By No Means There Yet: Centring the Voices of Black, Indigenous, and Youth of Colour Climate Activists in Ontario

Rupinder Kaur Grewal

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FACULTY OF EDUCATION

LAKEHEAD UNIVERSITY

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Abstract

This critical qualitative inquiry delves into the experiences of Black, Indigenous, and youth of colour activists involved in the climate justice movement. Semi-structured narrative interviews were conducted with 15 Black, Indigenous and youth in Ontario, aged 18 to 29, engaged with a climate justice organization for a minimum of six months. Utilizing timeline mapping and semistructured interviews, participants highlighted pivotal life events shaping their justice-oriented values. Two overarching themes emerged: 1) Deliberately Unheard? Conveying the Challenges Encountered by BIPoC Youth Climate Activists, and 2) Empowering Echoes: Nurturing Identity, Shaping Communities, and Forging New Pathways for BIPoC Youth Leaders. Early connections to the land, familial influences, and the Land Back movement significantly informed participants' activism, emphasizing the need for intersectional environmentalism. Amidst experiences of racism within the movement and the predominant whiteness of youth protests, BIPoC youth navigate a diverse range of climate emotions and advocate for leadership opportunities and dedicated spaces for youth to foster intergenerational knowledge transfer. The study calls for systemic change and concludes with recommendations to enhance climate justice education in schools, offering insights to inspire future generations for a more equitable and sustainable future, especially for the most vulnerable of peoples.

Keywords: youth climate justice movement; BIPoC youth activists; climate justice education; intersectional environmentalism

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Chapter 1: Introduction

Research Context

Over the years, a snowball effect has been observed among individuals participating in social movements such as Black Lives Matter, Idle No More, Climate Change Strikes, and Indian Farmers' Protests, all of which have gained tremendous momentum and international recognition. Starting with a small number of individuals, movements such as these continue to grow as more people begin to recognize injustices occurring around the world. Those participating in such movements are challenging existing oppressive systems that continue to damage the wellbeing of communities globally. In the coming decades, the wildfires, water shortages, food insecurity, greater exposure to natural disasters, weather extremes, and mass displacement that we have witnessed in the past few decades with climate change will accelerate, continuing to devastate and destroy the lives of many. In fact, up to 1.2 billion people face being displaced from their homes within the next 30 years as the climate crisis grows, impacting developing countries the hardest (Henley, 2020).

Individuals involved with climate change and related movements recognize the need for more activism as governments have failed to take appropriate action. People of all ages, from young elementary students to the elderly, are taking a stand. One such exemplary youth activist is Greta Thunberg, whose ingenious use of hashtags gained popularity on social media in 2018 and galvanized student climate strikes worldwide (Han & Ahn, 2020; Wynes & Nicholas, 2019). This success built on earlier climate action, and the *Fridays for Future* climate strikes were propelled by the 2018 IPCC 1.5°C report, which Thunberg (2019) referenced.

The youth climate justice movement may have gained traction when it did in part because Thunberg's voice is a strong one, and it came at a ripe time (Beeler, 2019). Still, it is important

to note that the voices of white youth activists like Thunberg continue to be most prominent in media coverage, while important voices of Black, Indigenous, and youth of colour activists such as Isra Hirsi, Vanessa Nakate, and Autumn Peltier are given far less media attention (Lammy, 2020; Langkilde, 2020; Thomas, 2020). For instance, the Associated Press cropped Nakate out of a picture (see Figure 1) with four white youth activists, one of whom was Thunberg, later saying the original photo was not "aesthetically" pleasing (Malowa et al., 2020). In spite of ongoing criticism of that cropping, the images of racialized activists are still often erased (Dahir, 2021; Evelyn, 2021), illustrating how climate injustices intersect with racial injustices.

Figure 1

Youth Climate Activists at the 50th World Economic Forum



Note. Climate activists, from left to right: Vanessa Nakate, Luisa Neubauer, Greta Thunberg, Isabelle Axelsson and Loukina Tille, at a news conference in Switzerland in January 2020. Copyright 2020 by Associated Press, photo by Markus Schreiber.

Climate justice acknowledges that climate change disproportionately impacts marginalized populations, including those who identify as Black, Indigenous, and People of Colour (BIPoC) whereas those who are most responsible tend to be amongst the world's wealthiest and most privileged (Pettit, 2004; Stapleton, 2019). Scholars and activists alike use concepts such as human rights, intersectionality, climate justice, and environmental justice, to

understand the complexity of, and the intersections between, environmental issues and racial injustices. I discuss these terms in further detail below.

Climate change education is an important wing of the climate justice movement (CJM). Recent studies such as Field et al. (2019) and Field et al. (2023), show most educators believe Canadian K-12 schooling needs to do more to teach young people about climate change. Many scholars in the field have also called for integrating interdisciplinary approaches to climate change education in Canada and beyond (e.g., Manni & Knekta, 2020; Monroe et al., 2017; Stapleton, 2019). Given that "race, power and culture remain largely unproblematized in both environmental education and the general environmental movement" (Haluza-Delay, 2013, p. 397), there are calls for climate change education to take an explicit climate justice approach (Haluza-Delay, 2013; Lowan-Trudeau, 2017a; Stapleton, 2020). One element of such an approach involves having students engage in pro-environmental behaviour and activism, which Buttigieg and Pace (2013) suggest should be part of environmental education programmes generally.

Despite current research already mentioned, few researchers have considered how the climate justice movement and youth activists can help to inform climate justice education policy and curricula, and little attention has been given to the voices of marginalized youth climate activists who hold a wealth of information on topics of inequity and injustices within the movement itself. Canadian water warrior Autumn Peltier, Land Protector Quannah Chasinghorse, Little Miss Flint—Amariyanna "Mary" Copeny, the *Guardians of the Forest*, and Zeena Abdulkarim are among many inspiring youths who are leading the CJM today (Janfaza, 2020). This thesis highlights the thoughts and experiences of Black, Indigenous and youth of colour activists in the CJM in Ontario, Canada who are actively involved in climate justice

organizations such as Fridays for Future Toronto, Climate Justice Toronto, and Climate Justice Peel. The focal point of this thesis is youth, whom I define as the demographic of young adults aged between 18 and 29, as outlined by the Government of Canada (2011).

A Note on Terminology

This research centres the voices of peoples who are not often heard—thus, the thesis title, By No Means There Yet: Centring the Voices of Black, Indigenous, and Youth of Colour Climate Activists in Ontario. Although I will mainly use Black, Indigenous, and youth of colour, it is not accurate to lump so many ethnicities and cultures into one broad category. Thus, wherever possible, I will use specific, rather than general terms such as BIPoC. For instance, Indigenous is an umbrella term, but using terms according to what participants specifically identify as, such as First Nations, Métis, or Inuit is one such example.

Research Questions

In this thesis, I pose the following two research questions:

- 1. What are the experiences of Black, Indigenous, and youth of colour activists in the climate justice movement?
- 2. What influence do these activists believe they have on their communities and schools?

Significance of the Thesis

This critical qualitative study of Black, Indigenous, and youth of colour climate activists in Ontario adds to the scholarly research dedicated to climate justice education, which is growing but still very limited. Patton (2015) claims that what makes critical research *critical* is that "it aims to critique existing conditions and through that critique, bring about change" (p. 692). Climate change is an urgent socioscientific problem that is primarily about climate (in)justices (Damico et al., 2020). Better climate justice education is needed in schools to help tackle climate

change. It is critical for those who teach, and those who collaborate with educators, to understand and address climate justice as fundamentally interdisciplinary and transdisciplinary (Beach et al., 2017; Damico & Baildon, 2011; Damico et al., 2020).

In their systematic review of research on climate change education, Monroe et al. (2017) reported that very few studies approach it from social *and* science perspectives, while scholars argue that the science should not be the only way climate change is taught to students (Monroe et al., 2017; Field et al., 2023), and that a justice and equity approach to climate change education does not preclude educating about the science of climate change (Stapleton, 2019).

McGregor and Christie (2021) argue that to develop robust climate justice education, it is necessary to create opportunities for "activists and educators to co-construct knowledge together, working between the spaces of social movement learning" (p. 14). Pedagogical practices need to incorporate critical dialogue and involve collective deliberation between teachers, youth activists, and marginalized communities that experience injustices (McGregor & Christie, 2021). Indeed, education systems worldwide need to be held accountable to youth in the face of an uncertain, full-of-climate-disruption present and future. This accountability demands a large-scale paradigm shift in the current approach to climate change education and needs to focus on justice, equity, and the support of youth, including through active learning and opportunities to foster political skills (Karsgaard & Davidson, 2023). I thus wanted to amplify the voices of Black, Indigenous, and youth of colour climate activists in Ontario, helping fill gaps in the scholarly literature while providing a source for educators to consider. I hope this research will help to improve practice, policy, and decision-making around climate change education.

Theoretical Influences

It is difficult to isolate what does and does not constitute "climate activism" because climate justice is intimately linked to social justice (McKibben, 2017). This interdependence is one reason why employing an interdisciplinary approach for this thesis is important.

Over the years, I have been inspired by many different authors including bell hooks (hooks, 1994), Eve Tuck (Tuck, 2009), and Kimberlé Crenshaw (Crenshaw, 1989). Thus, my life outlook is in line with a transformative worldview. This paradigm stresses studying the lives of traditionally marginalized groups "and the strategies they use to resist, challenge, and subvert these constraints" (Creswell & Creswell, 2018, p. 10). Transformative research highlights voices from marginalized communities and participants, moving us all towards a better place (Creswell & Creswell, 2018).

My social justice perspective has been significantly influenced by feminism, intersectionality, and critical pedagogy. Intersectionality, a term coined by Crenshaw (1989), can be understood as a concept that captures the idea that we all view the world through various identity lenses (e.g., race, class, gender). Through this framework, I have begun to recognize how the social categories I identify with have shaped how I perceive myself and others, the kinds of implicit biases I have, and what kinds of injustices I choose to ignore because I do not experience them. It has not been easy to challenge my own biases. However, the rise of social justice movements such as Black Lives Matter, the Indian Farmers' Protests and the school climate strikes have spurred me to re-evaluate how I understand social justice and work towards becoming more critical of the things I hear, and what I say, read, and do.

This thesis relies on critical theory. Critical theory perspectives empower individuals to transcend the limitations placed on them by social categories such as race, class, and gender

(Fay, 1987). Racialized discourses raise critical questions about the control and production of knowledge, eurocentrism, and especially knowledge about communities of colour (Ladson-Billings, 2000). My research is informed by critical race theory (CRT), which highlights power imbalances and oppression directly related to race (Merriam & Tisdell, 2016). CRT, alongside my previously noted commitment to an interdisciplinary approach, transformative worldview, and intersectional lens, informs my interpretation of existing research, my research design, and my analysis of findings.

My Positionality

How an individual defines oneself is not singular or fixed; identity is fluid and multifaceted. 'Positionality' takes this a step further by conveying that "our perspectives are based on our place in society...and recognizes that where you stand in relation to others shapes what you can see and understand" (Sensoy & DiAngelo, 2017, p. 15). Richardson (2001) wrote, "People who write are always writing about their lives, even when they disguise this through the omniscient voice of science or scholarship" (p. 34). It is, therefore, essential for me to identify who I am and to situate myself within this qualitative study. I am a 27-year-old, heterosexual, cisgender, Sikh, Punjabi, first-generation, settler Canadian woman. The social categories that I identify with have afforded me many privileges and various forms of discrimination throughout my life, which I describe below.

Woman of Colour and Being Bicultural

I am a high school educator and graduate student, born and raised in Brampton, Ontario which is located on the traditional territory of the Anishinabek, Huron-Wendat, Haudenosaunee and Ojibway/Chippewa peoples; and most recently, the territory of the Mississaugas of the Credit First Nation. I am passionate about all things related to social justice advocacy and love

writing about social justice issues. I may be seen as an "insider" in this thesis research because I identify as a member of the BIPoC community, am considered a youth, and am committed to climate justice.

There has never been a time in my life when I was not thinking about social justice issues. A combination of both external factors (such as religion, race, culture, and education) and internal factors (being raised in a single-parent family and living in India for two years) have significantly impacted my worldview. One example of how these forces come together to influence my worldview is my bicultural identity. Sodhi (2008) asserts that bicultural identity formation of Indo-Canadian people involves the fusion of both individualistic (Canadian) and collectivist (South Asian, Punjabi) worldviews, contending that there is often a clash between these two worldviews and resultant lifestyles. I identify as "bicultural" and constantly negotiate collectivist and individualistic beliefs in my identity. I come from a low-income, single-parent household. My father passed away from cancer when I was ten. Growing up without a father from a young age presented many challenges. These social categories affected how I grew up and the kinds of issues I saw as increasingly important, such as poverty and racism.

Geographic Location and Climate Strikes

Climate change has exerted discernible effects on municipalities worldwide, including urban, suburban, and rural settings. "Developing" countries, especially, have been facing the brunt of climate change impacts while regions such as Southern Canada, where I live, generally face them to a lesser and subtler extent. In this way, I am privileged.

In September 2019, I took part in my first-ever climate strike organized by youth as part of the Fridays for Future movement in Thunder Bay, ON. I, like many other youths my age, also

¹ I have put developing in quotations here to highlight that it is a term that stems from and is rooted in colonialism; another way to oppress and discriminate against entire nations and communities.

use social media to raise awareness about ongoing social movements. Social media accounts, such as Intersectional Environmentalist, EnviroDefence Canada and many others, have allowed me to develop a stronger connection to, and understanding of, what is going on in the world. In participating in events like the climate strike or sharing on social media, I recognize the interconnections between social justice, cultural values, and the environment. I have never been a person who attended strikes and chose to show my passion for social justice in different ways (e.g., being part of the Social Justice Club in high school, joining Global Youth Impact at the University of Toronto). Therefore, I would technically not consider myself an activist in the traditional sense of the word because I have not been to many protests. However, I have contributed in other ways through increasing my knowledge, writing articles, and educating others. This means that although I am an 'insider' and do relate to participants who were chosen for this study, I am also an 'outsider' because my activism has never been "hardcore" like organizing campaigns and working with large organizations. In more technical terms, I thus will be employing both an *etic* (outsider) and *emic* (insider) perspective (Merriam & Tisdell, 2016).

Coming Full Circle

Throughout my educational career, I have increasingly recognized the importance of embodying social justice through knowledge, overcoming internalized oppressions, and igniting my passion for advocacy. I realize the mental toll this work can have on my wellbeing, so I have also come to know how important it is to look inwards and do the internal work to build my capacity to do equity work. In the end, I have found nothing in life happens in isolated ways, which is why I always see everything as related. It bothered me, for example, when I asked one of my high school teachers about teaching the interconnections between certain subjects or

incorporating more lessons that touched on other subjects and they responded, "You can put the pieces together after high school."

As a graduate student, the climate strikes have definitely taught me one thing: It is *never* too early to connect the dots. What I knew back then, and now recognize even more, is that I was not too young to understand the interconnections but was frustrated that there was no space to voice those thoughts, or talk it through with others, and I lacked confidence to create such a space for myself. So, it is inspiring and eye-opening for me to see youth voice their opinions in the public arena about a crisis that is defining our times.

The key identities I have discussed above shape my worldview and my thesis research.

Chapter 2: Literature Review

As noted in the first chapter, the foundation of this study is built upon the relationship between climate justice education and youth activism. Because climate justice education relies on interdisciplinary fields such as climate change education and communication, environmental education, developmental learning, policy studies, and social movements and social movement learning, this literature review includes studies from multiple fields. In line with critical theory, with a special emphasis on critical race theory, this literature review uses intersectionality as a lens for understanding the complexities of climate justice and its application to educational contexts. I also review the limited literature available on activist youth experiences, and their perspectives on their influence on schools and communities. Three themes organize this chapter:

1) Contextualizing Climate Justice; 2) Youth Activism in the Climate Justice Movement; and 3) Climate Justice Education and Solutions.

Contextualizing Climate Justice

The term *climate justice* has a long history tied to the environmental justice movement (McKenzie et al., 2017). I begin by explaining the historical roots of the environmental justice movement in the U.S. and Canada and providing examples of climate injustices occurring worldwide. Then, I will differentiate between 'climate change' and 'climate justice,' and, finally, discuss the growth of the CJM, as it has come to be known today.

The Emergence of the Environmental Justice Movement

The term *environmental justice*, coined by Dr. Robert Bullard, first emerged in the United States and is often associated with the civil rights movement (Mitchell & D'Onofrio, 2016).

According to Brulle and Pellow (2005), several incidents in the 1970s and '80s helped people recognize that environmentally hazardous sites were located in, and severely affected, racialized

and low-income communities, including African American, Latinx, and Indigenous communities across the United States. For example, one environmental disaster in 1978 that gained prominent media attention was the Love Canal, where toxic chemicals leached into the soil and the groundwater in a poor community located in Niagara Falls, New York, resulting in many birth defects (Fletcher, 2003).

While environmental justice initially only referred to the siting of hazardous waste facilities and heavy industry in marginalized communities, it later expanded to include how beneficial environmental spaces, such as green spaces, were situated in more privileged communities, typically affluent, mostly white communities (Bullard, 1990; Gosine & Teelucksingh, 2007; Haluza-DeLay, 2013; Maina-Okori et al., 2018).

The specific case from 1982 that the American environmental justice movement is said to be instigated by was "the siting of a toxic waste dump in the primarily African American city in Warren County, North Carolina" (McKenzie et al., 2017, p. 60). Soil contaminated with PCBs from illegal roadside discharge was being buried in this low-income community, which led to numerous protests (Draper & Mitchell, 2001). Although the protests did not result in removing the waste dump, they did ignite passion and advocacy, galvanizing many people to join the environmental justice movement and demand environmental justice across the country (McKenzie et al., 2017). As attention to environmental justice grew, new concepts began to be introduced in activist circles and in scholarly literature, such as environmental racism, ecojustice, and just sustainabilities (Agyeman, 2003).

The Canadian Context. Although much research on environmental justice comes from the United States, what has been called 'Canada' since the 1800s has had many forms of social justice and advocacy regarding environmental justice over the centuries, even before the term

was coined (Agyeman et al., 2009). However, as Haluza-Delay (2007) points out, there has been no formalized environmental justice movement in Canada, despite there being, for example, numerous Indigenous land defenders drawing attention to Tar Sands poisoning their lands decades before research on the topic began. As a result of the many differences between Canada and the United States (in terms of geography, racial dynamics and history, multiculturalism, social policies, and discourses), American environmental justice research may not be the most suitable discourse to understand the intersections of the environment, race, and justice in the Canadian context. Moreover, the position of First Nations, Métis, and Inuit communities both politically and culturally should inform approaches to environmental justice specific to this country (Haluza-Delay, 2007).

Buzzelli and Jerrett (2003) observed that the incidences of environmental racism in Canada exhibit a greater complexity and variation than those observed in the United States. Several studies conducted at the beginning of the 21st century depicted a confusing pattern and relationship between environmental risks and race, socioeconomic status, and other demographic variables in Canada (e.g., Buzzelli et al., 2003; Buzzelli & Jerrett, 2007; Nabalamba, 2001). For instance, an early study on air pollution exposure in Hamilton, ON, showed that neighbourhoods with single-parent family status and low education were most exposed to the city's pollution, which was not clearly tied to race (Buzzelli et al., 2003). Perhaps this is one of the reasons the environmental justice frame has gained less traction in Canada compared to in the US.

The emerging Canadian environmental justice movement has remained scattered and locally oriented, and includes disparate mobilizing across many Indigenous communities, unions, social justice organizations, and environmental studies programs (Teelucksingh, 2020). It is particularly critical that cases of environmental injustices faced by Indigenous communities in

Canada be contextualized in history, the consequences of colonialism, and government policies that tried to assimilate First Nations, Métis and Inuit peoples and eliminate Indigenous cultures and traditions (Haluza-Delay, 2007; Temper, 2019). The struggles of Indigenous peoples over the ownership, use, and destruction of traditional lands are pivotal examples of fighting environmental injustice in Canada (Whyte, 2020). For instance, Shaikh et al. (2017) demonstrated how the flooding of Kashechewan First Nation was a form of environmental injustice where inadequate mitigation measures were put in place by the Canadian government, which neglected to take advice from Cree Elders.

Other examples of environmental injustices taking place across Canada over the decades have occurred in: Nova Scotia (the open dump in Africville, a pulp and paper mill in Pictou Landing First Nation, a pipeline in Sipekne'katik First Nation); British Columbia (a pipeline running through the Wet'suwet'en First Nation); Alberta (Tar Sands); and Ontario (mercury contamination in Grassy Narrows, 60+ petrochemical facilities near Aamjiwnaang First Nation) (Waldron, 2021). Marginalized communities affected by air, water, and soil contamination also face higher rates of cancer, such as in Mi'kmaw communities in Nova Scotia (Mitchell & D'Onofrio, 2016). Still, many scholars have noted very little environmental justice-related research and even fewer books published that use environmental justice as a central framework in Canada (e.g., Agyeman et al., 2009; Draper & Mitchell, 2001; Fletcher, 2003; Teelucksingh, 2007).

Reflecting on the past three decades, as awareness of environmental injustices and their effect on BIPoC communities increased in the 1980s and '90s, the government's priority both in practice and in rhetoric has remained that of "individualist, lifestyle approaches within the neoliberal context of deficit reduction and health reform" (Masuda et al., 2010, p. 456).

Consequently, many Canadian cases where industrial activities have resulted in environmental injustices within Indigenous communities are still ongoing. There have been activist responses, like the Land Back movement and a networked resistance movement led by First Nation groups, including the Unist'ot'en in BC and environmental organizations, who are opposing pipelines, petro-infrastructure, and fossil fuel investment capitalism in Canada (McCreary & Milligan, 2014; Scott, 2013). Their struggles are being fought on many fronts, including in the courts, by legislative means, and on the streets and the land, which fortunately has led to some victories recently (Temper, 2019), such as the Keystone XL Pipeline being halted by US President Biden (Denchak, 2021b). Dhillon (2018) argues that settler colonialism can be best viewed as ecological domination—"a form of governance committing environmental injustice against Indigenous peoples and other racialized groups" (p. 4).

Recently, environmental injustices in Canadian cities have included vulnerability to climate change and increased COVID-19 risks that BIPoC communities faced because of inadequate housing, precarious jobs, and the prevalence of food deserts (Teelucksingh, 2020). Ultimately, framing these issues through a decolonial lens can help generate a more reformed and emancipatory environmental justice (Temper, 2019). As the severity of environmental injustices increases for marginalized communities in Canada, there is a simultaneous exacerbation of the overall inequities they continue to confront (Masuda et al., 2016). To make progress toward achieving environmental justice, the voices of Black, Indigenous and peoples of colour need to be recognized and put at the centre of environmental and sustainability-oriented discourses.

Cases of Climate Injustices

Alongside the rising awareness of environmental justice and racism, scholars and activists have started focusing on climate injustices (Robinson, 2018). While it is commonly thought that environmental justice activists only shifted gears to address climate change issues after Hurricane Katrina hit the U.S., Schlosberg and Collins (2014) demonstrated that concerns about the impacts of climate change on justice were present long before the formal environmental justice movement began.

An environmental justice organization, The Environmental Justice and Climate Change Initiative, launched in 2001, defined key principles of climate justice, including reducing emissions and fossil fuel use, protecting vulnerable communities, and ensuring intergenerational justice (Schlosberg & Collins, 2014). Hurricane Katrina may have helped in the convergence of the environmental justice framework and climate change issues. Sharon Hanshaw, one of the people whose homes were destroyed in Hurricane Katrina in 2005, formed Coastal Women for Change. She recognized that the effects of climate change more severely impacted low-income neighbourhoods compared to those living in wealthier areas (Robinson, 2018).

These patterns also exist internationally. In her book *Climate Justice*, Robinson (2018) included firsthand stories from marginalized people who are at the forefront of the effects of climate change. These included the story of Constance Okollet, a climate activist and farmer based in Uganda. She used her voice to empower her community after floods destroyed her home and village in 2007, causing many deaths. Much of the African continent is facing the very real consequences of a warming planet, including the likelihood of floods, droughts, and landslides.

Indigenous peoples worldwide have also been among the first to confront the effects of climate change, given their intimate relationship with the environment and its resources. This

includes Indigenous peoples from Sub-Saharan Africa, the Maldives, the Himalayas, Bangladesh, the Amazon, and the Arctic regions, to name a few (Etchart, 2017; Haluza-Delay, 2013). Thunberg (2019) spoke to inequity issues in her book: "the people who have contributed the least to this crisis are the ones who are going to be affected the most" (pp. 39-40).

Incorporating climate change impacts has been one of the major shifts in the environmental justice discourse. This shift has helped "move the understanding of environmental justice from one where environmental risk is seen as a symptom of social justice to one where the functioning environment is seen as necessary for any form of justice—environmental, climate, or social" (Schlosberg & Collins, 2014, p. 370). Highlighting climate injustices worldwide better helps one connect the local impacts to the bigger picture. Likewise, it is necessary to understand the nuances of, and key differences between, climate change and climate justice, which I will discuss next.

Defining Climate Justice

Climate justice is a contested concept, developing out of policy discourses (e.g., Robinson, 2018), liberal philosophy, and the CJM (McGregor et al., 2018). It differs from climate change, environmental racism, ecojustice and sustainability, though these concepts often get grouped together or are used interchangeably in some contexts (see Haluza-Delay, 2013).

The term climate change, which has been used for many decades in scientific research, is defined by Damico et al. (2020) as "changes in the global climate system that result in longer-term changes, from decades to millions of years, in weather patterns" (p. 685). Anthropogenic climate change traces back to the Industrial Revolution when a dramatic increase in the release of carbon dioxide and other greenhouse gases led to global warming (Klein, 2014; Robinson,

2018), though research suggests that the burning of forests had a significant impact even before the Industrial Revolution (Wagreich et al., 2019).

Many scholars have advocated for the use of climate justice to describe the effects of, and responses to, climate change using a human rights lens and social justice framework (Haluza-Delay et al., 2009; Klein, 2014; Stapleton, 2019; Tuck & Yang, 2019). Climate justice, first used in academic literature by Weiss (1989), is best understood as one of the most significant environmental justice issues of all time. Climate justice includes the "inequitable impact fossil fuel production [and burning] has on a range of already vulnerable communities" (Schlosberg & Collins, 2014, p. 368). For instance, while bringing environmental injustices to the forefront, the Inuit Circumpolar Conference deliberately used the term climate justice to convey the impacts of climate change on the Arctic and its peoples (Watt-Cloutier, 2004). Arctic climate change impacts epitomize how global industrial activities can affect people living in remote regions.

Climate justice acknowledges the disproportionate ramifications of climate change for the world's poorest countries and emphasizes that those responsible are the world's wealthiest nations (Stapleton, 2019). The fundamental demands of environmental justice directly influence and relate to the conceptualization of climate justice. Climate justice disrupts and tries to reimagine an inequitable system where those who are already underprivileged are further disadvantaged by climate change (Kanbur, 2018). Oppressive systems of colonialism, capitalism, and racism exacerbate this injustice. Climate injustice is not merely an environmental issue but also racial injustice and gender injustice (McKibben, 2017). This understanding helps set the stage for the rest of the themes in my literature review as a foundational concept that allow me to connect the dots.

The Birth of the Climate Justice Movement

Many researchers explore the growth of the CJM and its historical past. What is understood to be the CJM is debated still, including, as McGregor et al. (2018) note "the extent to which we can include diverse movements, organizations and individuals which either claim to be part of the CJM or else such claim has been made on their behalf" (p. 14). Despite the contestation, the CJM is said to have begun with critiquing the carbon-driven economy as an indicator of larger inequities exploited by global capitalism (Schlosberg & Collins, 2014). The movement idea originated with a focus on eradicating the causes of climate change and addressing the inequitable impacts of the oil industry (which was first introduced in an article published by the non-governmental organization CorpWatch in 1999). CorpWatch was also the NGO that helped organize the first-ever known Climate Justice Summit during COP6 in 2000, which eventually led to creating one of the major movement network organizations, *Climate Justice Now!* at the Bali COP13 meetings in 2007 (Schlosberg & Collins, 2014). One of the central tenets of the CJM is that people of colour, women and the poorest bear a significantly unequal burden from climate change (Rainey & Johnson, 2009).

Schlosberg and Collins (2014) suggest that although climate justice academic discourse, elite NGOs, and grassroots movements developed at the same time, "only the discourse of grassroots climate justice movements is clearly tied to the history, principles, and demands of the environmental justice movement" (p. 359). The two thriving movements have significantly influenced one another and even fused at both the international and local levels.

Youth Activism in the Climate Justice Movement

The CJM most recently gained tremendous traction as it has been revitalized and invigorated by youth activism since 2015 when a group of students invited youth worldwide to

skip school on the first day of the United Nations Climate Change Conference in Paris (Climate Strike, 2016). On November 30, 2015, supported by several organizations, including 350.org, a Climate Strike took place in over 100 countries, from Melbourne to Mexico City, with more than 50,000 people participating (Phipps et al., 2015). In addition to demanding 100% clean energy and to keep fossil fuels in the ground, activists pushed for a bold international agreement at the climate summit (Adam & Siddiqui, 2015). The international agreement was negotiated over two weeks during the United Nations Framework Convention on Climate Change (UNFCCC) 21st Conference of the Parties (COP21). The Paris Agreement was adopted on December 12, 2015, a historically pivotal moment for global climate action. It was a point when world leaders came to a collective agreement that encompassed the commitments of 195 nations to combat climate change (Denchak, 2021a).

The Climate Strike of November 2015 and the establishment of the Paris Agreement gave rise to a proliferation of new movements and organizations oriented towards climate justice, including the youth-led Zero Hour (2017), Sunrise movement (2017), and Fridays for Future (2018). Climate movements existed prior to 2015, with organizations advocating change including Greenpeace (1971), 350.org (2007), Guardians of the Forest, also known as Guardians of the Amazon (2013), and Project Drawdown (2014). Some of these groups have deep roots. For instance, Guardians of the Forest are a group of 120 Indigenous Peoples in the Brazilian state of Maranhão who have been defending their land and the remaining Amazon rainforest for more than five centuries. When asked when they were founded, one of the group leaders, Olimpio Santos Guajajara, answered: "in 1500, the year the Portuguese landed in Brazil with an armada under the command of Pedro Álvares Cabral" (in Libardi, 2020, para. 1).

Youth activism is also not new, as youth aged 18-30 have participated in local and international social movements globally for decades. Alongside their counterparts, youth have been instrumental in fighting for social justice, for example, in the civil rights, feminism, environmental, and immigrant rights movements in North America and in the May 1989 Tiananmen Square Protests and in the Arab Spring (Han & Ahn, 2020). Concerning climate change activism, youth in Australia, for example, formed the Australian Youth Climate Coalition in November 2006 to organize youth in demanding climate change action from government leaders (Munro, 2009). What is relatively new and specific to the current youth CJM is that youth activists are positioned as leaders, where they are asked to speak at international governmental meetings, have rallied millions, and are leading robust social movements aimed at stopping this existential crisis (Bowman, 2020a; Han & Ahn, 2020).

The work explicitly done by resilient Black, Indigenous, and youth of colour activists will be discussed in later sections. In the following section, I explore youth protests, climate justice organizations, BIPoC experiences, youth agency and resistance, the emotional work of the CJM, and knowledge mobilization.

Youth Protests and School Strikes

Inspired by the Parkland, Florida students' school strike for gun control, Greta Thunberg, known by supporters as "the teenager from Sweden who is a key leader in the global climate justice movement" (Damico et al., 2020, p. 688), inspired the youth climate movement that spread across the world in 2018 and 2019. This movement arguably became the most well-known environmental social movement in history (Han & Ahn, 2020). Thunberg used Friday school boycotts to demand more aggressive climate policies from governments and international organizations (Thunberg, 2019). Biswas and Mattheis (2021) described these school strikes as

"the politically motivated defiance of school attendance" (p. 3) and noted how these climate school strikes, initially started as a single individual act, were popularized by the use of hashtags, #FridaysForFuture and #Climatestrike. Numerous scholars have cited Thunberg's influence and how she has inspired millions of youth around the globe to take to the streets, demanding immediate actions be taken, including reducing greenhouse gas emissions and fossil fuel phase-out (Biswas & Mattheis, 2021; Han & Anh, 2020; Martiskainen et al., 2020; Reid, 2019).

These youth protests have had a strong influence on formal political systems. For instance, on March 15, 2019, "1.4 million people in over 1700 cities worldwide participated in strikes" to "call for policies that would comply with the Paris Agreement" (Han & Ahn, 2020, p. 6). In response to the surge of protesters, the UN Headquarters introduced its very first Youth Climate Summit in September 2019, where over 500 youth climate activists from more than 140 countries took part. In addition to participating in the Youth Climate Summit, Thunberg and 14 children (from Argentina, the Marshall Islands, France, Germany, and the U.S.) lodged a formal complaint under the U.N. Convention on the Rights of the Child, stating that failures to address the climate crisis violated the convention (Han & Ahn, 2020).

Exclusion within COP

In 2009, official constituency status under the title Youth Non-Governmental Organizations (YOUNGO) was bestowed upon children and youth so that they could participate in the United Nations Framework Convention on Climate Change (Fisher, 2016). In other words, youth were finally recognized and given status to be a part of decision-making. The annual U.N. climate change negotiations, also known as COPs, are chief organizing sites on the global stage and the main hope for implementing an inclusive approach to climate policy (Grosse & Mark, 2020; Han & Ahn, 2020). Inviting mass media attention, Thunberg earned the opportunity to

present at multiple high-profile events, including COP24 in Poland and a TED talk (Han & Ahn, 2020). Although the Youth Climate Summits are a sign of social progress, Grosse and Mark (2020) critique what occurs at the U.N. conventions. Using participant observations and interviews of youth at COP25, they found that youth are disappointed with the COP process, including how it maintains structures of colonialism that marginalize Indigenous peoples and vulnerable communities who are fighting for justice. The authors contend that as the youth CJM continues to grow, prioritizing and centring Indigenous voices as well as those of Black and People of Colour will help the movement dispute the existing policy-making systems and rebuild the roots of the system that led to the climate crisis (Grosse & Mark, 2020).

Other scholars have also critiqued such systems that reinforce the status quo (O'Brien et al., 2018; Taft & Gordon, 2013; Trott et al., 2020). O'Brien et al. (2018) wrote that some youth may feel excluded and may begin to resist events where their contributions are tokenistic or seen as mere 'decoration'. These kinds of controlled forms of participation ultimately do not acknowledge youth as independent political actors or "recognize their engagement in the many alternative political arenas where they arrive at their own meanings of community, participation, and responsibility" (Coleman, 2010 as cited in O'Brien et al., 2018, p. 3). Trott et al. (2020), using the lens of countercultures and focusing on Haitian youth who are excluded from climate decision-making, echoed these injustices expressing that the voices and actions of critically affected groups who endure the greatest impacts of the climate catastrophe are completely overlooked.

There are clear points of contestation within the CJM, despite the tremendous work that it has done for climate justice. Understanding how youth strikes began and appreciating how far they have come in gaining recognition is important. However, critiquing what *kind* of

recognition they receive (and do not receive) is of greater importance, including exploring the negative experiences that are not usually broadcast on the news and mainstream media.

Youth Power, Agency, and Resistance

The youth CJM has demonstrated the collective power of their generation. The school strikes allowed for children's voices to be heard across the world (Bandura & Cherry, 2020; Biswas & Mattheis, 2021). Despite this progress, a critical argument is that "the Western view of children as not possessing much political agency is a reason why children's political agency and protest are not addressed more, and that the power of children has, therefore, been overlooked" (Holmberg & Alvinius, 2020, p. 81). By analyzing the speeches by Thunberg (2019), Holmberg and Alvinius (2020) demonstrated how youth mobilize and perform progressive resistance to demand action from their political leaders. To youth across the globe, the critical aspect of resistance is about fostering action. Although there have been some contradictory findings that youth are less knowledgeable compared to adults when it comes to environmental issues (e.g., Corner et al., 2015), Holmberg and Alvinius (2020) found that "children's resistance in relation to the climate emergency suggests that children possess knowledge, engagement and power to act on environmental issues" (pp. 87-88).

Stephens (1996) argued that the most critical reason youth have previously been neglected in the environmental justice literature is the pervasive assumption that although children face environmental inequities, they cannot participate in grassroots movements. As my discussion of the youth CJM above reveals, this has clearly been shown to be incorrect.

Recognizing children as both environmental victims *and* actors represents a vital and largely untapped aspect of the CJM. Using a "childist" theoretical lens, Biswas and Mattheis (2021) argued that climate strikes have been a powerful counterweight to formal education by allowing

youth to self-educate and build agency. Their finding emphasizes the capacity-building potential of youth to act independently and to uncover more about climate change and climate injustices.

Despite the numerous challenges they face, youth are gathering power in large numbers and showing adults that their generation is a force to be reckoned with.

In addition to the school strikes, multiple youth organizations worldwide came together to push the movement to what it is today. The easiest way to achieve power in numbers is through organizations with shared visions and goals. Students partook in strikes alongside other activist leaders, which were facilitated by many grassroots organizations who endorsed the strikes on their websites and social media platforms (Martiskainen et al., 2020). These organizations included Earth Strike (2020), Extinction Rebellion (2020), Fridays for Future (2020), Global Climate Strike (2020), and 350.org (2021).

Fisher (2019) noted that:

protest and social movements, research has yet to devote much attention to understanding how well these findings apply to young people when they engage in activism. (p. 431)

Larger organizations, including NGOs such as Friends of the Earth International (Buttigieg & Pace, 2013) and other think tanks and academic institutions which advocate for climate justice (e.g., Mary Robinson Foundation), have been included in the broader CJM (McGregor et al., 2018). However, how these activist organizations connect with youth-led ones, and how CJ organizations form are not well understood. Martiskainen et al. (2020) further underscore the need for research in this field by explaining that to appreciate the impacts of this movement—how youth are participating now, what it will mean for them throughout their lives and the political outcomes of their activism—research is needed.

Although we have some knowledge as to how adult activists mobilize to participate in

Social Movement Learning

Social movements are also a site where participants undertake various forms of informal learning. Using the framework of social movement learning and decolonization, Lowan-Trudeau (2017) interviewed ten participants across Canada to unpack the learning experiences of Indigenous and allied environmental activists participating in Indigenous environmental movements. His findings revealed complex relationships between and within activist organizations, and the promise of individual cultural revitalization as the pinnacle form of resistance. The most critical finding was the importance of looking inward to revitalize Indigenous traditions as participants realized that "before we can presume to advocate for or toward others, we must first 'protest' ourselves, reflexively considering our own habits and actions in light of those societal dynamics and practices against which we struggle" (Lowan-Trudeau, 2017, p. 105). This finding highlights the dual responsibilities of Black, Indigenous, and youth of colour activists who must do inner work of constantly being cognizant of, and overcoming, internalized oppression while also advocating for their own and their community's rights.

Compared to formal schooling, social movement learning uses no set curriculum. Social movements, like the CJM, can be viewed as "vehicles for 'educating desire'" (McGregor et al., 2018, p. 16). The CJM addresses inequities, disenfranchisement, and the undermining of the basic needs of vulnerable communities (Schlosberg & Collins, 2014). While social movements are clearly places where people learn, environmental and climate organizations *still* remain overwhelmingly white (Stapleton, 2020) and much of what we know about learning in social movements comes from a white lens. Spotlighting the voices of environmental youth activists of colour will provide richer contexts for appreciating seemingly non-dominant environmental

standpoints (Stapleton, 2020). Large environmental organizations focused on climate change are vital for the survival of youth work as they reinforce social movement learning in important grassroots spaces, which are not available in school. However, these organizations need to be inclusive in the truest sense of the word to acknowledge BIPoC voices. While there is much known about some adult leaders of colour such as Wangari Maathai, founder of the Green Belt movement, and environmental activist Vandana Shiva, the experiences of grassroots Black, Indigenous, and youth of colour activists are not so well-known.

Climate Justice Culture of Creation. Grosse (2019) highlights the work of Black, Indigenous and youth of colour activists who are working in organizations such as UCSB Fossil Free and 350 Santa Barbara. She conducted in-depth interviews with 29 climate justice youth activists in California and analyzed how youth in the CJM foster a culture centred on *justice* as a response to climate change. Grosse (2019) mentions in her study that she oversampled activists of colour, specifically including 41% who identified as having mutliple ethnicites and 31% who identified as a person of colour. This is significant, because as she mentions, activists of colour are underrepresented in CJMs. However, she did not report separately and specifically on BIPoC participants' experiences. Of the many things discussed in her interviews, Grosse (2019) asked participants about their work as climate justice activists and their pathway into activism, as well as their reflections on diversity and inclusivity within their activist organizations.

Delving into their experiences, Grosse (2019) found that many demonstrated awareness of their own privileges, identifed problems with dominant traditions and cultures, and are actively practicing justice-oriented values. By drawing on Foran's (2014) concept of "political cultures of creation," Grosse (2019) argued that four key values—relationships, accessibility, intersectionality, and community—enable movement building by creating a climate justice

culture of creation that is *not* reliant solely on fossil fuels and inequality. These key values are significant and directly connect to my thesis work as they help to frame the social movement under focus and highlight how collective identity is, or can be, reinforced for these climate justice activists.

More explicitly, Grosse's (2019) findings speak to the ways in which youth activists are using values such as relationships and community in an active way to demand justice. For instance, Grosse (2019) explains that "valuing intersectionality and privilege led students to recognize their leverage in the divestment movement and informed why they prioritized not only divesting, but also reinvesting in the communities most affected by energy extraction" (p. 20). Grosse's study highlights the importance of studying the ways in which activists work to build a better world, and since it mostly draws on youth activists working with 350 Santa Barbara, there is still not much known about the experiences of *Canadian* Black, Indigenous, and youth of colour activists and how they engage in creating an inclusive movement based on justice. Futhermore, because 28% of her participants were white, it is hard to know whether the findings accurately represent BIPoC youths' experiences.

The Scattered Voices and Experiences of Black, Indigenous, and Racialized Youth Activists

As previously mentioned, many students worldwide, from Jakarta to New York City, have walked out of class, inspired to demand action on climate change (Marris, 2019). Climate change communications experts note how young climate activists have been using their moral authority and position as children along with their social media and tech-savviness to raise adult concern and awareness (Marris, 2019). However, the question remains: Why has Thunberg been so effective? Curnow, who studies youth movements, thinks that it has a lot to do with race and racism: Greta's skin colour—her whiteness—is a great advantage as it makes her attractive to the

media, within governments, and at the UN (as cited in Beeler, 2019). Recognizing the media's problematic focus on her, Thunberg asked media at the COP25 Climate Summit in 2019 in Madrid to focus on youth climate activists from developing countries instead of her, explaining that what are mostly future climate impacts for wealthy nations are current impacts in developing nations: "Our stories have been told over and over again....We talk about the future, they talk about the present" (cited in Braine, 2019). This mounting tension—between highlighting the work of Thunberg and recognizing that she may have more impact because she has ties to privileged communities and is white—is critical.

Conducting a Google search for "Climate Activist People," returned 30 names of activists across the top of my screen, many of whom were BIPoC. However, the first person on my Google search list was, not surprisingly, Greta Thunberg. The continuous spotlight given to Thunberg by the media has put her at the centre of the youth-led CJM. Consequently, the work and efforts of many Indigenous, Black, and youth of colour activists worldwide often get erased or obscured (Burton, 2019; McFadden, 2020; Rafaely & Barnes, 2020). Most activists in this Google search were also young women of colour. This finding surprised me, and I note how it also connects well with one of Project Drawdown's (2014) solutions to climate change: promoting education for girls and women.

The U.S. youth climate movement has many young women of colour at the forefront who are taking command, including Jamie Margolin, co-founder of the Zero Hour movement and Isra Hirsi, executive director of US Climate Strike (Beeler, 2019). The problem is that not as much attention is given to *youth* of colour. As long-time environmental justice activist, Mustafa Santiago Ali, points out, these are the people "who have been literally, not just standing on the front lines, but living in the front lines for decades now" (in Beeler, 2019, para. 29). For

example, responses to climate change in Peru are conceptualized and enacted by Indigenous youth on the front lines of the latest forms of colonial devastation (Dhillon, 2018). Bringing awareness to, and giving credit to, youth of colour for their hard work is not about boosting their egos. It is about ensuring that society is "forced to reckon with the full scope of climate destruction" so that the movement is not only seen through white eyes (Burton, 2019, para. 3).

Searching for BIPoC Youth. From the limited information that is published in journal articles, the experiences of Black, Indigenous, and youth of colour activists are not clearly documented or analyzed together. The limited number of scholarly sources I could find came from databases such as ERIC, ProQuest, and Google Scholar. Keyword searches I used to search these databases included: youth and climate change, youth and climate justice, climate justice movement, climate justice education, youth climate activist and experiences, climate change strikes, and so forth.

Next, I conducted multiple Google searches to see what additional information was published in the "grey literature," using the following keywords and phrases: "Youth climate activists around the world," "BIPoC youth climate activists in Canada," and "Youth climate activists of colour." From these searches, I found many news websites such as CBC, blogs such as Vox, Waste-Free Earth, The Good Trade, TeenVogue, Wear Your Voice, and CanadaHelps, and environmental organizations such as the David Suzuki Foundation, Greenpeace, and The Climate Reality Project, and NGOs such as UNICEF that had compiled lists of various youth climate activists. Many of these activists also have social media accounts on various platforms, with Instagram and Twitter being two of the widely used ones.

From these sources, I compiled a list of 42 youth activists from around the world with a brief summary of their age, ethnicity, organization affiliations, social media handles, and

websites where more information can be found (see Appendix A). Out of the 42, eight are Canadian youth activists: Autumn Peltier, Ta'Kaiya Blaney, Danika Littlechild, Abhayjeet Singh Sachal, Haana Edenshaw, Larissa Crawford, Vishal Vijay, and Anjali Appadurai. There are many more Canadian youth activists out there, of course, such as the 15 Canadian youth suing the government for taking inadequate action against climate change (Crawford, 2020). However, there is no research or national organization that connects their voices and demands together. These one-off lists of youth with brief biographies of each activist are helpful to an extent; however, on their own they do not paint a clear picture of Black, Indigenous, and racialized youth experiences. Although there is common messaging throughout the CJM for demanding 100% clean energy, keeping fossil fuels in the ground, and holding developed countries accountable, the experiences of youth climate activists are *not* homogenous; the movement thus may be understood as a "polyphonic movement" (Bowman, 2020b, p. 1).

Youth of colour activists are striking from school, taking it to the streets, disrupting conferences and events, and lobbying government leaders to take action—all while seeing their own communities and families suffer. Many are connected across continents. For example, youth members of the Guardians of the Forest, such as Militza Flaco (aged 23), Jeffry Eduardo Torres Cortes (24), Yanisbeth González (24), and Draney Francisco Aldana Bac (22), are part of a coalition of Indigenous organizations from Asia, Africa, and Latin America called the Global Alliance of Territorial Communities (Janfaza, 2020). Advocating for inclusion and equity in global climate negotiations, this group of activists is actively fighting for forest peoples' rights in climate change conversations (Janfaza, 2020).

Another noted youth climate activist is the vocal and passionate Xiye Bastida, a Mexican-Chilean member of the Indigenous Mexican Otomi-Toltec nation. Bastida is a vocal activist who is passionate about climate justice. This passion stems from when she saw her hometown in Mexico suffering from a flood in 2015, which was the first time she witnessed the effects of climate change (Feller, 2019). After moving to New York with her family, she witnessed the damage caused by Hurricane Sandy, which made her realize that climate change impacts were occurring everywhere. Her passion, as she states, stems "partly from her parents' climate activism and her Indigenous roots, as she and her dad are both Otomi, part of a group of Indigenous people in Mexico" (Feller, 2019, para. 2).

Bastida was inspired by Thunberg's school strike idea (Beeler, 2019) and became one of the US Fridays for Future movement leaders, was invited to the 9th UN World Urban Forum to speak on Indigenous cosmology, and also received the "Spirit of the UN" award in 2018 (NPR, 2020). She is most known for organizing and mobilizing 600 students from her school for the climate strike in March 2019. She plays a leadership role in New York City, organizing strikes and speaking on climate justice issues in town halls (NPR, 2020). More recently, on April 22, 2021, an Earth Summit organized by the Biden-Harris Administration took place that brought 40 global leaders together to pledge new greenhouse gas reduction targets (Boyle, 2021). Bastida, 19 years-old, was one of two youth activists invited to speak. Her speech to global leaders demanded holistic and inclusive solutions to climate change. Bastida advocated for systemic change that addresses multiple injustices, reaching far beyond generational injustices to include considerations of race, colonial histories, geopolitics, and Western economic power and privilege (Boyle, 2021).

Then, there is 24-year-old Vanessa Nakate, who spent more than 60 hours per week in her dad's shop, selling solar PV system batteries in Kampala, Uganda (Marris, 2019). She speaks about the disproportionate effects of climate change on agriculture and the resulting daily

struggles of Ugandans. Nakate has often protested alone; however, social media has helped connect her with activists worldwide to amplify the message that the older generations have not done enough to combat climate change, and now youth need to clean up their mess (Marris, 2019).

An illustrative example of exclusion within the CJM is Nakate's firsthand experiences with racism. Founder of the Rise Up movement and Youth for Future Africa, Nakate went to a conference in Switzerland in January 2020 with other prominent climate activists, including Greta Thunberg, Loukina Tille, Luisa Neubauer, and Isabelle Axelsson (Evelyn, 2020). As I noted in the introductory chapter, when the Associated Press (AP) reported on the conference, it cut Nakate from the picture, showing only the four white youth activists (Dahir, 2021; Lammy, 2020) (See Figure 1). The actions taken by the AP exemplify how colonialism remains a lived reality for many BIPoC communities and how it is far from over. This incident "epitomises the context in which global climate justice is itself colonised" (Malowa et al., 2020, p. 4). Speaking up on Twitter about the omission, Nakate called out anti-Black discrimination and racism (Dahir, 2021). This resulted in an outpouring of support from other Black, Latinx, and Indigenous activists who expressed similar frustrations with being erased, unlike their white counterparts (Evelyn, 2020). Nakate stated that she now felt an even greater responsibility to amplify marginalized voices who are excluded, especially those who do not have the courage, for understandable reasons, to speak up (Evelyn, 2020).

Claims of racism, such as in Nakate's case, are often prone to extra scrutiny by media and colonial institutions. Black, Indigenous and youth of colour commitment to climate change activism may be challenged, and a considerable amount of effort needed to demonstrate their legitimacy, which is most unfortunate. Women and girl activists, in particular, need to prove

their worth lest they be seen as emotional and attention-seeking, "since emotion is normatively associated with irrationality, which is seen as weakening climate activists' competence" (Rafaely & Barnes, 2020, p. 84). Despite multiple attempts by spokespersons to delegitimize her activism, Nakate has deployed alternative narratives to resist and transform discourses about her.

Analyzing her interviews, Rafaely and Barnes (2020) found that whenever she was undermined, Nakate provided "evidence-based counterarguments to destabilize her interlocutors' arguments" (p. 84). Youth activists such as Nakate thus need to be knowledgeable not only about climate science but must also have skills to back themselves up when attacked with false accusations about their knowledge, work, and impact.

Combatting the White Saviour Complex. Indigenous, Black, and youth of colour activists are often put into boxes of what society deems appropriate to fit a certain image and narrative of whom they ought to be and what they can and cannot do. Stereotyping such as this has deep roots in the "white savior complex and its legacy of erasure" (McFadden, 2020, p. 2). The white saviour complex is the idea that racialized communities suffering from climate change impacts are located in the "third world" and can only be saved by white people (McFadden, 2020). This idea is repeatedly demonstrated by colonial legacies and is at the forefront of media and news representations around the world. As Malowa et al. (2020) argue, removing Nakate from the picture of activists not only seeks "to reduce her efforts to naught, but it fundamentally attempts to deny people of colour any say in the debate pitting climate change sceptics against science-believing folks—highly reflective of the white saviour industrial complex" (p. 5).

Images of Black women activists are *still* highly controlled, and anything that does not fit the narrative may be opportunistically ignored, erased, and/or cropped out.

Calling out deleterious media practices can act as an antidote to the trend of cultural erasure and harmful, false narratives that continue to plague news media. Media coverage does not represent the full breadth of diversity of those who attend the workshops, conferences, and panels within the youth CJM (Malowa et al., 2020; Rafaely & Barnes, 2020). As Jamie Margolin, founder of Zero Hour, asserted, "a photo crop-out is an easy way to describe it, but it's really a metaphorical crop-out from the narrative of climate science in general" (cited in Evelyn, 2020, para. 13). By contrast, social media and its accessibility as a platform allow youth worldwide to connect with each other, whereas mainstream environmentalism has not provided a platform for marginalized communities to voice their experiences to the same extent.

There is a growing interest in the new "breed" of youth activists that use social media heavily. However, mainstream media has been a powerful institution that deliberately manufactures the cognitive path for how this activism should be perceived (Malowa et al., 2020). Unfortunately for Nakate, she "was caught up in an act purposefully intended to bequeath Greta the limelight," and her "presence was not only misconstrued as aesthetically unappealing but also unwelcome" (Malowa et al., 2020, p. 3). This illustrates how the youth CJM, which has centred the intersectionality of racism, sexism, and classism with climate change, also demands justice for its very members. Understanding who these Black, Indigenous, and youth of colour activists are, their communities' historical pasts and passions, and seeing them as "leaders of their own revolution" (McFadden, 2020, p. 2) can help to disrupt the narrative that the only individuals working against capitalism and industrialization are white saviours.

It is evident from both the scholarly and the grey literature that the voices and experiences of Black, Indigenous and youth of colour are scattered and not given the attention they deserve. Learning occurring within this social movement's numerous organizations for

Black, Indigenous and youth of colour, especially, is fundamentally transgressive, allowing these youth to unpack such injustices and internal oppressions. It is also a space for negotiating complex emotions, as I will describe in the next section.

Emotional Work of the Climate Justice Movement

Along with trying to unpack the collective power and agency that Black, Indigenous and youth of colour demonstrate throughout the CJM, there is a growing concern about the emotional and psychological toll this has on the activists in the short and long term. Mackay et al. (2020) interviewed First Nations and Inuvialuit youth from Canada who attended the 2018 COP24 in Poland to explore the value of Indigenous youth engagement in climate governance in offsetting their climate-related anxieties. The narratives of Indigenous youth activists indicated tremendous value in getting global experience and having community support (Mackay et al., 2020). Their participation at COP24 gave rise to personal growth and the confidence to share their feelings and climate change experiences and the impacts of climate change on their communities. It also demonstrated "markers of hope and efficacy about 'being heard' by other Indigenous peoples in other regions" (p. 14). In this way, participation in events like COP can be a liberating experience for marginalized youth who typically have not been able to participate in such global events.

Kleres and Wettergren (2017) conducted qualitative interviews with youth climate activists in Denmark, Sweden, and at two UNFCCC Conferences to analyze the role of four key emotions—hope, fear, anger, and guilt—in their activism. The authors focused on how youth channel their emotions "to both mobilize (externally) and sustain (internally) their activism" (p. 508). They found that instead of being inhibitory as one might expect, fear can be managed by hope and can actually motivate action. Moreover, acknowledging guilt can help transform fear

into anger (Kleres & Wettergren, 2017). In the light of this study and its findings, it is conceivable that multiple emotions can help motivate youth activists (Bright & Eames, 2021; Kleres & Wettergren, 2017), despite some scholars arguing that fear can be debilitating (Kemper, 2001; Miller et al., 2009).

Wong-Parodi and Feygina (2021) found that eliciting emotion through climate (justice) communication is also a promising tool for counteracting biases and misconceptions surrounding scientific information, especially for older generations who might dismiss climate change for group-identity reasons. The analogy, "Our House is on Fire," frequently invoked by Thunberg (2019), can prompt a sense of necessity for action and effectively elicit feelings of responsibility (Bright & Eames, 2021; Reid, 2019). Family values and beliefs around climate change can also influence or add to the emotional toll that BIPoC youth feel when engaging in climate justice work. In a survey involving 1212 US adults, Pearson et al. (2021) discovered that familism serves as a robust predictor of climate beliefs and policy support among Latinx communities. Familism, as defined in the study, embodies "a cultural value reflecting the centrality and prioritization of the family," encompassing the use of family as a reference in decision-making and a felt obligation to one's family (Pearson et al., 2021, p. 1). While political ideology and education were influential predictors of climate change beliefs and support for mitigation policy in white communities, their impact was notably weaker in predicting the climate beliefs among Latinx communities. This study emphasizes the significance of relational values tied to BIPoC families in climate advocacy, and the toll that BIPoC youth may feel seeking acceptance from family when engaging in the climate justice movement.

Black climate essayist Mary Heglar asserted that when speaking of capitalism, racism, colonialism, and climate change, rage and anger should be seen as normal responses to these

injustices (in Burton, 2020). However, Heglar also problematizes the word "hope" as a "white" concept that can overwrite the actions of people of colour as they respond to climate injustices out of rage or sorrow. Karsgaard and Davidson (2023) suggest that by using a decolonial lens, youth can begin to question their responses to climate change and how they may or may not attend to marginalized perspectives and take up justice issues. Drawing attention to the emotional dimensions of climate change activism is integral to acknowledging how responding to climate injustices can impact youth mental health.

As noted above, youth have taken various actions to fight climate change, including communicating climate change information through a salient medium—social media—and it too can impact mental health. There has, however, been a lack of attention by academics to *youth* climate justice mobilization, including through social media (Han & Ahn, 2020; Holmberg & Alvinius, 2020). Since the last couple of decades of climate science communication has failed to bring high levels of awareness and understanding in the broader public, and, importantly, adequate political action, it makes sense that scholars have recently turned their attention to understanding how youth climate activists are effective in their messaging. For example, Han and Ahn (2020) used youth activists' narratives to demonstrate how successful collective youth action has called out governments for their climate inaction while establishing climate change through a justice-oriented framework. Youth climate activists, as Han and Ahn (2020) explain, "have produced and disseminated a shared narrative in collective action settings, including on social media and in street protests" (p. 9). The mobilization of knowledge through multiple avenues has demonstrated that young people are more than capable of leadership.

Climate Justice Education and Solutions

The final theme in this literature review explores the need for climate *justice* education, which has mainly been a neglected area in curricula across North America (Field et al., 2023; Stapleton, 2020). Climate change education requires an equity, diversity, inclusivity, decolonization, and intersectionality framework in schools to match what is happening in the 'real world' for youth climate justice activists. As noted earlier, in the last five years, youth have been mobilizing, motivated by the injustices inherent in the causes and impacts of climate change. However, as Karsgaard and Davidson (2023) note, "education systems lag behind, preoccupied with the 'what' and 'how' of climate change, rather than engaging it as a social issue in which students themselves are implicated" (p. 1). Climate change education needs to go beyond the science classroom and begin approaching questions of 'why' by critically engaging climate change as a social issue, thus shifting toward climate *justice* education (Karsgaard & Davidson, 2023; Monroe et al., 2017; Stapleton, 2019).

The Influence of Environmental Justice Education

As discussed previously, climate justice and environmental justice are closely intertwined. Climate justice can be conceptualized as a specific form of environmental justice, or a subcategory. However, while there is a growing body of literature on environmental justice education, there is very limited research on *climate justice* education. Stapleton (2019) demonstrates how narrow this line of research is with the following statistics:

A Google Scholar search in December of 2017 for "climate change education" revealed 4580 search results, while a search for "climate justice education" revealed only 17 search results, of which only two were related to climate education and neither were empirical studies. (p. 735)

When I did the exact search for 'climate justice education' in 2023, I got 260 results, which is better, but climate justice education is still an emerging field. Stapleton (2019) proposed that climate justice should be used as a robust frame for climate change education, just as environmental justice is for environmental and sustainability education.

There is evidence in the literature that the climate justice education concept has recently become a focus for research and understanding (Bigelow & Dankbar, 2016; Kanbur, 2018; McGregor et al., 2018). For instance, Kanbur (2018) explains how climate justice education has two dimensions that need to be addressed: *between* generations and *within* generations, which he calls intergenerational and intragenerational injustices, respectively. Educators shoulder a responsibility to ensure that youth recognize their stewardship role and what they will leave behind for generations to come, while also helping them to achieve justice within their generation. In this way, climate justice education could help mitigate the disproportionate climate change effects impacting marginalized populations of all generations (Kanbur, 2018).

Bigelow and Dankbar (2016) also wrote that the climate change conversation needs to extend to incorporate climate justice. They stated that "the first thing that a climate justice education needs to foreground is the human dimension of this crisis—that there is not some barrier between nature and human beings" (p. 4). When discussing climate change or even environmental hazards, the interconnection between the natural environment, humans, and other species must be at the forefront. Maina-Okori et al. (2018), speaking to reimagining environmental education through an intersectional lens, emphasized using activist-oriented research, which can play a vital role in helping students and educators alike develop strategies to build agency and make a difference in their own lives and in the lives of others. There seems to be a consensus developing that climate justice education is vital; hearing how BIPoC youth

activists perceive climate change in schooling and the influence they have, or could have, on their schools may help to design rich climate justice education.

Addressing Climate Change Policy and Curricula

If children and youth from diverse backgrounds worldwide are coming together to recognize the racialized disproportionality of climate change impacts, why then cannot educational structures and curricula also reflect such disproportionality? McGregor et al. (2018) affirm that climate justice has an educational component, which means that the ideological impact of the CJM "needs to extend far beyond social movement constituencies, and into schools, as well as further, higher and community-based educational institutions" (p. 5). Many researchers in the field argue that there is a vital need to integrate climate justice education into K-12 curricula and classrooms (Field et al., 2019; Lowan-Trudeau, 2017; Reid, 2019; Stapleton, 2019; Waldron et al., 2019).

To get a sense of where Canada currently is in relation to climate change education, Wynes and Nicholas (2019) analyzed climate science curricula used in secondary schools across every province in Canada. They found that most curricula only focused on climate change knowledge and had few learning objectives related to the scientific consensus and potential solutions to climate change. Meanwhile, Field et al. (2019) found that there continues to be a lack of even *basic* knowledge about climate change among Canadians across the nation—including among educators. Furthermore, Field et al. (2023) analyzing climate change education curriculum expectations across Canadian provinces and territories according to grade, subject, and mandatory versus elective courses, found that there is an uneven and shallow inclusion of climate change topics, themes, and units within grade 7 – 12 curricula, with most expectations occurring in elective senior secondary courses.

While studies have long shown that knowledge *about* the environment does not necessarily lead to action *for* the environment (e.g., Kollmuss & Agyeman, 2002), many provinces still neglect to move beyond scientific literacy in their curriculum, thereby minimizing the potential for students to learn about and from action for climate justice. On the policy front, Bieler et al. (2017) looked at 90 climate change education policies across Canada. They observed that energy efficiency upgrades for schools dominated educational policy as their central objective, while numerous other aspects of climate change were overlooked. Climate policies often state that the education sector plays a significant role in combating climate change, yet "education policies do not seem to have taken up the challenge" (Bieler et al., 2017, p. 79). Many scholars contend that climate change education falls short in addressing the deep colonial-capitalist roots of the crisis because it relies on the same foundations, and since research on climate change education is still primarily situated in the Global North, it further marginalizes the lived realities of many racialized youth (Karsgaard & Shultz, 2022).

Cutter-Mackenzie and Rousell (2019) argue that climate justice education can provide a remarkable platform not only for amplifying Black, Indigenous, and youth of colour voices but also as a space for the genuine activation of youth political agency within their schools and the public domain. There may be much unrealized potential; Ministries of Education across Canada are missing opportunities to educate students about climate justice and solutions to climate change. There is thus a strong need for drastic change on the educational policy level to address climate change and climate justice more robustly. In particular, there is a need for both top-down policy change and bottom-up cultural shifts that could come from placing significance on grassroots youth activism while also recognizing the agency-limiting practices common in today's formal educational settings (Trott et al., 2021). Such recognition could come from

engaging students in *critical* historical study to "trace the emergence, development, challenges and impacts of collective action—including, for instance, the recent youth climate strikes, along with their anti-racist and decolonizing components—rather than celebrating government leadership or focusing on heroic individuals such as Greta Thunberg" (Karsgaard & Davidson, 2023, p. 15). To be effective in the long run, policy needs to reflect the needs of students and the new generation of activists. The world continues to change, and climate change curricula should account for the decades-long, climate-related trauma experienced by BIPoC peoples.

Action-Oriented and Interdisciplinary Learning

To ensure that curricula and policies are relevant, action-oriented learning and interdisciplinary learning are needed. Manni and Knekta (2020) used thematic analysis of interviews with students and youth activists to demonstrate that most secondary students "expressed a lack of opportunities for real action" and stated that "this is what they want more of, i.e., more action in practice and less talk" (p. 18). Educators need to give students more opportunities to act within their schools and communities. There are, however, many barriers and challenges when implementing this kind of transformative approach in climate change education. One of the first steps that educators can take is to help students feel empowered by allowing them to be active participants and coming up with solutions to move forward, rather than having them passively regurgitating information (Chen & Liu, 2020). Climate justice education is also fundamentally interdisciplinary and transdisciplinary (Cutter-Mackenzie & Rousell, 2019). Interand trans-disciplinary learning can broaden the scope of climate change education to help students link together ideas from multiple fields and work towards solutions for climate change that are more encompassing and holistic. Such education could encourage current and future generations to push elected leaders to work for a just, sustainable world.

Having addressed policy, action-oriented learning, and the interdisciplinary nature of climate justice education that is required, teacher education is also implicated. Campigotto and Barrett (2017) interviewed 13 pre-service teachers who had a strong passion for environmental justice and activism and who reported a lack of acknowledgement of activist experiences within their teacher education programs. They wanted more support, space, and time in pre-service programs for teacher candidates to learn from each other and share resources on teacher activist pedagogies (Campigotto & Barrett, 2017). As future teachers, teacher candidates can help prepare students for a more just future in the face of climate disruption.

Climate justice education must challenge teacher candidates, educators, and students to create a space where youth activists and educators can co-construct knowledge (McGregor & Christie, 2021). More specifically, McGregor and Christie (2021) argue that climate justice education needs to explicitly challenge the normative, neoliberal public pedagogy that equates capitalism (corporate profit) with the national interest. Consequently, how climate (in)justices are addressed in education needs to utilize collective deliberation between different stakeholders—educators, youth activists and marginalized communities who actually stand to experience, or are experiencing, these injustices firsthand (McGregor & Christie, 2021).

Damico et al. (2020) suggest that climate justice educators use three overlapping sets of "beneficial stories" that "emphasize Indigenous narratives of place, gender and climate justice, youth activism and civic engagement" (p. 686). By integrating the stories of marginalized groups and their important work (which my thesis research adds to), students could have an enriched learning experience in schools that extends beyond the 'facts' emphasized in traditional curricula. Perhaps some of these stories are already making their way into classrooms? My second research question, What influence do these activists believe they have on their

communities and schools?—considers whether Black, Indigenous and youth of colour activists think so. Based on the review of climate change education and teacher education literature, I argue that there must be a broader symbiotic relationship between youth activism and teacher education and education policies.

Attending to Youth Well-being

Employing critical race theory, Miller (2018) stated that although there is a growing commitment to creating more transformative learning experiences for *all* students in environmental education, there has still been a large failure to uncover harmful discourses that exclude marginalized learners from equitable engagement in sustainability work. Such failure could negatively impact BIPoC youths' mental health, perhaps feeding fear and eco-anxiety. However, as Jaquette-Ray (2021) argued recently, eco-anxiety is predominantly a white phenomenon, reflecting a tendency to safeguard longstanding privileges before fully acknowledging the impacts of climate change on BIPoC communities. Educators need to support and attend to the well-being of BIPoC students specifically, as they are the ones who have been struggling with double the oppression; that is, the combination of racism and disproportionate climate change effects. As noted earlier, climate activism can be an antidote for Black, Indigenous and youth of colour to "engage with their networks and culture, which in turn may have positive benefits to their well-being" (Mackay et al., 2020, p. 2).

While having conversations with family and friends, students who continually fight for climate justice within their communities are also taking on this fight *within themselves* on an emotional and psychological level (Trott, 2021). Activism can allow young people to develop a sense of agency and resiliency that may counter their rising distress from increasing awareness. Students must be able to see themselves as capable of contributing to the transgressive change

necessary for responding adequately to climate change. The collective, everyday actions of youth can stimulate a powerful and diffuse ripple effect—"a global conversation taking place in many languages about why we live the way we do, what better to live for, and how" (Trott, 2021, p. 6). Addressing the social, political, economic—and most importantly, mental—aspect of climate justice education emphasizes how climate change is inherently *not* an isolated phenomenon. It requires a multi-pronged solution to reach desirable outcomes.

Conclusion

There is a clear gap in the literature on climate activism that has not yet sufficiently prioritized emphasizing the voices of Black, Indigenous, and youth of colour activists. It is not just about fighting for a livable future; it is about fighting for an *equitable* livable future so that BIPoC communities can have more opportunities to survive and thrive. BIPoC youth have to grapple with their own internalized oppression and use their voices to bring about change. The internal work alone is tremendous. Yet, despite overcoming such adversities, their voices are hardly heard in mainstream media because of the colonial, racist, capitalist, oppressive structures that control every aspect of society (Malowa et al., 2020; Rafaely & Barnes, 2020).

The integration of literature from environmental education (e.g., Agyeman et al., 2009; Haluza-Delay, 2013), climate change communication and education (e.g., Stapleton, 2019), and social movement learning (e.g., McGregor et al., 2018) has uncovered *some* of the nuances and complexities of climate justice and youth activism (Fisher, 2016). Understanding the implications of what climate justice (as opposed to environmental justice) entails, the impact and importance of youth activism, and how education can help further the cause of equity and decolonization, provides me with a dynamic lens for considering what needs to happen in the field.

From the limited amount of research specifically dedicated to climate justice education, the emerging findings include a need for more professional development, educational policies, and research to be conducted on this topic (Stapleton, 2019). The current study contributes to educational theory, research, and practice.

Chapter 3: Methodology

Theoretical Framework

I see climate justice issues (such as higher frequencies of natural disasters and weather extremes) as fundamentally social problems, particularly because their harmful impacts are greater for oppressed BIPoC communities and the poor worldwide (Fletcher, 2003; Shaikh et al., 2017). Understanding such inequities, the research questions I pose are: *1) What are the experiences of Black, Indigenous, and youth of colour activists in the climate justice movement?; 2) What influence do these activists believe they have on their communities and schools?* I am using an intersectional framework (Crenshaw, 1989) and a critical race lens (Ladson-Billings & Tate IV, 1995), and take an interdisciplinary approach by drawing from critical theory, environmental studies and education, climate change education, and communication. My background as a science and humanities educator influences my approach as does learning from systems thinking, anti-racism, culturally-relevant and -sustaining pedagogies, and pedagogies of empowerment (Dei, 1996; Freire, 2000; Hayden et al., 2011; hooks, 1994; Jennings et al., 2006; Ladson-Billings, 1995; Lambrechts, 2020; Paris, 2012; Steen, 2003).

Critical Race Theory

The paradigm that I used to foreground my study is critical race theory (CRT). In the 1970s, CRT first developed as a branch of Critical Legal Studies in the US and "originated as a critical response to the treatment of race in legal discourse and practice" (Strong-Wilson, 2011, p. 47). Generally speaking, CRT is a movement to understand and study the relationship between race, racism, and power (Ladson-Billings & Tate IV, 1995; Stefancic & Delgado, 2010; Treviño et al., 2008). CRT has many vital tenets: 1) racism is a normative facet of Western society; 2) legal processes and any apparent progress typically benefits whites more than provide *genuine*

social justice; 3) racism has to be understood through history; and 4) marginalized peoples' narratives are accounts of lived experiences that result from racist policies and practices (Strong-Wilson, 2011; Taylor et al., 2009). In other words, CRT highlights the different forms of discrimination, disenfranchisement, and dispossession that occur across social institutions (Treviño et al., 2008). Subsequently, it seeks to give voice to marginalized communities and thus, aims to identify injustices *and* be a systemic way to root out inequities.

CRT has since been extended into many different spheres and fields, such as education, political science, sociology, and ethnic studies (Stefancic & Delgado, 2010). Issues that CRT can help to critique include school discipline, tracking, standardized testing, curriculum and history controversies, and alternative schools (Ladson-Billings, 2006). Principles of CRT are also connected to youth activist organizing and social movement learning. As Stovall et al. (2009) note, CRT should operate as a call to action to address the predicament of Black, Indigenous and youth of colour in education. This theory helps to inform my research questions, methodology and interpretation of the study's findings, as I explain below.

Intersectionality

The concept of intersectionality, or intersectional theory, originated as a legal concept and was coined by legal scholar Kimberlé Crenshaw (1989). Intersectionality speaks to the ways that various structures of power intersect, resulting in intricate forms of oppression that cannot be comprehended through a single axis (e.g., race or gender) alone (Crenshaw, 1989). It offers a framework or prism in which to highlight people's experiences who are often dismissed and overlooked. Intersectionality gained popularity as it permeated mainstream discourse and was increasingly adopted by scholars and activists. In recent years, youth climate activists have embraced intersectionality, giving rise to a new term—intersectional environmentalism (Thomas,

2022). Although intersectional environmentalism closely aligns with, if not mirrors, environmental justice and may be perceived as a buzzword, it serves as an entry point for a new generation of youth to participate in environmentalism while scrutinizing systems of oppression (Oglesby, 2021). Despite ongoing debates regarding terminology and variances in how different generations interpret intersectionality, the overarching aim remains to redefine environmentalism to confront systemic inequalities and injustices, particularly affecting marginalized communities.

Counter-Narratives and Countercultures

While various theoretical frameworks informed this thesis, I was intrigued mainly by how CRT and intersectionality helps to recognize and counter the pervasive nature of white supremacy and racism while concurrently promoting counter-narratives informed by the knowledges held by BIPoC communities and youth (Solórzano & Yosso, 2002). CRT initiated a new form of critical expression by amplifying "voices of colour" and encouraged critical race scholars to write in narrative form or engage in storytelling (Giroux et al., 1996). This counterstorytelling allows marginalized individuals to "convey their personal racialized experiences" and "is a way of countering the metanarratives—the images, preconceptions, and myths—that have been propagated by the dominant culture of hegemonic whiteness as a way of maintaining racial inequality" (Treviño et al., 2008, p. 8).

Indigenous writer Thomas King (2003) wrote, "The truth about stories is that that's all we are" (p. 2). Stories are a powerful way to convey what we believe in and value, what we experience daily, and all that we choose to emphasize and even ignore in a given situation (Strong-Wilson, 2011). Counter-storytelling is very much in line with CRT as it combines the personal with the critical. Counter-storytelling can inform the related concept of "countercultures." For example, Trott (2021), writing about climate change, used the idea of

countercultures to critique dominant narratives that limit youths' participation in society, including their potential to transformatively engage with climate change. She demonstrated how youth activism helped challenge hegemonic discourses and agency-limiting practices present in formal educational settings (Trott, 2021). Everyday youth climate change activism is countercultural on two levels, she argues: 1) youth are challenging conventional ways of life that rely heavily on materialism and overconsumption; and 2) youth activism challenges the prevailing notion about the 'proper' or 'appropriate' role young people play in society. I use the idea of countercultures in my analysis to help make sense of the narratives of Black, Indigenous and youth of colour activists.

Methodology

My thesis is informed by my social constructivist and transformative worldview. I recognize the importance of intertwining research with social change and politics. I find tremendous meaning in exploring and seeking to better understand inequality, oppression, power, and domination. Further, I see the world through a lens of social constructivism (Creswell & Creswell, 2018) which means, according to Heikkinen, that "human knowledge is no longer regarded seen from 'the eye of God' reflecting a coherent and universal view on reality; instead, plurality and contextuality are emphasized" (as cited in Aarikka-Stenroos, 2010, p. 1). In other words, according to the social constructivist paradigm, the nature of reality is that there is no single knowable 'truth' and ontologically, reality is constructed by individuals in various groups in society but also within social contexts.

In terms of epistemology, this reality must then be interpreted, and the socially constructed meanings of various events and phenomena need to be assessed (Marshall & Rossman, 2016). Creswell and Creswell (2018) emphasize that researchers in this paradigm

"recognize that their own backgrounds shape their interpretation, and they position themselves in the research to acknowledge how their interpretation flows from their personal, cultural, and historical experiences" (p. 8). As a researcher, I aimed to comprehend the experiences of my youth participants; however, my positionality inevitably shapes my analysis and interpretation of what they shared, and thus also with how I represented the findings.

This qualitative research study is exploratory (Gray et al., 2007; Swedberg, 2020) given there has been little research conducted previously on the topic. It is influenced by narrative methodology, which, as Buttigieg and Pace (2013) point out, emphasizes the importance of experience, and facilitates investigation of a problem in all its complexity and wholeness. Given that the design is heavily informed by a critical theoretical framework, my study would be best described as *critical* narrative-informed inquiry (Rudman & Alrich, 2017). To understand the multifaceted nature of the CJM and its impact on Black, Indigenous and youth of colour, I sought participants' *stories* about their significant life experiences related to participating in the CJM. Given that I asked for individuals' stories, conducting one-on-one interviews was an appropriate choice of method. While short interviews only allowed me to glean a few stories from each participant (compared to multiple interviews conducted over a prolonged period of time, which is common in narrative inquiry), it is appropriate for exploratory master's-level research.

Participant Recruitment

Sampling Technique and Recruitment

Purposeful sampling, specifically convenience and snowball sampling, were employed for this study, meaning that I interviewed the people who responded to my recruitment strategies and who fit the criteria for the study (Merriam & Tisdell, 2016). Patton (2015) argues that the strength of purposeful qualitative sampling is that it leads to information-rich cases. The best

respondents for me in this case were those who could readily identify and express their experiences as Black, Indigenous and youth of colour climate activists.

The call for participants was made via email, on Facebook and Instagram (see Appendix B), reaching out to Fridays for Future Toronto, Climate Justice Toronto, Climate Justice Peel, and many others. I deliberately chose organizations that centered climate justice in their mission statements and used online social media platforms. After this initial recruitment effort did not garner sufficient interest, I recruited through the app *Slack* where a group I follow on Canadian Youth Climate Collaboration has 100+ members and multiple channels. After I recruited a few individuals who met my criteria, I used snowball (or network) sampling by asking these participants to refer me to other potential participants (Merriam & Tisdell, 2016).

Sample Size and Selection. I used criterion-based selection (LeCompte & Schensul, 2010), meaning I determined which attributes were critical to the study and then sought out respondents accordingly. My criteria included that participants must:

- 1) be classified as youth or *young adults* (Government of Canada, 2011), specifically between the ages of 18-29;
- 2) identify as Black, Indigenous, or a Person of Colour (i.e., Latinx, Asian, Pacific Islander, South Asian, bi/multiracial, etc.);
- 3) identify as a student, either in high school or a post-secondary institution; and
- 4) have been an active member of a climate justice organization in Ontario, Canada for a minimum of six months.

I interviewed 15 participants (see Figure 2 below for demographic information). All participants were given an Information Letter to explain my study and a consent form (see Appendix C and D). Small sample sizes are characteristic of exploratory studies and narrative

inquiries (Creswell & Creswell, 2018). Although the majority of participants were in Ontario, three were international students; thus, not all participants were long-time Ontario residents. One participant in particular was based in Ontario and was engaged in local climate activism but is primarily active with a foreign organization. The names of participants in the chart below are a combination of real names and pseudonyms, depending on the participant's preference.

Figure 2

Participant List: Demographic Information

Name	Age	Gender identity and pronouns	Cultural identity	Time with CJ Organization
Abhay	21	Male (he/him)	South Asian (Sikh)	More than 5 years
Annalee	22	Female (she/her)	Biracial; Half-Chinese and half-white	More than 1 year
Atreyu	20	Indigenous or other cultural gender minority (e.g. two-spirit) (he/they)	Indigenous (Anishnaabe Ojibwe) and Punjabi	More than 1 year
Aliya	18	Something else (e.g. gender fluid, non-binary) (she/they)	Indian Canadian	More than 1 year
Krissan	28	Male (he/him)	Tamil	6 to 12 months
Lita	19	Female (she/her)	Kenyan	6 to 12 months
Imani	28	Female (she/her)	Black (Sierra Leone)	More than 1 year
Simran	19	Female (she/her)	South Asian (Indian)	More than 1 year
Shadiya	29	Female (she/her)	Somali	More than 1 year
Jacob	23	Male (he/him)	Indigenous (First Nations)	More than 1 year
Gwyneth	20	Non-binary (they/them)	East Asian/Pacific Islander	More than 1 year
Malinali	29	Female (she/her)	Mexican	More than 1 year
Gabriela	29	Female (she/her)	Latin American	More than 1 year
Rajbalinder	23	Male (he/him)	South Asian (Sikh)	More than 1 year
Farah	29	Non-binary (they/them)	South Asian	6 to 12 months

Data Collection Methods

The two types of data collection methods I used were semi-structured interviews and timeline mapping and histories.

Semi-structured Interviews

After obtaining informed consent from participants, I conducted semi-structured interviews via Zoom that lasted on average approximately an hour and a half. As Merriam and Tisdell (2016) point out, most qualitative research interviews are semi-structured and so my interview guide contained many open-ended questions (see Appendix E). I first piloted the interview questions with a colleague to test the quality of the questions and got a sense of how long the interviews might take. Interviews were conducted between July 7, 2023, and October 5, 2023.

Timeline Mapping

Timeline mapping is a visual data collection method originating from graphic elicitation designs (Bagnoli, 2009; Kolar et al., 2015). A timeline is created highlighting a participant's life events chronologically, with visual indication of the most important events (Berends, 2011; Patterson et al., 2012). Timelines, alongside interviews, have been found to strengthen data by improving interviewee-interviewer rapport and building mutual understanding and reflexivity through interactive engagement (Berends, 2011; Sheridan et al., 2011).

Before the interview, I gave participants a brief explanation of what the interview would be about and provided them with a copy of the interview questions in advance to give them time to think about and reflect on their experiences. I also provided them with an empty timeline (see Appendix F), asking them to complete it in relation to significant events they witnessed or

experienced that have shaped their justice-oriented values and influenced their choice to be active within a climate justice organization. I noted these events could be large or small, personal, or environmental, as long as they related to climate justice. I also asked them to think about how these events shaped them and how they became aware of climate justice and were motivated to work within this field. Interviewees were asked to select up to five significant events and to mark the year and their age when the event happened, and to provide a short description of the specific event (Buttigieg & Pace, 2013).

Participants were given ample time to fill out the timeline at their own pace before the interview and were asked to forward it to me at least one hour before the interview began. After a few demographic questions, I proceeded by asking them about their timeline so that they could discuss the events they deemed important (Buttigieg & Pace, 2013). The discussion of the timeline did not necessarily proceed in a linear, chronological way, but was an initial way to organize significant life events. It also, as Adriansen (2012) states, "provides an opportunity for linking the story with the wider social, political and environmental context during the interview" (p. 40).

Data Analysis and Trustworthiness

All of the interviews were recorded on Zoom. I began with the Zoom transcription and then went through the transcription carefully to correct errors. I sent each participant a clean copy to review and edit as they saw fit. For practical and ethical reasons, to generate texts that are sincerely reflective of how research participants see themselves, their experiences, and how they wish to be represented (Freeman, 2003), it is useful to invite the participant to review their transcript. Such member checking increased confidence that the participant's intentions during and after the interview were respected and valued (Connelly & Clandinin, 1990), and gave them

input into how their story will appear, thereby giving them power over their own narrative (Squire, 2008). Five participants made changes to the interview transcripts and sent them back to me, five reviewed the transcripts and stated they were good as-is, and five did not respond.

I used thematic content analysis to generate themes from the interview data (Braun & Clarke, 2006) by employing both a deductive approach (looking for data related to environmental racism, climate justice, youth as environmental actors, and protest as pedagogy) and an inductive approach to create space for other themes to emerge. Data analysis was conducted using NVivo, using both open and axial coding. Coding is the process of reading transcripts and making notations next to small segments of the data that may be potentially relevant to the research questions (Merriam & Tisdell, 2016). Open coding is the first step of this process when a researcher is open to anything (Merriam & Tisdell, 2016). After the initial open coding, axial coding was conducted, where I grouped open codes together. I conducted open coding of all transcripts first and then merged the codes into a master list of codes derived from all 15 interview transcripts. Using the constant comparative method (Merriam & Tisdell, 2016), I combined codes from the open coding into more comprehensive categories (see Appendix G: Code Book). This master list became the primitive outline of key themes that cut across the data that helped me better understand and see patterns in participants' experiences in the CJM.

The trustworthiness of this study was increased by using multiple strategies, including reflecting on my own positionality, doing member checks, and seeking multivocality (Tracy, 2010). I discussed my positionality in Chapter One and how it has influenced this research and I continued to reflect on that during data analysis and writing. I engaged in member checking by having participants review their transcripts. Multivocality is the practice of ensuring that multiple

voices are reported in the study, reflecting a variety of opinions and lived experiences (Tracy, 2010), which is clearly a goal of my thesis research.

Ethical Considerations

Pseudonyms were used to replace the interviewees' real names (n= 5), unless they wanted their real name to be used to receive credit for their knowledge, which they indicated on their Consent Form (see Appendix D). Participants had the right to withdraw from the study at any time and to refuse to answer any questions. Data provided by participants will be securely stored at Lakehead University for a minimum of seven years following the completion of this thesis. There were no foreseeable harms or risks associated with participating in this study. The research was approved by the Lakehead University Research Ethics Board.

Chapter 4: Findings and Discussion

My research explored the experiences of Black, Indigenous, and youth of color activists in the climate justice movement and the perceived influence they had on their communities and schools. In this chapter, I present findings from interviewing 15 BIPoC youth in Ontario and using both a deductive and inductive approach to conduct data analysis. Two main themes emerged from the data that highlight the multifaceted experiences of the participants in the CJM:

1) Deliberately Unheard? Conveying the Challenges Encountered by BIPoC Youth Climate

Activists, and 2) Empowering Echoes: Nurturing Identity, Shaping Communities, and Forging

New Pathways for BIPoC Youth Leaders. I use quotes from the participants to support and illustrate the findings and situate findings with respect to the extant literature. I close the chapter with a discussion outlining the implications and opportunities for educational stakeholders, policy, and future research.

Deliberately Unheard? Conveying the Challenges Encountered by BIPoC Youth Activists

In this theme I explore how cultural background and connections to water and land, as well as other factors, led youth to participate in the CJM, then consider the experiences of BIPoC youth in the climate strikes and their transition into other arenas of climate justice. The first subtheme, *Land Stewardship and Familial Influences*, documents cultural perspectives, generational differences, youths' connection to nature, and the importance of decolonization and the Land Back movement. The second subtheme, *Participation in the Climate Justice Movement*, explores the power of climate protests and contrasts that with the ways in which BIPoC youth experience varying levels of racism within the movement and in environmental spaces. The third subtheme, *Being Radical in Multiple Arenas and Inclusive Activism*, discusses how youth are radical in many different areas of climate justice and intentional about getting involved with

BIPoC-specific organizations. Taken together, this theme addresses the first research question: What are the experiences of Black, Indigenous, and youth of colour activists in the climate justice movement?

Land Stewardship and Familial Influences

This subtheme explores how cultural background and upbringing influence individuals' connections to nature and their decision to get involved in climate justice work. One of the key findings of this study is how BIPoC youth relate their cultural values and lived experiences to their activism. For many participants, having early experiences and building a connection to land and animals kickstarted and influenced their approach to environmentalism from a young age. Planting trees, picking up garbage from school yards, and gardening were some of those small actions that participants recalled engaging in through clubs or school initiatives. All participants also talked about participating in activities that brought them closer to nature outside of school, such as going for walks in local ravine systems or parks with their families and visiting forests near their neighbourhoods growing up. Taking small actions helped build a personal connection that ignited their interest in the environment. This resonates with Duke and Holt's (2022) research that identified a student's connection to nature as an important factor in predicting whether they engage with climate change.

All participants recalled being exposed to Western views of environmentalism during their upbringing, emphasizing the significance of individual actions when addressing climate change. Recollections from the participants included educational exposure to concepts such as the water cycle, conservation, sustainability and the three R's (reduce, reuse, recycle) as well as solar, electric, and wind energy, transportation, and carbon emissions. While participants were discussing their timelines, a majority of the participants recalled having what I call a "pivotal life

experience," a moment that was life-changing for participants in terms of climate justice. Some referred to this as a "eureka" or "aha" moment in their life, or a wakeup call, realizing that caring about the environment also involves caring about people, and that it is not only about individual actions that will help solve the climate crisis. Examples of pivotal life experiences included: Going on an Arctic expedition and learning about Inuit ways of life; winning a nation-wide photo competition and attending an international conference in middle school; going to a nature retreat; seeing water and air pollution for the first time; learning about environmental disasters and worrying about family back home (2004 tsunami); responding to the death of a land activist (Joannah Stutchbury); and attending an Indigenous Nibi gathering (a 4-day Indigenous-led gathering that centres around *Nibi Onje Biimaadiziwin* [Water is life]), to name a few.

These pivotal moments helped transform their views and actions from a lens of mainstream environmentalism to climate justice; for instance, participants went from conventional experiences like gardening and farming to thinking more critically about food security and land stewardship; from experiences in hunting and fishing and making posters about polar bears to thinking more critically about habitat loss and animal species extinction. Jacob spoke about the importance of hunting growing up:

It pretty well made me who I am today. My first experience that really got me hooked in protecting the environment. I did a lot of hunting and fishing when I was younger. Around the age of 8, my first experience, deer hunting, I got to see a lot of the wilderness. I hunted with my grandfather and my father. I ended up wanting to protect it as I got older.²

Jacob joined the Green Party and continues to advocate for the protection of the land, including the Greenbelt in Ontario, making connections to the kinds of species that would go extinct if development of the land continues. Jacob also reflected on the unprecedented number

² I am purposefully departing from APA 7 by single-spacing quotations to help with readability.

of forest fires in so-called Canada this year, which has renewed his efforts to protect the land.

Bigelow and Dankbar (2016) stated that when addressing climate change or environmental injustices, it is crucial to centre the interconnectedness of the natural environment, human beings, and other species. Many participants share this understanding.

Participants also related firsthand experiences of climate change effects to environmental racism and pollution. Malinali's recounted seeing pollution and its effects on marginalized communities in Mexico:

We had an experience where we were measuring and doing water quality measurements in a very polluted river....I remember at 6 pm, we were still gathering some information. And suddenly the river grew. It had this smell that was unbearable. We were all wearing masks and gloves, like personal protection gear, but the smell and the fumes from the river were unbearable, so we were choking. We had to gather all of our tools and ran out of there. We had effects on our throats for 4 days after that very quick exposure to whatever it was because we couldn't measure it. Just thinking about how bad it was for us in a very quick exposure compared to the people who lived there, who didn't have a say when it came to pollution; their air is polluted, their soil is polluted. It was just heartbreaking.

Pollution is a tangible and visible manifestation of environmental degradation. When individuals, like Malinali, witnessed polluted air, water, or land, it serves as a direct and observable impact of human activities on the environment. This visual evidence makes the abstract concept of climate change more tangible and immediate. Thus, having this kind of experience helped participants note the urgency of climate justice. Similarly, Fisher (2016) found that climate change often helped participants connect their social justice and environmental concerns together.

Abhay recalled visiting his parents' homeland in India and noticing pollution for the first time, thinking that environmentalism was only a "Western" ideal:

Going to my family's home in Amritsar, and seeing like garbage right outside the house. And again, I was 6; it really confused me. I was called like a 'whitewashed' kid from Canada. And it was interesting for me, because, actually reflecting on this now, I think maybe it made me feel like environmentalism was like a Western value in a sense, 'cause I

was bringing it there. But I just didn't have a lens to actually view it through a local context, too. And so, I think that was maybe a first key moment for climate justice.

Familial beliefs play a role in instilling the value of preserving the environment. Some participants talked about having parents that had very pro-environmental views, while others said that they came from families that did not care much about climate change. Participants who had parents with strong environmental awareness noted that there was a generational disconnect between understanding the need for environmental efforts and the willingness to actually take environmental action and participate in climate protests, as Lita from Kenya recalls:

I always asked my dad, I always used to tell him, like you care about the environment. But you're not proactive. And I remember asking why. And he just said, "It's not our fault, we literally haven't done anything," and I think that so even in him not ever speaking about doing actual climate action was him acknowledging that we have nothing to do with that...And also my grandma quit being a principal full time to work as a farmer and trying to improve food security in her area. She grew up quite poor. But she really did try to learn Indigenous methods of farming from where she's originally from...and now, it really has laid the foundation for what I'm passionate about.

While Lita's father did not feel compelled to act, her grandmother changed professions to help mitigate food insecurity. Even within families, then, there can be a contrast of opinions that either inspire or hinder one's decision to participate in climate justice work. It may be relevant that 13 out of the 15 participants were first, second or third-generation immigrants, three of whom identified as being international students.

Some parents saw protesting as being too "radical" and some participants noted the need to get permission from their parents or sought approval from their families. Some had families that came from war-torn countries like Sierra Leone where protesting is strictly forbidden. These parents did not allow their children to take part in protesting as they were afraid of the repercussions. Lita's experience of wanting to protest while in Kenya exemplifies possible consequences:

When I was around 17, I was in this [environmental] club at school, and our President would always say we cannot do climate strikes. If we do climate strikes in this country, we will go to prison, the laws around protesting are so strict and people die. And I was like, "Yeah, whatever." I remember me and my friend were like, "That's so silly, we need to do a climate strike like everyone's doing the climate strike." And then Joannah Stutchbury, an American land activist who lived in Kenya, got shot outside a forest, just outside Nairobi in 2021, and it kind of hit me; people don't want us to do this.

In some cases, protesting results in literal life or death situations. In other cases, participants worried about their parents' disapproval of protest culture. Abhay said:

I think my parents care about the environment. Whenever there were strikes or protest for anything, I think my parents would often just be like, "Oh, why are they doing this? This is unnecessary." And, I think I had this up until honestly like 2020, I had this sort of middle-of-the-pack, middle-ground sort of viewpoint on environmental issues. No, I can't do that, even though I wanted to strike. I was worried about what my parents would think and more broadly, I think I was worried about repercussions. So, I didn't. I also was just trying to get approval from my family.

Some parents saw protesting as dangerous or unsafe, which is why some participants hesitated to participate in climate strikes. The strong influence of family was also seen in Pearson et al.'s (2021) study of climate beliefs in Latinx communities.

Participants' ethnicity, cultural beliefs, socioeconomic status, and faith also influenced their outlook on environmentalism and climate change. Some cultures naturally embed environmental consciousness in the way they operate from day to day, as Aliya mentioned:

A lot of immigrant or South Asian communities have a lot of principles of environmentalism in regular, everyday practice, eating every single piece of food, reusing plastic, saving every drop of water; it's something that comes with us as we are.

Oh et al. (2021) noted "that family values exhibit a similar effect to personal values when predicting strength of environmental concern" (p. 7). In contrast, certain cultural values people grew up with also contributed to climate change.

One participant noted their experience of being told to calculate their carbon footprint in middle school and noted feeling guilty about their family not having an electrical vehicle or not

being vegan—compared to their privileged white counterparts—stating how it would be relatively hard considering the closest connection to their culture was through their cultural dishes which are heavily meat-oriented. Gwyneth talked about the generational differences in thinking about environmentalism, and how the use of *balikbayan boxes* to send to the Philippines fuels more consumption and transportation costs, but also the importance of giving back to families who are heavily impacted by natural disasters:

I'm very much so an outlier in my Asian family. Like my parents are so wasteful. But with my family, too, like my grandparents expect me to have kids, and they don't understand why I'm pursuing environmentalism as a core part of my field. Because to them it doesn't make money. There's no security in it...It's a bit difficult reconciling with differences in family as somebody who is Filipino and educated just on the basis that with Filipino culture, it's based on a hierarchy system, you can never talk back. I've spent my entire life trying to teach adults that should be teaching me.

....There's this thing in our culture called 'balikbayan boxes' wherein if folks leave the country, but they still have family at home, boxes of various goods that are found in North America, whether it's food or its clothing, are actually culturally expected to bring back home, either ship it with you, or bring it with you as a carry on to give it to your family when you go to the Philippines to help mitigate any effects of either generalized property or climate disasters that do happen there. And it's interesting 'cause "balikbayan" itself, as a word, it means giving back.

There are many such culture-specific practices or traditions that participants addressed that relate to climate (in)justices and contrast their Western views of environmentalism with their families' cultural views. According to Marks et al. (2022), examining climate change through a cultural lens can provide profound insights. Participants' thoughts on culture focused on intersectionality, which helps enrich the understandings of BIPoC youths' experiences.

Another participant mentioned learning about the differences between halal meats (traditionally methods of preparing meats in Muslim communities) and contrasted that to mass meat food production in the West, as it relates to climate change. Two more participants noted how they were making connections between their climate justice work and their faith. One noted

that in Sikhi, *seva* is a main tenet that means self-less service and giving back to the community and taking care of both people and the environment, and another noted how they are inspired by a group of Muslims in the GTA who are creating a guide to find ways to make mosques more sustainable. Cultural aspects are important when thinking about the ways in which societies react and adjust to climate-related risks. Adger et al. (2013) illustrated how culture serves as a mediator for both environmental shifts and societal changes; information about climate change does not resonate uniformly across all cultures and worldviews.

Considering the Western view of environmentalism and their cultural backgrounds together creates a dissonance for BIPoC youth, between wanting to do more but also blaming themselves for climate change. There is also the added pressure for most of being from immigrant families, especially for those who have families back home who are impacted significantly by climate-related disasters. These tensions and pressures are also found in the literature. Studies provide evidence that teenagers' climate-related information-seeking behavior is sometimes influenced by their parents (Mead et al., 2012; Ohman and Ohman, 2013; Ojala, 2013, 2015). Furthermore, youth who engaged in discussions about climate change with friends and family were less likely to downplay the seriousness of climate change compared to those who did not (Ojala, 2013), while those who conversed with skeptical parents and peers tended to adopt a more skeptical stance themselves (Ojala, 2015). It is evident then, that many BIPoC youth may have an additional challenge in reconciling familial and cultural values with Western environmentalism and climate activism.

Intersection with Other Movements

Many participants talked about the importance of other movements that helped inform their justice lens. Some of the social movements mentioned included Fossil Fuel Divestment

movements, Indian Farmers' Protests, Diversify Outdoors, and Black Lives Matter. A majority of the participants noted the ways in which the Black Lives Matter protests helped them to sit with the uncomfortable and recognize the ways in which systemic racism continues to infiltrate every facet of society and how that ultimately raised their anti-racist consciousness. Atreyu took this one step further and reflected on the connections between the Black Lives Matter movement and Indigenous-led movements:

BLM was a very important issue that was going on, but also I feel like it was more of a learning curve for me. I was so angry that I didn't learn about it years ago, and that it was something that was very nuanced, and it was more of a learning experience which it should be....and part of me felt like I'm so glad this is being talked about, but I still felt Indigenous voices were not, like we didn't get the same amount of media attention. And we still don't get the same.

Most of the participants noted the influence of Indigenous-led social movements such as Land Back, Idle No More, and the Wet'suwet'en and the Mi'kmaq fishermen protests on their climate justice journeys. Participation in such Indigenous-led social movements, or awareness of them, informed youths' thinking on decolonization and the importance of centering Indigenous voices.

Some participants also grew up hearing about Indigenous creation stories and having the opportunity to engage in water-based and land-based teachings. Indigenous participants had family and other relatives involved in these Indigenous-led social movements. For instance, one Indigenous participant recalled their father being present during the Oka Crisis and mentioned having the opportunity to sing a traditional Ojibwe song at a climate protest. Atreyu spoke of growing up with Western views of environmentalism and becoming more vocal about Indigenous sovereignty and protecting the land:

I remember at a very young age, it started with wanting to protect animal species and living beings. You know, growing up in the Native school, we learned a lot about the creation story and how both human, nonhuman beings interact. And how that is a part of Anishinaabe

culture specifically. I remember wanting to make posters about saving polar bears and my mom actually pointed out the irony of it, saying if you print all these posters with the polar bears, you are actually kind of destroying all these trees. I saw environmentalism as more on the climate change front of saving animal species and talking about weather patterns. I also learned about it in school. I didn't understand it in a more intersectional way. I think that's probably because of the way nonprofits and charities work. They really paint to this, like, saving species from climate change, but not actually acknowledging the social roots.

I remember when Idle No More happened, and I was still in elementary and wanting to learn more about that. And that's really how I started in climate in general, like climate awareness as an Indigenous person learning Indigenous history and issues. I started to attend a few protests in the area run by Indigenous land defenders and young climate justice activists in organizations. And I was able to speak at a rally. I did some research and spoke on historical policies like pieces for land conservation. And I did a traditional Ojibwe song when we were marching. I really started off as a young activist, speaking on my lived experiences, as an Indigenous person. And that's how I kind of got my start.

Thirteen out of the fifteen participants brought up decolonization and the Land Back movement specifically. As much as participants recognized the interconnectedness of climate justice issues and inequities faced by Indigenous communities, such as unwanted pipelines across their land and the ongoing boil water advisories, they see climate justice and Land Back as distinct. Farah said:

I don't think of what I'm doing as climate justice. I think of what I'm doing as land and food sovereignty or land stewardship. I think [climate justice] is actually too narrow to be honest. I think Land Back is exactly all encompassing, and the way it needs to be....I'm engaging with more of the concept of Land Back than I am with climate justice...that's about wanting to divest from colonial systems as much as possible and valuing the decolonizing movement, valuing Indigenous systems more than colonial systems. How I see it, climate justice is a very stripped-down white version of what would be Land Back or decolonizing, right? It's what's palatable to white folks. And I would say, even palatable to a lot of cis BIPoC folks, too.

Gabriela mentioned how many are still not willing to understand or accept the Land Back movement:

Land Back, it's a more specific movement. I wouldn't say it encompasses all of them. It's a very important movement, but I know people that are not supportive. And they are climate activists. And I mean, I fully support it. But I know there are controversies. People get very defensive which is silly, and when I try to explain them, I myself realize I don't even know how to explain it. So, I feel like it's something that needs to be talked about more.

These are examples of how the Land Back movement is seen by some participants as inherently intertwined with the climate justice movement. Or, perhaps, that Land Back is the true fight forward, and that climate justice is just one battle. Although some participants see themselves as working for land sovereignty, others think climate justice is a broad enough term that encompasses injustices inherently connecting to capitalism and settler colonialism.

These varied views reflect the scholarly debate about "the extent to which we can include diverse movements, organizations and individuals which claim to be part of the climate justice movement" (McGregor et al., 2018, p. 14). However, what distinguishes the youth climate justice movement from others is the active role assigned to youth as leaders, where they address international governments and mobilize millions (Bowman, 2020a; Han & Ahn, 2020). Examples of this engagement will be addressed in the next subthemes.

Participation in the Climate Justice Movement

This subtheme explores the general experiences of BIPoC youth in climate strikes, the whiteness of youth protests, and the intersection of systemic racism and environmental experiences.

The majority of the participants mentioned Fridays for Future and the influence of, or at least hearing about, Greta Thunberg. Ten out of 15 participants took part in climate strikes, including ones organized by Fridays for Future, school climate strikes, March for the Land, or Fossil Fuel divestment rallies. Those who did not attend any climate strikes cited the following reasons for not participating: lack of time and resources (i.e. being in class or work during protests); health reasons; protest culture and feeling unsafe; parents' disapproval as addressed in the previous subtheme; and being unsure of strikes' effectiveness.

General Experiences of Participating in Strikes. The ten participants who took part in strikes recalled the protests being a place of happiness, joy, and energy bringing people of all ages together. Many participants said that protests had a lot of youth leaders present, with a variety of diverse speakers addressing many issues including public policy, environmental racism, and bringing awareness to climate justice. Six participants mentioned making posters with a variety of messages on them alongside others. Four participants helped organize the strikes in their local areas, including promoting and making a call-out for the strikes, making sure there were enough supplies, figuring out transportation for protesters who needed it, attending safety planning meetings, writing, researching, and giving speeches.

Many talked about the differences between larger protests in major cities like Toronto, versus smaller intimate ones that involved more storytelling. Gwyneth's account of a large protest included protesters blocking traffic:

I remember when I was like in grade 11 or 12, at Queen's Park there was this prominent climate strike that happened. I took some time off of school to go during my spare, and it was interesting, because I could see the amplification of various voices that were in that coalition of people that congregated at Queen's Park to protest for climate justice. But then I also realize the variance of people's different mentalities about it. The mob mentality of what happens at protests is a little bit scary, and even though I do believe in the values of it, that experience, in particular, has me straying away from a lot of protests for safety's sake. I find that working with such a large group with different interests doesn't reflect what I ideally want through climate justice, because, for example, during that climate strike, there's some crazy people who decided to stop traffic in protest of cars and carbon emissions. But I sit here and I'm like, you stopping them to get through their destination essentially is just burning more gas. So, I don't get what you're trying to do here. I guess there was just cognitive dissonance everywhere in the entire event. So that's why, a lot of the work I do strays away from protests, and more actually working with the community.

Contrasting that to a smaller, more intimate climate strike, Shadiya talks about her experience in a water protector gathering:

I feel like you remember things with photos, right? That's where you get your memories often. So, I do remember a photo of someone I took of a poster saying, "Water is life" that had really beautiful imagery on it. It was a very small group of people. That's what catches

my memory, because I find that sometimes strikes are usually midday in traffic, and thousands of people which I've been to those as well. But this was more intimate, and people were in a circle, gathered, telling their stories. And we were in the cold, and I remember wearing a scarf and a jacket. And it was late. The sun had already set because it was winter. And it was Indigenous-organized, like people who [are] water protectors. And there was another poster that said, "We're present. and speaking of their stories." And I was there as a listener. I guess it was a strike, like a protest, but it was a little different than I guess the typical one.

Although climate strikes were joyful events, downsides to larger gatherings were mentioned. Many questioned the effectiveness of strikes and whether strikes were important in bringing tangible change. Although they reflected on the importance of people power and taking up space, some were unsure if participating was worth their time, and if it was better spent working in the field of climate justice in other ways. Some participants found that the climate justice protests had unclear messaging and even questioned the motives of people who attend protests. Although they are demanding climate justice, the messaging sometimes gets lost in translation and convoluted with no real solutions in sight. Some thus found them to be not as effective as compared to local action, even as compared to protests for the Greenbelt. Jacob addressed the unclear messaging:

I feel like they seem to be fighting things they don't understand, because they seem to be pushing, like they want clean energy, but wind power and solar have their flaws, too. I don't like pushing an issue, I don't have a way to resolve it. 'Cause there's not really a certain path we can take just to save, just to immediately cut our emissions.

Whiteness of Youth Protests. Abhay took this idea a step further, noting how he feels unsure about people who attend strikes:

I feel sometimes a bit conflicted, and I think I feel conflicted in the sense that, I don't know if the youth that are marching actually do care about the planet in a way that's focused on justice and real people. Oftentimes protests are very white and tend to be very privileged kids, and I think about that because it makes me wonder if these are people that would stand up for other things that matter?

There was this general sense of conflictedness about who gets to protest, and why, that came up a lot. Lita reflected on a comment that was made during a university club meeting that she recalled being very unacceptable:

I remember, someone said, "It's so hard to hold an action when the people we're fighting for don't show up." So, I'm like, you want a person of colour working like 4 jobs just to sustain their family to show up for your strike outside and be part of it? Like no, don't be ridiculous. I just heard so many comments that are so unacceptable, in my opinion.

Gwyneth related this to Maslow's hierarchy of needs—that if one's basics needs are not being met, they would not be able to participate in things like strike actions:

There's this one concept called Maslow's hierarchy of needs that just really resonates with this. Because I'm thinking, from a perspective of BIPoC folks that are from Third World countries. You do not have the space in your life to give a crap about sustainability when you're focusing on putting food on the table with a wage that exploits your labour just on the basis that capitalism works that way. And it's so unfortunate. And it just makes me a little bit upset, because as a person, I can't solve it, but just recognize the problem.

Gwyneth further talks about this paradox, that those who are affected should be at the forefront to be able to have a bigger impact:

We do not have a BIPoC person at the forefront of [the youth climate movement], at least from what I can recall. And even if there is a BIPoC person, their experiences of being a person of color are not as prominent as they should be. And that's really concerning. Because if we're going to be teaching people about sustainability, you need people that reflect the population you're teaching in order to actually have an impact. The bulk of the global population is far from being Caucasian. And being able to relate sustainable practices to households that do think in similar ways is really important, because it's very hard to find folks like Asian folks in the sustainable field, at least from what I can tell. And it's just unfortunate because even though there should be prominence on a global scale, BIPoC voices are very neglected.

Depending on where a person is located, participants said climate strikes are often attended by white, middle-class, privileged people. Even thinking beyond protests, a lot of participants noted the whiteness of traditional environmental spaces and the exclusion they have experienced. This relates to the lack of opportunity for BIPoC youth and representation in the environmental field, within Ontario, and perhaps even in so-called Canada more broadly.

BIPoC Youth Climate Activists' Experiences of Systemic Racism. Participants reflected on their lived experiences and ranges of direct or indirect racism. There were many instances described of systemic racism within the movement. The three discussed below are stand-out events that I address in depth, indicating the ways in which social structures perpetuate discrimination alongside individualized racist behaviour. These may feel just like specific cases to these participants, but they shine a light on the very detrimental experiences of racism that BIPoC youth activists endure that do not necessarily make it to the news or onto social media, as Vanessa Nakate's case did (Dahir, 2021; Lammy, 2020).

Abhay's Experience of Overt Racism on a Panel. In January 2023, Abhay was speaking on a panel via Zoom with 120 people in attendance. Abhay was giving his presentation when racist messages appeared in the Zoom chat, including comments about his appearance (referring to his turban as a hat) and other religious references (Allahu Akbar), as well as about climate change being a hoax. Abhay was completely caught off guard while presenting but decided to ignore the messages. The organizers eventually removed the person from the meeting, but the moderator did not address the issue during the panel. The organization personally apologized afterward to Abhay. However, this incident was a clear indication to Abhay that they needed better training to handle such situations; he proposed the creation of a manual for dealing with inappropriate messages. Abhay points out how the lack of support in the moment made him feel alone and highlights the need for better awareness and response to such incidents:

It's less about the fact that the racist thing happened, but more so that I wasn't with people around me, who didn't meet me with the sort of care needed for that circumstance, and I think that made me feel alone. I was just like, maybe it's not that big of a deal. I was just like, "It's fine, I should keep going." Whereas realistically, if the organizers were great, they'd be like, "Hey guys, so this happened, that's problematic. We're gonna take a five-minute break," checked in with me in a Zoom room 'cause maybe I was actually bawling my eyes and struggling, right? But I definitely wanted to talk about it at the very

minimal, right?...That's definitely one experience that if I think about barriers to me taking action, that is one.

Aliya's Experience with a Well-Known White Youth Activist. In 2021, at the age of 16, Aliya faced a lot of issues surrounding racism from a well-known white activist during an international campaign she was involved with. The discrimination was targeted not only at Aliya but also at her BIPoC friends. Other prominent activists became involved, sending Aliya hate messages and engaging in hateful actions such as blocking and sending negative messages to Aliya's new employer not to work with her. This experience significantly impacted Aliya's mental and physical health, as she states:

That impacted my opportunity to make a career out of environmentalism and to sustain my way of living, and so that caused a lot of long-term personal issues for me and I had to do an extensive amount of self-reflection therapy just to sort of understand that situation.

The incident became a pivotal moment, nearly pushing Aliya to disengage from the movement due to its detrimental effects on her well-being. It prompted the realization that finding a safe space was necessary to continue their involvement in a positive manner.

Lita's Experience with a University's Climate Justice Organization. Lita shared her experience of joining a climate justice organization at a university with a lot of initial excitement but quickly realizing there was a disparity in treatment within the organization. Despite expressing eagerness to participate in the organization, the lead organizer responded back to her inconsistently—first being enthusiastic about her willingness to participate, and then once knowing she was a first-year student, brushing her off. Lita joined anyway, noting that she was there to learn and wanted to participate in any way or form, even if that meant she could not take on leadership roles within the organization because she was a first-year student. She assumed that those who were leading the group, the "authoritative people" in the organization were

experienced individuals, only to discover later that they were all first-year students. They were all white. Lita said:

There were so many people with so much authority in the organization that would tell us what to do and organize actions. I literally thought some of them are grad students, or fourth or fifth years. Until I found out two months ago, all those people that were telling me what to do ...were all first years. I remember we stood there, when this white girl told us, "Yeah, I'm in first year." And I was like, "No you can't be, you've been telling me what to do this entire time. You've been the main organizer for like half the things we're doing, and I don't even see you at meetings, you don't even show up to meetings, you'll just reply to a couple of texts, and telling us what to do over text." And we're showing up to every single meeting every single week, and we're being told, "Oh, you're first years, you can't do this."

This revelation, coupled with the feeling of exclusion from mentorship, left Lita feeling betrayed, and led to many people of colour leaving the organization.

Lita also noted the disparity in knowledge-sharing within the group, with people of colour being denied the same learning opportunities afforded to others in the organization:

[When I told them] this whole thing of knowledge sharing should be a thing within our organization, they always said, "Yeah, yeah, so true, we don't have time right now." But they were knowledge sharing with each other all the time. They would hang out so much and talk about these meetings and our actions so much and talk about things you should do during action and things you shouldn't do and like these people were allowed this learning and this grace to learn and I wasn't, and I was like, whoa, okay, that's insane.

Lita's argument for knowledge sharing relates to Biswas and Mattheis' (2021) research indicating how, in comparison to educational institutions, climate justice organizations have allowed youth to build agency through self-educating and capacity-building. However, this shows how even capacity building and knowledge sharing within organizations can become an exclusionary practice for BIPoC youth. These three stories of varying levels of racism are just three of many stories I heard from participants.

These instances of systemic racism within the climate justice movement point to the ways in which it is still operating within settler colonialism. These were specific cases where

participants experienced some kind of exclusion while working in climate justice spaces. They provide evidence of how many climate justice organizations remain overwhelmingly white and how much of what we know about learning in these social movements comes from a white lens (Stapleton, 2020). Spotlighting experiences of these youth activists of colour provides context for what the movement looks like beyond dominant narratives.

Being Radical in Multiple Arenas and the Need for Inclusive Activism

This subtheme focuses on the diverse methods and challenges of activism beyond conventional protests, emphasizing the need for inclusivity, representation, and a broader range of platforms for engagement in the climate justice movement. BIPoC youth navigate the multifaceted nature of climate justice by engaging not only in protests but also being radical in community-building, policy advocacy, and education. Participants noted that there are so many ways to get involved in the movement and that activism is much more than protesting. They highlighted that there is no right or wrong way to engage in climate justice either; many of the participants emphasized working within their communities locally to have an impact.

For the majority of the participants, climate activism began with having a personal connection to nature, then having a pivotal moment in life where they were able to understand the intersections between climate change and social inequities, which acted as a jumping off point to act radically using whatever means possible. Building on Dunn et al.'s (2021) idea of a radical doctrine, I too, use the word radical as "civil rights icon Ella Baker defined it: 'getting down to and understanding the root cause. It means facing a system that does not lend itself to your needs and devising means by which you change that system" (Dunn et al., 2021, p. 212).

Some of the ways participants took part in climate justice work includes, but is not limited to, sit-ins, teach-ins, occupations, and deputations. Many participants also talked about

having the opportunity to attend conferences where they were able to give their own presentations, or helped organize deputations where they made speeches. Seven out of 15 participants talked about their experiences being on youth councils, committees, and summits. Similar to Fisher's (2016) finding, participants' narratives showcased the ceaseless and dynamic journey of dedicating themselves to climate activism, with shifts from climate change concerns to other issues, which ultimately contributed to an enhanced commitment to their climate activism.

Two had participated in global climate strikes and actions in different countries including Mexico, USA, Scotland, and Egypt. Participants, whether operating on a global scale by forging international connections or on local scale by attending different climate actions, are taking a stance of radicalism. They are highlighting the "urgency of immediate, radical change and the failure of adult-led systems to respond in robust and reassuring ways, [which] has sparked increased political engagement among some youth" (Vamvalis, 2023, p. 90). Here, I focus on two participants' experiences at COP (Conference of the Parties):

Aliya's Experience at COP: Violence Against BIPoC Youth. Aliya was invited with other Canadian youth of colour to have a meeting with Steven Guilbeault, Canada's Environment and Climate Change Minister, at the Conference of the Parties to express their concerns. During the meeting, Aliya and other Indigenous youth felt that they were being heard but not truly listened to. After the meeting, as they exited, Aliya was invited alongside others to join Indigenous youth in a ceremony. However, security intervened and claimed smudging as a fire hazard, and the situation escalated to the point where Aliya and others were physically harmed to the point of them being pulled and their hair being tugged. Minister Guilbeault did not intervene

and eventually left. Aliya reflected on the experience, expressing frustration that politicians claim to listen but then fail to support and protect BIPoC communities when it matters:

Politicians often say they're listening to us, but when it comes time to help us speak to security and not be assaulted and physically harmed and emotionally traumatized, it's like the bare minimum and it's not met. And so, I think when you see politicians meeting with youth of colour climate activists on the news, it does not mean we are anywhere close to receiving justice, because what actually happens in practice is not. And then a couple months later, obviously they approved another pipeline and it's like, how could you do this? After the Indigenous communities who belong to that land have told you this is not OK. You claim to listen to us, but really, you're not and you're just trying to get us to finish talking so you can hurry up and do other things and I think that was one of the most frustrating experiences and really eye-opening.

This incidence highlights the dissonance between political rhetoric and the lived experiences of BIPoC activists, and how such incidents contribute to youth feeling unwelcome in formal political spaces, such as COP. By using the lens of countercultures and focusing on Haitian youth who are excluded from climate decision-making, Trott et al. (2020) similarly observed that the voices of marginalized communities who endure the greatest impacts of climate change are, more often than not, completely overlooked.

Malinali's Experiences at COP: Surveillance and Being on Edge. Malinali's experience at the UN first began at COP25 in Spain, which inspired her to build networks with other BIPoC youth, which eventually led her to create the Youth Climate Change Division in Mexico. They initiated the "Defenders of the Earth" project to address the lack of representation particularly for Indigenous youth voices at international climate conferences. Malinali described many of the challenges she faced, including fundraising, and navigating pandemic-related travel restrictions to help bring Indigenous youth to COP 26 in Glasgow. While COP 26 saw increased Indigenous representation, Malinali highlighted the difficulties in being heard, struggles with tokenism, and the limited spaces for BIPoC groups. Malinali speaks to the tokenism experienced at COP:

They are like, well, we're grabbing this Mexican young adult, and she can talk for all the BIPoC communities in the world, because she's young and she's a woman, and she is a person of colour. So, let's hear her....Well, I can talk from my reality, right. But it's not everyone's reality. I cannot talk for the Pacific Islanders who are struggling really hard right now. I cannot talk for the African folks that are going through different struggles, and we might have a lot of things that are similar. But it's not the reality of all. So that's where tokenism gets in the way.

Malinali's description of what happens at international conferences aligns with scholars' critique about formal political systems that reinforce the status quo (O'Brien et al., 2018; Taft & Gordon, 2013; Trott et al., 2020). BIPoC youth who experience exclusion may start opposing occasions where their involvement is perceived as tokenistic or merely decorative. Such controlled modes of participation ultimately fail to recognize BIPoC youth as autonomous political agents (O'Brien et al., 2018).

Malinali also expressed concern for the safety of the Indigenous women she works with at these global events, especially at COP 27:

In Egypt, it was hard feeling like I was being chased or observed all the time, and I could not do anything or say anything. COP security was around us all the time, especially because I was with Indigenous women from Mexico that are part of the Defenders of the Earth project, and with the Pacific Islanders, and as a political statement, they wear their traditional attires. And there's a way the security just blocked us and started following us.

These accounts at COP highlight the need for more inclusive spaces in climate discussions, and how more needs to be done to address instances of racism, classism, and even sexism occurring within the climate justice movement. Similarly, Grosse and Mark (2020) discovered during COP25 that BIPoC youth expressed dissatisfaction with the COP process, concerned about its perpetuation of colonial structures which marginalize Indigenous peoples and vulnerable communities striving for climate justice. By fostering the growth of the youth climate justice movement with the centring of BIPoC voices, the movement can challenge existing policy-

making systems and work toward reconstructing the systems that contribute to the climate crisis (Grosse & Mark, 2020).

The Imperative of Intersectional Environmentalism

Given these experiences of racism, participants were thinking more broadly about the complexities of climate justice and the way the movement needs to be more intersectional. Shadiya talked about the inconsistencies within the climate justice movement and peoples' thinking around the urgency of climate justice within Ontario versus other countries. She discussed how traditional 'climate justice' groups resort to taking actions like tree planting, whereas in BIPoC-led climate justice groups, thinking around climate justice goes beyond that:

As soon as you're talking to other BIPoC people, it's not something you're immediately drawn to when you think about climate like planting trees. I have people back home starving, are going through drought. And we're talking about planting trees in our backyard in Toronto. It seems so out of touch to people and so it's not something that you're gonna rush to advocate for. I can see why a lot of [BIPoC] people I talk to, talk about these things like they're so in tune to what climate justice is, especially where I'm from, where there is constant drought in Somalia, and I see my relatives in the struggles they're going through, and they can understand that. There is that lack of that bridge and understanding of what climate justice is because of like, what is the mainstream idea of the movement? It looks like Greta Thunberg, who's amazing, but is not necessarily representative of the issues that we're dealing with in our communities.

The media's persistent focus on Thunberg has positioned her as a central figure in the youth-led climate justice movement. As a result, the contributions of numerous youth activists of colour around the world frequently go unnoticed or are overshadowed (Burton, 2019; McFadden, 2020; Rafaely & Barnes, 2020). Shadiya highlights that although Thunberg's work has been important, it does not represent the diverse realities of BIPoC communities. She stresses the inconsistencies within understandings of climate justice in the Global North versus Global South countries where climate injustices are more immediate.

The majority of the participants addressed the complexities of working within the climate justice movement, and how it depends on the context—Global North vs. Global South—or even how one engages within the movement in Ontario and whether they are a part of youth- or BIPoC-specific groups. When I asked participants, "Do you feel that BIPoC voices are heard within the movement?", eight participants said no, two said yes, and five participants said yes and no depending on the context. Abhay speaks to the Canadian context of the climate justice movement:

Within the Canadian context, I just don't think that there is the level of organization in general within the climate justice movement. And I think where there is, it tends to be perhaps academics more than anything else that are talking about these issues. I think it depends on the space, like a lot of spaces are very white. And I guess I often tend to be one of the fewer BIPoC in spaces. Not in youth spaces, though. I think youth spaces, it's pretty diverse. But in adult, sort of more academic, spaces in environmental justice, spaces that are specifically for environmental justice, no.

Atreyu was one of the participants who answered yes to BIPoC voices being heard within the Canadian context, but they also mentioned that there is still a lack of opportunities for BIPoC youth, stating, "Even if certain people get a certain amount of social media influence, there's always still work to be done in terms of making sure that BIPoC youth are consistently being heard and represented."

When thinking within the global context, Aliya said BIPoC voices are not heard *enough*:

I'm going to say no, but we are becoming more listened to—like the fact that there is a space for climate activists of colour is a huge step in formal political spaces like COP. Unfortunately, this isn't fully eradicating racism and prejudice that has been there and that I've had to deal with, but I think there's definitely more honouring of our experiences, of our time, that I think we need to foster that more. And it's definitely in the right direction but we are by no means there and we won't be there until we achieve actual climate justice. Because yes, our voices may be being heard, but until our communities are actually protected, I don't think we're being heard enough.

Although a majority of the participants agreed that BIPoC voices are heard more than they were in years prior, Malinali problematizes this a step further:

Most of the voices that are heard now are the BIPoC voices that have a lot of assimilation, and who go with the Western view of things. Those are the voices that are mostly heard, and the BIPoC voices that are trying to advocate for different ways of living and just something different other than the Westernized view of development, and how society should be, they are still silenced and diminished.

Many scholars in the field have come to similar conclusion that despite overcoming adversities, BIPoC voices are hardly heard in mainstream media because of the colonial, racist, capitalist, oppressive structures that control every aspect of society (Malowa et al., 2020; Rafaely & Barnes, 2020). Malinali also noted the shifts away from tokenism and the changes in protest culture from 2019 to 2022:

The change of narrative from 2019 to 2021 in Glasgow was very noticeable for me. Hearing some of the white folks talking about how important it is to acknowledge that there are frontline communities, and that we need to speak more. But there was also a change between 2021 and 2022, because there was no big protest in Egypt at COP 27, it wasn't allowed. There was a lot of threats about persecution and going to jail, so [youth] didn't try to do anything. But noticing how the changes have been, and how some people, especially white folks from the Global North are giving up some space for marginalized communities to get the light, to get to speak about our experiences. That's been interesting to see, and how the Marches are organized. I was in the New York climate week protest to phase out from fossil fuels and the most affected people in areas go at the front of the march. And then we have the Allies behind that who are working to fight things connected to the climate crisis.

The majority of the participants pointed to the importance of intersectional environmentalism as a way to understand their role in the movement as BIPoC youth activists.

To bridge the gap between inconsistencies in understandings of climate justice, Atreyu identifies how intersectional environmentalism (IE) allows one to conceptualize the movement holistically:

IE is about looking at environmental issues from different lenses, and...acknowledging the social inequities and why public policies and environmentalism are the way they are. IE, it's about reducing harm. It's about providing room for representation. There's a lot of elements to it. [The climate justice movement] is inherently intersectional; we have to recognize the work being done by BIPoC, because BIPoC are disproportionately affected by the climate crisis. We don't have the same amount of resources. Places have gone without clean water for years, and people just don't talk about it, because they will be like, "Just move." ...It's constantly on us to get ourselves out of these situations and to be ultra creative or ultra strong in order to survive. And it's very frustrating. I think IE is a really good path to bridge those gaps.

Leah Thomas, a prominent BIPoC American youth activist who is known as "Green Girl Leah" on Instagram, published a book on IE in 2022. In it, she defines IE:

IE focuses on achieving climate justice, amplifying excluded voices, and approaching environmental education, policy and activism with equity, inclusion, and restorative justice in mind. IE argues that the same systems of oppression that oppress people also oppress and degrade the planet. (pp. 31-32)

One of the key findings of my study is that BIPoC youth activists who experienced exclusion or racism within environmental spaces are being more intentional about the spaces they decide to take up, as well as the organizations they are apart of. Aliya spoke to this intentionality and the importance of BIPoC-centered activism:

The next year I moved to a primarily BIPoC organization and it was my first time working at a place where I didn't feel as othered. Like, it wasn't a primarily white space, and I think for me that was the first time I realized that climate organizing doesn't have to be inherently traumatic or exclusionary. That I can work without micro and macro aggressions. Last week I was at the Greenpeace climate justice camp, and it was basically a camp of all youth of colour that were there learning community building skills. Every climate space I've been to, like COP or conferences, they all make me feel anxious and incredibly scared. And here I just felt very safe and at home. I would say the current organizations I work with, I picked specifically because I was having issues with white-dominated environmental movements and now, I exclusively work in BIPoC organizations where I feel my time, energy, and passion is really valued.

Working with organizations that align with tenets of intersectionality helps these youth to sustain hope and contribute meaningfully. Imani discussed how not being heard leads youth to learn from each other, building on a sense of community instead of feeling excluded:

We're not heard. But it's okay, the good thing about not being heard is we can make our mistakes. We can know where we could correct them and teach future generations how to be advocates as well, leaders in their countries to mitigate climate issues but not make them feel burdened by it. I never believed in that quote, "If they don't give you seat at the table, bring a folding chair." I'm like, "Hell no, I'm not bringing a folding chair. I am going to prepare my own table."

Malinali speaks to building her "own table" in a more literal sense, describing what is occurring on an international level:

This is building an alternate movement where the BIPoC groups are meeting. It's like, okay, the white folks are not gonna listen. Well, let's meet and do our own thing, which is nice to witness. In New York, there was the People's Climate Summit, organized by a lot of grassroots organizations in the US. I would describe it as a *movement for*, *with*, *and from BIPoC communities*, instead of waiting for the Global North and rich and white folks to meet us halfway. We will do our own meetings. We will make our own projects, we will get our own funds, we will build our own support networks between each other, and that is also going really well.

The idea of a movement for, with, and from BIPoC communities is encouraging and speaks to the ways in which people are being more intentional about the way they spend their time and resources to create change, instead of relying on systems marinated in colonialism and capitalism. While climate justice may appear holistic in theory, the practical manifestation of intersectional environmentalism in grassroots activism provides a more realistic perspective on its application. Participants are highlighting the need for diverse, accessible platforms, and the creation of BIPoC-specific organizations and events, while also addressing challenges related to systemic barriers and representation within environmental spaces.

Empowering Echoes: Nurturing Identity, Shaping Communities, and Forging New Pathways for BIPoC Youth Leaders

This theme emphasizes empowerment and personal growth fostered through local action, community engagement, resilience against challenges, and the cultivation of leadership within the climate justice movement. This theme is divided into three subthemes: 1) Identity, Climate Emotions and Personal Growth, 2) Influence on Communities and Schools, and 3) Role of Leadership and Youth-Specific Spaces. The first subtheme, *Identity, Climate Emotions and Personal Growth*, highlights the range of climate emotions experienced by youth, both positive and negative, while also identifying areas of growth in their lives. The second subtheme, *Influence on Communities and Schools*, addresses the perceived impacts of youth in their communities and schools, and the importance of community building and having strong

networks. The third subtheme, *Role of Leadership and Youth-Specific Spaces*, examines the opportunities for leadership participants have gotten over the years, and how they highlight the need for more diverse and accessible platforms for future generations. Taken together, this theme addresses the second research question: *What influence do these activists believe they have on their communities and schools?*

Identity, Climate Emotions and Personal Growth

BIPoC youth emphasized that their participation in the climate justice movement has been a significant personal growth journey. Despite facing challenges such as exclusion and racism, their engagement has proven transformative and has cultivated a profound sense of confidence, resilience, and empowerment. Aliya said:

I'm still figuring out my own spirituality, my own connection to my culture. And engaging in the environmental movement for me is what is helping me solve other pieces of my identity as well. So, it's like empowering but also healing in a way. I feel like at times I've been warped to fit in an existing narrative. They just want like a quote, or they just want somebody to portray it as a vision of a perfect activist or something. And so, it's been very frustrating and that's why I like using social media on my own accounts because I have the freedom to portray myself as imperfectly or as weirdly, or as confusingly, as I want to. I shouldn't have to make any part of my life, and who I am, quieter to appease anyone else.

Aliya's account of wanting agency over their own story and image in social media also connects to the ways in which many participants felt about the usage of the word "activist" and their identity. Instead of using the phrase climate activist, a majority of the participants said the term intersectional environmentalist felt more fitting. Gwyneth put it bluntly: "Personally, like, I don't consider myself a climate activist. I consider myself an everyday person who gives a shit. And that's how it should be." In a similar manner, Fisher (2016) avoided using the term *activist* during her participant recruitment because "this is not a universally agreed upon term and because some people are reluctant to self-identify in this way" (p. 233).

Furthermore, intersectional frameworks have been evident "in the discourses of self-identification among protesters" (Collins & Bilge, 2020, p. 166), and Fridays for Future consistently promotes intersectional awareness among its members and the public (Sorce & Dumitrica, 2021). Abhay talked eloquently about what being an intersectional environmentalist meant to him:

Ideally if I'm an intersectional environmentalist, then I can create climate action in all the spaces of the identities that I'm connected to, right? I feel that I do in many spaces in my life, as an academic, I do. And someone in climate spaces, I do, and in mental health, I'm trying to. In education, I'm trying to. But, you know, in hockey, I'm not really doing anything, and I want to in the Sikh community. I'm not really doing anything. And I want to. And so, I think there's different spaces where climate actions take place. And I think maybe an intersectional environmentalism isn't about doing everything. But it's about doing things that are connected to you.

A big part of their climate justice journey also involves healing and understanding the ways in which emotions play a big role in trying to understand climate justice. Atreyu had the opportunity to develop and facilitate an intersectional healing workshop and said that:

It goes into this idea that in order to really practice healing justice and reimagine ways we can heal ourselves and support each other is to really centre intersectionality at the core, and that people have different needs, but we all have shared values and goals.

Malinali, who has also been working on emotional tools, talked about how emotional work needs to be done to be able to listen to other groups. She feels that white people in powerful positions on the global platforms are often the ones who are not doing that work. She recalled,

When BIPoC groups are trying to tell them we need something different, they get very defensive. And there needs to be a lot of healing and learning to listen to each other in a more authentic way, instead of just going, like, "Oh, you're attacking me!" It's a very violent dynamic.

Thus, not only is it on BIPoC youth to do the internal work and build the capacity to sustain themselves for longevity in the climate justice movement, they must also deal with the emotional toll of having to deal with people who have not done that work themselves.

All 15 participants engaged in varying levels of self-reflection when sharing their stories of climate justice participation and the ways they think they have influence in their communities. Lowan-Trudeau (2017) documented the importance of introspection for those who are involved in Indigenous-led environmental movements to help revitalize Indigenous traditions. This profoundly connects to my finding that BIPoC youth have dual responsibilities; they must engage in internal reflection to overcome internalized oppressions while simultaneously advocating for the rights of their communities.

Climate Emotions. There are a broad range of negative climate emotions that participants expressed while sharing stories about their participation in climate justice organizations and even in their educational careers, including anger, rage, and climate anxiety. Specifically, they described being annoyed with the capitalist system, cynical about things not changing fast enough and the way politics is going right now, guilt for not taking enough action, anger at universities for not teaching about climate justice, and feeling unworthy when lacking knowledge.

Aliya talked specifically about the dynamic of wanting to be angry at the state of the world but constantly censoring herself during an interview podcast so that she would not play into the stereotype of "the angry woman of colour." As much as anger and rage are important climate emotions when thinking about instigating climate action, it is interesting to note the ways in which BIPoC communities have to think about displaying their emotions, just so they are not labelled or portrayed a certain way by the media. BIPoC youth activists are frequently confined within societal expectations, pressured to conform to a predetermined image regarding who they should be, and have limitations imposed on them. Such stereotyping is deeply rooted in the "white savior complex and its legacy of erasure" (McFadden, 2020, p. 2).

Another emotion that some participants addressed was climate anxiety. Atreyu connected their climate anxiety to hearing about the "timeline":

I tend to have some climate anxiety myself. But also, being afraid of the timeline. We've heard this in a lot of talk about how we only have seven years to fix things, and it can be very distressing. I think there's been a lot of climate doom-ism in the past few years, and I understand it, but also, there has been a lot of work going on.

Gwyneth also talked about the anxieties one faces while growing up that relate to capitalism:

I remember experiencing severe dread on the basis that I realized there's no such thing as sustainable consumption ultimately, with how things are generated within our economy. It's that no piece of clothing or piece of food, or anything you consume, truly comes from an ethical place that is sustainable, unless you have the money for it, and unfortunately, as a 15-year-old kid with a little part time job, that is not what I had, which was a little bit disappointing. I was kind of sick of wearing hand-me-downs. But at some point, that's where I honed my skills in upcycling and sewing, and I've actually learned how to make my own clothing from, for example, old fabrics that my parents don't really use.

Similar to Gwyneth's example of turning negative emotions into learning new skills, many participants discussed the ways in which they turned their knowledge into cultivating new skills. Kleres and Wettergren (2017) interviewed young climate activists, exploring the impact of emotions like hope, fear, anger, and guilt on their activism, and found that fear, when balanced by hope, can function as a motivating factor rather than an obstacle to action. In other words, emotions such as feeling dread, as experienced by a young Gwyneth, can be channelled into actions that help to both mobilize and sustain their activism.

Negative climate emotions also stemmed from the types of barriers participants faced, some of which included: money, stress, and managing multiple things. On top of experiences of racism and challenges faced on the systemic level, BIPoC youth expressed being spread thinly when engaging in volunteer initiatives. Especially for youth who are taking on leadership roles in organizations, they often felt the weight of responsibilities on their shoulders. Krissan said:

For organizing events, usually if I wasn't doing it, no one else would be so I have to coordinate with different organizations, get all the stakeholders involved, and for every event, usually I'm there making sure everything's running smoothly. And when I'm not there, I keep getting blasted on my phone like, "Oh, this is going wrong." So, I feel like I have a lot of ownership over the initiatives we run. And yeah, it's very stressful.

Another part of being a leader participants addressed was making sure that everyone finds the work fulfilling and understanding that climate justice work is not always easy. Shadiya mentioned the importance of finding a balance and that a person can "be [their own] biggest critic, too. I think a lot of us are doing the best we can with what we have. But sometimes you feel despondent. Like, hey, what we're doing, is it meaningful? Is anything actually happening?"

A lot of that hopelessness also has to do with struggling to feeling worthy of leadership roles, which Aliya captures:

I really struggle with taking leadership roles in areas of climate justice as I feel like I am not worthy of that role, that I am not deserving, knowledgeable or experienced enough. There's a lot of self doubt that I have as a person, but also as an activist of colour. There's a lot of doubt placed on us, especially someone who is very open about being an imperfect activist. A lot of my struggles have been internal, but also, there have been white activists who haven't agreed that I have the most experience or have seen this as a form of affirmative action, even if I earned that spot.

On the flip side of feeling hopeless or despondent, seven out of 15 participants took the time to talk about and recognize their own privilege. These privileges included being able to have a degree in the environmental and sustainability field, never having had to experience any super-devastating climate conditions due to climate change, and being able-bodied and having the privilege of time to attend climate strikes. Malinali articulates this dynamic of recognizing one's privileges and also one's barriers to participating in climate justice:

I've learned a lot around acknowledging how I can be both the oppressed and oppressor. And that's something that we don't usually talk about. It's either you're a victim or you're the bad guy, and there's some places where you can be the oppressed. Then there are some places where you can be the oppressor, right? And just acknowledging that and that it's ongoing, and that you always have to be aware.

All fifteen participants expressed many positive climate emotions associated with their activism, including feeling hopeful, empowered, encouraged, and confident. Participants noted that they have better and worse days. As Abhay put it, "I go through cycles of feeling hopeful and feeling, you know, not so hopeful." As with the natural ebbs and flows of life, climate emotions are no different, but perhaps more relevant in the context of BIPoC youth who are going through the multitudes of challenges discussed above. Many participants talked about feeling more confident. Imani mentioned one of her key take-aways from her climate justice work so far: "I am learning to be more confident in myself, in my skills and my knowledge." Having confidence in one's abilities gives BIPoC youth power over their own actions and the relentlessness to keep going forward. Having that confidence feeds into being empowered, as Aliya observed:

I think there's something that's very common in the spirit and the anger and the hope and joy of young people. I think that it can also be very empowering to see people from all these different places engage in the movement in all these different ways.

Mackay et al. (2020) found that the participation of Indigenous youth from so-called Canada in COP24 led to personal growth and increased confidence in expressing their emotions, and in recounting climate change experiences and impacts on their communities.

It appears that engagement in events like COP can serve as a liberating experience for BIPoC youth who traditionally have had limited opportunities to participate in such global forums. Simran spoke of about how it becomes a domino effect seeing other youth engage, and pushing one to be a little bit more radical and intentional in the actions one takes, in spite of all of the climate emotions one might experience:

It's pretty easy to feel overwhelmed with the scale of it all, especially being at a young age. You're kinda like, well, I'm one person, and I'm not even an adult yet, what can I do? And sometimes it feels like you're somehow in the wrong because you're protesting against these big companies. And you think, well, if they've gotten to the point where they

are today, maybe they're not so bad but then you kind of just have to reevaluate and think like, no, we're protesting against them for a reason. We have the right to be heard, it doesn't matter about our age. Like Greta Thunberg, she was so young when she started, and she still made a huge impact. It doesn't matter if you're one person, you can still make a difference. And I think that being publicly shared on social media, it's very empowering towards youth, because you feel like you're not alone in the matter.

Taking the spectrum of climate emotions experienced by participants, it becomes clear that the ways in which mental health and climate justice intersect is an important emerging field of study. The mindset shifts of going from a place of doom to recognizing their own privilege and subsequently gaining confidence helped these BIPoC youth to recognize that the climate crisis is something that cannot be solved on their own, but perhaps by working together.

Connection to others is especially important when engaging in work that feels lonely at times.

Influence on Communities and Schools

In this subtheme, I analyze how BIPoC activists perceive their influence in their communities and schools, including local initiatives, mentorship, and community building. Although the perceived impacts of their activism are subjective and personal, there are a variety of things participants shared: universities agreeing to divest from fossil fuels, initiatives for the Greenbelt that led to the reversal of the decision to use it for land development (Draaisma, 2023), bringing awareness and knowledge sharing within participants' families and communities, and the growth of school clubs.

Making a difference can even start within one's family, as Aliya celebrates:

I think that in my own small community, I've definitely seen a lot of impacts. I mean, my mom texted me the other day that she's starting to only drink oat milk instead of cow milk or carnation milk that we grew up with, and she even told me she takes it in her chai, which is a big step for her. So, like the small things in my community, I think have changed. When my family, especially my extended family, saw that I was getting involved in environmentalism, they expected me to push veganism on them or wash my clothes less and things like this, but I think that I have started to show people in my community and my family that environmentalism comes in all different forms and ways.

Other than helping to educate family and relatives on environmental issues and the ways they can get involved, participants talked about having an influence in schools and being able to mentor other youth. Returning to the idea of the domino effect, Rajbalinder was one of the first people in his high school to start an eco-club and reflected on what it has continued to become:

It was really interesting, because this was our first student-led club which was environmentally focused, and we had a lot of creative control. The first year when we started, we had around 30 or 40 people applying to be a part of the club. The year after I graduated, they had over 200 students applying to be a part of it. Maybe just having this platform will ignite some interest. And actually, it has. I've seen some people that are a few years younger than me, because they got involved with this eco team at their high school, they're now pursuing other major volunteer opportunities in the environmental field. Some people even putting that into their career, which is amazing to see.

Similar to Trott's (2021) finding, the combined daily endeavours of young people have the potential to generate a widespread ripple effect.

At the post-secondary level, five participants talked about their work with fossil fuel divestment protests, occupations, and sit-ins, along with pushing for the removal of RBC banks from campuses. Lita reviewed how her university divested from fossil fuels after their occupation:

That really did come as a shock that [the university] had divested. But there's like three colleges that had their own endowments, so they didn't divest, and we held the occupation for one of the colleges to divest and literally a few weeks later, another one did. And then, when we came back, this semester, another one did, and it was just so like, wow, they see us, they care, and our voices are being heard. And that was really hopeful.

An individual's influence can be equated with tangible actions and real-time results. Those moments of exerting pressure and seeing those changes being made leads to feeling more hopeful, which can fuel further action.

Another tangible win that participants addressed was the Greenbelt in Ontario. In fact, six participants brought it up and how the Ontario government reversing its decision to open the Greenbelt for development felt like a small win. Two participants had joined the Green Party to

help raise awareness by getting people to sign petitions. Atreyu helped make a mini-documentary to help protect this land:

We filmed at different locations. Indigenous locations that had historical significance or were important environmental regions. We were able to go to a few places and take some shots. I did some voiceovers for it and talk about my experience and why the Greenbelt needs to be conserved. It was a really great experience to have these conversations and further educate people on environmental issues, so they could just listen at home and go on that learning experience and apply it. Seeing myself on the screen like that, and actually talking about this and getting all that footage, I'm really glad that I've been able to be a part of certain organizations and just do the work and pass along information.

A lot of what felt impactful to participants had to do with what they found meaningful when they were engaging in climate justice organizations. Shadiya contends with the difficulty in determining if an action or event is successful:

It's hard to measure success and effectiveness especially from the position of an organizer. You could measure it in how many people you retain, how many people joined, you could do it based on how everyone felt afterwards, or did you gain what you came to do? Did you get that awareness out there? Did you get a vote? Did you get the petition signed? So, I feel it's hard for me to think of what was the most successful.

Shadiya described a successful sit-in that pushed the federal government to increase suicide prevention funding for Indigenous communities, noting that another win was making friends and meeting people she would continue to organize with. All fifteen participants spoke about how one of the key takeaways from their climate justice journey has been about community building and networking. Just as Shadiya pointed out in the excerpt above, Lita also stated that, "I've gotten most of my friends and community from climate organizing." Many participants emphasized finding the right group of people when engaging in climate justice work to help sustain themselves. Gwyneth captured the importance of community by stating, "I really do think that there is hope just as long as you cultivate the right people to ensure that hope has longevity."

Beyond joining clubs and making new friends, Krissan reminds us about why networking and creating micro-communities is a way forward to help amplify climate justice work across different regions:

I think we're connecting people [by] building networks. Like, if there's a nature stewarding group in our neighbourhood, we try to elevate that so more people from that area are participating in that nature stewarding group. And by building these small communities, whenever we need to advocate for a policy, we can instead of knocking on 500 doors, we can just talk to these five groups and have the same impact.

Networking has been one of the many ways participants have cultivated strong support systems. As an antidote to the negative experiences and associated emotions these BIPoC youth have had, meeting people with shared values and working alongside other BIPoC youth have helped participants to heal. Mackay et al. (2020) found that engaging in climate activism provides BIPoC youth with an opportunity to connect with networks and their culture, potentially resulting in positive effects on their well-being. Many participants also emphasized how crucial having the support from adults, such as educators and professors, has been. Rajbalinder states: "I felt like, yeah, we did have challenges, but we were lucky to find a great teacher supervisor who's very supportive of the work and providing guidance; it backed us up." Having that kind of support from adults helps validate the work that is being done by BIPoC youth and emphasizes the need for youth to take control over their own initiatives, while getting the necessary supports.

When it came to discussing what schools should be doing given their own experiences in the movement, all 15 participants had a lot to say. Approximately half of the participants said they had opportunities to learn about climate justice and cases of environmental racism in their post-secondary education. However, it was often an elective course, as Annalee recollects:

You have your Indigenous course content over here in one course and then, you have the Western-centric and mainstream environmental stuff over here. It's like no, it all informs one another. It's important for students to be exposed to that from the get-go. We have all this Western science take on environmentalism for 3 years and then, now you're in fourth

year, now you have the right to have some electives. And now we finally have a couple of Indigenous professors in the department, and I think it's really important that students have the understanding from the beginning. Because I think there's a lot of students who actually want to learn about this stuff. They just don't have the opportunity to learn.

Despite studies showing evidence that possessing environmental knowledge does not automatically translate into environmental action (Kollmuss & Agyeman, 2002), many Canadian provinces still fail to move beyond climate science in their curricula (Field et al., 2023). This oversight diminishes the opportunities for students to learn about climate justice. Moreover, Field et al. (2019) identified a lack of even fundamental knowledge about climate change among Canadians nationwide, including educators. Given their experiences with different organizations and being able to reflect on their school and post-secondary experiences, BIPoC youth in this study called for more inquiry projects, land-based, experiential, and interdisciplinary learning, as well as the need for decolonizing the curriculum.

When asked about the current state of schools, Farah argued:

I don't think there's a lot of change curriculum wise. I think whether it's Land Back or climate justice, whether you're talking about anti-racism stuff, we're not teaching them young enough, and we're not being radical enough in what we're teaching. It's grassroots organizations that are making a lot of difference. Schools could have a big role to play if they were willing to be to push the boundaries and be radical enough to actually discuss it from a holistic Land Back perspective, if ever there was the push to have it actually included in regulated curriculums.

In similar ways, numerous scholars in the field contend that there is a crucial need to incorporate climate justice education into K-12 curricula and classrooms (such as Field et al., 2023; Lowan-Trudeau, 2017; Reid, 2019; Stapleton, 2019; Waldron et al., 2019). Cutter-Mackenzie and Rousell (2019) assert that climate justice education serves as a remarkable platform, not only for amplifying the voices of BIPoC youth, but also as a space for authentic activation of youth political agency within schools and the public sphere.

Most of the participants noted that change was not happening fast enough, nor is it happening at the level of curriculum that is required to help new generations be equipped with the knowledge and critical thinking skills that they need. This resonates with Karsgaard and Davidson (2023). Furthermore, many participants stressed the need for youth to learn outdoors through hands-on activities and inquiry projects. Atreyu explains the impact of inquiry projects while growing up: "The only time I really felt like I could learn and do impactful work in middle school would be through inquiry projects, because it was very community-oriented, and we educated parents as well as students." This speaks to the idea of fostering positive learning environments where youth make connections across different disciplines and educate others in the community. On implementing land-based learning, Annalee reminds us that it is critical that schools are "ensuring that people have equitable access to the outdoors, and that people are creating those connections to the environment." Manni and Knekta (2020) similarly found that most secondary students wanted action, not talk.

Role of Leadership and Youth-Specific Spaces

This subtheme will explore the significance of youth taking on leadership roles and fostering more BIPoC representation, founding climate justice organizations, and the need for systemic change.

Given their experiences with systemic racism, participants reflected on the ways in which future generations of youth will have more opportunities. Imani talked about creating a workshop series through the climate justice organization she is working with in order to "help BIPoC youth get a foot in the door and reduce barriers for them." Creating opportunities for younger generations was a common topic in many of the interviews, especially when thinking about creating a more equitable movement going forward. Aliya reflected on her experiences

beginning as a young activist and how participating in the movement should be an easy and accessible process:

I saw on Instagram there's a strike coming up in a couple of months. That's something I'm passionate about, I should obviously volunteer, even if it's something small like passing out hand sanitizer. I ended up accidentally becoming one of the coordinators for it. It was a very nonchalant process. I think that's what was so good. It should be easy for you to get involved. And then once you're involved, you don't ever want to leave. And that's how it should be structured. It's also empowering to see people from different places engage in the movement in all these different ways. And in ways that are more accessible to them, which you may not have even thought of. Making a small change can make an impact and that environmentalism isn't necessarily this white elitist practice. It can be something that is accessible to everyone.

Participants stated the need for youth to be in spaces where they are valued and the need for compensation for their climate justice work. This goes back to the idea of tokenism as well—to compensate people for their effort—and for relationships not to be transactional but based on authenticity. Grosse (2019) argued that four key values—relationships, accessibility, intersectionality, and community—facilitate movement building. These four values are also apparent in the results of my study.

Participants explained some of the ways they are inspiring the next generations of young people by sharing their experiences with them. Atreyu talked about a specific moment when they felt like a leader, speaking at a teach-in:

[I was] stressing the urgency of the crisis, and why Indigenous voices need to be centred and just talking about my experience, and how I was pressured to conform to things and not talk about my Indigeneity. It was definitely very engaging for students as well.

Being able to talk openly about one's experiences with the younger generation was a commonality among many of the participants. Rajbalinder acknowledged the need for youth to see people in places of leadership who look like themselves:

Connecting with youth is very important. And just having someone speak from the same background as you is very powerful. I actually spoke at a few schools. I try to do that whenever I get time, to middle schools and also high schools. I recently spoke at the

Khalsa school [religious Sikh school] in Brampton about my environmental story and environmental careers that they can pursue. For them to see someone already in the environmental field will show them that this is something that they can do as well, right?

Founding Climate Justice Organizations. Building on the idea of seeing youth of colour in leadership positions, it was interesting to find that five out of the 15 participants actually founded their own climate justice organizations. Two of those participants decided to start their own organizations after working with political campaigns or the municipal governments' environmental advisory board. They realized the need for having an independent voice and freedom to put more pressure on local governments to hold them accountable, compared to working within their restricted policies. These climate justice organizations were founded to bridge the gap of work that is already happening in different areas. Krissan said:

In 2022, I founded [this organization because] I wanted to further expand on [pushing progressive policy] and get nonpolitical people who care about climate change involved because they don't know who to trust and sort of building a group of people who would be more willing to look at the policies being pushed and actually engage with it. We can pressure politicians and do better advocacy for our communities.

Two other participants founded their organization to focus on youth resources, distributing those resources, and providing safe spaces for youth to mobilize. Atreyu describes how their organization came to be:

We founded last year, early 2022, and it came from this idea to start looking at grassroots organizing, and how we can bridge some gaps that are going on within entrepreneurship and artistic opportunities. We run a market every year and similar events and how we can make resources more accessible, and how we can help other youth to connect with each other, create a peer support framework and really just resource-based action doing things like care packages and meals and having educational resources.

Starting climate justice organizations that are focused on bringing youth together, especially from underrepresented populations, was one of the most exciting parts of hearing these participants' stories of overcoming challenges and leading the way for other BIPoC youth. Abhay started his organization based on the word "connection":

[My organization] started when I came back from the Arctic. I was overwhelmed with a lot of emotion. I didn't know exactly what I wanted to do with all the experiences that I've had, but I knew that word that I mentioned earlier, connection, was a word that I was holding onto from that experience. The framework that we sort of built was moving young people from a place of apathy to empathy to action. And so, it's been about 6 years now of building up and it's cool to look back at the evolution of the organization. I started it as a project of connecting young people to talk about climate change and mental health.

Participants who started their own climate justice organizations—Abhay, Krissan, Malinali, Atreyu and Rajbalinder—are embodying inclusive activism by incorporating and amplifying underrepresented voices at the centre of their work. Their work relates to the notion that Kanbur (2018) advocates, that climate justice education be intra- and inter-generational. Krissan implores younger people to begin their own initiatives and organizations:

A lot of students could start their own initiatives and get a sense of leadership and build their own micro-communities, especially with things like the youth vote being so low. [I also encourage youth to] participate in local nature stewarding groups that already exist and getting a sense of how local change works.

Four participants, on the other hand, talked about the importance of knowing when to take the back seat and to listen instead of taking the lead. When asked about the kinds of roles they see themself taking in terms of leadership and even being an ally, Farah said:

I would consider myself an aspiring accomplice. I think the word ally is actually an insult and it's not for me to say whether I am an ally or an accomplice. It's up to other people to say that towards me, it's not a label that I could put on myself. I would say specifically since high school, I've been very aware of taking that back seat not necessarily for Indigenous sovereignty reasons; it started as burnout and as an examination of my own leadership style, and what kind of leader I want to be.

Shedding light on, and acknowledging the diligent efforts of, youth of colour is not aimed at inflating their egos. Rather, it is about compelling society to confront the entirety of climate destruction, ensuring that the movement is perceived not solely "through white eyes" (Burton, 2019, para. 3). Whether one decides to take the back seat to be able to listen or decides to

establish one's own climate justice organization, it is important for BIPoC youth to have spaces that are accessible and have platforms that are centring diverse narratives.

Taken together, participants call for systemic change. What systemic change looks like varies from person to person, but one message was clear: things need to change, and they are not changing fast enough. For Atreyu, this is what climate justice means:

It really is about deconstructing the systems we live in and finding alternative ways, like radical futurism and really just creating the future, recreating the environments that we ancestrally grew up with, but also like the ways that we can just live and exist in society in a sustainable way, and a lot of people don't want to hear that.

On one hand, participants are calling for deconstructing systems and on the other, participants believe in working within systems and making change from the inside out. As Krissan suggests,

One thing I tell people when I'm like, oh, you wanna fix the climate crisis? Well, we gotta fix our electoral system through proportional representation. Because we can't change the system if we keep electing people who only represent the 30% of people who aren't impacted by climate change.

Representation matters in all facets of our society, and participants in this study were very clear on that message. For Malinali, systemic change not only means to deconstruct systems or change them from within, but must emphasize degrowth:

I feel like the climate movement is still at a point where some people are still going for the idea that we can have a very technological and industrialized future without polluting and without making climate change worse. And there's the other perspective, of frontline communities saying we don't need that much. Thank you. We need to degrow....A lot of people say, "But what you want us to live in caves? You want us to give up electricity? But electricity is very good, it's been very helpful to do advances in medicine and education." And that's not what we're saying, we just want everyone to be less greedy.

While there is a shared call within the climate justice movement for advocating 100% clean energy, keeping fossil fuels in the ground, and holding developed nations accountable, the experiences of BIPoC youth activists are not homogenous; the movement thus may be understood as a "polyphonic movement" (Bowman, 2020b, p. 1).

Taking both themes together, the intersectional activism of BIPoC youth and the impacts they are having in their communities and schools, one can conclude that BIPoC youth indeed lead multi-dimensional lives with justice being integral to their work. Timeline mapping was an effective vehicle for understanding activists' life trajectories in the climate justice movement. They highlighted the importance of building early personal connections to the land and water in order to understand the gravity of climate change, as well as how one's cultural background influences their approach to environmental activism. The experiences of BIPoC youth in climate strikes further revealed challenges related to systemic racism and lack of representation within the movement. Going beyond climate strikes, BIPoC youth are engaging in community-building, policy advocacy, and education, and are being intentional about the spaces they are in to be able to bring all parts of their identities to their activism.

They experience a range of both negative and positive climate emotions while engaging in activism and are gaining a sense of empowerment despite facing challenges. BIPoC youth activists perceive their influence through the local actions they take in their communities and schools, including formal political spaces and building strong networks. They discuss the gaps in educational institutions and what schools should do to better support BIPoC youth engaged in climate justice, emphasizing the need for interdisciplinary and land-based learning. More opportunities through accessible platforms and the creation of BIPoC-specific organizations are needed to help BIPoC youth take on leadership roles to foster better representation within the climate justice movement.

Chapter 5: Conclusion

My thesis began with asking these two research questions: 1) What are the experiences of Black, Indigenous, and youth of colour activists in the climate justice movement? and 2) What influence do these activists believe they have on their communities and schools? I found that youths' early personal connections to the environment helped establish a motivation for engaging with climate change, while familial influences and cultural backgrounds played roles in their initial approach to environmental activism. Participation in climate strikes and experiences in mainstream climate justice organizations exposed deep layers of systemic racism and a severe underrepresentation of Black, Indigenous and youth of colour in these spaces. Beyond strikes, BIPoC youth are actively involved in community-building, policy advocacy, and education, intentionally participating in spaces where they can effectively utilize their diverse positionalities in their activism. While experiencing a range of climate emotions, BIPoC youth gain empowerment through their work by way of local actions, community engagement, and building networks. They address gaps in educational institutions, facilitate intergenerational knowledge transfer, and promote better representation through dedicated BIPoC-centered organizations.

Life trajectories via timeline mapping as a data collection technique allowed participants to reflect on their early start, choosing and attending specific post-secondary programs, and engaging in community work while also maintaining a job, attending climate strikes, doing the internal work of reflecting and healing, and educating others. People live multi-dimensional lives. This study helps to demystify the challenges BIPoC youth deal with while trying to blend and negotiate their views of traditional "sustainability" with a climate-justice lens, and the layers of intersections that BIPoC youth live with in their daily lives. I did not find it surprising that

many BIPoC youth bought up things like disability justice, 2SLGBTQIA+ justice, and immigration justice when also thinking about climate justice.

When thinking about their activism journeys, BIPoC youth cannot be boxed into generic, static binaries; rather, their views, values and identities continue to evolve and change. My research shines a light on the vast nuances, complexities, and contradictions that BIPoC youth encounter while working in climate justice organizations. I see it as a celebration of participants. This shift in narrative relates to Tuck's (2009) argument against damage-centered research, which positions Indigenous and other marginalized communities as inherently damaged. Her approach aims to understand the complexity, contradiction, and lived experiences of these communities, while documenting both the painful aspects of social realities and capturing the wisdom and hope within them. I have endeavoured to do this too.

Limitations

There are limitations of this study that should be considered related to the methodology, data analysis, and interpretation of the findings. One limitation of this study includes the small sample size and the geographical boundary of Ontario that limits the generalizability of the work. Another limitation is that some nuances may have been lost with interviewing participants online (such as body language, especially for those participants who chose to keep their videos off). Participant responses were also recorded at one point in time, and while climate journeys continue to evolve over time, participants may also change their opinions with more experience and with engagement with more organizations, especially with newer ones that centre BIPoC voices. Lastly, as I identify as a BIPoC youth myself, it is highly probable that cognitive biases may have influenced my analysis of the data and interpretation of the findings, despite my active intentionality to remain flexible to emerging insights.

Implications and Recommendations

There are many ways this research has implications for education, policy, and future research. Participants in this study had numerous recommendations for educational institutions while discussing the gaps in curricula and what schools should do to better support BIPoC youth engaged in climate justice, discussed in the previous chapter. Their recommendations also emphasize the need for systemic change within all fields of society, including academia, political spheres, and industry.

More research is needed on an interdisciplinary level that explores the ways in which climate justice work is being done by BIPoC youth and adults in specific niches, from non-profit work to the mental health field to larger corporations, and how this work impacts and informs other work. Future research can also explore the specific calls for systemic change that are being made by BIPoC youth. Furthermore, when thinking about the Canadian context more broadly, in comparison to, for example, the United States, the Canadian climate justice movement is very much intertwined with Indigenous-led movements, with an emphasis on Indigenous-related topics such as Land Back, the Wet'suwet'en Land defenders, Indigenous land rights and settler colonialism. However, the extent to which Indigenous-specific marches or movements are seen as part of, and amplified within, the broader climate justice movement in so-called Canada is still unclear. Abhay noted those interconnections:

I don't know if what's going on in Northern BC with Fairy Creek old-growth forest [logging protests], how much Indigenous advocacy there impacts the Greenbelt in Ontario, and it's clear that there are links, and there are people that are thinking about these things, but it seems like there can be a lack of connection.

Within settler colonial settings like Canada, colonialism, capitalism, and inequitable forms of violence are interdependent, reinforcing each other to sustain climate injustices. Youth are more cognizant of these complex connections and yet they continue to face discouragement

when trying to engage in climate spaces (Sloan Morgan et al., 2023). Future research can explore those interconnections between places across Canada, how aware youth are of them and how they address them.

There also needs to be more done on an organizational level to help centre BIPoC voices.

Abhay said:

In terms of recommendations in this research paper, I think that's actually huge, creating the ability to have BIPoC leaders network with one another and support the creation of this sort of work. [Canadian] climate spaces in general tend to be very white and I think BIPoC voices tend to be there, but I think the knowledge paradigms of BIPoC youth and the communities that we're coming from can often be under-investigated and not explored enough. And I think there's so much potential for climate action that's connected to cultural values of different communities, that's connected to religious values. It's connected to the ways that people actually practice their daily lives.

What I also hope to see going forward is more organizational work done on a national level to create a unified message of climate justice that is centered on decolonization.

Research gaps persist when it comes to centring the voices of BIPoC youth. An examination of BIPoC youth voices across different geographic locations, including rural and Northern communities, and different ethnicities and gender identities is urgently needed to introduce new perspectives to an issue that is saturated with Western, white, colonial viewpoints. One angle of inquiry can include delving further into the experiences of racism, whether implicit or overt, within the movement and environmental-justice oriented spaces. There is also a need for future research to explore the immigrant experiences of youth in Canada, understanding how their lived realities connect with climate justice and their identity as settlers. Additionally, the influence of different cultures, religions, and spirituality on climate justice beliefs within Canada's diverse demographic warrants further investigation.

While strides have been made in comprehending the emotional dimensions of climate change, as evidenced by the work of Galway and Field (2023), there remains a considerable need

for additional research in this domain. Subsequently, understanding the ways BIPoC youth are specifically finding and accessing different support systems is not well understood. Longitudinal studies examining whether or not youth activists in environmental programs eventually decide to embark on a career in green economies would be another fascinating research inquiry.

Conclusion

When a system is not designed for a person or a select population to succeed, it becomes increasingly impossible for a single individual, who is already conditioned to believe their unfortunate circumstances are inherently their fault, to liberate oneself and overhaul that system for the collective well-being of all. However, once people realize that those systems can be constructed, deconstructed, and reconstructed as many times as is needed so that they are built on principles of justice and equity, they are able to hold that oppressive system accountable and responsible for its actions. We have come to the point that there are so many injustices constantly happening around us, that we simply cannot proceed by ignoring them anymore. The BIPoC youth climate activists of today and tomorrow know this and are doing that work to shift the needle towards justice, every day. I think it is time we paid attention to them.

References

- Aarikka-Stenroos, L. (2010). The contribution and challenges of narrative data in interorganizational research. https://www.impgroup.org/uploads/papers/7553.pdf
- Adger, W. N., Barnett, J., Brown, K., Marshall, N., & O'Brien, K. (2013). Cultural dimensions of climate change impacts and adaptation. *Nature Climate Change*, *3*(2), 112-117. https://doi.org/10.1038/nclimate1666
- Adriansen, H. K. (2012). Timeline interviews: A tool for conducting life history research. *Qualitative Studies*, *3*(1), 40-55.
- Agyeman, J. (2003). Just sustainabilities: Development in an unequal world. MIT Press.
- Agyeman, J., Cole, P., Haluza-Delay, R., & O'Riley, P. (2009). *Speaking for ourselves:*Environmental justice in Canada. UBC Press.
- Bagnoli, A. (2009). Beyond the standard interview: The use of graphic elicitation and arts-based methods. *Qualitative Research*, *9*, 547–570.
- Bandura, A., & Cherry, L. (2020). Enlisting the power of youth for climate change. *The American Psychologist*, 75(7), 945–951. https://doi.org/10.1037/amp0000512
- Beeler, C. (2019, October 10). How did teen climate activist Greta Thunberg rise to fame so quickly? *The World.* https://www.pri.org/stories/2019-10-10/how-did-teen-climate-activist-greta-thunberg-rise-fame-so-quickly
- Berends, L. (2011). Embracing the visual: Using timelines with in-depth interviews on substance use and treatment. *Qualitative Report, 16*, 1–9.
- Bieler, A., Haluza-Delay, R., Dale, A., & McKenzie, M. (2017). A national overview of climate change education policy: Policy coherence between subnational climate and education policies in Canada (K-12). *Journal of Education for Sustainable Development*, 11(2), 63–85. https://doi.org/10.1177/0973408218754625

- Bigelow B. & Dankbar H., (2016) Climate change, education, and social justice: A conversation with Bill Bigelow. *Journal of Critical Thought and Praxis*, 5(2). https://doi.org/https://doi.org/10.31274/jctp-180810-62
- Biswas, T., & Mattheis, N. (2021). Strikingly educational: A childist perspective on children's civil disobedience for climate justice. *Educational Philosophy and Theory*, 1-14. https://doi.org/10.1080/00131857.2021.1880390
- Bowman, B. (2020a, August 28). Fridays for Future: How the young climate movement has grown since Greta Thunberg's lone protest. *The Conversation*.

 https://theconversation.com/fridays-for-future-how-the-young-climate-movement-has-grown-since-greta-thunbergs-lone-protest-144781
- Bowman, B. (2020b). "They don't quite understand the importance of what we are doing today":

 The people's climate strikes as subaltern activism. *Sustainable Earth*, *3*(16).

 https://sustainableearth.biomedcentral.com/articles/10.1186/s42055-020-00038-x
- Boyle, L. (2021, April 23). "Put her in charge of a continent or two": Teen climate activist is lauded for powerful speech at White House climate summit. *Independent*.

 https://www.independent.co.uk/climate-change/biden-climate-summit-teen-activist-xiye-bastida-mexico-b1836647.html
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Bright, M. L., & Eames, C. (2021). From apathy through anxiety to action: Emotions as motivators for youth climate strike leaders. *Australian Journal of Environmental Education*, 1-13. https://doi.org/10.1017/aee.2021.22
- Burton, N. (2019, October 11). Meet the young activists of color who are leading the charge

- against climate disaster. Vox.
- https://www.vox.com/identities/2019/10/11/20904791/young-climate-activists-of-color
- Burton, N. (2020, May 14). People of color experience climate grief more deeply than white people. *Vice*. https://www.vice.com/en_us/article/v7ggqx/people-of-color-experience-climate-grief-more-deeply-than-white-people
- Busch, K. C., Henderson, J. A., & Stevenson, K. T. (2019). Broadening epistemologies and methodologies in climate change education research. *Environmental Education Research*, 25(6), 955–971. https://doi.org/10.1080/13504622.2018.1514588
- Buttigieg, K., & Pace, P. (2013). Positive youth action towards climate change, *Journal of Teacher Education for Sustainability*, 15(1), 15-47. https://doi.org/10.2478/jtes-2013-0002
- Buzzelli, M., & Jerrett, M. (2003). Comparing proximity measures of exposure to geostatistical estimates in environmental justice research. *Environmental Hazards*, 5, 13-21.
- Buzzelli, M., & Jerrett, M. (2007). Geographies of susceptibility and exposure in the city:

 Environmental inequity of traffic-related air pollution in Toronto. *Canadian Journal of Regional Science*, 30(2), 195-210.
- Buzzelli, M., Jerrett, M., Burnett, R., & Finkelstein, N. (2003). Spatiotemporal perspectives on air pollution and environmental justice in Hamilton, Canada, 1985-1996. *Annals of the Association of American Geographers*, 93, 557-573.
- Campigotto, R., & Barrett, S. E. (2017). Creating space for teacher activism in environmental education: Pre-service teachers' experiences. *Canadian Journal of Environmental Education*, 22(1), 42 57.

- Chen, S.Y., & Liu, S.Y. (2020). Developing students' action competence for a sustainable future:

 A review of educational research. *Sustainability*, *12*(4), 1374.

 http://dx.doi.org/10.3390/su12041374
- Connelly, F. M., & Clandinin, D. J. (1990). Stories of experience and narrative inquiry. *Educational Researcher*, 19(5), 2-14. doi:10.3102/0013189X019005002
- Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *University of Chicago Legal Forum*, 140, 139-167.
- Creswell, J. W., & Creswell J. D. (2018). Research design: Qualitative, quantitative, and mixed method approaches (5th Ed). Sage Publications Inc.
- Cutter-Mackenzie, A., & Rousell, D. (2019). Education for what? Shaping the field of climate change education with children and young people as co-researchers. *Children's Geographies*, 17(1), 90-104. https://doi.org/10.1080/14733285.2018.1467556
- Dahir, A. L. (2021, May 7). Erased from a Davos photo, a Ugandan climate activist is back in the picture. *The New York Times*.

 https://www.nytimes.com/2021/05/07/world/africa/vanessa-nakate-climate-change-uganda.html
- Damico, J.S., Baildon, M., & Panos, A. (2020). Climate justice literacy: Stories-we-live-by, ecolinguistics, and classroom practice. *Journal of Adolescent & Adult Literacy*, 63(6), 683–691. https://doi.org/10.1002/jaal.1051
- Dei, G. (1996). Anti-racism education theory and practice. Fernwood Publishing.
- Denchak, M. (2021a, February 19). Paris climate agreement: Everything you need to know.

 NRDC. https://www.nrdc.org/stories/paris-climate-agreement-everything-you-need-know

- Denchak, M. (2021b, June 9). What is the Keystone XL Pipeline? *NRDC*. https://www.nrdc.org/stories/what-keystone-pipeline
- Dhillon, J. (2018). Introduction: Indigenous resurgence, decolonization, and movements for environmental justice. *Environment and Society*, *9*(1), 1-5. https://doi.org/10.3167/ares.2018.090101
- Draaisma, M. (2023, September 21). Advocates cheer decision to leave Greenbelt alone but say

 Ontario's planning policies still a concern. *CBC News*.

 https://www.cbc.ca/news/canada/toronto/greenbelt-reaction-advocacy-groups-1.6974927
- Draper, D., & Mitchell, B. (2001). Environmental justice considerations in Canada. *Canadian Geographer*, 45(1), 93-98.
- Duke, J. R., & Holt, E. A. (2022). Seeing climate change: Psychological distance and connection to nature. *Environmental Education Research*, 28(7), 949-969.
 https://doi.org/10.1080/13504622.2022.2042205
- Dunn, D. C., Chisholm, A., Spaulding, E., & Love, B. L. (2021). A radical doctrine: Abolitionist education in hard times. *Educational Studies*, *57*(3), 211-223. https://doi.org/10.1080/00131946.2021.1892684
- Etchart, L. (2017). The role of indigenous peoples in combating climate change. *Palgrave Communications 3*, 17085. https://doi.org/10.1057/palcomms.2017.85
- Evelyn, K. (2020, January 29). "Like I wasn't there": Climate activist Vanessa Nakate on being erased from a movement. *The Guardian*.

 https://www.theguardian.com/world/2020/jan/29/vanessa-nakate-interview-climate-activism-cropped-photo-davos
- Fay, B. (1987). Critical social science. Cornell University Press.

- Field, E., Schwartzberg, P., & Berger, P. (2019). Canada, climate change and education:

 Opportunities for public and formal education (Formal Report for Learning for a Sustainable Future). Retrieved from http://www.LSF-LST.ca/cc-survey
- Field, E., Spiropoulos, G., Nguyen, A. T., & Grewal, R. K. (2023). Climate change education within Canada's regional curricula: A systematic review of gaps and opportunities. *Canadian Journal of Educational Administration and Policy*, 202, 155-184. https://doi.org/10.7202/1099989ar
- Fisher, S. R. (2016). Life trajectories of youth committing to climate activism. *Environmental Education Research*, 22(2), 229-247.
- Fletcher, T. H. (2003). From Love Canal to environmental justice: The politics of hazardous waste on the Canada-US border. Broadview Press.
- Foran, J. (2014). Beyond insurgency to radical social change: The new situation. *Social Justice Studies* 8, 5–25.
- Freeman, M. (2003). Identity and difference in narrative inquiry: A commentary on the articles by Erica Burman, Michelle Crossley, Ian Parker, and Shelley Sclater. *Narrative Inquiry*, 13(2), 331-346.
- Freire, P. (1993). Pedagogy of the oppressed. Penguin.
- Galway, L. P., & Field, E. (2023). Climate emotions and anxiety among young people in Canada: A national survey and call to action. *The Journal of Climate Change and Health*, 9, https://doi.org/10.1016/j.joclim.2023.100204
- Giroux, H. A., Lankshear, C., Peters, M., & McLaren, P. (1996). *Counternarratives: Cultural studies and critical pedagogies in postmodern spaces* (Vol. 10). Psychology Press.
- Government of Canada (2011). The chief public health officer's report on the state of public health in Canada 2011 The health and well-being of Canadian youth and young adults.

- https://www.canada.ca/en/public-health/corporate/publications/chief-public-health-officer-reports-state-public-health-canada/chief-public-health-officer-report-on-state-public-health-canada-2011/chapter-3.html
- Gray, P. S., Williamson, J. B., Karp, D. A., & Dalphin, J. R. (2007). *The research imagination:*An introduction to qualitative and quantitative methods. Cambridge University Press.
- Grosse, C. (2019). Climate justice movement building: Values and cultures of creation in Santa Barbara, California. *Social Sciences*, 8(3), 79. https://doi.org/10.3390/socsci8030079
- Grosse, C., & Mark, B. (2020). A colonized COP: Indigenous exclusion and youth climate justice activism at the United Nations climate change negotiations. In B. Richardson (Ed.), From student strikes to the Extinction Rebellion. Edward Elgar Publishing. https://doi.org/10.4337/9781800881099.00011
- Haluza-Delay, R. (2013). Environmental justice and environmental education research. In R. Stevenson, M. Brody, J. Dillon, & A. Wals (Eds.), *International handbook on environmental education research* (pp. 394-403). Routledge.
- Haluza-Delay, R. (2007). Environmental justice in Canada. *Local Environment*, 12(6), 557-564. https://doi.org/10.1080/13549830701657323
- Han, H., & Ahn, S. W. (2020). Youth mobilization to stop global climate change: Narratives and impact. *Sustainability*, *12*(10), 4127. https://doi.org/10.3390/su12104127
- Hayden, M., Houwer, R., Frankfort, M., Rueter, J., Black, T., & Mortfield, P. (2011). Pedagogies of empowerment in the face of climate change uncertainty. *Journal for Activist Science* and Technology Education, 3(1).

- Henderson, J., Long, D., Berger, P., Russell, C., & Drewes, A. (2017). Expanding the foundation: Climate change and opportunities for educational research. *Educational Studies*, *53*(4), 412-425.
- Henley, J. (2020, September 9). Climate crisis could displace 1.2bn people by 2050, report warns. *The Guardian*. https://www.theguardian.com/environment/2020/sep/09/climate-crisis-could-displace-12bn-people-by-2050-report-warns
- Holmberg, A., & Alvinius, A. (2020). Children's protest in relation to the climate emergency: A qualitative study on a new form of resistance promoting political and social change.

 Childhood, 27(1), 78–92. https://doi.org/10.1177/0907568219879970
- hooks, b. (1994). Teaching to transgress: Education as the practice of freedom. Routledge.
- IPCC (2014). Climate change 2014: Synthesis report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change.

 https://www.ipcc.ch/site/assets/uploads/2018/05/SYR AR5 FINAL full wcover.pdf
- Jaquette-Ray, S. (2021). Climate anxiety is an overwhelmingly White phenomenon. *Scientific American*. https://www.scientificamerican.com/article/the-unbearable-whiteness-of-climate-anxiety/
- Jennings, L. B., Parra-Medina, D. M., Hilfinger-Messias, D. K., & McLoughlin, K. (2006).

 Toward a critical social theory of youth empowerment. *Journal of Community*Practice, 14(1-2), 31-55.
- Kanbur, R. (2018). Education for climate justice. *Review of Development and Change*, *23*(1), 107–121. https://doi.org/10.1177/0972266120180105
- Karsgaard, C., & Davidson, D. (2023). Must we wait for youth to speak out before we listen?

 International youth perspectives and climate change education. *Educational*

- Review, 75(1), 74-92. https://doi.org/10.1080/00131911.2021.1905611
- Karsgaard, C., & Shultz, L. (2022). Youth movements and climate education for justice. *Oxford Research Encyclopedia of Education*. Oxford University Press. https://doi.org/10.1093/acrefore/9780190264093.013.1808
- Kemper, T. D. (2001). A structural approach to social movement emotions. In J. Goodwin, J. M. Jasper, & F. Polletta (Eds.), *Passionate politics: Emotions and social movements* (pp. 58–73). Chicago University Press.
- Kim, E. T. (2020, July 29). The perils of "people of color". *The New Yorker*.
 https://www.newyorker.com/news/annals-of-activism/the-perils-of-people-of-color
 King, T. (2003). *The truth about stories: A Native narrative*. Anansi Press.
- Klein, N. (2014). This changes everything: Capitalism vs. the climate. Simon & Schuster.
- Klein, N. (2019). On fire: The burning case for a green new deal. Knopf Canada.
- Kleres, J., & Wettergren, Å. (2017). Fear, hope, anger, and guilt in climate activism. *Social Movement Studies*, 16(5), 507-519. https://doi.org/10.1080/14742837.2017.1344546
- Kolar, K., Ahmad, F., Chan, L., & Erickson, P. G. (2015). Timeline mapping in qualitative interviews: A study of resilience with marginalized groups. *International Journal of Oualitative Methods*, *14*(3), 13-32.
- Kollmuss, A., & Agyeman, J. (2002). Mind the gap: Why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental Education Research*, 8(3), 239-260.
- Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, 32(3), 465–491.

- Ladson-Billings, G. (2000). Racialized discourses and ethnic epistemologies. In N. K. Denzin & Y. S. Lincoln (Eds.). *Handbook on qualitative research* (pp. 257-277). Sage.
- Ladson-Billings, G. (2006). From the achievement gap to the education debt: Understanding achievement in U.S. schools. *Educational Researcher*, *35*(7), 3–12. https://doi.org/10.3102/0013189X035007003
- Ladson-Billings, G., & Tate IV, W. (1995). Towards a critical race theory of education. *Teachers College Record*, 97(1), 47–68.
- Lambrechts, W. D. B. H. M. (2020). Learning "for" and "in" the future: On the role of resilience and empowerment in education. UNESCO.
- Lammy, D. (2020, October). Climate justice can't happen without racial justice. TED

 Talk. https://www.ted.com/talks/david_lammy_climate_justice_can_t_happen_without_r

 acial justice
- LeCompte, M. D., & Schensul, J. J. (2010). Designing and conducting ethnographic research:

 An introduction (2nd ed.). Altamira Press.
- Lowan-Trudeau, G. (2017). Gateway to understanding: Indigenous ecological activism and education in urban, rural, and remote contexts. *Cultural Studies of Science Education*, 12(1), 119-128.
- Lowan-Trudeau, G. (2017). Protest as pedagogy: Exploring teaching and learning in Indigenous environmental movements. *The Journal of Environmental Education*, 48(2), 96-108.
- MacKay, M., Parlee, B., & Karsgaard, C. (2020). Youth engagement in climate change action:

 Case study on Indigenous youth at COP24. *Sustainability*, *12*(16), 6299.

 https://doi.org/10.3390/su12166299

- Maina-Okori, N. M., Koushik, J. R., & Wilson, A. (2018). Reimagining intersectionality in environmental and sustainability education: A critical literature review. *Journal of Environmental Education*, 49(4), 286-296.
- Malowa, V., Owor, A., Merissa, E., Lado, S., & Mayelle, H. (2020). The erasure of Vanessa Nakate portrays an idealised climate activism. *Africa at LSE*, 1-8.
- Manni, A., & Knekta, E. (2020). "A little less conversation, a little more action please": Examining students' voices on education, transgression, and societal change.

 Sustainability, 12(15). https://doi.org/10.3390/su12156231
- Marks, D., Bayrak, M. M., Jahangir, S., Henig, D., & Bailey, A. (2022). Towards a cultural lens for adaptation pathways to climate change. *Regional Environmental Change*, 22(1), 22. https://doi.org/10.1007/s10113-022-01884-5
- Marris, E. (2019). Why young climate activists have captured the world's attention. *Nature*, 573(7775), 471-473.
- Marshall, C., & Rossman, G.B. (2016). *Designing qualitative research* (6th ed.). Sage Publications.
- Martiskainen, M., Axon, S., Sovacool, B. K., Sareen, S., Del Rio, D. F., & Axon, K. (2020).

 Contextualizing climate justice activism: Knowledge, emotions, motivations, and actions among climate strikers in six cities. *Global Environmental Change*, 65.

 https://doi.org/10.1016/j.gloenvcha.2020.102180
- Masuda, J. R., Poland, B., & Baxter, J. (2010). Reaching for environmental health justice:

 Canadian experiences for a comprehensive research, policy and advocacy agenda in health promotion. *Health Promotion International*, 25(4), 453-463.
- McCreary, T. A., & Milligan, R. A. (2014). Pipelines, permits, and protests: Carrier Sekani

- encounters with the Enbridge northern gateway project. *Cultural Geographies*, 21(1), 115–129.
- McFadden, C. (2020). Vanessa Nakate and perceptions of Black student activists. *Journal of Sustainability Education*, 24.
- McGregor, C., & Christie, B. (2021). Towards climate justice education: Views from activists and educators in Scotland. *Environmental Education Research*, *27*(5), 652-658. https://doi.org/10.1080/13504622.2020.1865881
- McGregor, C., Scandrett, E., Christie, B., & Crowther, J. (2018). Climate justice education: From social movement learning to schooling. In T. Jafry (Ed.) *Routledge handbook of climate justice* (pp. 494-508). Routledge.
- McKenzie, M., Koushik, J. R., Haluza-DeLay, R., Chin, B., & Corwin, J. (2017). Environmental justice. In A. Russ & M. Krasny (Eds.), *Urban environmental education review* (pp. 59-67). Cornell University Press.
- McKibben, B. (2017). Climate justice is racial justice is gender justice: Interview with Jacqueline Patterson. *YES Magazine*. http://www.yesmagazine.org/issues/just-transition/climate-justice-is-gender-justice-20170818
- Mead, E., Roser-Renouf, C., Rimal, R. N., Flora, J. A., Maibach, E. W., & Leiserowitz, A.
 (2012). Information seeking about global climate change among adolescents: The role of risk perceptions, efficacy beliefs, and parental influences. *Atlantic Journal of Communication*, 20(1), 31-52. https://doi.org/10.1080/15456870.2012.637027
- Merriam, S. B. & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass.

- Miller, D. A., Cronin, T., Garcia, A. L., & Branscombe, N. R. (2009). The relative impact of anger and efficacy on collective action is affected by feelings of fear. *Group Processes & Intergroup Relations*, 12, 445–462.
- Miller, H. K. (2018). Developing a critical consciousness of race in place-based environmental education: Franco's story. *Environmental Education Research*, 24(6), 845-858.
- Monroe, M. C., Plate, R. R., Oxarart, A., Bowers, A., & Chaves, W. A. (2017). Identifying effective climate change education strategies: A systematic review of the research.

 Environmental Education Research, 25(6), 791–812.

 https://doi.org/10.1080/13504622.2017.1360842
- Nabalamba, A. (2001). Locating risk: A multivariate analysis of the spatial and sociodemographic characteristics of pollution. PhD dissertation, University of Waterloo, ON.
- O'Brien, K., Selboe, E., & Hayward, B. M. (2018). Exploring youth activism on climate change:

 Dutiful, disruptive, and dangerous dissent. *Ecology and Society*, 23(3).

 https://doi.org/10.5751/ES-10287-230342
- Oglesby, C. (2021, February 10). The generational rift over 'intersectional environmentalism'.

 Grist. https://grist.org/justice/intersectional-environmentalism-justice-language/
- Oh, R. R. Y., Fielding, K. S., Nghiem, L. T. P., Chang, C. C., Carrasco, L. R., & Fuller, R. A. (2021). Connection to nature is predicted by family values, social norms, and personal experiences of nature. *Global Ecology and Conservation*, 28. https://doi.org/10.1016/j.gecco.2021.e01632
- Öhman, J., & Öhman, M. (2013). Participatory approach in practice: An analysis of student discussions about climate change. *Environmental Education Research*, 19(3), 324-341. https://doi.org/10.1080/13504622.2012.695012

- Ojala, M. (2013). Coping with climate change among adolescents: Implications for subjective well-being and environmental engagement. *Sustainability*, 5(5), 2191-2209. https://doi.org/10.3390/su5052191
- Ojala, M. (2015). Climate change skepticism among adolescents. *Journal of Youth Studies*, *18*(9), 1135-1153. https://doi.org/10.1080/13676261.2015.1020927
- Paris, D. (2012). Culturally sustaining pedagogy: A needed change in stance, terminology, and practice. *Educational Researcher*, 41(3), 93-97. https://doi.org/10.3102/0013189X12441244
- Patterson, M., Markey, M., & Somers, J. (2012). Multiple paths to just ends: Using narrative interviews and timelines to explore health equity and homelessness. *International Journal of Qualitative Methods*, 11, 132–151.
- Patton, M. Q. (2015). Qualitative research & evaluation methods: Integrating theory and practice (4th ed.). Sage.
- Pearson, A. R., Bacio, G. A., Naiman, S., Romero-Canyas, R., & Schuldt, J. P. (2021). Cultural determinants of climate change opinion: Familism predicts climate beliefs and policy support among US Latinos. *Climatic Change*, *167*(11), 1-8. https://doi.org/10.1007/s10584-021-03165-2
- Rafaely, D., & Barnes, B. (2020). African climate activism, media, and the denial of racism: The tacit silencing of Vanessa Nakate. *Community Psychology in Global Perspective*, 6(2/2), 71-86.
- Reid, A. (2019). Climate change education and research: Possibilities and potentials versus problems and perils. *Environmental Education Research*, *25*(6), 767-790. https://doi.org/10.1080/13504622.2019.1664075

- Robinson, M. (2018). *Climate justice: Hope, resilience, and the fight for a sustainable future.*Bloomsbury Publishing.
- Rudman, D. L., & Aldrich, R. M. (2017). Discerning the social in individual stories of occupation through critical narrative inquiry. *Journal of Occupational Science*, 24(4), 470-481.
- Schlosberg, D., & Collins, L.B. (2014). From environmental to climate justice: Climate change and the discourse of environmental justice. *WIREs Climate Change*, *5*, 359-374. https://doi.org/10.1002/wcc.275
- Scott, D. N. (2013). The networked infrastructure of fossil capitalism: Implications of the new pipeline debates for environmental justice in Canada. *Revue Générale de Droit*. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2271320.
- Sensoy, O., & DiAngelo, R. (2017). How to engage constructively in courses that take a critical social justice approach. In *Is everyone really equal? An introduction to key concepts in social justice education* (2nd ed., pp. 1-22). Teachers College Press.
- Shaikh, A., Kauppi, C., & Case, R. (2017). Flooding in Kashechewan First Nation: Is it an environmental justice issue? *The Canadian Journal of Native Studies*, *37*(2), 105-130.
- Sheridan, J., Chamberlain, K., & Dupuis, A. (2011). Timelining: Visualizing experience. *Qualitative Research*, 11, 552–570.
- Siegner, A., & Stapert, N. (2020). Climate change education in the humanities classroom: A case study of the Lowell School curriculum pilot. *Environmental Education Research*, 26(4), 511–531. https://doi.org/10.1080/13504622.2019.1607258

- Sloan Morgan, O., Melchior, F., Thomas, K., & McNab-Coombs, L. (2023). Youth and climate justice: Representations of young people in action for sustainable futures. *The Geographical Journal*, 00, 1–9. https://doi.org/10.1111/geoj.12547
- Sodhi, P. (2008). Bicultural identity formation of second generation Indo-Canadians. *Canadian Ethnic Studies*, 40(2), 187-199. https://doi.org/10.1353/ces.2010.0005
- Solórzano, D. G., & Yosso, T. J. (2002). Critical race methodology: Counter-storytelling as an analytical framework for education research. *Qualitative Inquiry*, 8(1), 23–44. https://doi.org/10.1177/107780040200800103
- Squire, C. (2008). Experience-centred and culturally-oriented approaches to narrative. In M. Andrews, C. Squire & M. Tamboukou (Eds.), *Doing narrative research* (pp. 41-63). Sage Publications.
- Stapleton, S. R. (2019). A case for climate justice education: American youth connecting to intragenerational climate injustice in Bangladesh. *Environmental Education Research*, 25(5), 732-750.
- Stapleton, S. R. (2020). Toward critical environmental education: A standpoint analysis of race in the American environmental context. *Environmental Education Research*, 26(2), 155-170.
- Steen, S. (2003). Bastions of mechanism, castles built on sand: A critique of schooling from an ecological perspective. *Canadian Journal of Environmental Education*, 8, 191-203.
- Stephens, S. (1996). Reflections on environmental justice: Children as victims and actors. *Social Justice*, 23(4), 62-86.
- Stevenson, K. T., Peterson, M. N., & Bondell, H. D. (2019). The influence of personal beliefs, friends, and family in building climate change concern among adolescents.

- Environmental Education Research, 25(6), 832-845. https://doi.org/10.1080/13504622.2016.1177712
- Stovall, D., Lynn, M., Danley, L., & Martin, D. (2009). Critical race praxis in education. *12*(2), 131–132. https://doi.org/10.1080/13613320902995418
- Strong-Wilson, T. (2011). Foundations of critical race theory in education. *Cultural and Pedagogical Inquiry*, 3(2).
- Swedberg, R. (2020). Exploratory research. In C. Elman, J. Gerring, & J. Mahoney (Eds.), *The production of knowledge: Enhancing progress in social science* (pp. 17-41). Cambridge University Press.
- Taylor, E., Gillborn, D., & Ladson-Billings, G. (2009). Foundations of critical race theory in education. Routledge.
- Teelucksingh, C. (2007). Environmental racialization: Linking racialization to the environment in Canada. *Local Environment*, *12*(6), 645-661. https://doi.org/10.1080/13549830701657455
- Teelucksingh, C. (2020). The Canadian environmental justice movement needs Black Lives

 Matter. *NiCHE*. https://niche-canada.org/2020/11/23/the-canadian-environmental-justice-movement-needs-black-lives-matter/
- Temper, L. (2019). Blocking pipelines, unsettling environmental justice: From rights of nature to responsibility to territory. *Local Environment*, 24(2), 94-112.
- Thomas, L. (2020). How to uplift the voices of young climate activists of color (plus 10 accounts to follow). *The Good Trade*. https://www.thegoodtrade.com/features/climate-activists-of-color
- Thomas, L. (2022). The intersectional environmentalist: How to dismantle systems of oppression

- to protect people + planet. Souvenir Press.
- Thunberg, G. (2019) No one is too small to make a difference. Penguin Books.
- Tracy, S. J. (2010). Qualitative quality: Eight "big-tent" criteria for excellent qualitative research. *Qualitative Inquiry*, 16(10), 837-851.

 https://doi.org/10.1177/1077800410383121
- Trott, C. D. (2021). What difference does it make? Exploring the transformative potential of everyday climate crisis activism by children and youth. *Children's Geographies*, 1-9. https://doi.org/10.1080/14733285.2020.1870663
- Trott, C. D., Rockett, M. L., Gray, E. S., Lam, S., Even, T. L., & Frame, S. M. (2020). "Another Haiti starting from the youth": Integrating the arts and sciences for empowering youth climate justice action in Jacmel, Haiti. *Community Psychology in Global Perspective*, 6(2/2), 48-70. https://doi.org/10.1285/i24212113v6i2-2p48
- Tuck, E. (2009). Suspending damage: A letter to communities. *Harvard Educational Review*, 79(3), 409-428. https://doi.org/10.17763/haer.79.3.n0016675661t3n15
- Vamvalis, M. (2023). "We're fighting for our lives": Centering affective, collective, and systemic approaches to climate justice education as a youth mental health imperative. *Research in Education*, *117*(1), 88

 112. https://doi.org/10.1177/00345237231160090
- Wagreich, M., Williams, M., Draganits, E., Zalasiewicz, J., Waters, C. N., & Edgeworth, M. (2019). 7.3 Pre–industrial revolution start dates for the Anthropocene. *The Anthropocene as a Geological Time Unit: A Guide to the Scientific Evidence and Current Debate*, 246.
- Waldron, F., Ruane, B., Oberman, R., & Morris, S. (2019). Geographical process or global injustice? Contrasting educational perspectives on climate change. *Environmental*

- Education Research, 25(6), 895-911. https://doi.org/10.1080/13504622.2016.1255876
- Waldron, I., (2021). Environmental racism in Canada. In *The Canadian Encyclopedia*.

 https://www.thecanadianencyclopedia.ca/en/article/environmental-racism-in-canada
- Weiss, E. B. (1989). In fairness to future generations: International law, common patrimony and intergenerational equity. Transnational Publishers.
- Whyte, K. (2020). Indigenous environmental justice: Anti-colonial action through kinship.

 In *Environmental Justice* (pp. 266-278). Routledge.
- Wong-Parodi, G., & Feygina, I. (2021). Engaging people on climate change: The role of emotional responses. *Environmental Communication*, 1-23. https://doi.org/10.1080/17524032.2020.1871051
- Wynes, S., & Nicholas, K. A. (2019). Climate science curricula in Canadian secondary schools focus on human warming, not scientific consensus, impacts or solutions. *PloS One*, *14*(7). https://doi.org/10.1371/journal.pone.0218305

Appendix A: Black, Indigenous, and Racialized Youth Activists Worldwide

Note: Rows highlighted in **blue** are Canadian Activists

Name	Age (in 2021)	nted in <i>blue</i> are Ca Identity/Ethnicity	Organization/Work known for	Social Media handles	Websites: More information found
Jamie Margolin	19	Jewish, Latina, Queer / Family from Columbia; Based in Seattle, Washington	Co-founder of Zero Hour; Indigenous Rights; Biodiversity; Protecting the Amazon Rainforest	ights; Biodiversity; Protecting the https://www.instagra	
Amariyanna "Mary" Copeny <i>aka</i> "Little Miss Flint"	13	Black; Based in Flint, Michigan	Founder #DearFlintKids & #WednesdaysforWater - Weekly water distribution events; Flint Water Crisis (high levels of lead); Partner with Filtration Company	WednesdaysforWater - Weekly vater distribution events; Flint Water https://twitter.com/Li thtleMissFlint https://www.instagra com/littlemissflint/	
Xiye Bastida	19	Mexican; Otomi- Toltec; Born in San Pedro Tultepec (outside of Mexico City); Based in NYC	Co-founder of Re-Earth Initiative; Fridays for Future organizer; Indigenous knowledge and cosmology; Spoke at Earth Summit 2021 (Bidden); TedTalk speaker	o-founder of Re-Earth Initiative; ridays for Future organizer; digenous knowledge and osmology; Spoke at Earth Summit https://twitter.com/xi yebastida https://www.instagra m.com/yiyebasry/ of	
Isra Hirsi	18	Somali-American (daughter of Congreewoman IIhan Omar); Based in Minnesota	Co-founder and co-executive director of US Youth Climate Strike; Inclusive Solutions; Minnesota oil pipeline (Line 3)	https://twitter.com/isr ahirsi https://www.instagra m.com/israhirsi/	https://www.vox.com/iden tities/2019/10/11/2090479 1/young-climate-activists- of-color
Kevin J. Patel	20	First Gen Indian American; Asian; Based in LA	Founder of One Up Action; Co- Deputy Partnerships Director for Zero Hour; Diagnosed with heart palpitations d/t pollution at age 14; Climate Crisis and Health Risks; Asthma	https://twitter.com/im kevinipatel https://www.instagra m.com/imkevinipatel	https://www.greenbiz.com/ kevin-patel
Elsa Mengistu	19	Born in Ethiopia; Based in North Carolina	Youth Advisory Board for Young Voices for the Planet; Leader for Decean Heroes Bootcamp, BlackGirlEnvironmentalist, Generation Green, and Power Shift https://www.instagra m.com/elsamengistu https://twitter.com/elsamengistu https://twitter.com/elsamengistu https://www.instagra m.com/elsamengistu https://twitter.com/elsamengistu https://www.instagra m.com/elsamengistu https://www.instagra m.com/elsamen		https://therising.co/2020/0 8/28/elsa-mengistu-tackle- environmental-racism/ https://www.vox.com/iden tities/2019/10/11/2090479 1/young-climate-activists- of-color
Nadia Nazar	19	Indian American; Based in Baltimore, MD	Co-founder and art director of Zero Hour; lead organizers for the March 5th DC Climate Strike; Designed Zero Hour's logo; Artist; Leads creative spaces in the Youth Climate movement https://twitter.com/na diabaltimore https://www.instagra m.com/nadianazar		https://nadianazar.com/ https://www.vox.com/iden tities/2019/10/11/2090479 1/young-climate-activists- of-color https://www.ioes.ucla.edu/ person/nadia-nazar/
Autumn Peltier aka "Water Warrior"	16	Indigenous; Anishinaabe-Kwe from Wiikwemkoong First Nation, Manitoulin Island, Canada	Chief Water Commissioner/Protector for Anishnabek Nation; Water Activist; Advocates for clean drinking in First Nations communities and across Mother Earth; nominated for the International Children's Peace Prize in 2017, 2018 and 2019; Film: The Water Walker	https://www.instagra m.com/autumn.peltie r/ https://twitter.com/A utumnPeltier1	https://naaee.org/about- us/people/autumn-peltier https://www.thecanadiane ncyclopedia.ca/en/article/a utumn-peltier

Helena Gualinga	19	Indigenous; from the Kichwa Sarayaku community in Pastaza, Ecuador	Environmental and Indigenous Rights Defender. Daughter of the first uprising; threat of losing their scared sites by extractive industries; Advocate of land and forests	https://www.instagra m.com/helenagualing a/ https://twitter.com/su makhelena	https://latinamericareports. com/helena-gualinga- voice-indigenous- communities-fight- climate-change/4192/ https://www.refinery29.co m/en- us/2020/09/10037691/gen-
Quannah Chasinghorse aka "Land Protector"	18	Indigenous; Hän Gwich'in and Oglala Lakota; Based in Fairbanks, Alaska	Defends her tribe's sacred lands and way of life; Fighting to Save the Arctic National Wildlife Refuge; Model	https://www.instagra m.com/quannah.rose	z-climate-advocate-helena-gualinga https://www.teenvogue.co m/story/arctic-national- wildlife-refuge-quannah- chasinghorse https://nativemaxmagazine .com/climate-warrior-land- protector-model-quannah- chasinghorse-featured-on- the-cover-of-vogue- mexico/
Ta'Kaiya Blaney	19	Indigenous; From the Tla'amin Nation in British Columbia, Canada	Singer, actress, and environmental activist; At age 13 - the youngest person to have intervened at the UN Permanent Forum on Indigenous Issues; film Kayak to Klemtu; Earth Revolution song; Spoken at United Nations conferences and classrooms across Canada/worldwide	https://www.instagra m.com/takaiya.blane y https://twitter.com/sal ishmemer	http://www.takaiyablaney.com/ https://indspire.ca/laureate/takaiya-blaney/ https://www.mcgilltribune.com/climate-justice-is-racial-justice
Feliquan Charlemagne	19	Black; From St. Thomas, Carribean Virgin Islands; Now based in Florida	National Creative Director and Florida State Lead for US Youth Climate Strike; Hurricane Irma destorying his home island;	https://www.instagra m.com/feliquan	https://www.washingtonpo st.com/graphics/2019/natio nal/climate-change-kids/ https://www.wearyourvoic emag.com/youth-climate- activists-of-color/
Karla Stephan	16	Arab American; From a Lebanese and Syrian immigrant family; US	National Finance Director for US Youth Climate Strike; Family fled during the 2006 invasion of Lebanon by Israeli forces	https://twitter.com/ka rlastephan https://www.instagra m.com/karlastephan_	https://www.wearyourvoic emag.com/youth-climate- activists-of-color/
Anya Sastry	18	Indian American; Based in Chicago, Ilinois	National Outreach Director for the US Youth Climate Strike; intersectional advocacy; Line 3 Pipeline; Little Village Environmental Justice Organization (LVEJO)	https://twitter.com/an yasastry12 https://www.instagra m.com/anyasastry	http://anyasastry.com/ https://www.wearyourvoic emag.com/youth-climate- activists-of-color/
Salomée Levy	19	French-Belizean American; Based in Las Vegas, Nevada	Artist, writer, and State Liaison for US Youth Climate Strike; Launched We The Immigrants in 2018	https://www.instagra m.com/salomee.levy/	https://www.internationalc ongressofyouthvoices.com /salomee-levy
Ridhima Pandey	12	Indian; From Uttarakhand, India	At age 9, filed a legal complaint against the Indian government; Among the 16 young activists in a joint lawsuit against Germany, France, Brazil, Argentina and Turkey for their environmental destruction; TEDxspeaker; Member of youth advisory council for COP26; Awarded BBC's 100 women 2020	https://www.instagra m.com/ridhimapande yy https://twitter.com/rid himapandey7	https://www.wearyourvoic emag.com/youth-climate- activists-of-color

Jerome Foster II	19	Black, New York City	Youngest member within the Biden administration serving on the white House Environmental Justice Advisory Council since 2021; Founder and Executive Director of One Million of Us; National Geographic Explorer, a Smithsonian Ambassador, Founder and Editor-in-Chief of The Climate Reporter, Founder and CEO of TAU VR	https://twitter.com/Je romeFosterII https://www.instagra m.com/jeromefosterii	https://www.wearyourvoic emag.com/youth-climate- activists-of-color https://people.com/human- interest/jerome-foster-ii- teen-climate-hero-saving- the-planet-earth-day/
Xiuhtezcatl Martinez	21	American & Mexican; Based in Xochimilco, Distrito; Mexico City	Hip-hop artist; Youth Director of Earth Guardians; has been fighting for climate justice since he was six years old; Multiple TedTalks; first book, We Rise, released in 2017; Spoken at the UN General Assembly many times	https://twitter.com/xi uhtezcatl https://www.instagra m.com/xiuhtezcatl	https://www.earthguardian s.org/xiuhtezcatl https://www.wearyourvoic emag.com/youth-climate- activists-of-color/
Bertine Lakjohn	20	Marshallese; from the Marshall Islands; Studied in Japan	Attended 2019 U.N. Youth Climate Summit; 2018 TedTalk; facilitated a youth leadership camp that's focused on leadership and climate change	https://www.instagra m.com/ber.tiny	https://bust.com/feminism/ 196496-7-teen-female- climate-activists-of- color.html https://www.youthsolution s.ymca.int/video/ashley- kolaya-interviews- marshallese-climate- activist%2C-bertine- lakjohn https://www.wearyourvoic emag.com/youth-climate- activists-of-color/
Leah Namugerwa	16	Ugandan; Based in Kampala, Uganda	Team Leader & student striker with #FridaysForFuture; leading tree planting campaigns and for starting a petition to enforce the plastic bag ban; Awareness to hunger in Northern Uganda caused by prolonged drought and several landslides; Childs Right Activist; #SaveBugomaForest	https://twitter.com/N amugerwaLeah https://www.instagra m.com/namugerwale ah	https://therising.co/2020/0 1/02/leah-namugerwa- climate-activism/ https://www.euronews.co m/green/2020/08/18/move -over-greta-7-young- activists-you-didn-t-know- about https://www.wearyourvoic emag.com/youth-climate- activists-of-color/
Artemisa Xakriabá	21	Indigenous Brazilian; Xakriabá peoples	work focuses on the Amazon jungle and environmental destruction; Brought together 4 organizations from Brazil, the Amazon Basin, Central America, and Indonesia to combat environmental destruction across indigenous peoples' lands	https://www.instagra m.com/artemisa_xakr iaba	https://www.democracyno w.org/2019/9/23/brazil_in digenous_climate_activist artemisa_xakriaba https://www.wearyourvoic emag.com/youth-climate- activists-of-color/
Naelyn Pike	21	Member of San Carlos Apache Tribe; Based in Chiricahua Apache, Arizona	Indigenous Rights and Environmental Leader fighting hard to protect sacred lands; co-leads the Apache Stronghold group to defend her people's sacred sites, tribal sovereignty, culture and language	https://www.instagra m.com/naelynpike https://twitter.com/na elyn_pike	https://medium.com/bione ers/youth-leadership- naelyn-pike- 5671b3a86239
Danika Littlechild	?	Indigenous; From Ermineskin Cree Nation in Treaty 6	Assistant Professor at Carleton; lawyer whose practice focuses on the rights of Indigenous Peoples,	https://twitter.com/da nikabillie	https://jia.sipa.columbia.ed u/one-step-forward-two- steps-back-indigenous-

		territory in Alberta; Based in Ottawa, ON	Indigenous legal traditions, environment, water, health, and international law. From 2014-2018, served as Vice President of the Canadian Comission for UNESCO		perspective-recent-efforts-fight-climate-change
Leah Thomas	23	Black; From St.Louis, Missouri, Based in Ventura, California	eco-communicator; intersectional environmentalist; founder of ecolifestyle blog @greengirlleah, @thegreensgirlco and The Intersectional Environmentalist Platform (resource + media hub advocate for environmental justice + inclusivity within environmental education + movements); Dismantle Racism in the Climate movement	https://www.instagra m.com/greengirlleah/ https://www.instagra m.com/intersectional environmentalist/	https://www.greengirlleah. com/about-2 https://www.greenmatters. com/p/intersectional- environmentalist-leah- thomas https://www.wastefreeeart h.com/post/10-bipoc- environmentalists-on- instagram-that-you- should-be-following
Aditi Mayer	24	Asian American; Indian; Based in LA	Decolonizing Fashion & Sustainability; Blogger, (Photo)Journalist; labor rights activist, and frequent speaker, explores the intersections between style, sustainability, and social justice. Will spend 2022 as a National Geographic Digital Storytelling Fellow, spending one year documenting the social and environmental impacts of India's fashion supply chain	https://www.instagra m.com/aditimayer https://twitter.com/ad itimayer	https://www.adimay.com/a bout/
Abhayjeet Singh Sachal	19	Punjabi; Indian Canadian; Based in British Columbia, Canada & Toronto, ON	Researcher @ReachAllianceTO; Participated in an expedition to the Arctic in 2016 with the Students on Ice Foundation; Launched Break the Divide, an international network of students who could connect, communicate, and create change on a number of different issues (inequality, climate change, intergenerational trauma, and food insecurity). Awarded \$5,000 from Shaw's 2018 Kindness Sticks Grant for promoting social inclusion and breaking down the stigmas against Indigenous communities	https://twitter.com/ab haysachal	https://parliamentofreligions.org/users/abhayjeetsingh-sachalhttp://breakthedivide.net/about/https://www.canadahelps.org/en/giving-life/youth-activists-changing-theworld/
Haana Edenshaw	18	Indigenous; From Haida Gwaii, B.C.	Among 15 Canadian youth who filed a lawsuit in the Federal Court of Canada in 2019. Chosen to be a speaker at the United Nations Permanent Forum on Indigenous Issues. Organized organized climate strike day. Passionate about environmentalism and using her voice to protect her culture, land and the environment; challenges of sea level rise from climate change. Drier, hotter summers have seriously reduced her family's ability to catch salmon;		https://davidsuzuki.org/sto ry/meet-some-of-canadas- leading-young-climate- activists-haana-hiroki- montay-sierra-and-sophia/ https://www.haidagwaiiob server.com/news/haida- gwaii-youth-joins-federal- climate-lawsuit/ https://www.cbc.ca/kidsne ws/post/watch-climate- change-hurts-kids-teen- activist-says

Licypriya Kangujan	9	Indian; Based in India's north- eastern state of Manipur	Started The Child movement, a body that aims to raise awareness "to protect the planet by tackling climate change and natural disasters". Addressed world leaders at the United Nations Climate Change Conference 2019 (COP25) in Madrid, Spain. Pushed for new laws to curb India's high pollution levels and wants climate change lessons to be mandatory in schools; "If you call me Greta of India, you are not covering my story. I already began a movement to fight climate change before Greta started,"	https://twitter.com/Li cypriyaK https://www.instagra m.com/licypriyakang ujam	https://www.bbc.com/news/world-asia-india-51399721 https://www.ctvnews.ca/health/coronavirus/meet-the-9-year-old-activist-using-social-media-to-send-oxygen-to-covid-19-patients-in-india-1.5429461
Vanessa Nakate	24	Ugandan; From Kampala	Founder of the Rise Up movement; help amplify the voices of climate activists from Africa; Book: A Bigger Picture	https://twitter.com/va nessa_vash https://www.instagra m.com/vanessanakate 1	photo-davos https://www.1millionactivi
Oladosu Adenike	26	Nigerian; Based in Lake Chad Region, Africa	Founder of I Lead Climate, a green democracy grassroots climate campaign; initiator of the Fridays For Future movement in Nigeria; Ecoreporter; Agricultural Economist; campaigns for the recharging of Lake Chad, and a green recovery post Covid-19; attended COP25 climate conference in Spain as a Nigerian youth delegate	https://twitter.com/th e_ecofeminist https://www.instagra m.com/An_ecofemini st/	https://www.queenscomm onwealthtrust.org/inspirati on/oladosu-adenike-i-lead- climate-nigeria-lake-chad/ https://www.greenpeace.or g.uk/news/young-climate- activists-of-colour- profiles/
Lesein Mutunkai	15	Kenyan	love of football into an incentive for environmental action. For every goal he scores, he plants a tree. dedication to reforestation; encouraged his school and football club to be more sustainable, and he hope to expand his #Trees4Goals campaign across Africa.	https://twitter.com/tre es4goals https://www.instagra m.com/trees4goals	https://www.bbc.com/new s/av/world-africa- 45876475 https://www.euronews.co m/green/2020/08/18/move -over-greta-7-young- activists-you-didn-t-know- about
Karida Niode	15-17	Indonesian, in Jakarta, Indonesia	Climate Reality Leader; Blogger for Omar Niode Foundation; lives near an urban low-income community; launched the Grains & Seedlings for Neighbors initiative. She's been growing some vegetable seeds into seedlings. help neighbors in need feed themselves with nutritious and healthy food. She also hopes to increase the awareness of minimizing food mileage and reducing carbon emissions.		https://www.climatereality project.org/blog/5-youth- climate-activists-leading- climate-fight-earth-day

Nkosilathi Nyathi	18	Zimbabwean; from Victoria Falls, Zimbabwe	@unicefzimbabwe Youth Climate Advocate; Greenline Africa Youth Climate Ambassador; talks about changes he has witnessed firsthand as a result of climate change; He feels that although young people can see and feel the effects of climate change, many don't know what's happening and he wants to change that.	https://www.instagra m.com/nyathinkosilat h_official05	https://www.unicef.org/stories/young-climate-activists-demand-action-inspire-hopehttps://www.globalcitizen.org/en/content/nkosilathinyathi-zimbabwe-climate-change-activist/https://www.voicesofyouth.org/blog/i-have-started-change-i-want-advocating-climate-change-zimbabwe
Carlos Manuel	19	Filipino; based in Koror, Island of Palau	among a group of young people from 12 countries around the world who in 2019 presented a landmark complaint to the UN Committee on the Rights of the Child against government inaction on climate change. Participated at COP25	https://twitter.com/pa laukarlos	https://www.rnz.co.nz/international/pacific-news/399656/teen-asks-un-to-ensure-palau-not-swallowed-by-the-ocean https://www.aa.com.tr/en/environment/island-nations-experiencing-climate-change-firsthand-/1800607 https://www.greenpeace.org.uk/news/young-climate-activists-of-colour-profiles/
Elizabeth Wanjuri Wathuti	25	Kenyan; Based in Nairobi, Kenya	Founder of Green Generation Initiative; Recently joined Wangari Maathai Foundation as the Head of Campaigns; Coordinator @daimagreenspace	https://twitter.com/liz wathuti https://www.youtube. com/channel/UCHQ YgejdPCOZPbLrAM B2wag?app=desktop https://twitter.com/G GI_Kenya https://www.instagra m.com/lizwathuti	https://www.kenyans.co.ke/personality/elizabeth-wanjiru-wathutihttps://www.greenpeace.org.uk/news/young-climate-activists-of-colour-profiles/
Wanjiku (Wawa) Gatheru	22	Black; First generation American Kenyan; Based in Connecticut	Environmental justice advocate; Founder of BlackGirlEnvironmentalist; First Black person in history to receive Rhodes, truman & udall scholar; Led the successful implementation of an environmental literacy general education requirement and co-led the state's first assessment of food insecurity at a public institution of higher education. At Oxford, Wawa will continue her studies at the intersections of race, environment and policy.	https://twitter.com/w awagatheru https://www.instagra m.com/wawa_gather u	https://www.wawagatheru.org/about https://www.aashe.org/conference/speaker/wanjiku-wawa-gatheru/ https://www.rhodeshouse.ox.ac.uk/scholars/rhodes-scholars-class-of-2020/wanjiku-wawa-gatheru/
Brianna Fruean	23	Samoa Native; Based in Auckland, New Zealand	Activist and Environmental Advocate for Samoa; At age 11: Founding member of the grassroots climate change movement 350.Samoa and leader of the environmental group "Future Rush", which have rallied youth and communities alike in Samoa and the wider Pacific region to tackle climate change and embrace	https://twitter.com/bri anna_fruean https://www.instagra m.com/briannafruean	https://www.spc.int/sdp/70 -inspiring-pacific- women/brianna-fruean https://assembly.malala.or g/stories/what-island-life- taught-brianna-fruean- about-saving-the-earth

			sustainable development. One of the youngest persons to attend the United Nations Conference on Sustainable Development in Brazil in 2012, as a Pacific youth ambassador.		
Aka Niviâna	26	Inuk; From Nuuk, Kalaallit Nunaat (Greenland)	Inuk writer and climate activist; Greenland Land Defender; Passionate about climate change, colonialism and indigenous people's rights.started doing poetry with a wish to create nuanced conversations about not only climate change. believes in the importance of representation and the inclusion of black, brown and indigenous peoples. Poem: Rise-From One island to another	https://twitter.com/ak aniviaana https://www.instagra m.com/akaniviaana	https://350.org/rise-from- one-island-to-another/ https://movingpoems.com/ poet/aka-niviana/
Larissa Crawford	26	Métis-Jamaican; Afro-Indigenous; from Calgary	Founded and managing director of Future Ancestors Services Inc.; CohortX Climate Justice Fellow; Anti-racism and Indigenous research to renewable energy policy and program development in Canada; award-winning ribbon skirt making and research, nationally broadcasted political commentary, and contracts with the federal government and Métis Nation of Ontario	e https://www.instagram.com/larissa_speaks	https://www.womenofinfluence.ca/2020/10/05/meet-larissa-crawford-founder-and-managing-director-of-future-ancestors-services/https://www.futureancestors.ca/team/larissa-crawfordhttps://www.canadahelps.org/en/giving-life/youth-activists-changing-the-world/
Vishal Vijay	20	Indian Canadian; Based in Oakville, ON	began a youth-run national non-profit organization they eventually called EveryChildNow, empowering kids to help other kids and provide children locally and globally with basic needs. Since then, they have raised over \$100,000 and collected over 30,000 worth of items and supplies to provide children living in extreme poverty.	https://twitter.com/its vishalvijay https://www.instagra m.com/itsvishalvijay	https://everychildnow.mys trikingly.com/ https://www.canadahelps.o rg/en/giving-life/youth- activists-changing-the- world/
Anjali Appadurai	?	Based in British Columbia, Canada	Climate justice advocate, communicator and consultant; Climate Justice Lead at Sierra Club BC; Sectoral Organizer at Climate Emergency Unit; Founder of Padma Centre; Addressed United Nations Climate Change Conference in Durban on behalf of youth delegates in 2011 (mic checks).	https://twitter.com/an jaliapp	https://sierraclub.bc.ca/anj ali-appadurai/ https://www.youtube.com/ watch?v=Ko3e6G_7GY4 Transcript of Address at UN (2011): https://www.democracyno w.org/2011/12/9/get_it_do ne_urging_climate_justice Addressing experiences at COP25 (2019):https://www.youtub e.com/watch?v=eSu5TfXp



Appendix B: Recruitment Poster

CALL FOR PARTICIPANTS

DO YOU IDENTIFY AS A BLACK, INDIGENOUS, OR YOUTH OF COLOUR CLIMATE JUSTICE ACTIVIST?

Are you:

- 18-29 years old? A student or recent grad?
- An active member of a **Climate Justice Organization in Ontario**, such as *Fridays for Future, Climate Justice Toronto or Peel*?

If so, I'd like to hear from you!

Please fill out the following questionnaire to be selected for an interview:

https://bit.ly/climatejusticestudy

Once completed, you will be sent an info letter regarding the details of the study.

Interviews will be an hour long and you will receive \$30 for participating!

For more information, please contact: **Rupinder Grewal, MEd Candidate** rkgrewal@lakeheadu.ca



This project has been approved by the Lakehead University Research Ethics Board, file no. 1469666.



Appendix C: Information Letter

Amplifying Black, Indigenous, and Youth of Colour Voices in the Climate Justice Movement

Dear Potential Participant,

Thank you for your interest in this research project. I am inviting you to take part in a research study to find out more about your experiences as a Black, Indigenous or youth of colour climate activist. Please note that taking part in this study is voluntary. Before you decide whether or not you would like to take part in this study, please read this letter carefully to understand what is involved. After you have read the letter, please ask any questions you may have.

Purpose:

This research seeks to explore the experiences of Black, Indigenous, and youth of colour activists in the climate justice movement, and their perceptions of the impacts they have on their communities and schools. The findings will help to inform climate justice education in schools and how it can help to inspire future generations to take action to help create a more equitable and sustainable future, especially for the most vulnerable of peoples.

What information will be collected?

You are being invited to participate in this research because you are involved in a climate justice organization. I am asking you to participate in a Zoom interview approximately 1 hour in length to share your knowledge and perspectives about your activism in the youth climate justice movement. Before the interview, you will be provided with a copy of the interview questions and an empty timeline to give you time to think about and reflect on your experiences. The timeline I will be asking you to complete is regarding significant events you have witnessed or experienced that have shaped your justice-oriented values and influenced your choice to be active within the climate justice organization. You will be asked to select up to five significant events, mark the year, your age when the event happened, and to provide a short description of the event. With your permission, the interview will be audio-recorded. Only my thesis supervisor and I will be able to hear the recording and view your completed timeline. If you do not wish to be audio-recorded, you may still participate in this study.

What are my rights as a participant?

Your participation is completely voluntary; you may refuse to answer any questions or withdraw from the study at any time. As a research participant, your rights include: the right to not participate; to withdraw at any time during the data collection phase, and to continuing and meaningful opportunities for deciding whether or not to continue to participate; to opt out without penalty and to have any collected data withdrawn from the data base and not included in the study (until completion of the data collection phase of the study; if you choose to opt out any data pertaining to your participation will be destroyed); to privacy, anonymity and confidentiality; and to safeguards for security of data.

What are the risks and benefits?



There is no foreseeable harm and risks associated with participating in my research. You will receive a \$30 thank you for participating in the interview. The interview process may also offer the opportunity for you to become introspective about your activism and will encourage you to reflect on the challenges of operationalizing climate justice. The interview will honour your engagement in climate justice work. The findings of this research also aim to support the broader youth climate justice movement and help better inform researchers working in this field. Given that the topic of this research can be heavy, if you feel distressed while discussing any of the questions, the interview will be stopped, and you will be encouraged to reach out to one of the numbers listed below.

Where will my data be stored?

Your anonymity and confidentiality as a participant in the research will be guaranteed, as far as possible, through the use of pseudonyms in the data analysis and reporting processes unless you choose to be identified by name. All data will be securely stored in password protected files on my computer while completing the research and then stored for seven years on Dr. Paul Berger's desktop computer at Lakehead university. Only members of the research team will have access to the interview transcript and identifiable materials (including recordings, notes and your consent form). Additionally, anything linking names to pseudonyms will be securely and separately stored in a password protected file separate from the research data.

How can I receive a copy of the research results?

The final research results will be submitted as part of a master's thesis. You may also request a summary of the results by contacting me via the information provided below.

Research Ethics Board Approval:

This research study has been reviewed and approved by the Lakehead University Research Ethics Board. If you have any questions related to the ethics of the research and would like to speak to someone outside of the research team, please contact Sue Wright at the Research Ethics Board at 807-343-8010 ext. 8283 or research@lakeheadu.ca.

If you have further questions about these processes, please let us know as soon as possible. Thank you for your time and assistance,

Rupinder Grewal

Master of Education Candidate Department of Education Lakehead University rkgrewal@lakeheadu.ca 647-808-5939

Dr. Paul Berger

Associate Professor
Faculty of Education
Lakehead University
955 Oliver Road, Thunder Bay, ON, P7B 5E1
807-343-8010 ext. 8708
paul.berger@lakeheadu.ca

Helplines if you feel distressed:

Kids Help Phone

• Call: 1-800-668-6868

• Text: CONNECT to 686868

Good2Talk

• Call: 1-866-925-5454

• Text: GOOD2TALKON to 686868

Mental Health Helpline

• Call: 1-866-531-2600



Appendix D: Consent Form

I,, have read a	nd understand the information co	ontained in the
information letter. I hereby consent to n	ny participation in the research st	udy, Amplifying Black,
Indigenous, and Youth of Colour Voice	s in the Climate Justice Moveme	nt. I also agree to the
following:		
 ✓ I agree to participate in this stud ✓ I understand the risks and benefit ✓ I am a volunteer and can withdrawanswer any question. ✓ The data will be securely stored completion of the research projet ✓ I understand that the research fit ✓ I will remain confidential in this 	its to the study. aw from the study at any time and at Lakehead University for a per- ect. addings will be made available to a	iod of 7 years following
By consenting to participate, I have not research-related harm.	waived any rights to legal recour	rse in the event of
I give permission to have this interview \Box Yes \Box No	audio recorded.	
I would like my name to be used in the \Box Yes \Box No	thesis, publications, and presenta	tions.
Would you like to receive a copy of the	research results?	
	ecord your email address here:)
	_	
(Print Name)	(Signature)	(Date)

If you would like to participate in this study, please sign and return this form to me, the student researcher. For further information concerning the completion of this form, please contact me at rkgrewal@lakeheadu.ca or 647-808-5939. If you have any additional questions regarding this study, please contact Paul Berger at paul.berger@lakeheadu.ca or 807-343-8010, ext. 8708.



Appendix E: Interview Guide

A. Biographical Questions

- 1. What is your age? What is your gender?
- 2. What is your current level of education? If you are currently a student, what are you studying?
- 3. Are you working right now? If so, what is your current job?
- 4. What is your cultural identity/ethnicity? (*Must identify as BIPoC*)

B. Timeline Mapping and Histories

- 1. Please walk me through the timeline you created.
- 2. When and how do you first recollect becoming aware of the climate strikes and the climate justice movement?
- 3. Have you attended any of the climate strikes taking place in Ontario? If so, walk me through a memorable one.
- 4. How has seeing other youth protest across North America and around the world made you *feel*? Please tell me a story about a specific incident that sticks out for you for evoking an emotional response.

C. CJM-related Questions

- 1. What inspired you to be a member of the organization(s) you are currently working with?
- 2. Please share a story with me about a time when you felt particularly hopeful while engaging in CJM work.
- 3. How has this pandemic influenced the way climate justice action is taking place in your group(s)? Please tell me a story that exemplifies the sort of work you and your group have done during the pandemic.
- 4. Do you feel that BIPoC voices are heard within the climate justice movement? Please explain.
- 5. What, if anything, does intersectional environmentalism mean to you?
- 6. What have you learned by working with the organization(s) you are a part of related to climate justice?
- 7. Where else have you learned about climate justice? Was any of that formally in school? If so, in which subjects and to what extent?
- 8. Are there any clubs in your school that focus on climate justice? If so, how, if at all, have you been involved with them?
- 9. Please tell me a story, if applicable, of when you felt like a leader in your school in bringing climate justice to the forefront.
- 10. What, if any, challenges have you faced while trying to participate in, or take up leadership roles, in your climate justice work? Please provide me with an example.
- 11. What kind of impacts do you think you are having in your own community and school? Is there a particular moment that stands out for you when you felt like you made an impact on others?
- 12. What would you like to see happen in schools related to climate justice? What role do you think you could play if you were invited by teachers to share your experience(s)?

D. Wrapping Up

- 1. Is there anything else you could tell me that would help me understand your experience as a person involved in climate justice work?
- 2. Is there anything else you could tell me about your experience in school and how your climate justice experience is, or isn't, recognized in your schooling?



Interviewe	ee Name:	A	Appendix F: Timeline Mapping			
Year:Event:	Age:	Year: Event:	<i>F</i>	Age:	Year:Event:	Age:
Description:		Descri	ption:		Description:	
	Year: Event:	Age:		Year:Event:	Age:	
	Description:			Description:		



Appendix G: Codebook

Themes	Sub-theme Example	Codes	Example Response
Deliberately Unheard? Conveying the Challenges encountered by BIPoC Youth Climate Activists	Land Stewardship and Family Influences	Connection to Nature Land Stewardship: Starting Young Western view of Environmentalism Pivotal Life Experiences Cultural Values and Generational Differences Decolonization and Land Back	Going to my family's home in Amritsar, and seeing like garbage right outside the house, and again, I was 6, it really confused me. I was called like a 'whitewashed' kid from Canada. And it was interesting for me, because, actually reflecting on this now, I think maybe it made me feel like environmentalism was like a Western value in a sense, 'cause I was bringing it there. But I just didn't have lens to actually view it through a local context, too. And so, I think that was maybe a first key moment for climate justice.
Empowering Echoes: Nurturing Identity, Shaping Communities, and Forging New Pathways for BIPoC Youth Leaders	Identity, Climate Emotions and Personal Growth	Identity Personal Growth and Healing Negative climate emotions Positive climate emotions The intersection between Mental Health and Climate Change	I'm still figuring out my own spirituality, my own connection to my culture. And engaging in the environmental movement for me is what is helping me solve other pieces of my identity as well. So, it's like empowering but also healing in a way. I feel like at times I've been warped to fit in an existing narrative. They just want somebody to portray it as vision of a perfect activist or something. It's been very frustrating and that's why I like using social media on my own accounts because I have the freedom to portray myself as imperfectly or as weirdly, or as confusingly, as I want to.