

Building Community: Vocabularies and Rituals Used to Define and Process Climate Grief by Politically Active Youth in Mi'kma'ki

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ABSTRACT

There are many terms that exist to describe and define climate grief but the vocabularies that youth use to describe climate grief are not well defined. The purpose of this research was to identify the vocabularies that politically active youth use to describe and define climate grief and the rituals that they use to process it through a poetry workshop, interviews, and arts-based engagement. Twenty youth ages 12-29 living in Mi'kma'ki (Atlantic Canada) engaged in political activism connected to climate change participated in individual interviews to understand their journey to becoming politically active, their personal experiences of climate grief, and how they define and manage their climate grief on a day-to-day basis. Five of those twenty youth participated in a facilitated poetry workshop that guided them through writing poetry expressing their definitions of and experiences with climate grief, followed by a focus group debriefing their experience in the workshop. An additional three of the twenty participants submitted individual visual and written pieces of art on climate grief and participated in short interviews following their submission. The main vocabularies used to define and describe climate grief were found to be in contrast: full of despair and focused on apocalypse; and full of hope and centered on community and building just futures. Additionally, participants identified that community-centered rituals that involved tangible change or meaningful interactions were crucial for helping them manage their grief through rituals.

Keywords: Climate grief; Youth; Arts-based

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INTRODUCTION

Background

Youth have higher rates of depression and anxiety related to climate change than other age groups (Majeed & Lee, 2017) and are often spurred to become politically active by feelings of fear for their future and climate anxiety (Fisher, 2016). A recent global survey of youth found that the vast majority of young people are extremely worried about climate change (60%), are afraid, sad, anxious, angry, powerless, or helpless (>50%), find the prospect of the future to be frightening (77%), and feel that governments and leaders have failed to care for the planet and humanity (Marks et al., 2021). This recent global survey identified that the most prevalent cause of climate anxiety in young people is inadequate government action on the climate crisis, which causes youth to feel betrayed and abandoned by the people in power (Marks et al., 2021). Young people's experiences of the climate crisis yield anxiety, depression, and other serious mental health challenges, but they also manifest emotions like anger/bitterness, fear/anxiety, guilt/self-criticism, hopelessness/despair, resolve/determination, aggression/violence, and sorrow/hurt (Gelderman, 2021; Sanson et al., 2019).

Despite the fact that many people experience climate grief due to ecological loss and changes to their lives, there are very few formal spaces and processes for people to work through these emotions (Mühlbacher, 2020). Climate grief is difficult to find space to process because climate destruction and government inaction are prominent throughout daily life and the grief is chronic, long term, and inescapable (Marks et al., 2021). Access to shared spaces of mourning, however, is crucial and the lack of such spaces often leads those plagued by climate grief to cope through numbing their pain, avoidance, blaming others, and disconnecting from themselves and their communities (Gelderman, 2021). Access to appropriate and welcoming spaces is even more rare for members of marginalized communities experiencing the brunt of the climate crisis including youth, women, gender queer people, 2SLGBTQIA+ people, racialized communities, newcomers, and disabled people (Mühlbacher, 2020). Spaces and programs that provide youth with an opportunity to contribute to the stewardship of land in their communities are examples of appropriate spaces that aid in alleviating feelings of helplessness associated with climate grief (Sanson et al., 2019).

While the potential impacts of climate change on youth are well reported in the literature, little research has considered how politically engaged youth describe and engage with climate grief. The climate crisis will be a threat for generations to come, thus it is critical to understand youth responses to climate change and equip them with the tools and support to process their grief and remain resilient in the face of climate destruction. This paper will identify definitions and descriptions of climate grief by politically active youth participants and rituals/approaches they use to work through their climate grief and build resilience.

This study is a component of a New Frontiers in Research project led by Dr. Melanie Zurba (co-author of this paper) and Professor Erica Mendritzki titled "Creating Vocabularies and Rituals for Climate Grief Through Multiple Knowledge Systems and the Artistic Process" that defines "climate grief" as a general term used to encapsulate negative emotions such as cognitive dissonance, sadness, and other forms of pain that people feel when experiencing loss associated with a changing climate. The vocabularies and rituals around experiencing climate grief are insufficiently developed, however, and there is a pressing need for community spaces to discuss, visualize, and process feelings associated with loss.

For many activists, grief due to climate related loss, like the extinction of species, is one of their primary motivations for becoming involved with activism (Pike, 2016). Environmental activists feel the loss of non-human beings and are often in perpetual mourning because of the magnitude of the crisis

leading to their activism (Pike, 2016). Marginalized communities, especially Indigenous communities, experience this perpetual mourning to an even greater extent as they are more vulnerable to the crisis (Cunsolo et al., 2020). They are also more likely to have a closer connection to the land and the non-human beings living in it (Pike, 2016). Furthermore, studies in queer ecology illuminate the fact that queer folks and other marginalized communities are often drawn to environmental/climate activism because their experiences encourage them to be empathetic (Mühlbacher, 2020). Although many at the margins are drawn to climate work, there seems to be a lack of access to intersectional spaces to process their complex grief (Mühlbacher, 2020). The current literature fails to examine how climate grief impacts politically active youth specifically and does not determine whether there are mediums for youth to process their climate grief. It also neglects to analyse climate grief from an intersectional perspective, leaving out the potential impacts of systemic oppression and discrimination on feelings of grief.

Rituals are both individual and communal processes. In mourning, each individual has their own unique experience of the loss or tragedy but there is also a shared experience of grief within the group or community who has lost someone or something (Willox, 2012). Rituals can be gatherings of mourning like funerals, memorials, protests, vigils, eulogies, obituaries, and are often long-term processes that are repeated over time (Willox, 2012). Grief and mourning rituals can be transformative experiences that help people and communities to regain environmental consciousness and reconcile their love for the world (Craps & Olsen, 2020). These rituals can help people find hope in the face of massive tragedy and crisis (Craps & Olsen, 2020). Cafés, peer support groups, online support groups, and community discussions around grief, specifically climate grief, can help people in their mourning by validating and normalizing their experiences (Wardell, 2020). Communal rituals for processing climate grief are particularly important because the systems of capitalism and neoliberalism have led to a shared sentiment of being alone at the end of the world and collective trauma (Wardell, 2020). To process one's own trauma, one must also address and come to terms with the trauma of others, this is explained well by Stolorow : "In order to tackle the overwhelming perils of climate change, we must include in our dwelling on earth an emotional dwelling with one another that renders shared apocalyptic anxiety more tolerable" (Stolorow, 2020).

Purpose and Objectives

The purpose of this study was to understand how climate grief is expressed and experienced by politically active youth in Mi'kma'ki¹ through arts-based participatory methods and intersectional analysis. The main objectives of this paper are to identify what vocabularies and rituals politically active youth use to describe their emotional responses to climate change and to examine the impact of being politically active on feelings of climate grief.

For this research, we followed the critical reflexive methodological framework: a constant, dynamic, and complex process that begins with a critical examination of one's positionality as a researcher in the context of race, class, gender, sexual orientation, and (dis)ability (Mao et al., 2016). Critical reflexivity is a framework in which the researcher must integrate and interrogate their positional and social location with respect to their participants, the world, and their research (Mao et al., 2016). It is an ongoing and relational process in which researchers must actively and continuously engage so

¹ This research is situated in Mi'kma'ki, the land of the Mi'kmaq. Mi'kma'ki encompasses the colonial provinces in so-called Canada of Nova Scotia, Prince Edward Island, the Gaspé peninsula, Newfoundland, and most of New Brunswick (*Mi'kma'ki*, n.d.).

as to identify and work to mitigate biases and assumptions, inequitable power dynamics, and the socio-cultural and political contexts in which the research is taking place (Mao et al., 2016; Subramani, 2019). Incorporating a critical theoretical and methodological perspective into research makes it possible to identify and highlight the social institutions and power difference/dynamics that form the meanings and experiences that people live with and understand one's role as a researcher and experiences of the participants through the reality of everyday experiences and societal influences (Subramani, 2019).

In developing the objectives and proposal for this research, we examined our own positionality and experiences as youth climate activists. The main researcher critically reflected on their motivations for conducting this research and for the focus on politically active youth with climate grief. One of the first steps was to reflect on their upbringing and identities clearly and critically, they examined the potential for unequal power dynamics within the researcher-participant relationship because of their position as a researcher, their whiteness, their financial and ability privilege, and their education status. Additionally, they consciously worked to ensure that the framing of their research was relevant to all politically active youth, and not only those who may have similar experiences to the researchers. Throughout their review of the literature, they explored many different disciplines and searched terms to reach literature that expanded their worldview and conception of the issues of climate grief and activism. They employed critical reflexivity throughout the engagement with participants as well. During the interviews, they aimed to create a reciprocal and safe space in which participants felt comfortable sharing the depth of their experiences, they felt listened to and that they had the space to share anything they felt, and in which they were co-creating knowledge. Reciprocity and relationality between the researcher and participants are key components of employing critical reflexivity in research.

They also conducted participant observations as an *observer as participant* in which "The *observer as participant* stance enables the researcher to participate in the group activities as desired, yet the main role of the researcher in this stance is to collect data, and the group being studied is aware of the researcher's observation activities" (Kawulich, 2005). Their participation supported the goal of fostering a safe, reciprocal space for participants, but their poetry was not included as data for analysis in the results of this study.

METHODS

This research took a qualitative methods approach using semi-structured interviews, a poetry workshop followed by a focus group, and individual art submissions and interviews. This study took place from September 2020 – June 2022, with data collection occurring between August -November 2021. The study took place in Mi'km'aki, which encompasses the colonial provinces of Nova Scotia, New Brunswick, Prince Edward Island, Newfoundland and Labrador, and parts of Eastern Quebec in Canada. This study took a phenomenological approach to understand the lived experiences of politically active youth with climate grief.

As this study took an intersectional and anti-oppressive approach, it is important to understand how the positionalities of the authors connect to the research:

Lilian Barraclough is a settler of English, Scottish, Irish, and German descent originally from Toronto, on the territory of the Mississaugas of the Credit, the Anishnabeg, the Chippewa, the Haudenosaunee, and the Wendat peoples covered by Treaty 13. Lilian Barraclough holds an integrative worldview, described by the Institute for Cultural Evolution as "primarily characterized by a self-reflexive attempt to bring together and synthesize elements of other worldviews, or of domains that in other worldviews tend to be viewed as mutually exclusive". She is a youth climate activist and a member

of many organizations and youth-led movements focussed on climate and social justice in so-called Canada, thus she is a member of the youth climate activism community that was engaged with for this research. She is also a member of the 2SLGBTQIA+ community and identifies as pansexual and as a non-binary person. She is also able-bodied, but with experience living with a chronic illness, and comes from a financially secure background. She acknowledges that she conducted this research from a place of privilege on stolen land. She was personally motivated to conduct this research because of her own experiences with climate grief. On some days, their climate grief makes it difficult to get out of bed and enter into the world that is destroying the planet and humanity. Through their own experience, as well as understanding and knowing about the experiences of their peers in the youth climate community and at school, she felt strongly that this research was needed to validate and communicate our experiences and work towards a climate resilient and equitable future.

Melanie Zurba is a settler of Ukrainian and English heritage originally from Treaty 1 territory/Winnipeg, Manitoba. In her younger years, she was a leader in the youth-environment movement and recently led the review of youth engagement and intergenerational partnership for the International Union for the Conservation of Nature (worlds largest conservation NGO with over 1,400 member states and organizations). She is an Associate Professor at Dalhousie University and is head of her research group, the Community-Engaged CoLab.

This study received ethics approval from Dalhousie University's Research Ethics Board. Given that this study's participants included some minors, and vulnerable young people, there were ethical considerations given to the potential harm to the mental health and wellbeing of participants. The ethics agreement identified this study as one of moderate risk to participants, given that there was the possibility of emotional distress when asked about intense emotions relating to the climate crisis and climate grief. Participants had the ability to withdraw their participation from the study at any point during the interviews or workshop and focus group. Additionally, during the group activities (poetry workshop and focus group), the lead researcher (Barracclough) and workshop facilitator employed active listening to be prepared to support participants should they experience distress. The study had a distress and debriefing protocol to minimize discomfort and risk for participants and had a list of mental health counselling services readily available, should participants need to be referred for urgent mental health care. Informed consent was obtained by written consent forms. Participants that were of age completed their own informed consent forms, where they were provided with the details of what they would be asked to do, any risks associated, resources available to them, and decisions regarding anonymity in the research. Participants who were minors had an informed consent form completed by their parents or guardians, and there was a separate form of assent for minor participants so that they could be personally informed as to the context and risks of the study. The informed consent and assent forms were approved by the Research Ethics Board, and the forms asked participants to select a choice between being given an alias, so as to be anonymous in the research products, or to retain the use of their name in the research products. This research was conducted through Microsoft Teams, which is the virtual meeting tool.

Recruitment and Selection Criteria

To be selected as participants in this study, the criteria were that the people had to: a) be between the ages of 12 and 29; b) Currently live in Mi'kma'ki (Atlantic Canada); c) Be involved in political work related to climate change including, but not limited to, activism, climate strikes, research, employment, engagement in political parties and the democratic process, grassroots community work, art, writing, social media, or community care work related to climate change. Additionally, participants were given the option to self-identify as a member of an equity-seeking group based on gender, sexuality, race,

ethnicity, language spoken, (dis)ability, and an explanation of what constitutes equity-seeking group was provided.

Participants were sought out through existing youth climate organizations by purposive sampling. The researchers contacted organizations and networks connected to youth to share information on the study and request recommendations of individuals in their organizations who might be interested in participating, these organizations included School Strike for Climate Halifax, Nova Scotia Youth Climate Action, the Centre for Local Prosperity & the Thinkers Lodge, Our Time network, Divestment and other climate groups at universities, environmental clubs at schools, as well as others. Building off the participants recruited from relevant organizations, those participants provided recommendations of other potential participants through snowball recruitment methods. In addition to direct outreach to organizations, recruitment occurred through voluntary sampling through social media posts that were shared through the researchers' personal networks, organizational pages, and posted in community groups on Facebook, Instagram, Twitter, LinkedIn, and mailing lists. Outreach to existing organizations was based on the researchers' awareness of youth activist networks and ethical protocols were followed by making it clear that there was no requirement to participate. We reached out to all groups that we knew of in the area, and to contacts who we knew were active in many areas of the movements to get as far a reach as possible. Those connections then shared the information by word of mouth. This study had an initial aim of 15-20 participants. The goal of this study was to undertake an in-depth exploration of each participant's experiences with climate grief. This would not have been possible within the timeframe with a larger pool of participants. This research was conducted as research for a master's degree and as such, was limited to two-years.

Data Collection Methods

Interviews

All participants (**Table 1**) participated in a virtual semi-structured individual interview through Microsoft Teams of up to one hour to explore their experiences with climate grief. Microsoft Teams was the virtual conference software approved by the Dalhousie Research Ethics Board – the researchers used their Dalhousie University credentials to sign into Microsoft Teams and a statement of potential risks of the platform were disclosed in the informed consent and asset forms for the participants.

The individual interviews explored their journey to becoming politically active and engaged with climate change, how they first learned about climate change, the emotions associated with their climate work and learning about climate change, how their life is impacted by climate grief, and how their personal journey is connected to feelings of climate grief. Individual interviews were the best opportunity to understand the personal lived experiences of the participants with climate grief. Interviews took place from August – October 2021.

We took an anti-oppressive and intersectional approach in the interviews to foster a safe space for participants to describe their experiences with climate grief, as well as how their personal identities intersected with their experiences of climate grief. Anti-oppressive interviewing takes a participatory, emancipatory, and action-oriented approach to research and focuses on levelling the power dynamic between the researcher and participants (Strier, 2006). As such, the interviews were amenable to the direction that participants wanted to take them in and the primary researcher focused on listening as much as possible, and only directed the interviews as needed.

Table 1. Participant life experiences and identities.

| Alias or First Name | Identity | Age |
|---------------------|--|---------|
| Sarah | Sarah is a white cis-female member of the 2SLGBTQIA+ community | 26 |
| Sophia | Sophia is a white cis-female | 18 |
| Amanda | Amanda is a white cis-female | 26 |
| Hailie | Hailie is a white cis-female member of the 2SLGBTQIA+ community | 25 |
| Ricky | Ricky is a white cis-male member of the 2SLGBTQIA+ community | 26 |
| Tanya | Tanya is a Mi'kmaw woman | 28 |
| Cole | Cole is a white nonbinary member of the 2SLGBTQIA+ community | 19 |
| Kyle | Kyle is a cis-male newcomer to Canada and a person of colour | 23 |
| Jo | Jo is a nonbinary person of colour who is a newcomer to Canada and a member of the 2SLGBTQIA+ community | 21 |
| Dylan | Dylan is a white disabled cis-male who is a member of the 2SLGBTQIA+ community | 25 |
| Bailey | Bailey is a non-binary person of colour who is a newcomer to Canada and a member of the 2SLGBTQIA+ community | 25 |
| Shreetee | Shreetee is a person of colour who is a newcomer to Canada and a member of the 2SLGBTQIA+ community | 22 |
| Beth | Beth is a white cis-female who is a newcomer to Canada and a member of the 2SLGBTQIA+ community | 22 |
| Mackenzie | Mackenzie is a white cis-female | 22 |
| Choyce | Choyce is a white disabled cis-female member of the 2SLGBTQIA+ community | 26 |
| Sasha | Sasha is a white cis-female who is a member of the 2SLGBTQIA+ community | 19 |
| Cameron | Cameron is a white straight cis-man | 23 |
| Rena | Rena is a Métis woman who is a member of the 2SLGBTQIA+ community | 23 |
| Cadence | Cadence is a white cis-woman | 17 |
| Nadia | Nadia is a Black cis-female newcomer to Canada | Unknown |

Poetry Workshop and Focus Group

Participants were also given the option to participate in a group poetry workshop to guide them through writing poetry to reflect on their experiences with climate grief. This poetry workshop took place in October 2021. The poetry workshop was then immediately followed by a focus group, which provided an opportunity for debrief and reflection on their experiences in the workshop. Drawing on research that illustrates the ability of poetry to serve as a research tool in helping youth express, communicate, and understand difficult emotions, the poetry workshop provided an avenue for participants to engage

in additional self-reflection (Call-Cummings et al., 2020). The poetry created during the workshop also aided in identifying the vocabularies used by politically active youth. The poetry workshop and focus group were also included to help participants experience an option for a type of ritual they could partake in to work through their grief.

The participants for the poetry workshop and focus group were the same as the participants who were interviewed, however, participants had the option of not participating in the poetry workshop & focus group and only being interviewed. Both the poetry workshop and the focus group took place virtually through Microsoft Teams. Six participants, including the primary researcher, took part in the poetry workshop. They participated in the prompts as well as observed the participants throughout the workshop and they only shared their responses to the prompts if there was no participation from other attendees so as not to take up too much space and disrupt the power dynamic as the researcher. They conducted participant observations as an *observer as participant* in which “The *observer as participant* stance enables the researcher to participate in the group activities as desired, yet the main role of the researcher in this stance is to collect data, and the group being studied is aware of the researcher's observation activities” (Kawulich, 2005). Their participation supported the goal of fostering a safe, reciprocal space for participants, but their poetry was not included as data for analysis in the results of this study.

The poetry workshop titled “Unearth: A Poetry Workshop on Climate Grief” was facilitated by a local poet/facilitator involved in the climate/social justice movement for research participants in which they wrote poetry collectively and independently, reflecting on their emotions relating to climate grief. The primary researcher worked with the poet, Katie Feltmate, to develop the outline and programming for the two-hour poetry workshop. The workshop was held on Microsoft Teams on October 6th, 2021, where Katie guided the participants through prompts in three major sections:

- (1) Open Waters: “A warm-up to allow participants to wet their feet and become familiar with the context they will be writing about. It contains several free writing and journaling exercises designed to trigger stream of consciousness writing, offering flexibility, accessibility, and creative license.”
- (2) Tides of Change in which “participants will be challenged to dig deeper as they begin to ‘unearth’ the profound impacts of climate grief and the climate crisis.”
- (3) Building Resilience in which “participants will move away from the depths of climate grief and into a mindset of empowerment with a focus on healing, resilience, and action.”

It was crucial that the poet had facilitation experience, as much of the literature attributes the success of poetic methods to the competence of the facilitator leading the methods (Norton & Sliep, 2019). Katie had facilitated multiple poetry workshops guiding youth through prompts to write about their experiences as refugees, and with the planet. Additionally, Katie writes her own poetry about climate grief, nature, and the COVID-19 pandemic and is incredibly passionate about work on the climate crisis.

Poetry allows for reflection that leads to transformative change that empowers both the researcher and the participants and pairs well with qualitative data collection to provide unique insights to the lived experiences of participants (Fernández-Giménez et al., 2019; Johnson et al., 2020). The poetry workshop led by Katie allowed participants to reflect on their experiences with climate grief and how they arrived at that place through many facets.

The poetry workshop was then directly followed by an hour-long focus group with workshop participants that delved into their experience in the poetry workshop, whether it contributed to their learning as a group about each other and climate grief, and whether it stimulated meaningful individual reflection on their experiences with climate grief. The primary researcher guided the participants

through some pre-prepared questions that specifically focused on learning related to their shared group experiences in the poetry workshop and shared understandings of climate grief, particularly on how they defined and described climate grief, and whether the workshop served as a ritual to help them process their grief. For example, to understand how participating in the group workshop and hearing other people's experiences influenced their understanding of climate grief we asked: "What did you learn from the other people in the group?" "Do you feel that you have a better understanding of each other's experiences?" "Do you think it is important to understand other people's experiences?" "Do you feel more supported and understood after this poetry workshop?"

While the focus group was moderated, it was also designed in a flexible manner that allowed for the participants to determine the direction. The participants responded directly to the prepared questions we asked them, but they also brought up their thoughts and ideas coming out of the workshop throughout the focus group. The focus group transcript and poetry were also used to identify the vocabulary that youth use to describe climate grief and what sorts of activities/rituals they may partake in to process their climate grief.

Artistic Submissions

Additionally, all participants had the opportunity to submit individual pieces of art of any medium that illustrated their experiences with climate grief, followed by an individual semi-structured interview to communicate their artistic process and describe the meaning of their art. The artistic submissions took place from September – November 2021. Given that this study is a part of the larger project looking at how multiple knowledge systems and the artistic process interact to help communities develop vocabularies and rituals to describe and process climate grief, the artistic components of these methods provided participants with the opportunity to express their experiences through mediums that felt the most meaningful to them for conveying their experiences and emotions.

They were asked to submit a piece, or multiple pieces, of art that they created responding to their experiences of climate grief and then participated in a short semi-structured interview to explain what their art meant and what the process of using art to reflect on their experiences was like. They were invited to submit any previously created art, or to develop new art pieces and be reimbursed for their materials. These individual submissions allowed participants the opportunity to reflect on, and express, their experiences of climate grief in the fashion that felt the most meaningful to them. It also allowed them to reflect personally and individually on their experience through individual artistic means, rather than through a group workshop. This approach supported participants to reflect on their personal journey and experience of climate grief and to have the chance to express it. Three different participants submitted artwork based on their experiences with climate grief, two submitted pieces of visual art, and one submitted a poem as they were unable to participate in the group poetry workshop. We then undertook short semi-structured interviews with them about their artwork, what the artwork represents, and how it connects to their experience of climate grief (Zurba & Berkes, 2014).

There were separate guides for all four of components of data collection – the semi-structured interviews, focus group, the poetry workshop, and the artistic interviews. The interview, focus group, and artistic interview guides were developed by the lead researcher and reviewed with the project team of the larger Climate Grief project, comprised of leading researchers on youth health, ecology, fine arts, research with Indigenous peoples and newcomers, and feedback was given and implemented.

Data Analysis

The data analysis process involved initial thematic content analysis of the transcripts of interviews, the focus group, and the artistic interviews as well as the poetry written by participants. Once the

transcripts were fully coded, we used NVivo Pro 12 to visualize the results identifying the most frequently coded themes; the hierarchy of codes; and the overarching objectives of this research in identifying the vocabularies and rituals used to describe climate grief.

Interviews

The interview transcripts were collected through the Microsoft Teams transcription function and then reviewed for errors alongside the recordings of interviews prior to coding. The transcripts were analysed through thematic content analysis. We used deductive codes to broadly identify the vocabularies and rituals that participants used to describe and define climate grief, as well as identify their different approaches to political action regarding climate change. For example, deductive codes included 'system change'; 'descriptions of climate grief'; 'introduction to climate change'; 'lived experience'; 'rituals to process climate grief'; 'social media'; 'vocabularies'; 'work'. Beyond those initial deductive codes, the rest of the data were inductively coded through themes that arose out of the data. These inductive themes were topics/ideas/themes that were repeatedly mentioned throughout the interviews and were significant to the participants that were not covered by the deductive codes including 'burn out'; 'calls to action'; 'hope'; 'personal futures'; 'personal impacts of climate change'; 'politics'; and 'the future of humanity'. Once the main codes were identified, sub codes were developed as well that identified themes within the overarching code to detail the findings coming out of the interviews. For example, under the inductive code of 'personal futures' subcodes were identified that included 'uncertainty'; 'reproductive decisions'; 'security'; 'running out of time'; 'powerless'; and 'apocalypse'. The coding was done using NVivo 12 Pro.

Poetry Workshop and Focus Group

Some participants submitted the poetry that they wrote during the workshop for analysis, and to be included in publications on the study. These poems were uploaded to NVivo 12 Pro and were analyzed through thematic content analysis. One deductive code was used 'definitions of climate grief'; while the other codes were identified inductively and included 'systemic change'; 'politics'; 'loss'; 'injustice'; 'loss'; 'impacts of the climate crisis'; 'hope'; 'grief'; 'fear'; 'despair'; 'connection with the land'; 'compassion'; 'community'; 'anger'; 'action'; and 'accountability.'

The focus group was recorded and the transcription tool in Microsoft Teams was used. The transcription was then reviewed and compared to the recording to correct any inconsistencies. The transcript was then coded starting with two deductive codes 'vocabulary' and 'exposure to poetry' and identifying inductive codes relating to the experiences of participants in the workshop including themes like 'resonate'; 'resiliency'; 'relating to others'; 'reflection'; 'positive'; 'motivating'; 'positive collective experience'; 'community care'; and 'comforting.'

Artwork

The artwork itself was not coded, but the transcripts of the interviews with artists were analyzed inductively to identify what the process of using art to reflect on their experiences of climate grief was like, the types of terms and imagery they used to describe the art pieces, and what the ritual of art creation did to aid in their processing of climate grief. The coding of the artistic interviews was primarily inductive. One deductive code was used: 'ritual for processing climate grief' and the other codes were identified inductively including 'reflection'; 'nature'; 'interconnectedness'; 'impacts of the climate crisis'; 'frustration'; 'expression'; 'community'; 'anger'; and 'action'.

RESULTS

Youth vocabularies of climate grief, particularly of politically active youth, are not well defined. Participants shared different emotions that arose for them in the context of climate grief and those emotions were tied to how they defined climate grief. **Figure 1** illustrates the top emotions and phrases that participants used to describe their experiences of climate grief. Participants described deep, gutting emotions that seemed to touch them to their core. Many referenced the injustices within society that contribute to their experiences and those of others with climate grief. Climate grief was often described by participants as a very embodied experience affecting their physical and mental states.

Bleak and Apocalyptic Vocabulary

Participant responses in interviews and the poetry and visual art that they created portray a bleak and apocalyptic experience of the present and the future. **Figure 1**, below, illustrates some of the bleak and apocalyptic emotions and vocabulary that participants expressed during their individual interviews. One participant, Amanda, wrote in the poetry workshop:

*My brain is on fire and the planet is dying.
I can't breathe for worry but some can't breathe for smog.
Living is expensive and barely sustainable but it is not going to get better.
I dread the heat and what is coming.
I am trying to get people to care but the right ones don't.
The people who care are ignored by the people who can make change,
So they continue making money by burning coal and clearing forests*

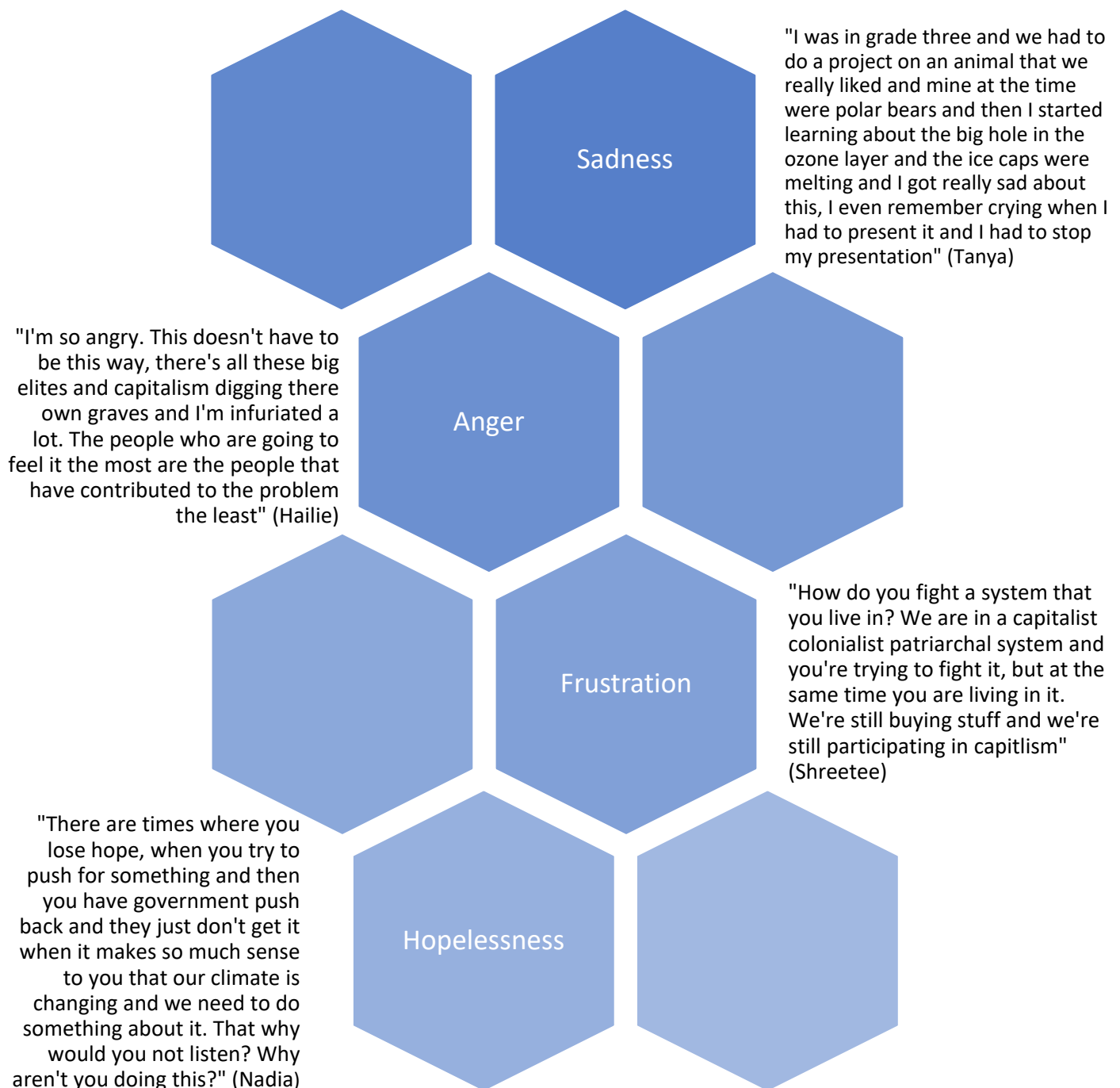
Another participant, Shreetee, described climate grief in this poem from the poetry workshop:

*Climate Grief
Feels like barbed wire wrapped around my heart,
Always there, always hurting.
Looks like half of the world on fire and half of it is under water,
Smells like the rotten flesh of the fish washed ashore because of warming ocean,
And
Sounds like the screams of people demanding change
against a system that does not want to hear them and does not want to change.*

One participant, Beth, described her experiences of climate grief through the following:

*Climate grief sounds like roars through empty woods
Climate grief feels like sobs wracking through an empty landscape, desolate of life.
Climate grief looks like standing amid the rubble; once a home, now a carcass
Climate grief smells like burnt plastic permeating my lungs.
Climate grief tastes like sulfur caressing the hollows until I can no longer intake food, for it rots my core.*

Figure 1 Top vocabularies used by participants to describe climate grief and associated quotes from participants; the blank hexagons represent the structures of society that contribute to the experiences that politically active youth have regarding climate grief.





In addition, Sophia wrote a poem outside of the poetry workshop as an individual art submission (without using the prompts provided to participants in the poetry workshop) that focused on bleak and apocalyptic imagery as well:

what an absurdity

*we seem to live in the long-term.
trained to close our eyes and dream of the future
while the moment passes right by.
while mother earth's screams go unnoticed.
it's not like it's a someday event.*

*it's here, right now.
she flings hurricanes at our shores
and ignites forest fires to fill our skies with smoke,
emergency flares
desperately trying to get you all to listen.
and you just idly wonder whether the drought will ever end,
or if the temperatures will stop being so drastic
or if the ice will halt its melting
but of course those couldn't be because of a rapidly changing climate.
what an absurdity.
that's an issue you have to pass on to your children,
not something that happens within your life time.*

*but what about my lifetime?
after your excuses have grown as thin as the ozone layer
and your words don't stop the roaring winds and poison air,
what is left?
a wreckage of a planet you promised was just a far-off nightmare
that now fills our everyday lives.
something you said we didn't need to worry about,
even though we told you
and the scientists told you
and all the sane people in the world told you it wasn't a fucking joke.
it was the present, not the future, because of the past.
because of your past.
the one you threw at us whether we wanted it or not.
and yet you laughed it off in press conferences,
in your thousand-dollar suits made from modern slave labour
and gallons of water
and filaments of plastic that will exist for millennia to come.
because you didn't care.
you didn't dare to.
not when caring would mean acknowledging the fact
that you messed up royally and left us to deal with the shattered remains,
trying to eke out some semblance of a life
in the midst of an apocalypse that happened far before its time,
if only you'd done something.
and you can't protest and say you didn't know better,
because you did.
because we screamed at you alongside mother earth
thousands of us
from the city streets, shoes sticking to the steaming pavement
and swore we'd never forgive you for your sins
and we won't
but we'll all be dead before it matters much,
so you're safe in the end anyway.
not like us.
not as we watch islands sink
and fields turn to dust
and millions of people migrate across broken continents
desperate for the safety we were promised would always be there.
not unless you do something.
now.
to stave it off a little bit longer until it's our time
until we wear the suits and call the shots*

*and work for something more important than money.
we're not asking for magic or a miracle or forever
or for you to even try to permanently fix this.
we've been let down too many times to expect that.
just a little bit more time
so that we at least get the chance
to try to save the world.*

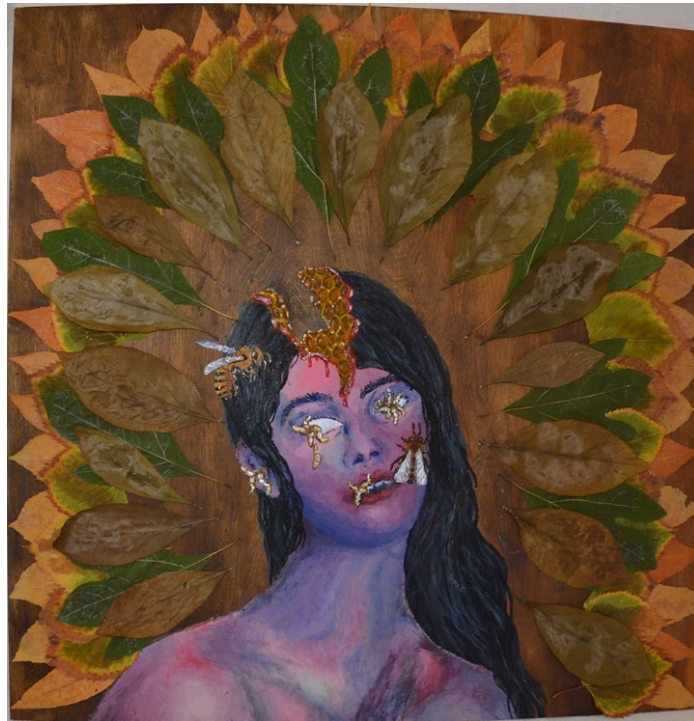
An individual art submission by the participant, Sasha, included as **Figure 2** below, portrays the contrast and cognitive dissonance of the current reality of society and life on planet Earth compared to the potential for destruction and loss if things continue as they are. The artwork also displays the fine line that Sasha feels society is walking between thriving and death and shows that while the government and decision makers speak about protecting nature and acting on the climate crisis, that their actions are doing the opposite and leading to the deaths of people and non-human beings across the planet. This artwork builds on the vocabulary theme of the threat of apocalypse and death and showing that we, as a society, are very close to destruction.

Another piece of art by Sasha, shown in **Figure 3**, focuses on that disconnect between appreciation of nature and disregard for how the climate crisis and human activity impacts the environment. It illustrates the potential for more pandemics and increased viral strains from human consumption of animals and the destruction of habitats across the planet. The art emphasizes the interconnection between humanity and nature and how human actions towards nature will reflect on our lives and society. Both pieces of art communicate a sense of apocalypse and destruction and how those can devastate humanity. They also, however, include an element of hope, reflecting the necessary relationship between humanity and nature and that there is potential to remain on the side of flourishing along with the planet and embracing the interconnected nature of all existence. These art pieces communicate resiliency and that desire to build strong relationships with each other and the planet, and that there is potential through love and reciprocity with Mother Earth to repair the climate crisis.

Figure 2. Individual art submission by Sasha Chilibeck[©]



Figure 3. Artwork submitted by Sasha Chilibeck ©



Vocabulary of community-based climate justice and visions of hope

While many participants described a devastating picture of turmoil and apocalypse, many also envisioned a possible future of justice and community. Nadia, through the poetry workshop wrote:

*I feel the injustice has gone on for too long
The land we live on, the air we breathe, the water that sustains us polluted
I feel tired of anger
BUT
I feel I must continue to fight
The fight for our future
The fight to heal our Earth
I know I am not alone
Around this fight a community has grown
For that I feel hope.*

Beth wrote through the poetry workshop:

*Justice is equality, but more so equity.
A voice ignored finally heard, respect.*

*Voices raised from the depths of despair,
United in song, a chorus of hope, one of healing.
A harmony.
The lamented listened to.
No longer to fear the obstacle but feel the drive.*

Another participant, Shreetee, also described what a climate just world might look like:

*Climate justice looks like
clean drinking water for all,
no more violence or unjust arrests for simply existing and,
exerting our rights for a better future.
Climate justice looks like
People over profit,
Love over money,
Care and reciprocity over economic growth,
Climate justice looks like centering the needs of the people
over the needs of a system that solely exists to cause harm
Climate justice is radical love and kindness above all and,
a better future for the souls who exist already and the ones who have yet to exist.*

The vocabularies used by participants had two main realms: those associated with the devastating doom and potential apocalypse of the climate crisis and injustice, and those to describe the potential for change, growth, and community resilience through hope and solidarity. It is common for activists and those involved in the environmental and climate justice fields to hold their grief and despair at the state of the world in hand with their hope and motivation (Park et al., 2020). This resilience and determination to continue working with community towards a better, sustainable, and more equitable future through the despair of climate grief is reminiscent of the persistence of communities who have experienced and continue to experience apocalyptic conditions but continue to fight for justice (Davidson & da Silva, 2021). The participants who communicated their hope and desire through their poetry for community, love, and kindness were primarily participants who are marginalized by racialization, queer oppression, and gender discrimination. It is pertinent that the youth who carry hope in their hearts for a just future are those who are at the most systemic disadvantage in society. The white and more privileged participants tended to focus solely on the devastation and apocalyptic potential of the climate crisis and feel that there is no hope or potential for change to be found. The end-of-the world dialogue is often centered around the end of the conveniences and privileges for the white, financially stable society and fails to acknowledge that marginalized communities have been experiencing different apocalypses for hundreds of years. For example, Black (slavery, pervasive racism, police brutality, murders, incarceration), Indigenous (colonialism, missing and murdered Indigenous women, Two-Spirit people, and girls, lack of clean drinking water, medical racism, police brutality), Queer (AIDs crisis, pervasive serial killers, police brutality, domestic and sexual abuse), and disabled (eugenics past and present, forced sterilization) communities (Davidson & da Silva, 2021). The vocabularies that youth participants use are also centered on justice and connect to the many other social justice issues as well as relationships with the land and other people.

Rituals for Processing Climate Grief

Community Care and Community-Based Rituals.

The rituals that participants described follow their visions brought forth in the vocabularies for climate justice and hope. Access to a like-minded community, community spaces, and community care were the most prevalent descriptions of rituals to process their climate grief, and many expressed concerns that they did not have accessible spaces where they could discuss their

experiences of climate grief and feel heard and listened to. One participant, Jo, explained that having access to a like minded community:

"Gives me more hope for sure, because you're not just going through that grief alone, like at least you have a community that knows what's up. There is a community of mutual understanding."

Another participant, Dylan, explained that he doesn't feel like he has access to such a space:

"Most people I talk to, I talk to through a screen and that ends up being the people I already knew, the people that I was already friends with. And lovely people, but to find a space where I can just vent these frustrations as opposed to inserting myself into say, a group chat and ranting where I feel like I'm taking up somebody's time and they're like OK, what do I do with this? A dedicated space for this kind of stuff in a dedicated community where I can really talk these feelings through, I don't really feel like I have access to that right now."

Community spaces and social connections within social and climate justice movements are not only crucial to help people process their climate grief, but also are key in fostering long-term social movement learning. The disconnect that many who are in this field of work and these organizing spaces feel from their friends, family, and communities limits their ability to learn about themselves and their positionality in society with respect to the issues that they are working on, which may enhance their experiences of climate grief (Sandlin & Walther, 2009). People may end up feeling stuck in their despair and experiences of climate grief, as well as their position in the movement and society, again increasing their feelings of grief and despair at the state of the world (Zielińska et al., 2011). Without those spaces to feel supported by others in the movement, feel accepted and loved, and feel like they are contributing meaningfully, people could become burnt out or disempowered (Zielińska et al., 2011). Social connections are often what encourage people to become and remain politically active and continue to learn about themselves and the issues facing the world. One participant, Mackenzie, only became concerned about the climate crisis and involved because of her friends:

"I have a friend who start talking about his anxiety more and stuff that I never would talk to him about and I never fully understood where his anxiety was coming from and then I'd listen to him talk with all my friends, and there's three of them who are really interested in big corporations and what they're doing to the world. And like I always knew it was a bad thing that was happening and then with them I started understanding because he was getting a lot of world anxiety like climate anxiety so then I started looking into it more because he was a really good friend and I was just like whoa, this is actually bad, we are literally destroying everything."

Mackenzie's experience witnessing her friend's climate anxiety and the discussions between her group of friends led her to come to terms with the climate crisis herself and identify her own climate grief. Her experience also led her to the turning point of becoming truly aware of the issue and started her on the steps of her political engagement. She described changing her own behaviours in terms of recycling and driving and encouraging her family members and roommates to do the same, as well as her start to comprehending the enormity and the complexity of the climate crisis. Access to like-minded groups of individuals seems to be key not only in helping politically active youth process their climate grief, but also for encouraging personal change and motivation for action.

For these community spaces to effectively aid in the processing of climate grief, they must also be safe spaces where people's diverse lived experiences are acknowledged and accepted, and there is

no tolerance for discrimination. A Métis participant, Rena, originally from Saskatchewan explained that she:

“Definitely didn’t appreciate feeling really at home somewhere before I moved away from Saskatchewan. It just wasn’t something that I thought about, but now that I’ve left and I don’t get to go back very often, it’s harder than I thought it would be. I just felt a lot more connected there and I had a much better understanding of my place in the world which was about the community there and feeling more connected to everything.”

Everyone experiences climate grief differently and have different needs in the context of community groups and spaces. Social movements and spaces can help create collective identities and help individuals build those connections within the community where they feel that they can contribute meaningfully and that they have a network of people who care about them and whom they care about (Mühlbacher, 2020). Spaces that are particularly cognizant of the lived experiences of marginalized people, however, are lacking and were identified as a need for politically active youth to effectively process their climate grief (Mühlbacher, 2020).

Participants with access to community explained that having that having access to a like-minded community and a close-knit group of friends is a lifeline that helps them feel safe and secure and to feel at home. As the climate crisis continues to cause destruction and devastation, more people are going to lose their sense of place and home and having access to a tight-knit community will be key for building resiliency through those events (Albrecht, 2020) Rena explained that she used to have access to a strong and caring community in Saskatchewan in which they:

“Always had someone that you could ask for help if you needed it and not feel like you were pressuring them or anything because you know that you would do the same thing for them which was really nice and made it easier to know how to give back to the community as well because you knew which groups were actually doing good work and who was going to benefit from the work you were doing.”

It seems to be very challenging to build the strong community networks that Rena describes, and Nadia, another participant, expressed the challenges that she has experienced as a Black newcomer to Canada in accessing both white activist spaces, and the Black community as an outsider to both:

“I definitely see myself existing in the movement a bit differently from how my white colleagues might see themselves within the movement. We haven’t been listened to and I find I spend lots of time with community in conversation about that. As someone who didn’t grow up in these communities, I take those [interactions] as learning opportunities and I think it helps me position myself and still just not lose myself as being part of a movement that has historically been very white.”

In Nadia’s experience, learning from the Black Nova Scotian community fosters her learning of the historical and present environmental injustices and racism the communities face (Waldron, 2015) and her learning and definition of her own identity and positionality within society and the climate movement (Walker & Walter, 2018). Nadia also describes the importance of maintaining her identity through her work in the environmental movement and ensuring that her approach to environmental work is grounded in the needs and experiences of the marginalized communities in the region.

Tangible Activities as Rituals to Process Climate Grief

Tangible activities were some of the other key rituals that participants described for processing their climate grief (**Figure 4**). The focus was on activities that have the potential to draw people out of their situation in the moment and bring them into the present through activities that lead to some form of obvious positive impact on the environment or community and/or obvious impact on the individual.

Kyle, a newcomer person of colour from the Bahamas, described a specific tangible project that he led:

“With the tree project there were 500 or 600 thousand planted in Haiti and they have a lot of deforestation which caused a lot of mud slides and other issues, so being able to plant those trees there was a good thing. But what really made the whole project worthwhile is that we got a lot of feedback from people in different community groups, and they were telling people about the importance of trees and how they were excited about the project and were getting other people to plant trees and getting their friends and their community members involved. It was just nice to see that the work was able to translate into something tangible for people as well as some value.”

Kyle explained that being able to clearly see the impact that his work had on the environment of Haiti and the community helped him feel more comfortable with himself and the state of the world and fueled him to continue in his work. This example also shows the power of a like-minded community, the project and impact on the community grew exponentially when the participants shared their experience and knowledge with others in their community and it gave all involved something to come together to contribute to and to be proud of.

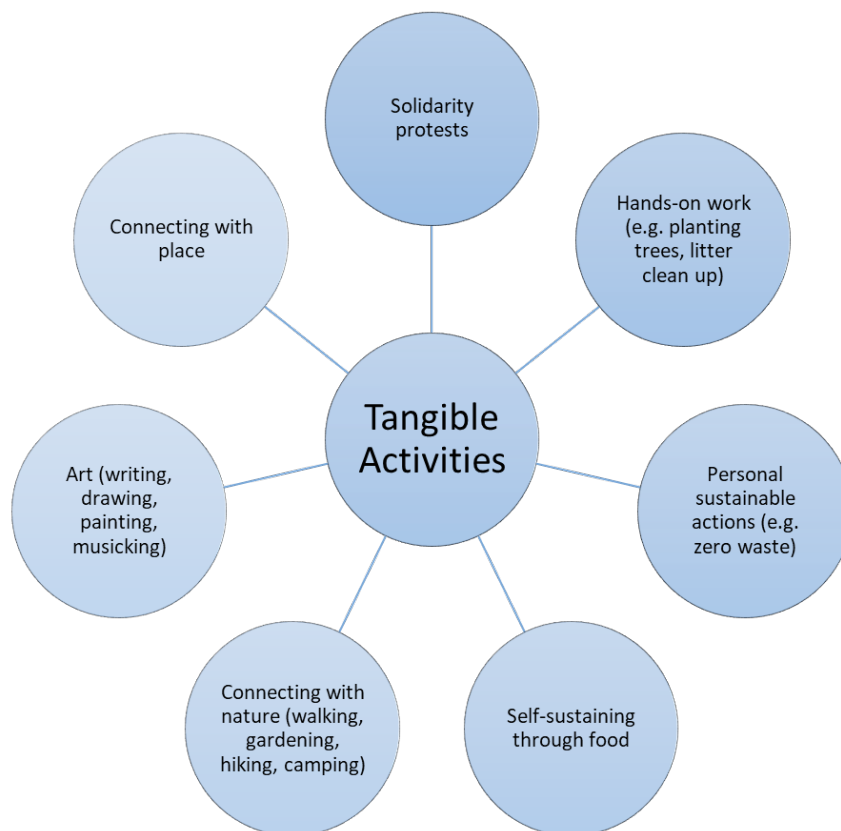
Other participants explained that taking part in personal or group activities to reflect on their experiences and work through their emotions in a tangible way are effective like artistic practices or writing, drawing, painting, musicking, connecting with nature through walking, gardening, hiking, or camping or becoming more self-sustaining through baking their own bread, making food with local produce, and making sustainable choices in their everyday lives like shopping zero waste or second hand. These activities not only help people to situate themselves within the context of society and the climate crisis through critical self-reflection, but also take that to the next step and apply their reflection and learning to choices in their everyday lives (Cranton, 2016). In all of these tangible activities, there are some key factors that arose: connection to community, connection to land and sense of place, and connection to oneself and one’s emotions and wellbeing.

We live in a time of disconnection, especially in the aftermath of the COVID-19 pandemic where in-person and face-to-face interactions are rare, spontaneous or informal socializing is unlikely, and close interactions are fraught with fear (Cost et al., 2021). Shreetee, a queer person of colour and a newcomer to Canada expressed their frustration at the disconnected messages they received during their undergraduate in environmental studies where:

“I feel sometimes there is a disconnect in some of my classes in terms of how humans are [described] as kind of an external factor to the environment when it’s like, no, we are all a part of the environment.”

It seems to be clear that to process climate grief and maintain lifelong learning, these youth participants have clearly identified the need to connect with like-minded others in the community and foster community care, connect with the land they live on and nature, and connect with themselves through reflection.

Figure 4. Types of tangible activities participants described that help them to process climate grief.



DISCUSSION

This research engaged politically active youth ages 12-29 in Mi'kma'ki in reflection through semi-structured interviews, a poetry workshop followed by a focus group, and individual art submissions. This research fulfilled the objective of identifying key vocabulary that youth use to describe their climate grief as well as activities that they use to process it.

The definitions and descriptions of climate grief were similar across all participants and centered on two major themes: climate apocalypse and climate justice. These themes reflect the variety of vocabularies participants used to describe their climate grief and illustrate the contrast and internal conflicts that participants face as activists in which they must simultaneously hold their grief and fear with hope and visions of potential positive futures (Park et al., 2020). Their definitions and descriptions were apocalyptic, focused on end-of-the-world narratives, but their responses to climate grief and their visions for action spelled a story of resistance, hope, perseverance, and community. Community care, community wellbeing, and community strength were key themes throughout the entirety of this research. Participants emphasized the need for strong relationships with others to be able to withstand their climate grief and the worse impacts of the climate crisis to come, but also to build resilience and communities where people can count on one another to show up, to stand in solidarity, and to have a shared vision and identity. They identified that not only are community care and spaces necessary for processing climate grief, but also for developing directions forward for the climate movement and climate action as a whole. Their calls for transformation of the way that we relate to one another in

society, in the movement, and in our personal relationships towards one of reciprocity, respect, and sustainability spoke to the types of rituals they felt were needed to support them in their climate grief.

Strengths & Limitations

This research does not claim to provide generalizable results on the experiences of politically active youth with climate grief in Mi'kma'ki. The goal was to explore the depth of their experiences through learning, vocabularies and rituals, and their political activism and how that connects to and describes their climate grief. Although the results and discussion were successful in exploring and addressing all three objectives with a lot of depth, there were some key limitations. One of the primary limitations being that we only had one round of interviews with participants exploring their personal journey and experience with political activism and climate grief. We knew many of the participants from outside of the research to varying degrees but only having one interview might not have allowed for participants to become comfortable enough to share the entirety of their experiences with climate grief. Additionally, all the research engagement (interviews, poetry workshop, focus group, individual art interviews) were held through Microsoft Teams and as such there was little possibility for picking up on body posture and cues and it was difficult at times to read participants' comfort in the research, it also made some of the interactions unnatural. Furthermore, since this research focused on arts-based engagement, the participants may have favoured arts-based rituals when describing how they process climate grief. The arts-based nature of the research may have also attracted certain individuals with an interest in arts, although there was an opportunity to only participate in the interview component, the recruitment did emphasize the arts-based components as well.

This research was strong in that it took an intersectional and anti-oppressive approach and considered the experiences of participants in relation to all the interconnected injustices related to climate change. Additionally, there were multiple methods of data collection which improved the robustness of the data, including the opportunity for the artistic representation of the participants' climate grief. Incorporating artistic methods allowed the participants to explore their experiences in more depth and communicate them creatively. Although the artistic representations may have expressed the experiences of climate grief differently than participants shared in their semi-structured interviews, the pairing of the discussions of the everyday experiences during the interviews, with the visual and poetic descriptions, provided a more comprehensive understanding of their experiences.

Relevance and Implications

This research illustrated the powerful role that artistic approaches to climate work in communities can have in connecting people, facilitating reflection, and providing opportunities for learning. This research identifies the ways in which politically active youth are expressing and describing climate grief, including their messages for hope, perseverance, and community through visual art and poetry that can inspire and uplift readers and other youth activists. Furthermore, the existing literature on definitions of emotions related to climate change lacked definitions directed by youth experiences and as such this study adds to the growing literature on climate grief and anxiety, specifically from a youth perspective. Many key rituals and activities were also identified that other youth can try and implement into their lives to help them process their climate grief including: spending more time with community, building stronger relationships and community with those around you and in your work, helping each other out, having social and community building events, using art or journaling to reflect on experiences of climate grief and express them, having more conversations about climate grief with those they work with and care about, grounding themselves in nature and through physical activity or environmental actions like

tree planting, litter clean ups, or shoreline clean ups, and participating in both individual consumer choice actions like shopping zero waste and political action like protests.

This research is the beginning of a larger conversation that needs to happen within families, friend groups, chosen families, organizations, clubs, educational institutions, and everywhere young people are learning about and are engaged in action on the climate crisis. The systems of society like to convince people, especially youth, that we are all alone and that we have the responsibility alone of making the world change, but part of resisting the climate crisis and injustice, and processing climate grief needs to be through rejecting the notion that it is an individual's burden to bear.

DECLARATIONS

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AVAILABILITY OF DATA AND MATERIALS

Anonymized data and corresponding materials are available by request to the primary researcher, Lilian Barracough.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

This research received ethics approval from the Dalhousie University Research Ethics Board. All participants signed forms of informed consent to participate. Underage participants were provided with a form of informed assent, and their parent or guardian completed the informed consent form.

CONSENT FOR PUBLICATION

This publication draws on Lilian Barracough's master's thesis, including some reproduction. The primary author, Lilian Barracough, holds the copyright for the thesis and provides consent for reproduction.

COMPETING INTERESTS

The Authors declare they have no competing interests.

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