



Research Brief: Climate Change Concerns, Climate Change Risk, and Mental Health Among LGBTQ+ Young People

July 2024

LGBTQ+ young people report high levels of climate change anxiety, with the majority (55%) reporting that they worry about it frequently.

Background

Climate change plays a critical role in the physical and mental health of the general population, and has been argued to have an even more significant impact on historically disadvantaged communities, such as people of color, low-income individuals, and LGBTQ+ people (Dooley et al., 2021). LGBTQ+ adult couples are more likely than their cisgender and heterosexual peers to live in coastal areas and cities, which are more susceptible to the negative impacts of climate change, as well as have more limited resources and weaker infrastructure (The Williams Institute, 2024). In addition, LGBTQ+ youth have reported higher levels of climate change worry compared to their heterosexual and cisgender peers (Whitley & Bowers, 2023). LGBTQ+ people are more likely to experience greater consequences after a natural disaster due to existing vulnerabilities, compounded by reduced access to disaster relief services (e.g., issues accessing gender-segregated shelters; Dominey-Howes et al. 2014; Goldsmith et al. 2022). However, little research has examined whether or not climate change worries among LGBTQ+ young people vary based on where they live, or how these worries may relate with their mental health. Using data from The Trevor Project's [2024 U.S. National Survey on the Mental Health of LGBTQ+ Young People](#), the Department of Housing and Urban Development (HUD-USPS; 2023), and the Federal Emergency Management Agency (FEMA; 2021), this brief explores climate change concerns and its relationship with physical location and mental health among LGBTQ+ young people.

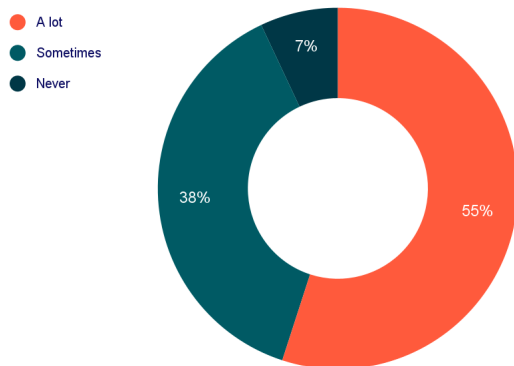
Results

Among the entire sample of LGBTQ+ young people, the majority reported worrying about climate change “a lot” (55%; i.e., frequent worry), 38% reported that they worried about it “sometimes,” and only 7% did not worry about climate change at all. Worrying about climate change was associated with a variety of demographic variables. Frequent worry about climate change was more likely to be reported by LGBTQ+

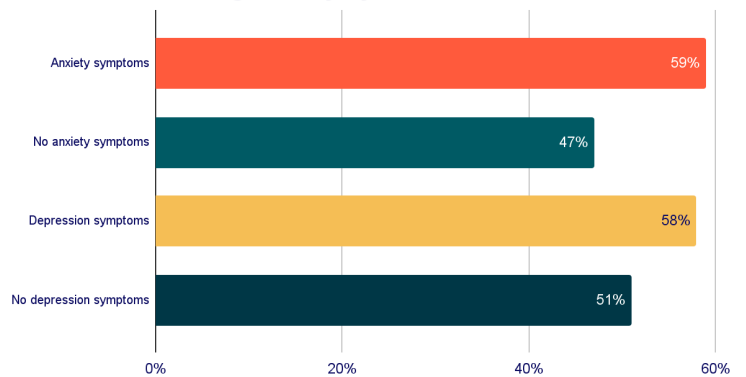
youth ages 18-24 (59%), those living in large cities (59%), and those in the Northeast (56%), West (56%), and Midwest (55%) compared to those who were younger (50%), in the South (52%), or outside of cities (54%), respectively. Additionally, individuals who struggled to meet basic needs reported higher rates of frequent climate change worry (61%) than those who could meet basic needs (55%). Rates of frequent worry about climate change also varied by race/ethnicity, sexual orientation, and gender identity. Frequent climate change worry was more commonly reported by White (57%), nonbinary (61%), and queer (64%) young people compared to Black/African American (49%), cisgender boys/men (44%), and heterosexual transgender and nonbinary (44%) young people, respectively.

Climate change worry was related to higher rates of depression and anxiety symptoms. Individuals who reported symptoms of anxiety were more likely to report frequently worrying about climate change (59%) than individuals who did not report anxiety symptoms (47%). Similarly, those who reported depression symptoms reported higher rates of frequent climate change worry (58%) than those who did not report depression symptoms (51%).

Climate Change Worry Frequency Reported by LGBTQ+ Youth



Percentage of LGBTQ+ Youth Who Reported Frequent Climate Change Worry by Mental Health Concerns



LGBTQ+ young people's climate change worries were associated with their place of residence and the local climate risk levels. Among the sample, LGBTQ+ young people lived across all levels of climate risk levels: very low (10%), relatively low (22%), relatively moderate (33%), relatively high (25%), and very high (11%). Climate change risk, a variable provided by FEMA (2021) that identifies the level of risk for various U.S. natural disasters in a specific area, had a small, positive correlation with reported climate change worries ($r = .031, p < .001$). This indicates that individuals in higher risk areas reported more frequently worrying about climate change. Climate change risk was also associated with several demographic variables. For example, some individuals were more likely to live in “very high risk areas,” such as those who were ages 13-17 (12%), living in the West (26%), able to meet basic needs (11%), questioning their sexuality (13%), and Asian American/Pacific Islander (29%). This is compared to their peers who were ages 18-24 (10%), living in other

regions (7%), unable to meet basic needs (8%), pansexual (9%), and White or Native American (6%), respectively.

Climate change risk was negatively associated with having symptoms of anxiety. Individuals in areas with “very low risk” reported the highest rates of anxiety symptoms (69%), and those in areas with “very high risk” reported the lowest rates of symptoms (63%). These differences in anxiety symptoms persisted even after controlling for demographic variables. Of note, those in rural areas also reported higher rates of anxiety (71%) than those in larger cities (64%).

Methods

Data were collected through The Trevor Project’s [2024 U.S. National Survey on the Mental Health of LGBTQ+ Young People](#). In total, 18,663 LGBTQ+ young people between the ages of 13 to 24 were recruited via targeted advertisements on social media and were included in these analyses.

For demographic and geographic questions, participants selected an option from a provided list. Participants were also asked, “In the past year, how often have you worried about climate change?” and could respond Never, Sometimes, or A lot. Questions assessing symptoms of depression and anxiety were taken from the PHQ-2 and GAD-2, respectively (Löwe et al., 2005; Löwe et al., 2008).

FEMA (2021) provided the National Risk Index, which is a data set and tool that identifies a level of risk for 18 different natural disasters in the U.S. that are associated with climate change. Data is provided in multiple ways; for the purposes of this study, we used both their qualitative ratings of risk (Very low to Very high, five point scale) and standardized quantitative scale, which ranged from 0-100 (i.e., the higher the number, the greater the risk). The HUD-USPS (2023) provided a crosswalk that helped map zip codes in our dataset onto county level risk data provided by FEMA. For analyses including the FEMA National Risk Index data, 23% of the overall sample did not provide a valid zip code and were excluded. Almost a quarter (23%) of the sample lived in a zip code that matched two or more counties; in these instances we randomly selected one of the matching counties.

Throughout, all reported comparisons are statistically significant at least at $p < 0.05$, which means there is less than a 5% likelihood these results occurred by chance. Chi-square tests were run to examine differences between groups. The Pearson correlation coefficient was used to examine the correlation between climate change worry and climate change risk level. Logistic regression was used to examine the relationship between climate change risk level and recent anxiety symptoms, while controlling for the effect of relevant demographic variables (i.e., race/ethnicity, gender identity, sexual orientation, socioeconomic status, and age).

Looking Ahead

The findings reveal a high level of concern about climate change among LGBTQ+ young people, with the majority reporting frequent worry. These worries varied significantly across demographic and geographic variables, as well as access to basic needs, which highlights the diverse experiences and perspectives within the LGBTQ+ community concerning climate change anxiety. Additionally, the relationship between climate change worry and mental health concerns is clear, with significant associations found between climate change worries and symptoms of both depression and anxiety. Our findings suggest that climate change worry is intertwined with broader mental health challenges faced by LGBTQ+ young people, emphasizing the need for integrated support systems addressing both environmental and psychological stressors.

Climate change risk, as assessed by FEMA, had a small, but positive correlation with reported climate change worries among LGBTQ+ young people. This indicates that concerns about climate change are pervasive across LGBTQ+ youth, with a small fraction of that concern being attributable to their local area and its risk for climate change. Demographic factors were also related to climate change risk, with specific groups being more likely to live in "very high risk" areas, such as Asian American and Pacific Islander LGBTQ+ young people, as well as those in the West.

Furthermore, climate change risk was associated with anxiety symptoms, though in a paradoxical manner. LGBTQ+ young people in "very low risk" areas reported higher rates of anxiety symptoms compared to those in "very high risk" areas. Similarly, residents in large cities reported lower rates of anxiety symptoms than their rural counterparts. Though our available data cannot explain these associations, they underscore the complexity of factors influencing the mental health of LGBTQ+ young people. Our analyses reinforce the need for mental health interventions that consider the broader socio-environmental context in which LGBTQ+ youth live (Dooley et al., 2021). Furthermore, policymakers should consider the differential impact that climate change can have, as natural disasters and other climate change phenomena – as well as their aftermath – more frequently and seriously impact marginalized groups (Dominey-Howes et al. 2014; Dooley et al., 2021; Goldsmith et al. 2022). Future research on climate change and its impacts should employ a critical environmental justice approach (Pellow, 2016), focusing on LGBTQ+ people, as well as other underserved populations.

At The Trevor Project, our Crisis Intervention team works 24/7 to help LGBTQ+ young people in crisis. We also focus on prevention efforts in order to limit the need for crisis resources in the future and reduce the risk of suicide for LGBTQ+ young people. We provide training to youth-facing adults, including professionals who work with LGBTQ+ young people (e.g., counselors, educators, nurses, social workers) to increase understanding of LGBTQ+ young people's identities and provide guidance on trauma-informed suicide

prevention efforts. Additionally, Trevor's Research team is committed to the ongoing dissemination of research that explores the experiences of LGBTQ+ young people to prevent suicide, as well as improve their life experiences.

Recommended Citation: The Trevor Project. (2024). Climate Change Concerns, Climate Change Risk, and Mental Health Among LGBTQ+ Young People.

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