

Experiences of Climate Change and Environmental Agency among Black College Students

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Introduction

Abstract

Climate Change Anxiety (CCA) (Clayton et al., 2021) describes the experiences of environmental distress, which is common among young adults at an intersection of injustice and marginalization (EPA, 2025). This research explores how Black students perceive and respond to climate change, through their sense of self-agency (control) and self-efficacy (beliefs) that are shaped by socio-cultural context by theorists Bandura (1986) and Vygotsky (1978). We interviewed Black college students through semi-structured interviews on Zoom. Thematic analysis was used to analyze the interviews. This study investigated the influence of peers, campus environment, media, and politics influence on students’ environmental resilience. Implications for the development of culturally responsive climate change education and mental health resources are shared.

Research Questions

RQ1: How do Black College students perceive climate change?
RQ2: How do Black college students perceive their self-agency in responding to climate change?
RQ3: What are the significant sociocultural responses to climate change in their community (media, family, campus, politics, and peers)?

Research Design

- A qualitative phenomenology approach was used to understand the impact of climate change by examining personal accounts of student's experiences (Williams, 2021).
- Participants completed a screener to determine eligibility.
- Eligible participants were selected for a one-on-one semi-structured interview through Zoom, which was transcribed.
- Data analyzed using thematic analysis (Braun & Clarke, 2022).



Method and Results

Participants and Procedures

- $N=3$ Black undergraduate participants; self-identified as male ($N=2$); female ($N=1$); ages of 18-22.
- After IRB approval, participants were recruited using an online survey, and eligible participant interviewed through Zoom.
- 7-Items from the Climate Change Anxiety Scale ($M=15$, $SD=1.73$) Clayton and Karazsia, 2020). Sample Item: “I have conflicting feelings about climate change.”

Data Analysis

Code	Quote
Climate change is destructive and dangerous for individuals and communities	<i>It's affecting people's health...the day that I was moving into here, it was really hot outside and I almost fainted. It's really humid out... it's not good for our bodies. So, I feel like health has definitely been an indirect exposure. There's also been a lot more hurricanes recently, which has been really bad for Florida infrastructure, especially last year reading all those news articles, there was flooding everywhere.</i>
Disheartened in their perception of climate change	<i>“I feel like if I think about it too long,... it's kind of disheartening, almost, because it's like wow. I'm really here, and I don't know, the weather is just... climate change is just really bad and it's just like sucks, because it's all preventable...but nobody's doing anything about it...</i>
Climate change distracts and disrupts everyday living	<i>It derailed my academically oriented mindset that I came into the beginning of the semester with... I kind of felt like after these sudden breaks or moving to virtual learning where you have to pace yourself and all that...temporarily. That would always interrupt my focus.</i>
Perception of increased climate change as out of one's control	<i>you hear the stories of people who weren't so lucky. I think it's like a big reminder... that nobody is completely safe when environmental occurrences due to climate change like these happen, you know? I'd say the only reason that I haven't had any, personal property destroyed or anything like that is luck, you know?</i> <i>I feel like my contribution to greenhouses gases is unavoidable because I drive a car...</i>
Ambiguity towards climate change behaviors	<i>I feel like it's a double-edged sword. I say that because, not to admonish anyone or believe about the situation, it's more so predicated on seeing that I guess the lack of knowing... It's been good and bad. I've seen where people are like, hey, I want to be informed of this issue. In other areas, we have seen where it's been ineffective, where people are like I don't know what you're talking about, really don't care about that right now</i>
Increased responsiveness towards climate change events	<i>I'd say the feeling of preparation, being prepared for what's coming, is being lessened because you never know when it could hit at this point. You never know if you need to really stock up to prepare for one hurricane, or if there's gonna be, like, another Category 4 looming behind it.</i>
Diffusion of responsibility to address climate change	<i>So, feel like, to that extent, there's only so much we can do. Depends how much we know... I don't wanna feel too bad about it, I'm only 1 out of 8 billion now, so you gotta remember that or I have to, anyway.</i>
Reciprocal relationship of culture and sustainability	<i>I feel...the climate of your area...that plays a big part in the culture of the area as well, and when that climate deviates from the norm, it can also have cultural impacts.</i>
Climate change propels community-oriented care	<i>I think...my mom used to say like a tiny drop of water makes a mighty ocean, so just like doing whatever you can and your like community to remind those around you. Maybe it wouldn't, that idea wont spread as far as you'd like it to but if everyone stops if nobody is making those efforts then it definitely...</i>
Desire for increased education about climate change impacts and role as individuals/ communities to build agency	<i>I'd say...community teaching events to teach people about climate change, what their personal actions could look like that contribute to that... along with community-based efforts. Just more encouraging people to take those preventative measures and do things like park cleanups, beach cleanups and just be more aware of their surroundings when it comes to how can I help?</i>
Distrust in the government/systemic barriers to climate change	<i>I've seen...environmental disadvantages amongst people of color and communities I worked with. It's even Alabama...where you've seen health disparities... due to just the basic air pollution and stuff like that has affected them. I can say I've seen...where the city has lack of funding... to support certain communities in certain areas when it comes to climate change.</i>

Discussion

Implications

- Education**
- Mobilize the relationship between self-efficacy and agency
 - Inspire student motivation
 - Foster culturally-responsive climate curricula
 - Cultivate socially and emotionally inclusive classrooms
- Health:**
- Amplify Black students’ voices and experiences
 - Integrate mental health into environmental justice
 - Advance trauma-informed resources
 - Improve equity in health disparities
- Policy**
- Inform culturally tailored interventions
 - Promote access to climate literacy programs
 - Empower student lead activism

Limitations & Future Research

- Limitations**
- Small sample size.
 - Specific recruitment strategies, which may not fully capture the diversity of Black students’ experiences.
 - Self-report measures.
- Future Research**
- Mixed-methods approach with an observational or longitudinal designs.
 - Expand the participant pool to include a wider range of geographic context.
 - Explore moderating variables for anxiety to deeply understand outcomes

References

Scan QR code for references:



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