

**Climate Change, Natural Disasters, and Disaster Reduction Impacts on
LGBTQ+, Black, and POC Communities**

Ash Orr

Federal Organizer in West Virginia

Corresponding author: Ash Orr

ABSTRACT

Issues surrounding the marginalization of LGBTQ+, Black, People of Color (POC), and minority communities include diminishing access to safe spaces; religious or general stigmatization; and mental, emotional, or physical abuse. In addition to these common problems, with more frequent and increasingly intense natural disasters and climatological events (Harvey 2018), there are inadequate Disaster Risk Reduction (DRR) policies that fail to address the needs of these communities. Most work on minority communities is heavily biased by the Western ideology of colorism, as well as a binary conception gender and sexual orientation: black or white, man or woman, straight or gay. These theories are dismissive towards the multitude of identities within these communities, especially those in non-Western settings. DRR policies and overall risk preparedness and response structures fail to acknowledge the experiences and needs of these communities. Research has been conducted to gather and evaluate experiences of marginalized communities impacted by climatological or natural disaster events. Results from this study can help inform, update, or create new and more-inclusive DRR policies that recognize the experiences and needs of minority communities, and improve outcomes for these individuals. This research paper will cover the methodology applied and share preliminary results.

Introduction

It is understood and accepted that LGBTQ+, Black, People of Color (POC), and minority communities face both societal and political discrimination throughout most modern societies. The severity of said discrimination varies across countries and geopolitical regions. Discrimination experienced by these communities is also dependent upon applicable anti-discrimination laws, as well as political and social views (Gormon-Murray et al. 2017). This discrimination results in psychological, emotional, and mental abuse or traumas; physical or

sexual assault; police brutality; homelessness or job loss; and living on lower levels of income. These issues inevitably lead to isolation, be it social or political, as well as an increased risk for mental health issues (Kahn et al. 2018). States and geopolitical regions with protection rights and anti-discrimination laws in place do not consistently exercise or enforce those rights and laws; and thus, minority communities in these locations still face discrimination and marginalization (Sauer and Podhora 2013). LGBTQ+, Black, POC, and minority communities experience higher levels of discrimination than white, cisgendered minorities, especially in terms of natural disasters or climate change (Gormon-Murray et al. 2017 and Tigue 2020).

The vulnerability of a population, specifically in times of crisis or emergency, can worsen discrimination and marginalization, which in turn exacerbate pre-existing social issues. Minority communities face multiple obstacles during these times of crisis, including diminishing access to safe spaces; religious or general stigmatization; mental, emotional, or physical abuse; as well as inadequate Disaster Risk Reduction (DRR) policies that fail to address needs of those communities. In addition, the vulnerability of minority groups is both intersectional and heavily influenced by contributing factors such as income, disability, and land placement (Baird 2008).

Marginalized groups frequently develop their own mutual aid groups and support systems, creating coping mechanisms with the resources available to them (McKinnon et al. 2016). During emergencies, such as natural disasters or climate change, how people approach these events determines how resilient they will be. While there are many methods for improving community resilience, (i.e. emotional and mental regulation; educational and sociological relationship building), such activities may not be feasible for LGBTQ+, Black, POC communities due to social rejection (Beasley et al. 2015).

Contributing Research

Studies compiled on how disasters impact communities have mostly been focused heavily within the Western concept of gender, sexuality, and colorism. The traditional Western concept is dismissive and fails to acknowledge the wide range of gender and sexual identities, as well as race identities. Scientists and researchers agree that current Disaster Risk Reduction (DRR) policies fail to address LGBTQ+, Black, POC, and other minorities and the needs of their communities (Baird 2008, Gorman-Murray et al. 2014, Gaillard et al. 2017). In 2005, governments from across the globe formed the Hyogo Framework for Action (2005-2015) which focused on creating initiatives to help protect global communities and reduce the loss of life from natural disasters by 2015. The sister project to the Hyogo Framework, the Sendai Framework, was created in 2015 with the hopes of creating more substantial steps to protect land and people from natural disasters by 2030. In addition to these frameworks, FEMA created the National Disaster Recovery Framework (NDRF; 2011-current). Researchers noted that both the Hyogo and Sendai Frameworks mention gender and sexuality, but focus heavily on the needs of heterosexual women (Gaillard et al. 2017). Researchers also discovered that multiple acts of abuse, harassment, and assault occurred under the NDRF (Murray 2018, McKinley 2019). Throughout the world, socio-culture groups consider minority communities (i.e. LGBTQ+, Black, POC, and Ingenious peoples) a burden, needing containment rather than equality (McSherry et al. 2015). The review of these frameworks highlighted an alarming lack of research focusing on LGBTQ+, Black, POC, and other minority communities in relation to natural disasters or climate change. As of 2020, little has progressed in terms of protection policies for these minority communities. The goals of this review are as follow: to compile current stories and studies on the experiences that LGBTQ+, Black, POC, and other minority communities have faced in times of natural disasters or due to climate change; to help inform, update, or create new and more-inclusive

DRR policies that recognize the experiences and needs of minority communities, and improve outcomes for these individuals.

Methodology:

An extensive search was conducted using ResearchGate (2008-8/4/2020), Google (2008-8/4/2020), and ProQuest (1938-8/4/2020) databases. The following phrases were searched using various combinations: ‘LGBTQ+ climate change’; ‘minority and climate change’; ‘policies for minority communities natural disasters’; ‘Queer natural disaster protections’; ‘Hyogo LGBTQ+’; ‘Sendai LGBTQ+ and minorities’; ‘climate change impacts Queer communities’; ‘climate change minority communities climate change’; ‘minority communities and natural disasters’; ‘race and climate change’; ‘natural disasters and racism’; ‘FEMA discrimination’; NDRF failure’; ‘FEMA natural disasters’; ‘FEMA climate change’, ‘Hurricane Harvey racism’, ‘Hurricane Irma discrimination’, ‘Bakla discrimination’; ‘climate impact deaths’; ‘mutual aid resource minorities’. Search results were limited by year (2005 - current), peer-review, and full text options.

A public survey, created in Google Forms, discussing climate change, natural disasters, discrimination, and access to shelters during natural disaster or climate change events, was distributed to invite anonymous submissions from across the United States. Survey respondents were asked a series of questions about their identity, age, location, what climate change impacts they have noticed on a local scale, access to emergency shelters and resources, and personal safety within said resources.

Results were collected, analyzed, and listed in the reference tables. All results and referenced works were read in full.

Search and Survey Results

The keyword and phrase search returned 153 publications that were potentially applicable, including: 97 from ProQuest, 8 from ResearchGate, and 48 from Google Scholar. After similar publications were removed, 86 remained for potential use. The remaining publications were then reviewed based upon their title relevancy and abstract length. This process removed 44 publications, leaving 42 peer-reviewed, full-text publications left. After filtering through the remaining 42 publications, multiple publications were then removed due to: subject matter not including either the LGBTQ+, Black, and POC communities; did not focus upon climate change or natural disaster events; excluded gender or racial injustices in emergency events; misuse of pronouns and non-Western third-gender representation. This left 35 full-text, peer reviewed publications selected for the final review.

Theory

LGBTQ+, Black, and POC communities are at much higher risk from the impacts from climate change or natural disaster events, especially given these communities' struggles to find acceptance into today's society. Various forms of discrimination have been stated and described during natural disaster or climate change-influenced events.

Richards (2010), Urbatsch (2016), and Collins (2017) have all depicted hostility towards minority communities after natural disasters, such as Hurricane Katrina and Hurricane Harvey. Given that minorities tend to be in lower income brackets and reside in low-income homes, they are greatly impacted by natural disasters, often last to receive resources. All studies noted an uptick in discrimination towards the LGBTQ+, Black, and POC communities subsequent to natural disasters and climate events. After the 2010 earthquake in Haiti, LGBTQ+ citizens were assaulted and abused in emergency shelters (Phillips 2015). Haitian government officials accused the LGBTQ+ community of causing the earthquake by "calling down the wrath of God", and justified ongoing abuse (IGLHRC 2011). Similar

instances have been discovered in Paine's (2018) work, which highlights governmental and religious-based leaders discriminating against the LGBTQ+, Black, and POC communities.

Discrimination and passive, micro-aggressive behaviors against minority communities manifest in numerous ways. This includes: the Houston government handling of post-hurricane Harvey, when chemicals were spilled into a local Latinx community, causing an increase in cancer cases (Parras 2017); Haitian LGBTQ+ community members being "characterized by secrecy, isolation, discrimination, and violence", which led to abuse and assault after both earthquakes (Bell 2011, Phillips 2015) by first response and aid volunteers (Petchesty 2012); assaults and forced coming out of LGBTQ+ community members took place in Japan after the 2011 earthquake and tsunami (Yamashita, et al. 2015); severe lack of government assistance in lower income, Black, and POC communities after Hurricane Harvey; post-hurricane Harvey when police detained and arrested a transgendered woman who was showering in the women's restroom in the emergency shelter (D'Ooge 2008).

Results

The survey results yielded 30 responses from LGBTQ+, Black, POC, Tribal Nation, and Two-Spirit individuals. Ages of the survey respondents ranged from 20-58, with states and Tribal Nation land throughout the country being represented. Within those results, 90% identified as LGBTQ+, 10% identified as Black, 6.7% identified as a POC, 3.3% identified within the Tribal Nation, 3.3% identified as Two-Spirit. When asked about emergency shelters available in case of a natural disaster or climate change, 56.6% stated that they had access to community emergency shelters in case of a climate or natural disaster. 80% stated that they do not feel safe or would not be welcomed within the local community emergency shelter. 26.7% stated they would be denied entrance into their community emergency shelters due to their gender, sexual, or racial orientation.

Thirty-two submissions were received from the Google survey. Out of the thirty-two submissions received:

Age: ranged from 20-58

Location: 13 states and one Tribal Nation were represented

Identity: 78.1% identified as LGBTQ+; 6.3% identified as Black and LGBTQ+; 3.1% identify as POC and LGBTQ+, 3.1% identified as Black; 3.1% identified as POC, 6.3% identified as Two Spirit

Local climate and natural disaster policies in place: 15.6% were unsure of any policies in place; 28.1% reside in an area with policies in place; 56.3% do not reside in an area with policies in place

Local Emergency Shelters: 56.3% reside in an area with an emergency shelter; 43.7% reside in an area without an emergency shelter

Personal Safety in Shelters: 84.4% would not feel safe within their local emergency shelter due to their identity; 15.6% would feel safe

Denial of Shelter: 75% would not be denied access based on their identity; 25% would be denied access due to their identity

Inadequate Policies and Planning Lead to Severe Repercussions

Gender, sex, and race minorities are frequently absent in terms of DRR policies (Chen et al. 2007, Henkel et. al 2006, Dominey-Howes et al. (2014, 2016). Some progressive countries have omitted these minority communities, perhaps not out of spite, but negligence (Dominey-Howes et. al 2016). This negligence is also occurring in other more accepting countries where minority communities have similar legal protections against discrimination as their cis-white counterparts. Research has discovered these minority communities facing severe challenges in other countries, where they are deemed “non-conforming” and illegal (Fordham et al. 2017). Regardless of one’s legal status, basic human decency, protections, and needs are not

being met. For example, Japanese LGBTQ+ citizens with same-sex partners were denied hospital visitation rights post-earthquake and tsunami, and were often not notified of their partner's death (Yamashita et al. 2017). Also, in Japan, transgendered community members avoided public restrooms in their emergency shelters out of fear of assault, putting their health at risk (Yamashita et al. 2017). Black community members developed severe PTSD after Hurricane Katrina due to governmental discrimination (Chen et al. 2007). Same-sex couples were denied hospital visits, and had medical power rights revoked (Haskell 2014). POC community members were denied nutritional food, healthcare access, and access to Spanish-speaking volunteer workers after Hurricane Maria (Murray 2018). In Haiti, citizens that identified as male and lived in an all-male household were denied healthcare and relief support (IGLHRC 2011). The Bakla community, (often referred to as a third gender or gender fluid in the Philippines, includes nonbinary, transsexuals, and other LGBTQ+ community members), faced harassment and assault when seeking emergency shelter, and were often misgendered and/or turned away from assistance (McSherry et al. 2014). In 2015, nearly 13,000 farmers in India committed suicide due to climate-change-driven drought and governmental discrimination (Sealey-Huggins 2018). Individuals in Nepal who identified as a different gender other than legal identification listed were refused medical care and banned from enrolling in school (Knight et al. 2013).

Without updated and enforced DRR policies and procedures, we will continue to see discrimination and assault, as well as destruction and erasure of the LGBTQ+, Black, and POC communities. McKinnon et al. (2014) and Gorman-Murray et al. (2017, 2018) discovered that daily micro-aggressions and acts of discrimination against minority community members is creating distrust towards emergency relief actions. There are numerous documented instances in which minorities are modifying their behavior and actions in order to obtain resources and remain safe. This is mentally and emotionally damaging. It

has been documented that those who identify as male created a “more masculine” persona in hopes of avoiding discrimination or assault, and to obtain access to basic services (IGLHRC 2011). After Hurricane Katrina, a lesbian couple pretended to be related in order to access emergency services (Leap et al. 2007).

The Dismantling of Minority Safe Spaces and Community Services

Research states that access to community and safe spaces are basic human necessities, especially for minority community members. LGBTQ+, Black, and POC individuals find themselves at higher levels of vulnerability due to income inequality, discrimination, and poor access to safe housing. Such vulnerabilities are exacerbated when their belongings are lost/seized and privacy is revoked, as well as when their safe spaces are dismantled; this includes emergency shelters. Haskell (2014) and Gorman-Murray et al. (2014) compare the loss of one’s home or safe space to losing the ability to protect oneself from discrimination, assault, or self-expression. Yamashita et al. (2017) also touch upon the occurrences of “forced coming out” when LGBTQ+ community members seek emergency resources. This leads to further trauma and isolation, as well as mental and emotional health issues. After the Haiti earthquake, numerous community hubs and services were destroyed and never rebuilt, which left numerous LGBTQ+ Haitians without access to health and social care (IGLHRC 2011). Post-Katrina, forced-migration occurred, causing found-families (an LGBTQ+ term for blended, accepting families) to split up, as well as whole neighborhoods to relocate (Leap et al. 2007). This forced migration exacerbated the already severe issue of housing insecurity due to the Louisiana Equal Housing Opportunity Act, which allowed for discrimination on the basis of race, gender, and sexual orientation (Haskell 2014). During the post-Katrina rebuilding, LGBTQ+ tourist spots were not given priority, leaving LGBTQ+ community members exposed and income insecure (D’Ooge 2008). Creating and maintaining safe spaces for LGBTQ+, Black, and POC communities allows individuals to feel empowered and safe

(Coleman 2016), and therefore are crucial measures that should be considered in governmental emergency planning policies.

Shortcomings Within Structural Relationships

LGBTQ+, Black, and POC relationships with police or emergency services tend to be strained due to past or expected discrimination. This leads to minority communities being wary to reach out for assistance, even during a time of need. During Katrina, multiple emergency service organizations were openly opposed to the LGBTQ+ community, often denying assistance (Stukes 2014). Also during Katrina, a low-income Black community had access to one emergency center which lacked supplies (Black and POC communities fear seeking emergency assistance due to racial profiling and discrimination, frequently being labeled as “medication seeking” (Tello 2017) or receiving inadequate care). The repercussions of not being able to safely obtain emergency assistance have also led to an increase in PTSD in Black and POC communities, (Davidson et al. 2015). Due to FEMA’s negligent misinterpretation of “household”, numerous LGBTQ+ members have been dismissed and families have been separated (Haskell 2014). LGBTQ+ foreign aid workers assisted peoples impacted by Typhoon Haiyan, creating multiple local safe spaces for Queer community members (Ong 2017). However, this also led to the aid workers participating in sexual relations with the local community members, which while perhaps consensual, is normally frowned upon.

Vulnerability and Resiliency

It is important to note that vulnerability and resiliency can occur simultaneously (Gaillard et al. 2017, Dominey-Howes et al. 2016, Gorman-Murray 2014). With anti-discrimination policies and laws in place, many minority communities opt for mutual aid and self-governed networks during times of need (Seebohm et al 2013). In conjunction with mutual aid programs, online presence is also pivotal for minority communities’ safety and well-being

(Beasley et al. 2015). Online platforms such as Instagram, Facebook, Reddit, Twitter, and TikTok allow members of the LGBTQ+, Black, and POC communities to find mutual aid resources, as well as to safely pass along information. When looking at policies that address climate change and natural disasters, it is crucial that we consider the importance of online outreach within minority communities.

According to Stukes (2014), LGBTQ+ individuals often participate in disaster relief efforts. LGBTQ+ in non-Western settings were able to assist in relief tasks that were traditionally assigned to cis men and women, and were able to dedicate more time to relief efforts due to the lower likelihood of having children to care for (Gaillard et al. 2017). During relief efforts for Typhoon Haiyan, those who identified as gay men were given leadership roles, helping with communication and organization of aid programs (Ong 2017). I believe these leadership roles were given to Queer individuals due to their ability to empathize and communicate with those in need.

Creating Inclusivity

LGBTQ+, Black, POC, and other minority communities are neglected DRR policies. This is mostly due to the miniscule amount of research that has been conducted on how updated, more inclusive policies and laws would benefit these communities. Without enforced policies, minority communities once again resort to mutual aid. In Indonesia, Baklas have cultivated their own social network, addressing issues within their own community. This eventually led to a large reduction in discrimination and harassment towards the Baklas. Within West Virginia, numerous organizations such as Fairness West Virginia, the ACLU of West Virginia, Wheeling City Council, and Morgantown Human Rights Commission, are becoming directly involved in statewide policies impacting minority communities. Mutual aid and resiliency are causing a shift in how LGBTQ+, Black, POC, and other minority communities are viewed. Rather than being viewed as “vulnerable” and “high-risk”, these

communities are now being viewed as individuals with capabilities and resourcefulness to contribute to risk reduction efforts. By creating inclusive policies and positions for minority community members, we can expect the levels of vulnerability to decrease, and bonds between emergency services and LGBTQ+, Black, POC communities to strengthen (Cianfarani 2012).

Resolutions

Reformation

There must be a DRR policy reform which includes LGBTQ, Black, POC, and other minority communities. New policies within the reform should shift towards protecting and decreasing the vulnerability within these communities. All heteronormative wording and definitions should be removed, allowing for a wide variety of family and gender definitions.

Community and Mutual Aid Acknowledgment

LGBTQ, Black, POC, and other minority communities should be acknowledged for their ongoing role in DRR. Throughout years of climate change and natural disasters, these minority communities have continuously led and supported relief efforts by creating their own mutual aid networks. Creating new policies that merge DRR with mutual aid would allow all communities to thrive.

Mandatory Emergency Response Organizational Trainings

Emergency response organizations must be trained in minority emergency services, as well as on how to network and create relationships within the LGBTQ+, Black, and POC communities. This means creating an awareness of minority struggles and how organizations can address and reduce minority vulnerability.

Research Funding

More funding is needed for research on how LGBTQ+, Black, POC, and other minority communities are impacted by climate change and natural disaster events. Research on this

topic is showing that LGBTQ, Black, POC, and other minority communities will be heavily impacted by ongoing climate change and natural disasters. Continuous research will inform safer, more inclusive DRR policies, thus creating a more hospitable environment, more community services, and reduced vulnerability for these minority communities.

Political and Educational Reformations

Creating a more inclusive community, as well as learning how to create inclusive policies and laws, should be taught in both educational and political settings. Providing educators and policy makers with the tools to understand how discrimination, climate change, and disaster events form compounded negative outcomes will allow for the establishment of more thorough policies and laws.

Summary

LGBTQ+, Black, POC, and other minorities face daily discrimination on a societal, behavioral, and socio-economic scales. In times of emergencies caused by natural disasters or climate change, members of these communities face denial of services, assault, harassment, and discrimination on a large scale. When minority safe spaces are destroyed, greater marginalization and isolation results. This isolation leads to extreme barriers for those seeking assistance and support, thus leading to poor outcomes. This cycle is perpetuated by discriminatory policies, lack of education on these issues, as well as strained relationships between minority communities and emergency organizations. Despite the odds being against LGBTQ, Black, POC, and other minority peoples, these communities continue to remain resilient and supportive in vulnerability reduction. Resilience and vulnerability go together, and deserve consideration in reformed policies and laws, as well as by emergency response organizations. Research in this field is not for the light-hearted, but those that are able to make headway will greatly assist in the guiding and development of inclusive DRR policies.

Acknowledgments.

I would like to thank every LGBTQ+, Black, POC, or minority person for speaking their truths and standing their ground. Without their bravery, this research would not have been made possible.

Data Availability Statement.

Due to the confidentiality of this research, the Google Forms data can only be made available with written authorization to the author along with a signed non-disclosure agreement. To request access to this data, please email Ash Orr at asheorr@gmail.com

REFERENCES

A few of the most common reference types are shown below as examples. Each in-text citation must have a corresponding reference, and each reference listed must be cited in the text. References should be arranged alphabetically without numbering.

Example References:

Antonov, J. I., R. A. Locarnini, T. P. Boyer, A. V. Mishonov, and H. E. Garcia, 2006:
Salinity. Vol. 2, *World Ocean Atlas 2005*, NOAA Atlas NESDIS 62, 182 pp.

Batchelor, G. K., 1981: *An Introduction to Fluid Dynamics*. Cambridge University Press, 615 pp.

Christensen, J. H., and Coauthors, 2007: Regional climate projections. *Climate Change 2007: The Physical Science Basis*, S. Solomon et al., Eds., Cambridge University Press, 847–940.

IPCC, 2013: *Climate Change 2013: The Physical Science Basis*. Cambridge University Press, 1535 pp., <https://doi.org/10.1017/CBO9781107415324>.

Kalnay, E., and Coauthors, 1996: The NCEP/NCAR 40-Year Reanalysis Project. *Bull. Amer. Meteor. Soc.*, **77**, 437–471, [https://doi.org/10.1175/1520-0477\(1996\)077<0437:TNYRP>2.0.CO;2](https://doi.org/10.1175/1520-0477(1996)077<0437:TNYRP>2.0.CO;2).

TABLES

Tables should include full captions. They will be processed as text and should not contain colored text, shading, or underlining. The preferred way to highlight table information is to use bold and/or italic fonts. Footnotes should be used if additional variables must be indicated. Do not insert tables as images. Appendix tables should be included here if any.

FIGURES

Figures should include full captions. Appendix figures should be included here following any main manuscript figures (if any).