations of uncertainty regarding exact predictions due to the possibility of unknown tipping points or feedback loops are central aspects that influence the public's sentiments and beliefs (Clayton, 2020). While these images are effective in reminding the public of the severity of the situation, they also skew reality and result in a sense of hopelessness, as they offer no positive or encouraging outlook on the future (Huber, 2022).

Moreover, nowadays individuals most frequently resort to social media platforms to discuss their feelings and opinions on various topics, including climate change (Mavrodieva et al., 2019). This is because social media is closely embedded in our daily life, with most people having their smartphone around them every minute to be constantly available to consume content, connect with others or share their own thoughts and opinions (Morris, 2020). As such, the participatory and decentralised nature of social media sites offers unique possibilities to study social interaction in a naturalistic setting (Williams et al., 2015).

In relation to the climate crisis, certain characteristics emerged that mark the discourse due to this constant availability of content and limitless engagement of users. For instance, climate change discourse on social media is marked by strong polarisation and emotionality, which may influence an individual's emotions about the issue (Villanueva, 2021). One explanation for this polarisation is that climate change as an anthropogenic phenomenon has been contested for decades by *climate sceptics*, who deny or question the scientific consensus on CC (Villanueva, 2021). This contest of established climate science fostered a lot of heated discourse with another group, *climate activists*, who believe in the scientific evidence of CC (Villanueva, 2021). The discourse between both groups is marked by verbal attacks, including ad hominem attacks and skewed representations of climate change from the side of the climate sceptics, which have contributed to lingering distrust in the public about the validity and accuracy of the information disseminated in climate change discourse. While the polarisation is mainly fostered from both extremes, *climate sceptics* and *climate activists*, the lack of action from governments and corporations to mitigate the climate crisis further contributes to the divide in opinions and beliefs surrounding the climate crisis and contributes to lingering distrust when dealing with the issue from side of the public (Fairbrother, 2017).

Furthermore, the internet and the anonymity it offers facilitate the spread of both misinformation (unintentional spreading of false information) and disinformation (deliberate

spread of misleading information) that distort the scientific reality of climate change and, therefore, can significantly impact the way individuals feel about the issue (Treen et al., 2020). One tool aimed at controlling the dissemination of accurate scientific information about CC was Facebook's "Climate Change Center". Yet, despite the original task of disseminating scientific information, the platform has faced criticism for providing implicit support to climate change deniers and failing to address the spread of misinformation as Facebook intended to (Durkee, 2020; Treen et al., 2022). Moreover, Twitter gained notoriety in 2020 for marking multiple tweets by then-US President Donald Trump as disinformation, which received widespread coverage in mainstream news outlets (Dawson, 2020; Treen et al., 2022). Overall, these influences highlight the importance of studying climate emotions more comprehensively and from different angles, including online conversations, as this aids in uncovering the diverse ways Redditors construct and communicate their emotions about the climate crisis to deepen our understanding of the discursive landscape surrounding climate emotions on social media.

Emotional Discourse on social media

Emotions are socially constructed in discourse, meaning they are not solely based on individual psychological experiences but instead constructed in interaction with other individuals in discourse that creates a shared social reality (Boiger & Mesquita, 2012). Thus, it is important to understand the societal and cultural context in which climate emotions are expressed, rather than seeing them as purely individual experiences. By looking at the discussion trends on social media, an understanding of the prevailing online discourses on climate change can be established, as well as an understanding of how individuals use language in online discourse to construct and make sense of their emotions about climate change.

Research has already offered insights into users' emotions on various social media platforms like Facebook, Twitter, and blogs to explore how individuals view, talk about, and feel about climate change (Harvey et al., 2017; Treen et al., 2020). Most research on the emotional and psychological responses to climate change are of quantitative nature and not specifically centred around climate change discourse on social media (Hickman et al., 2021; Lawrance et al., 2022; Ojala, 2012; Reyes et al., 2021). In contrast, qualitative studies in this field of research remain underrepresented (Fritze et al., 2008; Clayton, 2020), especially in the context of online discourse (Villanueva, 2021). However, as social media plays an increasingly important role in formulating

and influencing an individual's beliefs and emotional responses to the climate crisis (Morris, 2020), the need for more in-depth qualitative analyses arises that aim to look closely at what individuals are doing with language on these social media sites to construct their understanding and feelings about an issue.

According to Harvey et al. (2017, p. 281), social media platforms such as Facebook and Twitter significantly impact public opinion regarding climate change and provide "powerful voices" in shaping this discourse. In light of this previous research, Reddit, also known as the "front page of the internet," with one of the largest and most active communities online, remains underrepresented in research (Villanueva, 2021, p.29). The study of online climate change discourse on Reddit emerged as a relatively new and increasingly popular research topic, fueled by the increased prevalence of social media usage in society (Treen et al., 2022; Villanueva, 2021). Looking into how climate emotions are discursively constructed on Reddit can provide essential insights into how people express their emotions about CC and, in turn, how they engage with the topic.

Reddit is a platform characterised by numerous subreddits. Each subreddit operates with its own rules, which regulate the type of content that is permitted and the specific topics that are relevant to the subreddit. This allows for a highly differentiated and nuanced approach to online discussion, compared to other platforms that have more strict limitations. For example, Reddit provides a generous character limit of 40,000 characters, as opposed to platforms like Twitter, which have a much more restrictive limit of only 180 characters (Treen et al., 2022; Villanueva, 2021). This provides users with ample space to express their thoughts and opinions, making it a popular platform for discussions and debates, including climate change. Furthermore, doing discourse analysis on Reddit enables for the study of huge and heterogeneous populations in a naturalistic setting (Villanueva, 2021). Reddit's decentralised structure, with its various subreddits and liberal character limit, provides a distinct and rich setting for online discourse. With this in mind, in this study, I aim to understand how climate emotions are constructed and expressed in online discourse on Reddit by analysing the language and discursive strategies on a specific subreddit to answer the following research question:

RQ: How do individuals, who acknowledge the scientific reality of climate change, discursively construct climate emotions within the subreddit r/sustainability on Reddit?

Methods

Study Design

The focus of this research is on understanding the discursive constructions of climate emotions on Reddit. To do so, I used discourse analysis (DA) to gain a deep and nuanced understanding of how these emotions about CC are constructed discursively in the subreddit *r/sustainability*. For that, I placed myself in the field of discursive psychology, which emphasises the role of discourse as the fundamental medium for human interaction (Potter, 2011). DA allows for understanding how specific phenomena, such as emotions related to climate change, are constructed in discourse and how this, in turn, influences our social reality (Calliari, 2016; Gill, 2000; Potter, 2004; Potter & Wetherell, 1987). As previously stated, one of the main characteristics of discourse analysis includes, most importantly, the focus on language and how language is used to construct meaning (Komulainen et al., 2019). While DA allows for such a detailed analysis of how language is used to construct phenomena and experiences in our world, it cannot provide psychological inference or explanations about the author's emotions, intentions or experiences. This is because DA is primarily concerned with understanding how our social reality is constructed and negotiated in discourse through the words and phrases that individuals actively use in interaction with others (Gill, 2000; Potter, 2004, 2012).

First of all, discourse, in its most basic way, could be conceptualised as verbal and written interchanges between individuals (Potter & Wetherell, 1987). To be more precise, discourse is an omnipresent aspect of our lives, occurring in both face-to-face interactions in real life, and in online interactions through social media platforms. In particular, it is acknowledged that discourse goes beyond being a neutral means of communication; instead, it is an active social practice that involves a range of actions and functions (Gill, 2000; Potter, 2004, 2011). As elucidated by Gill (2000), discourse serves as a tool for certain actions or for attaining certain objectives, such as making excuses, laying blame, presenting oneself in a certain light or to evoke certain responses in interaction partners.

In line with this understanding of discourse and its characteristics, this study takes a language-centred DA approach guided by a social constructionist framework, that elucidates how our understanding and interpretations of the world are shaped through social interactions with others. Social constructionism argues that how we understand or perceive the world is mediated by

language and that this understanding depends on our culture and the context we are engaging in (Burr & Dick, 2017). Hence, social constructionism offers a theoretical framework that aids to analyse and understand the present discourse. Moreover, analysing the language, including words and phrases, can provide valuable insights into how these emotions influence the social context of discussion because “words convey intentions, emotions, and feelings” (Komulainen et al., 2019, p. 398).

Moreover, I used a bottom-up approach to conduct the DA in the present study. The bottom-up approach starts with an examination of the raw data. In this study, the raw data are the comments of the respondents on Reddit. This data is then used as a starting point of the analysis without imposing any previously established categories or constructions. This approach to analysing the data makes it possible to look at the individual discursive constructions of climate emotions, which can then be linked together and organised into more extensive discourses to generate a larger and more comprehensive understanding of how emotions about climate change are discursively constructed in this subreddit. To make these concepts of discourses and constructs even more apparent, I will apply them in the later parts of the method section in an example to illustrate how I conducted the analysis.

Subreddit Selection and Participants

I first searched the different Reddit communities available online that engage in climate change discourse. Reddit makes such searches easy as it allows searching for the ‘Top-Communities’. The rank of a Top-Community stems from both the subreddit’s popularity and the engagement of individuals in this subreddit. Hence, I could browse these communities to find those related to climate change. Ultimately, the subreddit *r/sustainability* was one of the communities in the top 1%, with nearly half a million members (467.000 members). The subreddit *r/sustainability* describes itself as “a science based subreddit (...) with a zero-tolerance policy for the deliberate spreading of disinformation such as denial of human-caused climate change” (*R/Sustainability*, 2008). Each subreddit on Reddit operates within a specific set of rules that guide the discussion of the community members. In the selected community *r/sustainability*, the individuals are asked to be respectful, not to engage in greenwashing, not to disseminate misinformation or employ anti-scientific rhetoric, as well as a necessity to cite their sources, and, lastly, not to ask for interview requests (*R/Sustainability*, 2008). Because of these guidelines, the data in this study will primarily

centre around the emotions of individuals who believe in the anthropogenic nature of climate change. For this reason, climate deniers or sceptics, who oppose this view, are less likely to participate in the discourse in this subreddit. Thus, it is important to acknowledge that this study may not include the full range of emotions people hold about climate change, as the subreddit's rules explicitly exclude those individuals who hold contrarian views about established climate science.

After selecting the subreddit, I conducted a thorough search for threads relating to individuals discussing their emotions about climate change. However, instead of discussions centred around climate emotions, I discovered that individuals often expressed their emotions in replies to other related topics, such as climate inaction or mitigation policies. Recognising the scarcity of climate emotion threads, I created a thread called "*How does climate change make you feel?*" with the explicit focus on climate emotions to analyse these emotional experiences and discourses of the commentators. In this thread, I chose not to identify as a researcher, and kept my contribution to the discussion limited to the original question. This was intentional, to prevent any bias from my side and to preserve a typical Reddit conversation. As a result, the comment section reflected comments by Redditor's replying to the initial question of the thread, as well as discussions among the commentators themselves about their emotions on climate change.

Overall, the thread yielded 67 comments, from which 30 were excluded based on their lack of mention of emotions about CC or them being unrelated replies to other commentators. For instance, sometimes Redditors did not explicitly mention any emotions in their comment, such as in this comment "*100% feel the same*". Other comments were excluded because they were a reply to other commentators without relating to the thread's initial question. One such example is this comment "*Ooooo I'm looking that up now- thanks for the mention*". Moreover, some commentators seemingly used their real names as Reddit handles, whereas other Redditors used names that may be reflective of their perspective to climate change, such as the handles 'climatesceptic' or 'greenenvironmentalist'. To avoid any bias from the reader as well as from my side as a researcher, I chose to replace their Reddit usernames and instead name them User (1, 2, 3, and so on) to protect their anonymity.

Moreover, the thread has 38 *upvotes*. According to Reddit's support page, "upvotes show that redditors think content is positively contributing to a community or the site as a whole", whereas "downvotes mean redditors think that content should never see the light of the day" (*How*

Does Voting Work on Reddit?, 2023). Due to Reddit's anonymous nature, downvotes are not explicitly illustrated as a separate count next to the upvotes; instead, a downvote is indirectly represented in the total number of upvotes. For example, if the thread has 40 upvotes and one Redditor downvotes the thread, the total score of upvotes would then be 39. Considering this information, the thread seemed to contribute positively to the community, so I chose both the community and the post for my analysis.

Procedure and Data Analysis

The analysis involved several steps that I have undertaken in different rounds of reading and engaging with the data. In this study, I define the unit of analysis to be the clause of the sentence. By studying clauses as opposed to the entire comment, I aim to take into account the complex and non-uniform nature of emotional responses to the climate crisis, given that Redditors may construct multiple climate emotions in a single comment. In the first round of reading, I focused on gaining an understanding of the content of the comment to identify the main perspectives expressed by the commentators. The purpose of this initial content-focused analysis was to establish a contextual background that informs the subsequent analysis of how emotions were constructed in the comment.

In the second round of reading, I shifted the focus to the emotions constructed in the comments. Emotion constructs, in the present study, were identified through an analysis of the language used by the commentators, as well, through recognising recurring patterns of emotion expression by paying attention to linguistic markers or expressions used to construct these emotions. With emotion construct, in the present study, I mean a specific way of constructing an emotion on Reddit. For instance, the excerpt of the comment "*Extremely frustrated bc the people who have all the power [...]*" (User 17 on Reddit, 2023) illustrates how the commentator constructs feelings of frustration on climate change based on the 'people who have all the power' They construct this strong negative emotionality by phrasing that they feel 'extremely frustrated' and indicate the source of their frustration by referencing the people who have all the power'. Respectively, this emotion construct in the data would then also be labelled as 'anger and frustration'. Overall, based on these observations, I developed a coding scheme to categorise the various ways in which commentators construct their emotions about climate change. I adapted this

coding scheme iteratively in multiple readings of the data to continuously ensure a consistent and accurate interpretation of the data.

In this present study, I observed that the commentators were engaging in broader discourses and that these narrower constructions of emotion were part of this broader emotional discourse about CC. This new insight also illustrated that climate emotions could be constructed in many ways, depending on the individual's personal beliefs and perspectives towards the issue (Potter & Wetherell, 1987). As a result of this new insight, in the third round of reading, the emotion constructs were developed into larger discourses and labelled as such. To be more precise, in alignment with the bottom-up approach, I looked at all emotion construct categories I established in the previous reading round and looked at what people are doing with language in these comments to understand what bigger discourse they produce. These larger discourses were then labelled to capture the essence of the discourse that commentators were engaging in when constructing a certain climate emotion. In relation to the example excerpt above, this means that the commentator constructing emotions of anger and frustration about climate change in this subreddit, is also engaging in a larger discourse of Criticism and Discontent, in which Redditors often construct these negative emotions based on the lack of mitigating action and the persistent lack of understanding about climate science and consensus on the issue. Overall, this new understanding enhanced the quality of the analysis by allowing for a discursive examination of emotions within the discourses in which they were constructed.

Moreover, during the analysis, I noticed that it was not uncommon for Redditors to engage in multiple discourses in one single comment. To ensure clarity, I decided to illustrate the discourses separately and pinpoint to the intricate nature of climate emotions throughout the analysis. Choosing to show the results in this way allows for a more nuanced representation of CC as it acknowledges the complex nature of emotions about a pressing global issue as CC. For the last round of reading, I stuck to the bottom-up approach in the context of discourse analysis to analyse rhetorical and linguistic features rather than conducting a separate rhetorical reading. This was done to present how language and rhetorical tools form specific emotion discourses and emotion constructs. These included, for example, looking at the sentence structures (short, long, convoluted, simple), metaphors ('I want the world to burn...but not like that'), or essential words that underline an emotion, such as expletives ('fucking angry'). Even more so, I looked at whether some commentators engaging in specific discourses align with one another in their linguistic

patterns and rhetorical strategies to understand how commentators collectively constitute and shape a particular discourse. Analysing the rhetoric in the comments proved to be a valuable addition to the analysis, as language or words, in general, are often used as a tool to persuade (Rocklage et al., 2018), manipulate (Van Dijk, 2006), or influence others (Zlatev & Blomberg, 2015). Conceptualised this way, it is implied that rhetoric serves as an act to achieve a specific goal, whether it is forming a new attitude or prompting some action in other individuals (Burke, 1969). In this way, rhetoric can potentially affect an individual's beliefs, as through discourse and the employment of particular rhetoric, beliefs and perspectives can be shaped or changed (Bonet, 2014). In relation to climate change, which continues to be debated in public despite scientific consensus, it becomes necessary to understand how specific rhetoric shapes or frames the emotional experiences of individuals. In summary, doing a discourse analysis allows for looking beyond the literal content of the comments and deepens our understanding of how individuals construct certain emotions about climate change through language. Additionally, through an examination of the language and rhetoric used by Redditors commenting on the subreddit *r/sustainability*, we can gain insight into the prevalent emotional themes and how they are formed within this community.

Results

This study aims to answer the research question: *How do individuals, who acknowledge the scientific reality of climate change, discursively construct climate emotions within the subreddit r/sustainability on Reddit?* A discourse analysis was conducted with data from the subreddit *r/sustainability* to answer this question. Accordingly, Table 1 provides an overview of the analysis results of the Reddit data. The left column illustrates the overarching emotion discourse, followed by the emotion constructs involved in this discourse. The third column describes the discourse, and the last column shows how frequently the emotion discourse has been found in the included 37 comments. Overall, I identified six climate emotion discourses in the data, which have been ordered based on their thematic relevance to each other. To provide clarity, the analysis starts with an examination of the variability and personalised nature of climate emotions, then progressively dives into specific emotion discourses prevailing within the online discourse on Reddit. Subsequently, the analysis shifts the focus to climate emotions in relation to broader structural

concerns, and finally, concludes with a discourse that offers a contrasting outlook compared to the previous discourses.

Table 1

Constructed Climate Emotions divided in Overarching Emotion Discourses

Emotion Discourse of...	Emotion constructs involved...	Description	Frequency
... Personal Engagement and Emotional Variability	... feelings of anxiety, sadness, hope, anger, fear, frustration, pessimism as well as overall emotional overwhelm, often presented as a mixture of different emotions.	Commentators construct their emotions about CC based on their personal experiences and beliefs about the issue, closely intertwined with their perceived capability to address the climate crisis on an individual level. Moreover, the prevailing emotional variability and ambivalence are frequently attributed to the inherent uncertainty of CC and its impacts, as well as to the challenges in finding personal solutions to mitigate CC.	10

... Perceived Irreparability and Lack of Control	... feelings of hopelessness, resignation, fatalism and emotional overwhelm.	Commentators construct feelings of hopelessness and resignation by portraying CC as an irreparable issue, highlighting the lack of control over the issue, and fostering a sense of fatalism regarding the damage that has already been done.	13
... Criticism and Discontent	... feelings of frustration, anger, disgust, and disbelief.	Commentators construct strong negative emotions towards climate change deniers and those who fail to take action, emphasising disbelief and frustration about other people's lack of understanding about climate science.	11
... Structural Critique and Shared Responsibility	... feelings of disappointment, rage, concern, sadness, and determination.	Commentators construct disappointment by assessing and criticising those in power and shifting the blame to corporations and politicians for inadequate CC mitigation efforts. Simultaneously, they emphasise shared responsibility and concern for the planet and its inhabitants.	9

... Empowered Action and Optimistic Outlook	... feelings of hope, determination, excitement, interest, agency, and perseverance.	Commentators construct emotions of hope and optimism in light of the technological advancements and innovative solutions that emerged from the climate crisis, while also emphasising personal agency in addressing this global crisis.	8
... Dismissiveness and Trivialisation	... feelings of disinterest, detachment, dismissiveness, neglect, and indifference.	Commentators construct disinterest and detachment towards climate change by shifting the focus to ‘more important issues’, by trivialising CC’s significance and by downplaying the emotional experiences of others.	5

In the following sections, the emotional discourses will be elucidated using selected exemplary comments. These comments have been selected to reflect the ways in which climate emotions are constructed within each discourse and how these constructions align with the overarching emotion discourse. In particular, the selection represents a diverse range of comment lengths, construction styles (e.g., more direct or indirect way of constructing an emotion), linguistic differences (from simple language to eloquent, complex language), and varying rhetorical peculiarities. This way of presenting the results aims to offer a more comprehensive overview of how commentators construct their climate emotions and how these emotion constructions manifest within the online discourses on Reddit.

Discourse of Personal Engagement and Emotional Variability

In this discourse, climate change is constructed as an issue evoking a pervasive sense of insecurity, as well as an overall uncertainty about how to feel in the face of the climate crisis and

its daunting consequences. This uncertainty is, on the one hand, mirrored in the construction of a range of emotions which can sometimes appear contradictory, such as the interplay of frustration and hope. On the other hand, commentators consistently construct multiple, predominantly negative emotions in a single comment, for example, a combination of anger, fear and sadness. In this way, this discourse reflects the emotional variability that Redditors experience as they navigate the uncertainties of the climate crisis. Moreover, these emotions are often tied to personal actions that the commentators think they should be taking, which illustrates their personal engagement with the issue. Hence, this discourse emphasises the role of individuals in taking action and often involves them reflecting on their sustainable behaviours, lifestyle choices, and efforts to reduce their environmental impacts. Along with that, Redditors frequently emphasise their difficulties in finding an appropriate individual solution to the problem to address the systemic nature of climate change.

“It’s a mix of extremely frustrated and hopeful that we’ll either make it or earth will find a way to be fine without us, idk” (User 11 on Reddit, 2023)

Here, the commentator indicates the variability of their emotions by constructing them as ‘a mix of’ two contrasting emotions: extreme frustration and hope. On the one hand, the commentator signals their frustration. It is unclear what the frustration is explicitly referring to; still, it shows personal engagement with the issue as the commentator appears to be emotionally invested in climate change. On the other hand, they express feeling hopeful, constructing a hopeful and optimistic outlook of the future that ‘we’ll either make it or earth will find a way to be fine without us’. The latter notion of the natural adaptability of the earth (‘earth will find a way to be fine without us’) further conveys a picture of the Earth as resilient and capable of recovering from such a conundrum. Overall, acknowledging the mixture of emotions and the uncertainty signified by the ‘idk’, short for ‘I do not know’, aligns with the overarching discourse. They reflect the complex nature of the climate crisis as well as the natural variability of the commentator’s emotions in the face of an uncertain future.

“Anxious. I try to do everything I can but it never feels like enough. I’m 35, will clean water run out during my lifetime? I just hate all the unknowns” (User 12 on Reddit, 2023)

In this comment, the Redditor highlights their insecurities based on climate change's uncertainty and, as a result, constructs feelings of anxiety. In stating that 'I try to do everything I can, but it never feels like enough', they highlight their inadequacy in dealing with the CC themselves. Hence, they demonstrate a common sentiment in this discourse, namely that they are personally engaged in this issue but that their individual action is insufficient to address the climate crisis's magnitude adequately. Additionally, the commentator explicitly mentions their age ('I'm 35') as a contributing source for concern as they worry, they may not have access to clean water their whole lifetime. By doing so, they add a greater sense of urgency to their emotional responses while also emphasising that these various emotions arise from the uncertainty that the climate crisis entails ('I just hate all the unknowns'). In particular, the rhetorical question ('will clean water run out during my lifetime?') reinforces this articulated urgency and insecurity. It communicates a personal connection to the problem as well as helplessness in dealing with the crisis.

I do everything I can to help climate change, this comes at a co side table cost, then I take to friends and family who just don't give a shit and do what ever they want, it seriously breaks my heart. (User 13 on Reddit, 2023)

In this short statement, the Redditor expresses frustration, sadness, and disappointment, as well as a sense of isolation with their friends and family's lack of emotional concern concerning the climate crisis. This emotional variability aligns with other commentators in this discourse, reflecting their engagement and commitment to dealing with the climate crisis. Significantly, 'it seriously breaks my heart' indicates genuine emotional investment in the issue. Moreover, the statement serves as a rhetorical device to appeal to the reader's emotions, also referred to as pathos (Higgins & Walker, 2012). By appealing to the reader's emotion, the commentator creates sympathy and shared concern with the lack of emotional involvement from their friends and family about CC. Moreover, they state that they 'do everything I can to help climate change', further reinforcing their commitment to mitigate CC. Their feelings of frustration and sadness, thus, arise from the lack of understanding from friends and family who 'just don't give a shit and do what ever they want'.

Some days I see cool innovative concepts and advancements in technology (usually from Matt Ferrel on YouTube) and I feel like there is hope. Other days I feel there is hope for rich countries but the global south is going to be willingly sacrificed by those same wealthy countries. Other days I feel we're absolutely fucked and the powers that be are doing nothing but lip service and we're rapidly running out of time. And these days I feel a crushing weight that I can't describe. And some days I see my scallions growing in old shelves out the back of my house. And I feel somehow we'll be ok. Overall I don't feel optimistic. But I know I'm at least doing what I can to push for better (User 14 on Reddit, 2023)

Here, the commentator explicitly underlines the variability of their emotions on different days, ranging from hope to frustration and pessimism to even ‘a crushing weight’ that they cannot express. Expressions such as ‘some days’, ‘other days’, and ‘these days’, serve to underline the variability of the commentator’s emotions on different days and mirror the complexity of the climate crisis. Overall, these multiple emotion constructs are evident in the whole comment and align with other Redditors in this discourse who emphasise their uncertainty on how to feel about the climate crisis. Additionally, they highlight their personal engagement or agency in dealing with the climate crisis by saying, ‘I know I’m at least doing what I can to push for better’. This sense of agency is reinforced by the commentator’s experiences with ‘cool innovative concepts and advancements in technology’, which indicate a sense of hope for human development of mitigation possibilities in the future.

I recently started working as a climate justice advocate and I definitely feel some of the same waves of feelings that many others here do. Some days i'm hopefully, other days I feel frustrated with politics and the failed promises, other days I just try to work my hardest and try to not feel one way or the other. (User 15 on Reddit, 2023)

This is another comment in which the Redditor highlights the variability of their emotions. They mention that they ‘definitely feel some of the same waves of feelings that many others here do’. The words ‘waves of feelings’ underline the fluctuating nature of emotions to such a complex issue as climate change. Moreover, like the previous commentator, the Redditor uses phrases like ‘some days’ and ‘other days’ to reinforce their emotional variability on different days. Besides, by mentioning their line of work as ‘a climate justice advocate’, they establish a personal engagement and connection in dealing with the climate crisis.

Discourse of Perceived Irreparability and Lack of Control

In the discourse of perceived irreparability and lack of control, climate change is constructed as an issue beyond repair with the future being depicted as bleak, sinister or even non-existent. In particular, commentators construct a sense of hopelessness and resignation due to the unavoidable consequences of CC. Furthermore, they underline their lack of agency in adequately dealing with the climate crisis, a sentiment equally central to the previous discourse. This in turn, mirrors the interwoven nature of climate change discourses in the context of online discussions on Reddit. To be more precise, when having to deal with CC, Redditors construct feelings of resignation, hopelessness, and powerlessness by alluding to their absence of control over the actions of large corporations and the government. More specifically, their sense of powerlessness develops when confronted with structural obstacles, including the government's lack of involvement and influential parties, such as businesses, that impede practical mitigation efforts. Consequently, the prevailing pessimistic sentiment in this discourse is constructed through the recognition of the perceived lack of individual and collective power to address the issue. This sentiment is not entirely unique to this discourse as these constructed feelings of powerlessness also emerge in the Discourse of Structural Critique and Responsibility, in which political and corporal actors and their lack of action are the central source of constructed frustration and anger by the commentators.

Additionally, the discourse is permeated by a pervasive sense of pointlessness or fatalism. As a result, the climate change discourse within this context reflects a prevalent perception of the commentators that the adverse effects of climate change will persist indefinitely, irrespective of the measures taken to address the issue. Such a fatalistic viewpoint considerably contributes to the

prevalent hopelessness and resignation since they see their efforts as meaningless, in the face of this uncontrollable force of human passivity.

I feel well-beyond resigned to our mutual fate. If all (net) carbon emissions stopped tomorrow, (1) 80% of the world would starve to death within a year or two, and (2) based on momentum + irreversible tipping points, the escalating impacts will continue for the next 1000 years anyway. I now live like we are in our last good decade and I fully expect the decline to come, quickly or slowly, indefinitely... (User 1 on Reddit, 2023)

Most prominently, the commentator constructs their hopelessness by illustrating a dramatic and devastating outlook on the future. In particular, they do not offer any sources for their extreme claims about the future, therefore, seemingly representing the truth when talking about '80% of the world population starving to death within a year or two'. Specifically, using percentages contributes to presenting the danger objectively and factually, thereby making it seem more realistic, given that the statement is presented separately from the author's point of view (Kalavasis, 2017). Ultimately, using numbers in this way aids in positioning the author as an authoritative and trustworthy source, strengthening the credibility of their statements.

In contrast to the factuality of the previous statement stands the expression of feeling 'well-beyond resigned to our mutual fate'. Hereby, the commentator's resignation towards what they perceive as our mutual fate can be seen as a construction of fatalism, where the belief is that the future is predetermined and beyond human control. Moreover, a recurring pattern in this discourse is that the construction of fatalism is tied to the perspective of the commentators that individual agency in mitigating CC is futile. Specifically, a 'mutual fate' implies a shared destiny, where all human beings are interconnected and subject to the same predetermined outcome.

Within this discourse, the language used by the commentators reinforces the substantial certainty regarding this envisioned catastrophic future. This is visible, for example, in the way they articulate their views, such as using phrases like 'I fully expect...' or 'I feel well-beyond...'. Given this picture of the future they paint, they position themselves as realists who can grasp the reality of that fate, we will all eventually experience. Finally, the author underlines this bleak picture of

the future in constructing their resignation based on the 'decline' they anticipate 'quickly or slowly, indefinitely'.

It makes me glad my kids aren't having kids. I wouldn't want to put anyone through what's coming. If I had been more cognizant of the global climate crisis when I was younger, I might not have had any kids myself." (User 2 on Reddit, 2023)

In this comment, the author constructs their sense of despair or even fatalism by expressing relief that their children do not have kids. Notably, this contemplation among commentators regarding their decision to have children amidst the climate crisis is widely observable in this discourse. This sentiment contributes to a pervasive sense of hopelessness about the future and emphasises the significance of climate change in shaping major life choices. Against this backdrop, the commentator constructs a sense of regret and resignation towards their decision to have children by asserting that they might not have had children if they had 'been more cognizant'. The latter expression ('had been more cognizant') suggests that the commentator is now in a more knowledgeable position than in the past and that with their current knowledge, they 'wouldn't want to put anyone through what's coming'.

By expressing a desire to spare others from the anticipated consequences of CC, the commentator implicitly assumes a position to decide and judge what would be right and wrong in response to the climate crisis. In this way, the commentator implies a sense of moral superiority by connoting a dichotomy between those who are aware of the climate crisis and choose not to have children and those who lack the awareness to understand the problem or deliberately disregard the consequences. Hence, this moral stance adds significance to the idea that not having children is the only responsible decision given our planet's uncertain state. It shows that the commentators consider the climate crisis as a major threat to their well-being and the quality of life for other generations, insofar as they are inclined not to reproduce in a potentially hostile world.

"Everything is too little too late..." (User 3 on Reddit, 2023)

The commentator constructs hopelessness about the future by stressing the notion of time.

With the statement that everything is 'too little too late', the commentator insinuates that there is insufficient time to address climate change effectively. Such a construction implies a resignation to the inevitability of the negative consequences caused by climate change.

“At this point more tired than anything.” (User 4 on Reddit, 2023)

This is another short comment exemplifying the discourse of the perceived irreparability and lack of control. The commentator’s expression ‘more tired than anything’ resonated with the sentiments often observable in this discourse, namely the resignation that Redditors construct in the face of the consequences that CC will bring.

“Screwed. We're all screwed unless we're insanely wealthy.” (User 5 on Reddit)

In this comment, the commentator emphasises their lack of control over doing something about climate change ‘unless we’re insanely wealthy’. Especially the choice of their language underlines this as the word ‘screwed’ implies a feeling of helplessness in the face of the climate crisis. Even more so, mentioning wealth as the potential saving factor to redeem climate change reinforces the lack of agency Redditors often feel when they do not possess enough financial resources. These emotion constructs of hopelessness, as well as helplessness, contribute to the overall discourse of the irreparability and lack of control over CC.

Discourse of Criticism and Discontent

In the discourse of criticism and discontent, the commentators construct a range of negative emotions such as disgust, anger, frustration, and disbelief. Most prominently, Redditors construct their anger and frustration about the current status quo concerning climate change. These emotion constructs are commonly reflected by intense negative emotionality directed at those who deny the scientific evidence of climate change or those who do not take action to mitigate climate change. Notably, social, and political factors, such as the lack of involvement of corporate and political figures in the mitigation of CC, are often the centre of the Redditor's anger and frustration. In this way, the emotional landscape of the present discourse shows to be overlapping with the discourse of structural critique and shared responsibility. To be more precise, political factors, such as the

lack of involvement of corporate and political actors in climate change mitigation, serve as the foundation of the constructed anger and frustration. While these emotions are rooted in structural concerns in the latter discourse, the commentators use specific targets within the present discourse to construct their anger, such as for instance individuals who are actively denying climate change.

Furthermore, in this discourse, a sense of disbelief and frustration is also constructed by emphasising people's lack of knowledge or understanding about climate science. Generally speaking, the discourse is primarily characterised by more forceful and emotive vocabulary compared to the previous discourses. To exemplify, commentators frequently use expletives to amplify their anger and frustration and convey this issue's emotional intensity to Redditors. Likewise, ad hominem attacks and prevalent questioning of the intellect of other individuals who do not share the same views and values underpin the discourse of criticism and discontent about climate change and the current status quo.

“Fucking angry. And ready to fight anyone who stands in the way of progress.” (User 7 on Reddit, 2023)

This comment exemplifies the discourse of criticism and discontent as it reflects intense anger and a readiness to take action against those ‘who stand in the way of progress’. Here, the commentator constructs his anger through forceful and aggressive language, such as the expletive ‘fucking angry’ to stress his rage. Moreover, the commentator indicates a sense of frustration through the implication that there are forces opposing progress, exemplified through the statement ‘ready to fight anyone who stands in the way of progress’. In this way, these individuals who obstruct mitigation efforts are constructed as a source of frustration for the commentator, seemingly committed to change. Such viewpoints were commonly observed in the overarching discourse of criticism and discontent.

“Disgusted. As an American, we had the resources and the technology to make sweeping changes and avert the now inevitable climate crisis.” (User 8 on Reddit, 2023)

This is a section of a longer comment in which the commentator initially proclaims to feel ‘disgusted’. Furthermore, they actively attribute responsibility to the American government and

construct their frustration towards their lack of action by stating that 'we had the resources and the technology to make sweeping changes'. By referring to themselves as American, the commentator suggests a sense of national identity and belonging to an insider group that had the potential to make impactful changes. Furthermore, they reinforce this sense of belonging by stating that as an American, 'we had the resources', which reinforces this sense of responsibility and conveys frustration and disappointment in the missed chances of their own country. Besides, by referring to the 'now inevitable climate crisis', the commentator underlines their conviction that the situation has reached a point of no return. Such a focus on missed opportunities and omitted action is often found in the discourse of criticism and discontent.

Angry. I think of all the people I have spoken to, and who have held positions of political power, who still cling to their ideology in the face of scientific evidence, and it just makes me furious that we have wasted so much time even though we know the solutions already exist. (User 9 on Reddit, 2023)

In this comment, the author articulates his anger and frustration towards people in positions of power in politics who resist acknowledging the scientific evidence on climate change. The use of the word 'angry' and the statement 'it just makes me furious' aids in constructing their anger and underlines their profound disappointment over the absence of progress. Furthermore, the commentator also underlines the idea of wasted time and, thereby, the urgency to take action. To be more specific, they critique how much time has been wasted by insisting on ideological beliefs despite being aware of the possible solutions to address climate change. This, in turn, conveys a sense of exasperation toward those people, positioning them as a source of frustration and disappointment. Moreover, this construct of wasted time contributes to the overall tone of discontent and criticism towards the current status quo on CC.

Two things really test my patience: (1) trolls on both sides of the issues, and (2) the stunning lack of knowhow/knowledge regarding earth science and the technology of civilization. Dealing with number 2 at least does not involve ill will—it is just draining. The first

problem makes me feel disgust. Serious informative discussion is always uplifting even when it's about really serious problems because solving problems requires debate. (User 10 on Reddit, 2023)

The commentator constructs his frustration by highlighting the 'stunning lack of knowledge' humans have concerning the 'earth sciences and the technology of civilization'. This constructed lack of knowledge is pointed out as demoralising while testing the patience of the commentator. This emphasis on the lack of knowledge enables the commentator to position themselves as knowledgeable and experienced, juxtaposing their expertise with the perceived ignorance of others. Moreover, the comment critiques the presence of 'trolls on both sides' of the debate. A troll is defined as someone who deliberately creates disruptive or offensive messages on the internet to upset someone, draw attention or stir up trouble (*Trolling*, n.d.). Thus, this is how trolls act by creating polarisation and conflict among people discussing climate change, with examples ranging from some spreading misinformation to overall disrupting productive discussions (Simchon et al., 2022). This critique is consistent with the prevailing discourse of criticism in highlighting the negative influence of those who engage in unproductive and disruptive behaviours. In addition, the commentator contrasts their frustration caused by trolls and the lack of knowledge against the uplifting nature of a serious, informative discussion. This juxtaposition reinforces the commentator's preference for serious, informed debates contributing to problem-solving. Further, it positions the commentator as someone who values rational discourse and expresses disappointment with the current state of the online debate on climate change.

Discourse of Structural Critique and Shared Responsibility

The discourse of structural critique and shared responsibility is characterised by multiple key elements. Firstly, the commentators acknowledge that there are systemic obstacles that impede individual efforts to mitigate climate change. In particular, they express frustration and disappointment with the control exerted by major corporations and governments, both apprehended as impediments to addressing sustainability. This recognition reinforces the understanding that individual action alone is insufficient to effect meaningful change. In particular, the criticism of political and corporate inaction is especially prominent in this discourse. In relation to this critique,

commentators construct feelings of frustration, rage, and disappointment over the perceived inaction of politicians, billionaires, and corporations. What sets this discourse apart from the others is that there is a focus on the specific targets of the commentator's emotions. More specifically, emotions such as anger and frustration are linked to the behaviour - or lack thereof - of powerful actors such as politicians, corporations and billionaires who hold significant influence in addressing the climate crisis. In criticising the perceived greed, denial, and slow responses of powerful actors, they highlight the need for systemic change and a shift away from the current status quo. Moreover, there is a remarkable shift of responsibility to the citizens. Commentators argue that governments and leaders have not done enough, so the responsibility for meaningful change now lies with individuals and communities. They emphasise the importance of collective action, pointing out that responsibility lies with citizens rather than relying solely on those in authority, as shown by the example of User 16 who states that "*it is up to the citizens on this earth to make the change*".

I think I feel the same. We have also been watching the same people too. I have reached the point where I realise, the government isn't going to do enough fast enough because of "politics". It is up to the citizens on this earth to make the change. Not the leaders. They have so far proven that they wont (not that they can't). (User 16 on Reddit, 2023)

In this comment, the author aligns themselves with sentiments often expressed in the discourse by stating, 'I feel the same. We have been watching the same people too'. By doing so, they acknowledge experiencing similar events as others in the discourse, thus, reinforcing the collective nature and sense of community often found in this discourse. Like other Redditors in this discourse, the commentator constructs disappointment towards the government as they do not take sufficient actions to mitigate climate change. This becomes apparent when looking at the statement that 'the government isn't going to do enough fast enough because of "politics"'. Using quotation marks around the word politics positions political activity as something not to be taken seriously, almost like a mock activity. This, in turn, underlines the structural critique prevalent in this discourse.

In particular, expressing that they now 'have reached the point' implies a shift in their perspective due to the lack of governmental action. Accordingly, the commentator positions the

government and political leaders as individuals who do not adequately fulfil their responsibilities in mitigating the climate crisis. Instead, they highlight the citizens as potential agents for achieving change, reinforcing the importance of collective action in this discourse. Finally, by phrasing that 'they have so far proven that they wont (not that they can't)', the commentator implies that the government deliberately chose not to participate in mitigative action, despite their capabilities. Looking at this comment, it exemplifies a contradiction, in which, on the one side, the author is stating that the government 'is not doing enough fast enough'; on the other side, they are stating that it is up to the citizens on this earth to make a change.

Extremely frustrated bc the people who have all the power and the big corporations care more abt making money than preserving life and our planet. While people continue to be so greedy, it's hard to believe much will change. (User 17 on Reddit, 2023)

In this comment, the commentator voices intense disappointment and frustration with those in power, such as large corporations, who tend to put financial gain before protecting the planet and its people. This emotional construct is characteristic of the affective dimension embedded in the discourse of structural critique and shared responsibility. In particular, the commentator focuses on the issue of power imbalance, highlighting that 'the people who have all the power', such as major corporations, prioritise money-making over preserving life and the planet. By portraying the situation this way, the commentator emphasises the structural obstacles that impede progress in addressing climate change. This is consistent with the discourse of structural critique, which underlines the role of power relations and mechanisms in perpetuating unsustainable practices.

Moreover, the expression 'care more abt making money' further accentuates the perceived imbalance between the financial interests of powerful actors and the well-being of the planet and its inhabitants. By doing so, they critique the prioritisation of profit over the sustainment of life and the environment, reflecting a shared responsibility perspective within this discourse. Lastly, the comment mentions the notion of greed, suggesting that people generally continue to be driven by self-interest rather than a collective concern for the planet. As such, this remark stresses the need for systemic change and reflects the discourse's focus on critiquing individual and corporate behaviour.

“What we lacked was the political willpower and the ability to educate our own citizens enough to overcome corporate greed.” (User 8, 2023)

In this comment, the Redditor highlights two essential aspects within the discourse of structural critique and shared responsibility: political inaction and corporate greed. The commentator begins by identifying a lack of 'political willpower' as a critical factor contributing to the difficulties in dealing with climate change. By using the term 'lack', the commentator insinuates a lack of necessary political determination and commitment to promoting meaningful change. This is consistent with this discourse's focus on critiquing the actions or inactions of governments in addressing climate issues. Furthermore, the author emphasises the importance of educating citizens to overcome 'corporate greed'. Using the term 'educate', the author implies the need to raise the general population's awareness, knowledge, and critical understanding regarding the harmful effects of corporate greed on the environment. This aligns with the discourse's emphasis on collective responsibility for mitigating climate change. Besides, the phrase 'overcoming corporate greed' reflects a sense of opposition or resistance to the perceived profit-driven motives in corporations. It underscores the discourse's critique of prioritising financial interests over the well-being of the environment and society.

Discourse of Empowered Action and Optimistic Outlook

In this discourse, commentators construct emotions of hope and optimism through discussions of technological advancements and innovative or sustainable solutions that appear to have the potential to avert the climate crisis. In this way, they construct climate change as a reparable issue, with a positive outcome or change in the future still being possible. This stands in contrast, especially to the discourse of perceived irreparability and lack of control, as the Redditors in this discourse tend to construct the future with climate change as non-existent, dark, and sinister. Hence, individuals construct a more hopeful future in relation to climate change with the belief that change is still possible and that it is not too late to mitigate this global conundrum.

Moreover, Redditors display interest in exploring these new solutions and innovations to address climate change from new, unknown perspectives. Thus, their proactive engagement and interest reflect a common sentiment in the discourse of empowered action and an optimistic

outlook. Besides, commentators engaging in this discourse often work with environmental issues in their careers, such as climate justice advocates or sustainable business majors. Despite Redditors' optimistic outlook on a future with climate change, they still acknowledge personal frustrations and challenges, which are apparent in all discourses in this data. This acknowledgment, in turn, adds a layer of complexity to this discourse as CC is not presented as an issue that is black or white and instead is presented as a more nuanced issue.

Personally I feel excitement and hope. I'm interested in efficiency as a concept, and climate change is a subject with lots of interesting discussions about efficiencies. Seeing the constant stream of new ideas and innovation over the last couple decades gives me hope for the future, even if a lot of the new ideas and technologies don't pan out. The ingenuity of the human mind is amazing to see in action. (User 18 on Reddit, 2023)

In this comment, the author positions themselves as someone interested in 'efficiency as a concept' and conceptualises climate change as a 'subject with lots of interesting discussions about efficiencies'. This helps them present themselves as an efficient-minded individual and, therefore, as a credible source when discussing these efficiencies. While talking about efficiencies, the commentator points out 'the constant stream of new ideas and innovations over the last couple of decades', which constructs a hopeful response in light of the future possibilities in mitigating CC. Similarly, they construct hope by conveying the excitement and highlighting the 'ingenuity of the human mind', which offers a more positive outlook on human engagement and capability in addressing the problem. This narrative contrasts the prevailing narrative in climate change discourse that often portrays human beings as simply exacerbating the consequences of climate change. Overall, by conceptualising CC as a challenge that can be overcome with technological innovation and human problem-solving, CC is framed as a chance and opportunity to develop new solutions to a global crisis of that extent.

At the same time, I am also hopeful. The economics have now turned, and people are realising that it makes no financial sense to continue with a fossil fuel based economy. It's

stupid that this is what it took, but maybe we can still salvage the situation. (User 9 on Reddit, 2023)

In this section of a longer comment, the commentator constructs his hopeful account by stating that 'the economics have now turned, and people are realising that it makes no financial sense to continue with a fossil fuel based economy' By doing so, they acknowledge a shift in the public's awareness about the financial impracticality of the continuous usage of fossil-fuels, therefore, communicating a positive outlook often found in the discourse of empowered action and optimistic outlook. Finally, this optimistic outlook is reinforced by the commentator's belief that 'maybe we can still salvage the situation'.

Some days I see cool innovative concepts and advancements in technology (usually from Matt Ferrel on YouTube) and I feel like there is hope. (...) And some days I see my scallions growing in old shelves out the back of my house. And I feel somehow we'll be ok. (...). (User 14 on Reddit, 2023)

In this part of a longer comment, the commentator aligns with an overarching belief within this discourse, namely that positive outcomes are still possible in the face of the climate crisis. This belief becomes apparent when they talk about the 'cool innovative concepts and advancements in technology'. Moreover, the commentator uses phrases such as 'I feel like there is hope' and 'I feel somehow we'll be ok', reflecting the emotion construct of hope in this discourse. Finally, with the metaphor of the 'scallions growing in old shelves out the back', the commentator constructs a new source of hope, namely that despite the neglected or forgotten 'old shelves', plant life continues to flourish, which conveys a belief that humanity will be fine in some way or another.

Discourse of Dismissiveness and Trivialisation

In the discourse of dismissiveness and trivialisation, a disinterest, indifference, or overall detachment from climate change is being constructed. Interestingly, in many cases, the Reddit

commentators shifted the focus of attention to 'more important issues'. By doing so, CC is constructed as an issue that is not worth worrying about or even an issue that is distant from people's minds. To be more precise, sometimes Redditors construct climate change as a distant issue as if they will not be affected by the perceived consequences. This detachment of Redditors from climate change and its significance contributes to a more dismissive emotional response towards this global issue.

Besides, commentators in this discourse argue that humans will adapt to the changes, implying that the overall consequences of CC will not be that impactful. Moreover, the language used in this discourse is characterised by pervasive sarcasm used to ridicule or convey disdain for climate change, contributing to an overall lack of concern or indifference. For example, statements such as 'Do the math, will kill each other before the climate kills us' and quotation marks around terms like 'livable' construct a dismissive attitude towards the severity of the climate crisis and the need for action.

I thing the humans will adapt at least at the places that will be "livable". Thousands of millions will suffer in some grade. There's happening for decades or maybe a few centuries a massive extinction of species without the climate change. And it's not just biological, we are losing more things. Lot of loss wich make room for evolution to continue but talking in a human lifetime scale, yes, loss. (User 19 on Reddit, 2023)

Overall, the commenter starts his argument by constructing a sense of detachment by dismissing the severity of climate change, exemplified when looking at the phrase 'humans will adapt at least at the places that will be 'livable''. The word 'livable' in quotation marks underlines the commentator's lack of confidence in the actual habitability of these places. In this way, they indicate a lack of emotional investment or even taking oneself out of the equation as if one is not affected by these portrayed consequences. Similarly, the commentator further constructs his detachment by saying that 'thousands of millions of people will suffer in some way', thereby again not explicitly considering themselves to be affected by these consequences, a pattern commonly

observed in this discourse.

Even more so, this dismissal of climate change is exacerbated by suggesting that ‘there’s happening for decades or maybe a few centuries a massive extinction of species without the climate change’, therefore, framing climate change as part of a larger natural phenomenon. Subsequently, they present the consequences of climate change as just another set of losses and changes in the world, portraying them as inevitable while downplaying their severity. Such an approach downplays the urgency and severity of the climate crisis and hinders efforts to address it effectively, which is usually a common tactic employed by climate sceptics (Roper et al., 2016, p. 780). From a discourse analytical perspective, this comment aligns with the discourse of dismissiveness and trivialisation as the commentator uses language to create a sense of detachment from the issue, suggesting that this expected loss is part of a broader evolutionary cycle. Lastly, the commentator concludes his statement by referring to ‘lots of loss which make room for evolution to continue’, reinforcing the sense of emotional attachment apparent in the whole comment about what will happen to the planet.

Pretty great. I figure that 8 billion people on earth can't avoid it. 8 billion people on earth also give me iPhones, cures for an insurmountable amount of disease, and AI that aids in everyone's livelihood. Will the climate change? Sure. To match its populace. That is all. (User 20 on Reddit, 2023)

The commentator uses language in this comment that minimises the importance of CC and dismisses its possible implications. They take a dismissive tone by asserting that the presence of 8 billion people on Earth indicates that climate change is inevitable, as evidenced by the statement, ‘I figure that 8 billion people on Earth can't avoid it’. They associate the very existence of a large population with technological developments and advantages, including ‘iPhones, cures for overwhelming amounts of disease, and AI that aids in everyone's living.’ They argue that these technical breakthroughs brought about by human innovation and the positive characteristics of human existence will outweigh the concerns about climate change.

From the standpoint of discourse analysis, this comment exemplifies the discourse of dismissiveness and trivialisation by portraying climate change as a minor worry when contrasted

with the perceived benefits of human progress. The depiction of the climate issue as a natural and unavoidable phenomenon rather than a problem caused and aggravated by humanity creates an emotional disconnect, as have previous comments in this discourse. By implying that climate change will 'match its populace,' the author, further, separates climate change from human activity and accountability, a common technique in this discourse.

Climate change is the least of our worries. In 1960 there were about 3 billion people on the planet, today it's nearing 8 billion. Do the math, will kill each other before the climate kills us. (User 21 on Reddit, 2023)

The commentator starts his argument by employing one common strategy in this discourse: outright dismissal of climate change as a pressing global issue. Statements like 'climate change is the least of our worries' and 'will kill each other before the climate kills us' underline the commentators' dismissive stance towards the issue. Moreover, the commentator redirects attention to overpopulation by stating that this problem requires public attention instead. Interestingly, shifting the focus to something 'more urgent than CC' is usually a widespread rhetorical move in the climate sceptical online sphere (Bloomfield & Tillery, 2018), but also in this discourse of trivialisation and dismissiveness. By suggesting a more immediate threat (in this example, overpopulation), they invite the reader to see for themselves and 'do the math.' In this way, they convey that climate change, a complex and nuanced problem, can be minimised to something solvable with a simple equation. This reflects a general tendency of the Redditors in this discourse as they frequently downplay the urgency of taking action to mitigate climate change and simultaneously trivialise the importance of addressing this issue.

"Bold if you to assume we have feelings anymore" (User 22 on Reddit, 2023)

Finally, with this concise comment, the Redditor dismisses having any feelings about the climate crisis. Instead, they employ a sarcastic and dismissive tone to convey a lack of emotional concern by stating that it is 'bold if you to assume we have feelings anymore'. From a discourse

analytical standpoint, this comment trivialises the emotional dimension of climate change discourse and downplays other people's emotional experiences, consistent with other comments in this discourse.

Discussion

This study aimed to examine online conversations within the Reddit community *r/sustainability* in the year 2023 by answering the research question: *How do individuals, who acknowledge the scientific reality of climate change, discursively construct climate emotions within the subreddit r/sustainability on Reddit?* The findings highlight the diverse range of discourses and various constructions of climate emotions in climate change discussions on Reddit. In total, six overarching emotion discourses have been found in the data that reflect the complexity of emotional responses towards CC. These discourses are, 1. The Discourse of Personal Engagement and Emotional Variability, 2. The Discourse of Perceived Irreparability and Lack of Control, 3. The Discourse of Criticism and Discontent, 4. The Discourse of Structural Critique and Shared Responsibility, 5. The Discourse of Empowered Action and Optimistic Outlook, and finally, 6. The Discourse of Dismissiveness and Trivialisation.

First of all, the *Discourse of Personal Engagement and Emotional Variability* was often centred around the commentators' personal steps to mitigate the climate crisis. Often, these individual actions were seen as challenging and unfruitful in successful mitigation, which is why these commentators often constructed a range of fluctuating emotions, ranging from anger and sadness to more positive emotions, such as hope and optimism. Moreover, the commentators emphasised their uncertainty on how to feel about the climate crisis, which underlines the variability of emotions in this discourse. This experience has been previously discussed and referred to as 'affective dilemmas' (Mosquera & Jylhä, 2022). The results of the present study support the results by Mosquera & Jylhä (2022, p. 357), in which they propose that "at the individual level, people are faced with affective dilemmas, situations where they are genuinely uncertain about what is the right way to feel in the face of the climate crisis." Moreover, Ojala et al. (2021) acknowledge that these feelings of uncertainty are central to climate change discourse, given that there are no possibilities to make exact and definitive predictions about the magnitude of the consequences to be expected.

In the *Discourse of Perceived Irreparability and Lack of Control*, commentators constructed feelings of resignation and hopelessness in the face of the climate crisis. Moreover, Redditors constructed a sense of helplessness in dealing with the climate crisis and often saw no hope for change in this discourse. The emotional experiences constructed in this discourse align with the findings of previous research in that they underscore the tangible concern that climate change poses a substantial threat to human well-being (IPCC, 2022; Lawrance et al., 2022). At the same time, while previous studies focused primarily on anxiety as the central emotional response to climate change (Brügger et al., 2015; Clayton, 2020; Pihkala, 2019; Pihkala, 2020; Pihkala, 2022; Sangervo et al., 2022), the current analysis identifies a broader spectrum of emotions constructed in discourse, ranging from feelings of hopelessness, resignation and fatalism to utter emotional overwhelm. Notably, this sense of hopelessness about the future as well as a sense of helplessness to deal with the climate crisis, is commonly expressed by individuals in the discourse surrounding CC (Clayton, 2020; Lawrance et al., 2022; Ojala et al., 2021; Seth et al., 2023; Toivonen, 2022). Furthermore, individuals negotiated significant decisions in the future, including reproduction based on the expected existential threat of CC. Comparable sentiments have been documented in previous research, where concerned young people increasingly made their decision to reproduce dependent on the climate crisis, therefore, expressing significant concerns about the potential impact of climate change on their future children (Schneider-Mayerson & Leong, 2020).

In the *Discourse of Criticism and Discontent*, the commentators often constructed emotions of anger and frustration because of the lack of action and understanding perpetrating climate change discussions. In relation to this, Mosquera and Jylhä (2022) argue that anger can be triggered as an emotional response to CC when individuals are faced with injustices, such as persistent delay in climate change mitigation. Even more so, Redditors tend to construct anger based on the perceived lack of understanding about CC and the resulting lack of environmental engagement from individuals in their community. A study by Harth et al. (2013) illustrates this connection, by showcasing that increased anger in individuals is often related to the judgement of others for their perceived negative or complete lack of environmental actions.

Commentators engaged in the *Discourse of Structural Critique and Shared Responsibility*, when blame and criticism were actively shifted to governments and corporations, which can make meaningful changes. In this way, they constructed their disappointment, sometimes even betrayal, towards these actors for their inaction and lack of interest in the issue. In light of this lack of

governmental action, commentators often emphasised the notion of shared responsibility for the planet and that collective action is needed to mitigate such a global conundrum appropriately. Such a finding is not uncommon, as previous research illustrates that the topic of politics evokes the least positive emotions in individuals in climate change discourse (Mosquera & Jylhä, 2022).

Additionally, research by Villanueva (2021, p. 47-49) on Reddit revealed that the climate crisis was most commonly framed in terms of ‘political/ideological struggle’ with feelings of anger most commonly expressed in her data. This is in juxtaposition to the results of my study, where the most commonly expressed emotions were feelings of hopelessness and resignation. An explanation for these diverging insights is that emotional expression varies between the different subreddit types, with anger being more present in the climate sceptical and neutral subreddits (Villanueva, 2021). This means that, for example, the chosen subreddit *r/sustainability*, a climate believer subreddit, is regulated by specific rules, which may hinder individuals critical of CC from entering the discourse and thus, could offer an explanation as to why feelings of hopelessness and resignation have been most prevalent in the present study. Moreover, it should be noted that in general climate emotions evoked in individuals are dependent and shaped by their own experiences and opinions, cultural and social norms, as well as ecological factors (Norgaard, 2011). For this reason, climate emotions cannot be considered as fixed and instead can be seen as evolving over time which offers a further explanation to the different experiences of climate emotions.

In the *Discourse of Empowered Action and Optimistic Outlook*, commentators emphasised the endless possibilities of human innovation and the new technological advancements that have the potential to address the climate crisis. On the basis of these possibilities and opportunities the future offers, the commentators constructed feelings of hope and a sense of agency that CC is manageable. In environmental research, the emotion of hope has increasingly received scholarly attention (Ettinger et al., 2021; Huber, 2022; Li & Monroe, 2019; Mosquera & Jylhä, 2022). However, the role of hope and its influence on climate action is still contested in research. Some researchers consider hope to be a motivator to take important climate action (Geiger et al., 2021; Ojala, 2012), aligning with the constructed sense of hope and positive outlook for the future prevalent in this discourse. Contrastingly, other researchers express concern that hope may inhibit individuals from acknowledging the magnitude of the climate crisis and, in turn, may weaken their engagement with the issue (Hornsey & Fielding, 2016; Huber, 2022). While the present study did not explore the influence of climate emotions on climate action, the illustrated complexity and

interconnectedness of emotions and environmental action in this analysis highlights the need for further research that aims to investigate the relationship between emotional expressions and behavioural change to ultimately increase our understanding of the role of emotions in driving sustainability in our society.

Finally, in the *Discourse of Dismissiveness and Trivialisation*, commentators constructed disinterest or detachment towards climate change as a global phenomenon. Often, individuals believed other issues to be more pressing, and they actively tried to shift the focus away from these more important problems in this discourse. Interestingly, research on climate emotions is commonly centred around the notion that individuals indeed feel a certain emotion in response to the climate crisis, irrespective of this emotion being positive or negative (Clayton, 2020; Hurley et al., 2022; Verplanken & Roy, 2013). The present discourse, however, highlights that emotional detachment or dismissal of climate change is an equally important emotional response to CC. A recent study by Lawrance et al. (2022) highlights this finding by arguing that psychological defence mechanisms such as denial, numbness, or complete emotional detachment can be considered equally important emotional responses when dealing with a crisis of a global scale. Similarly, Villanueva (2021) underlines that this avoidance or emotional apathy towards the climate crisis stems from feelings that are too intense to deal with, so that individuals can protect themselves from this emotional overwhelm.

Notably, the results illustrated that some Redditors engaged in multiple discourse in a single comment. Overall, this interwoven nature of climate emotions and discourses as presented in the data illustrates that in this study, Redditors did not necessarily limit themselves to engage in only one discourse on climate change or to construct only one climate emotion, and instead the results represent the complexity of dealing with the climate crisis, as well as the various different sentiments or viewpoints individuals hold about this global conundrum. In this way, the discourse on Reddit reflects the real-life complexities of dealing with climate change, involving personal, societal, emotional as well as broader structural dimensions. Moreover, the overlapping themes in the discourses, such as, for instance the lack of individual agency in targeting the climate crisis, led some commentators to construct feelings of anger and frustration, whereas others constructed more hopeless and resigned emotions based on their perceived lack of influence to mitigate the climate crisis. In relation to that, the view that structural obstacles, such as lack of political and corporal action impede CC mitigation resulted in a range of constructed negative emotions that have been

observed in all discourses, despite the *Discourse of Dismissiveness and Trivialisation* and the *Discourse of Empowered Action and Optimistic Outlook*. Despite their interwoven and overlapping nature, I chose to illustrate the discourses separately to highlight their unique thematic focus as well as the climate emotions typically constructed in this discourse. By doing so, the nuanced ways in which Redditor construct climate emotions as well as the manner in which they engage with the climate crisis could be explored in detail to provide a comprehensive understanding of the broad emotional landscape prevalent in climate change discourse.

Especially the notion of personal agency was a key theme in two of the discourses, namely the *Discourse of Personal Engagement and Emotional Variability* and the *Discourse of Structural Critique and Shared Responsibility*. In the former discourse, Redditor focused more on what they are actively doing at this moment to address CC, such as working as a climate justice advocate or being vegan. Their personal actions were often seen as insufficient and resulted in the respondents constructing a range of fluctuating emotions, ranging from sadness to anger to more positive emotions. Contrastingly, in the latter discourse, emotion constructs were more related to the actions of others, such as disappointment at the inaction of powerful actors or shared concern for the planet. Additionally, agency was often attributed to those who hold the power to make changes about current climate change policies, such as governments and corporations. Interestingly, despite this vague or distant agency attributed to powerful actors, the commentators still emphasised the role of collective action. This notion of collective action implies some sort of collective agency to deal with CC, which contrasts the active attribution of responsibility to external actors. For this reason, these findings suggest that agency or climate action, whether it be individual or collective, plays an important role in the formulation of an individual's emotion.

Another interesting finding is that the emotional discourse found in this data extends beyond the well-researched emotions about climate change, like anxiety and hope. While these emotions were observable in the discourse, they were not the most prevalent; instead, feelings of hopelessness and resignation were most prominently constructed by the Redditors. Juxtaposing this extreme emotional attachment to the issue are the feelings of disinterest, neglect, and indifference that commentators constructed in the *Discourse of Dismissiveness and Trivialisation*. Previous research has often centred around the emotional involvement individuals described in the face of the climate crisis, whereas emotional detachment received only little attention in climate change discussions (Norgaard, 2011). As previously established, research illustrates that individuals feel

some way about the climate crisis, whether it be anger (Lawrance et al., 2022; Lorenzoni et al., 2007), anxiety (Brügger et al., 2015; Sangervo et al., 2022), or hope (Ettinger et al., 2021; Huber, 2022; Li & Monroe, 2019; Mosquera & Jylhä, 2022). This finding, however, illustrates another social reality, one in which individuals also do not feel emotionally connected to the issue, a reality in which they do not care about the crisis or one in which they are not able to deal with the emotionality that CC and its impacts bring about. Future research could explore the reasons or incentives behind such an emotional detachment and investigate how it influences climate change discourse.

Challenges

While conducting the analysis, I experienced some challenges with the data that are crucial to discuss to ensure transparency in the analysis process. I noticed that while reading the data, the emotional experiences of the commentators did not leave me unfazed. The reason is that climate change is a topic that I personally deeply care about, and this may have influenced the way I conducted the analysis or approached the topic in general. When reflecting on the analysis, I experienced difficulties initially with being too involved with the data. What I mean by that is that it proved to be challenging for me to take distance from the emotional experiences of the commentators, leading sometimes to unintentional inference or making assumptions based on their comments. This is because I can personally relate to various climate emotions that the commentators constructed as a response to the climate crisis. Nonetheless, acknowledging this bias aided me to be more critical towards my own analysis, allowing me to notice the intricacy of emotional discourses and climate emotions as represented in this study. Along with that, I decided to remove the Redditor's usernames to replace them with 'User' because I noticed myself being sometimes implicitly judgemental towards the Redditor based on their username. For instance, usernames such as 'climatesceptic' or 'greenenvironmentalist' indicate a particular perspective towards climate change that may influence the reader's perception equally. For this reason, I decided to delete the usernames to get into a more unbiased and objective mindset and protect the reader from the same implicit or explicit judgement towards the Redditors based on their usernames.

Limitations and Implications

In relation to the discussed challenges, it is equally important to address the limitations of this research. Most importantly, DA as a qualitative method allows for analysing text on the language level of the discourse, therefore, psychological inference about the beliefs, attitudes, or intentions of the commentators are out of the scope of this research. Additionally, the data was extracted from the subreddit *r/sustainability*, a subreddit with specific rules that explicitly aim to exclude some members from participating in the discourse, such as climate deniers. This also means that the six observed emotional discourses in this research may not reflect the complete emotional landscape of climate emotions on Reddit as other emotional expressions could emerge in other subreddits with different communities. In this way, future research could take, for instance, a comparative approach to explore the differences in the construction of climate emotions across different subreddits to get a more comprehensive understanding of the emotions in CC discourse.

Furthermore, it is essential to acknowledge that the primary language on Reddit is English, with users being mostly white (Villanueva, 2021), therefore, possible cultural or even linguistic biases in the analysis should be considered. Individualistic and westernised cultures, for example, value ideals such as autonomy, self-assertion, and open emotional expression, whereas collectivistic and eastern cultures value interpersonal harmony and connectedness, with emotions being suppressed frequently to maintain social cohesion and order (Han et al., 2022). Thus, one could explore how the cultural context shapes emotional discourses about CC around the world, as well as the construction of certain climate emotions. Such an understanding of the emotional landscape globally is necessary to understand how certain emotions influence and shape an individual's attitude and behaviour towards the climate crisis in consideration of their respective cultural and social factors.

Additionally, the findings of this study suggest an important implication related to positive psychology. Positive psychology is a field of psychology focusing on fostering positive experiences, building positive emotions, and resilience to increase well-being in individuals, therefore, contrasting the dominant psychological goal of symptom reduction to alleviate distress (Bohlmeijer & Hulsbergen, 2018). This notion of building resources and resilience in dealing with the climate crisis proves crucial as commentators in this study most often underlined their hopelessness and resignation in dealing with the climate crisis. These findings indicate a bigger social problem, in which individuals feel entirely overwhelmed in dealing with climate change and struggle to find solutions without feeling that their actions are fruitless. This emotional overwhelm

could obstruct successful mitigation measures, such as collective action. Similarly, such hopelessness could drive people to completely detach themselves from the issue, whether because they do not believe in CC or because these emotions are too much to deal with in their daily life. Hence, psychologists need to be aware that this is the reality of how people construct their emotions about climate change; their emotions about CC are predominantly negative, and they are often individualising as they are most frequently about their own feelings and not about them as part of a collective community. Ultimately, this is why climate psychology should explore ways to support more agentic, resilient, and collective-oriented ways of feeling about CC. Future research could explore these new ways by investigating interventions, as well as coping strategies that work not only for an individual, but collectively, so that a sense of connectedness with others and shared responsibility in face of the climate crisis can be established. This focus on collective adaptation proves to be vital in the face of the climate crisis, as CC cannot be solved individually and instead represents a global challenge that affects everyone living on this planet and thus, requires collective effort to achieve change.

Conclusion

Taken together, the findings of this study contribute to a more comprehensive understanding of climate emotions on social media, particularly how individuals engage in emotional discourses online and how they construct their emotions on climate change on a social media platform like Reddit. As previously described, emotions can potentially influence an individual's beliefs and behaviours (Clayton et al., 2017; Pidgeon & Fischhoff, 2011). In climate change discourse, these emotional experiences are often shaped and negotiated through interaction with other individuals on social media. Several findings of this research align with previous research on climate emotions, highlighting the consistency and relevance of the results of this study. In particular, commentators most frequently constructed feelings of hopelessness in relation to the climate crisis, reflecting the emotional toll that the climate crisis takes on individuals as established by previous studies on hopelessness (Lawrance et al., 2022; Mosquera & Jylhä, 2022). Additionally, Redditors constructed anger and frustration at the perceived lack of action from individuals, as well as powerful actors that impede climate change mitigation, resonating with previous studies on anger as a climate emotion (Lawrance et al., 2022; Lorenzoni et al., 2007). Similarly, the analysis revealed that Redditors constructed hope in relation to the climate crisis

based on the technological advancements and innovations that emerge solely through adapting to the climate crisis. Despite research continuing to be conflicted of the influence of hope as an emotional response to the climate crisis, the results of the present study align with previous research in that hope is considered as a motivator for the individuals to either take climate action or to recognise the possibilities that emerge through the climate crisis (Geiger et al., 2021; Ojala, 2012).

Moreover, this study also yielded new insights that add to the current research on climate emotions. Emotional variability was often observed in this data, illustrating the range of emotions individuals construct in relation to the climate crisis. Specifically, choosing to focus on presenting the *Discourse of Emotional Variability and Personal Engagement* separately from the other discourses was aimed at highlighting how Redditors did not merely construct one climate emotion in discourse, but a range of different ones. Along with that, emotional detachment in the present study was constructed by dismissing climate concerns or climate change as a phenomenon, as well as by shifting the focus to more important problems than the climate crisis. Both of these emotional experiences are understudied in climate emotion research, therefore, further research exploring these emotions is needed to understand in which way they influence climate action and to support resilience in dealing with difficult climate emotions. Thus, understanding how climate emotions are constructed in discourse as part of our shared social reality on social media platforms like Reddit could inform appropriate climate change communication strategies as up to 50% of fluctuations in climate change policy support stem from an individual's emotional response to CC (Smith & Leiserowitz, 2013). This exploration and understanding of climate emotions in climate change discourse prove to be one important step to create a more collectively oriented society that is actively mitigating CC. Such an understanding could aid in exploring ways to deal with the climate crisis on an individual and a collective level to improve the resilience of individuals and foster more helpful or constructive emotions about the climate crisis. This could be done, for instance, by becoming aware of the diverse range of climate emotions individuals hold about the issue, to illustrate that there is not one fixed or appropriate way to feel about a global crisis like this. Along with that, individuals feeling hopeless could build connections with like-minded individuals to share their emotional experiences and to understand that they are not alone in feeling that way. This could, in turn, strengthen their sense of collective community which then would allow them to promote more positive emotional responses in order to get a step closer to achieve collective action.

In conclusion, the exploration of the multifaceted and complex emotional landscape of climate emotions that have been constructed in CC discussions on Reddit allowed me to metaphorically ride the waves of the diverse sentiments and emotional expressions that commentators navigate when dealing with the climate crisis. Just as the sea's waves incessantly ebb and flow, similarly the emotional responses to climate topics on Reddit are in a continuous state of change. Overall, this study explored the intricacy of climate emotions and emotional discourses online to enhance our knowledge of how people emotionally navigate through the climate crisis and the elements that drive the construction of certain emotions and emotional discourses. When we have a greater knowledge of this global issue, we will be able to regulate and stay balanced, like surfers do when riding the waves, so that we can approach the climate change discourse online with a more comprehensive understanding of the emotional tides that create and influence our emotional responses to this global crisis.

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