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**Incorporating University Students' Lived Experiences of Disasters  
in a General Education Science Course**

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## Abstract

Natural disasters often illustrate historical inequities by disproportionately affecting vulnerable and marginalized groups. The impacts of Hurricanes Irma and Maria in 2017 were devastating to all residents of the United States Virgin Islands, with two Category 5 storms battering the islands within a two-week period. At the University of the Virgin Islands, the SCI 100 course aims to limit the loss of life and property in the wake of such disasters through targeted formal education in hurricane preparedness. In this paper, we explore the lived experiences and the preparedness of hurricane survivors in SCI 100 by analyzing essays on the 2017 hurricanes and we discuss the extent to which the objectives of traditional hurricane preparedness curricula reflect these lived experiences.

## Purpose

Natural disasters are becoming a leading source of social injustice across the globe, impacting a staggering number of United States residents: for example, 8% of the U.S. population was affected by disasters in 2017 (Federal Emergency Management Agency, 2018). Effects of natural disasters consistently impact socioeconomically disadvantaged and marginalized populations disproportionately. This was illustrated during Hurricane Harvey in 2017, when the predominantly Black and Latino neighborhoods were the worst flooded areas (Mankad, 2017), and during Hurricane Dorian in 2019, when the effects were the most devastating across the shantytowns on Great Abaco Island (Shultz, 2020). With the impacts of natural disasters forecast to increase due to population growth, the inequitable distribution of disaster impacts is a social justice issue that compels action among responsible citizens and policymakers.

The United States Virgin Islands (USVI) are at high risk of hurricane impacts due to geographic isolation, a non-diversified economy, and various socioeconomic factors. For example, the rate of poverty in the USVI is higher than any state, and in 2010, 22% of Virgin Islanders lived below the poverty line (US Virgin Island Estimates: U.S. Census Bureau, 2010). In addition, tourism accounts for 70% of Gross Domestic Product and suffers greatly after natural disasters (USVI Hurricane Recovery and Resilience Task Force, 2018). In educational assessments, students in the USVI consistently fall behind their stateside peers. For example, on the 2018 SAT examination, the average score of Virgin Islanders on both the evidence-based reading and writing (490) and the mathematics (445) sections were below those of every U.S. state, as well as D.C. and Puerto Rico (College Board, 2018). The only institute of higher learning in the USVI is the University of the Virgin Islands (UVI), a public, open admissions, Historically Black College/University (HBCU). UVI has two main campuses on the islands of St. Thomas and St. Croix, and an enrollment of approximately 2400 students, 95% of whom are USVI residents (USVI Hurricane Recovery and Resilience Task Force, 2018). UVI students generally represent the socioeconomic, educational, and racial/ethnic demographics of the USVI, and 79% of students are African American, 17% are Latina/o of any race, 56% of undergraduates receive Pell grants, and 83% of students require remedial math or English.

In 2017, residents of the USVI twice bunkered down to endure the unprecedented Category 5 hurricanes of Irma (September 6) and Maria (September 20) - collectively referred to as "IrMaria." In terms of employment losses, the impacts of IrMaria within the USVI are second only to the most catastrophic disaster in all of US and US Territorial history: Hurricane Katrina (Bram, 2018). Despite evident high vulnerability, policymakers in the USVI and Federal agencies were not prepared to manage the aftermath of the hurricanes (USVI Hurricane Recovery and Resilience Task Force, 2018). The institutional framework that supported the people of the USVI collapsed, and the most vulnerable residents of the Territory were provided little recourse and guidance towards recuperating their way of life. Much of the immediate hurricane response was initiated by island residents.

The purpose of this paper is to highlight the lived experiences of UVI students in enduring Hurricanes Irma and Maria, while discussing the role that UVI plays in promoting social justice and responsible citizenship through formal education on hurricane preparedness. The general education science course, Science 100 (SCI 100) presents a clear opportunity to build capacity for disaster recovery and preparedness. Originally inspired by Hurricane Marilyn in 1995, SCI 100 has focused on natural disasters and local ecosystems in the Caribbean for over 20 years (Paul & Watlington, 1997; Jones et al., 2018). SCI 100 is the largest class on both UVI campuses; as such, it is the largest formal learning environment for adults in the Territory. As part of the course, students are invited to document their lived experiences by writing essays on hurricane experiences or other resilience themes (hereafter referred to as "hurricane essays"). Based on the emergent themes from these essays, we reflect on how UVI can support hurricane preparedness in the community.

### **Theoretical Framework**

Interpretive phenomenology (Shaw, 2001) was used as a theoretical framework to explore the lived experiences of SCI 100 students as they endured IrMaria. As a research orientation, phenomenology follows a social constructivist viewpoint of human development and experience, where sociocultural and historical processes are central to one's interpretation of their own life (Eatough & Smith, 2008). Interpretive phenomenological approaches, as opposed to descriptive ones, acknowledge the role the researcher and the embrace the blending of meanings that are articulated by both the participants and the researchers (Lopez & Willis, 2004). The essay analysis presented here was led by undergraduate students (A. Freeman and B. Good) utilizing codes developed by Science 100 Lead Instructor M. Guannel and a recent UVI graduate (Guannel et al., 2021). All of the researchers experienced IrMaria and/or other hurricanes within the Caribbean and their aftermath, and we were embedded in the community to witness and live through these experiences. As such, all researchers brought our own individual identities as lenses through which students' hurricane essays were interpreted, and we incorporated this into our own understanding and interpretation of the data.

Understanding the interpretative role of the researcher is critical in order to understand how the researcher examined and understood the meaning of the words of the participants (Finlay, 2012). Researcher Freeman grew up on nearby St. Kitts, a sovereign island nation along with the island of Nevis, where the occurrence of natural hazards was a normal experience. She acknowledges that she regularly assisted her family with disaster preparations, and that hurricanes are an expected annual occurrence that is rooted in her mind. During Hurricane Irma, she recalls telling stories to pass the time, an experience detailed in several hurricane essays that were analyzed. It was through this lens that she interpreted expressions of struggle, fear, and worry in the essays. While Freeman experienced Hurricane Dorian in 2019 upon arriving to St. Thomas, a new country and island, this level of uncertainty was counterbalanced by previous knowledge and hurricane experiences. Researcher Good relocated to St. Thomas from Pennsylvania, U.S., and weathered Hurricane Dorian in 2019 in the dorms at UVI, as her first hurricane experience. She had been part of a hurricane response team that helped rebuild homes in Texas damaged by Hurricane Harvey, which impacted the states as a Category 4 hurricane just weeks before Irma and Maria arrived. Good acknowledges feeling unprepared before, during, and after the storm, and acknowledges a feeling of connection with fellow students in her interpretation of the essays.

### **Methods and Data Sources**

A total of 95 students completed SCI 100 during Fall 2019, and unique IDs were created for each student using a random number generator for de-identification of data. Of the 95 students, 36 adult students provided informed consent for the analysis of all written assignments completed during the semester. Not all students completed the hurricane essay, and a total of 26 essays were analyzed. As researchers Freeman and Good may have known some of the students who submitted the essays, Guannel de-identified the essays before they were shared with Freeman and Good for analysis. Guannel also identified three essays that contained particularly graphic content (description of death) and coded those essays.

Analysis of the hurricane essays occurred in an iterative fashion consistent with a hermeneutic cycle (Bontekoe, 1996). As a starting place to analyze data, codes based upon 19 previous essays from Fall 2018 and Spring 2019 (Guannel et al., 2021) were reviewed. One research question, led by Freeman, asked "What were the experiences that students found challenging – before, during, and after a hurricane?" For the same set of essays, Good asked the question, "What were the elements of preparedness that were lacking or important to the ability of students to withstand the unique challenges of Irma?" Good's approach utilized and expanded upon traditional preparedness categories such as survival preparedness, planning preparedness, and structural preparedness (Wang, 2018).

All researchers immersed ourselves in the text by reading the essays multiple times and made note of the various patterns that emerged. We then analyzed the accounts of the hurricane survivors' experiences as influenced by our own life experiences and beliefs. In doing so, we were able to identify subtle meanings of events or words that are likely most recognizable to hurricane survivors. We translated the emotion conveyed through text, in order to identify specific situations that challenged students. To ensure no information was lost, we then revisited and re-read the essays until no new meaning was discovered, from both sets of codes. We focused on common themes emerging from the participant essays, and coded words, phrases and sentences to represent those themes. Ideas were synthesized to provide a more complete understanding of the phenomenon.

## Results

To explore the challenges posed by Hurricanes Irma and Maria, initially, a total of 13 emergent themes were coded from the 26 essays. These codes were then collapsed into the seven most cited themes, which we describe as the major challenges experienced by UVI students during the hurricanes (Table 1).

- 1) **Lack of Knowledge and Preparation.** Many essays mentioned that students lacked knowledge about the magnitude, direction, and nature of impact of the hurricanes. Students often reported that Irma was their first hurricane encounter, and in several cases basic preparedness strategies were not followed: not stocking up on food/water, not securing homes, and having no evacuation plan. A minority of students, who had experienced hurricanes before, still expressed that they underestimated the hurricane's damaging potential and were surprised by the physical damage.
- 2) **Emotional State.** A majority of essays expressed a high level of fear, shock, anxiety, and/or terror. It was evident that many students saw the fear and emotional reaction to the hurricane as one of the most challenging aspects of the phenomenon.
- 3) **Damage/Physical Impact.** Nearly all students reported some aspect of damage, whether to homes, vehicles, telecommunication, infrastructure, or the natural environment. Some damages were long-lasting (homes rendered uninhabitable), while others could be rectified quickly.
- 4) **Response to Emergency.** Some students described an immediate threat to life - for example, having to brace doors and find shelter after losing their roofs. Some described escaping their homes during a hurricane for safer shelter. Many essays highlighted the need to relocate before and after the hurricanes, and many students described securing shelter with family and friends near or abroad.
- 5) **Physical and Emotional Loss.** Many people lost possessions, resources, income, and lives as a result of the damage inflicted by the hurricanes.
- 6) **Life Adjustments.** Most students mentioned some alteration of their normal life, including living with limited food and water and without electricity, and interruptions to schooling, internet, and communications.
- 7) **Responses Suggestive of Trauma or Post-Traumatic Stress Disorder (PTSD).** A large number of the essays detailed numerous painful memories of the hurricane and traumatic experiences with varying levels of disturbance. Some persons thought they were going to die. Others expressed less trauma but still stated they wished to never experience a hurricane again.

From the seven themes, a lack of knowledge was the most frequently-cited challenge before the hurricane, while emotional state and damage/physical impact were the most common challenges described during the hurricane. Physical and emotional loss were mentioned frequently as being challenging experiences after a hurricane. Phrases and statements describing trauma are consistent with high levels of PTSD and trauma that can result from natural disasters (e.g., Russoniello et al., 2002; Substance Abuse and Mental Health Service Administration, 2013). Such losses and impacts continue to affect many lives and help us to recognize the importance of preparation.

Based upon these findings, we analyzed the types of preparedness that were described as helpful or lacking, which may have been used by students in order to weather the storms. Four major categories of preparedness were identified within the same set of essays (Table 2).

- 1) **Survival Preparedness.** When thinking about preparing for a storm, students stockpiled supplies, including basic resources such as water, canned goods, and radios.
- 2) **Planning Preparedness.** Some individuals or families created plans for relocation to safer shelter, communication, or resource-sharing.
- 3) **Structural Preparedness.** To minimize damage, homes were reinforced for hurricanes, including boarding windows, trimming trees, and placing sandbags near doors.
- 4) **Emotional, Spiritual, and Social Preparedness.** Students described mental preparation, praying during the hurricanes, and gathering with friends and family before, during, and after the hurricanes.

The vivid imagery and intensity of students' experiences are included in example quotes that are representative of the identified codes (Tables 1 and 2). Such details exemplify the indelible mark of these events upon individuals, families, and broader communities. When reviewing these Fall 2019 essays as well as those analyzed previously (Guannel et al., 2021), a few points are striking.

Each semester, when concluding their hurricane essays, most students ended with statements of pride in having overcome such extreme, prolonged, and varied challenges (Guannel et al., 2021). Despite being given four options for writing an essay related to resilience, nearly all students chose to write about their own hurricane experiences. This pattern suggests that the act of storytelling is empowering for students and could be a marker of Post-Traumatic Growth, or PTG (Tedeschi & Calhoun, 1996).

Students reported extreme physical impacts during the hurricanes (e.g. watching their homes' roofs ripped off over their heads). It is possible that some of these impacts could be mitigated by increased structural preparedness. However, with record-shattering hurricanes of a magnitude certain to cause massive damage, we posit that the emotional, spiritual, and social strategies may be the most critical in carrying survivors through recovery challenges.

Many students said that they will never underestimate a storm again and acknowledged the need for greater preparedness. As described by one student:

"What I've learned from this tragic event was that you always have to be alert, prepared and aware because you may never know what the outcome of such a traumatic event can cause to the life of yourself and others."

Identifying the potential challenges to individual emergency preparedness among vulnerable populations is the first step in overcoming them. The capacity to complete basic survival, planning, and structural preparedness, especially the ability of those with limited incomes and other vulnerabilities, must be prioritized. We argue that effective and comprehensive emergency preparedness education calls for decision makers to better understand and explicitly address the experiences of hurricane survivors. In highlighting the importance and types of preparations, the students(/we) were able to recognize and reflect on hidden strengths, growth, resilience, appreciation, and lessons learned that can be applicable to future hurricane experiences. For example, each household should create and implement an emergency plan that includes food, water, and medical supplies for at least two weeks, hurricane drills,

communication plans in the absence of electrical current, and devices that utilize solar or other alternative energy to power them.

Moreover, through analyzing the essays from two research questions, we appreciate more clearly the importance of intertwining the fourth type of preparedness – emotional, spiritual, and social preparedness – across the curriculum. While students have completed individualized emergency preparedness plans in the class since Spring 2018 (the first semester after IrMaria), increasing recognition is given to the devastating emotional impacts and residual PTSD, in support of survivors. We recognize that it is important to empower, but not mandate, the telling of hurricane stories by survivors. The hurricane essay assignment is now offered with more options, including writing about Caribbean ecosystems. Common triggers of PTSD are discussed, and instructors who are IrMaria survivors openly discuss their own PTSD and PTG when appropriate. The course includes guest talks by psychologists or references on coping with stresses of natural disaster (Substance Abuse and Mental Health Services Administration, 2013). The teaching of natural science, in this case, must be conducted as trauma-informed care infused throughout the curricula (DeCandia & Guarino, 2020).

### **Significance**

As the impacts of natural disasters increase with population growth and extreme weather events, student engagement in disaster preparedness provides a powerful instrument to promote resilience within diverse communities. UVI is uniquely positioned to be a leader in this field, attracting students and scholars from across the Caribbean and other disaster-prone regions.

In particular, the position of USVI residents, during and after disasters, must be placed in the context of the USVI's Territorial status. Post-IrMaria, Caribbean communities suffered disaster capitalism (Klein, 2018) that further marginalized vulnerable communities. Indeed, as pointed out by Moulton & Machado (2019), colonial legacies and present-day realities are shared by Caribbean islands devastated by the 2017 hurricanes. A generic call for a "return to normalcy" should be questioned in light of the fact that "normalcy" is framed relative to colonial powers, such as aid organizations that lack the rich cultural and geographical knowledge of the USVI.

The course aims to build broad elements of culturally competent resilience in our communities by engaging students in introspection and action related to their hurricane experiences and the ongoing recovery. Now during the COVID-19 pandemic, USVI residents are challenged to draw upon another dimension of preparedness. These student experiences suggest that USVI residents are well-equipped with emotional, spiritual, and social preparedness, despite still being in recovery from the 2017 hurricanes. It may well be that these preparedness skills, strengthened by IrMaria, will continue to help USVI residents navigate threats posed by both physical and biological hazards.

## References

- Bontekoe, R. (1996). *Dimensions of the Hermeneutic Circle*. Humanities Press.
- Bram, J. (2018, March). Impacts of Hurricanes Irma and Maria on Puerto Rico and the Virgin Islands. Federal Reserve Bank of New York Report.
- College Board. (2018). SAT suite of assessments annual report. New York: College Board.
- DeCandia, C., & Guarino, K. (2020). Trauma-informed care: an ecological response. *Journal of Child and Youth Care Work*, 25, 7-32.
- Eatough, V., & Smith, J.A. (2008). Phenomenological psychology. In A.P. Giorgi & B. Giorgi (Eds.), *The SAGE handbook of qualitative research in psychology*, (pp. 165-179). Thousand Oaks, CA: Sage.
- Federal Emergency Management Agency. (2018, January 3). Disasters affected 8% of U.S. population in 2017, FEMA notes in review of historic year. *Insurance Journal* [Web article]. Retrieved from <https://www.insurancejournal.com/news/national/2018/01/03/476001.htm>
- Finlay, L. (2012). Debating phenomenological methods. In: F. Finlay (Ed.), *Hermeneutic phenomenology in education* (pp. 17-37). New York: Springer.
- Guannel, M.L., Guannel, G., Daniel, I., Copemann, N., Freeman, A., & Good, B. (2021). Manuscript accepted for publication. A course on natural disasters gets real: living the impacts of climate change in the US Virgin Islands. In E. Walsh (Ed.), *Social justice in climate change education: Exploring social and ethical dimensions of environmental education*. New York City, NY: Routledge.
- Jones, N.N., Cummings, L., Guannel, M.L., & Abdallah, S. (2018). Reforming science education to a place-based focus: cultural congruence and 21st century skill development. Conference Proceedings: Arts, Humanities, Social Sciences, & Education, 2018 Hawaii University International Conferences.
- Klein, N. (2018). *The battle for paradise: Puerto Rico takes on the disaster capitalists*. Chicago, IL: Haymarket Books.
- Lopez, K. & Willis, D. (2004). Descriptive versus interpretive phenomenology: Their contributions to nursing knowledge. *Qualitative Health Research*, 14, 726-735.
- Mankad, R. (2017, August 23). As Houston plots a sustainable path forward, it's leaving this neighborhood behind. *The Texas Tribune* [Web article]. Retrieved from <https://www.texastribune.org/2017/08/23/houston-plots-sustainable-path-forward-its-leaving-neighborhood-behind/>
- Moulton, A.A. and Machado, M.R. (2019). Bouncing forward after Irma and Maria: Acknowledging colonialism, problematizing resilience and thinking climate justice. *Journal of Extreme Events*, 6(1), 1940003-1-1940003-22.
- Paul, D.F. & Watlington, R.A. (1997). Development and initial implementation of the general education reform: Creating the UVI graduates of the 21<sup>st</sup> century: A general education reform project. Unpublished Internal University of the Virgin Islands Committee Report.
- Russoniello, C.V., Skalko, T.K., O'Brien, K., McGhee, S.A., Bingham Alexander, D., & Beatley, J. (2002). Childhood posttraumatic stress disorder and efforts to cope after Hurricane Floyd. *Behavioral Medicine*, 28, 61-70.



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Shaw, R. (2001). Why use interpretative phenomenological analysis in health psychology? *Health Psychology Update*, 10, 48-52.

Shultz, J M., Sands, D E., Kossin, J.P., & Galea, S. (2020). Double environmental injustice - climate change, Hurricane Dorian, and the Bahamas. *New England Journal of Medicine*, 382(1), 1-3.

Substance Abuse and Mental Health Service Administration. (2013). Tips for survivors of a disaster or other traumatic event: Managing stress. SAMHSA Publication ID SMA13-4776. Retrieved from <https://store.samhsa.gov/product/Tips-for-Survivors-of-a-Disaster-or-Other-Traumatic-Event-Managing-Stress/SMA13-4776>

Tedeschi, R.G. and Calhoun, L.G. (1996). The posttraumatic growth inventory: Measuring the positive legacy of trauma. *Journal of Traumatic Stress*, 9, 455-471.

U.S. Virgin Island Estimates: U.S. Census Bureau; 2010 Census of the Island Areas, Table DP-3; using American FactFinder. Retrieved from <http://factfinder.census.gov>.

USVI Hurricane Recovery and Resilience Task Force. (2018, September 6). USVI Hurricane Recovery and Resilience Task Force Report. [Web report]. Retrieved from <https://www.usvihurricanetaskforce.org/>

Wang, C. 2018. Bracing for hurricanes: A qualitative analysis of the extent and level of preparedness among older adults. *The Gerontologist*, 58(1), 57-67.

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Table 1. Seven major challenges described by University of the Virgin Islands (UVI) students before, during, and after the 2017 hurricanes, Irma and Maria.

Code	Description	Example Quote(s)
Lack of Knowledge and Preparation	Some persons had no prior experience of a hurricane and as a result didn't know how to prepare or what to expect, or they underestimated the storm.	"Having not experienced such an event, I grossly underestimated her strength and didn't think anything of it."  "I figured it would just be some rain, wind, and mild flooding. Nobody was expecting that kind of impact from Hurricane Irma."
Emotional State	Destruction and relocation caused people to panic and be fearful.	"With maybe 5 pairs of clothes and two pairs of shoes in my bag, I was so confused and scared."
Damage / Physical Impact	The hurricanes damaged the island and homes. The strength and damage could be seen from inside the homes.	"The doors and windows of the house had been blown out and the entire house was completely overtaken by water."
Response to Emergency	Many persons took steps to try to secure themselves during the hurricane to prevent destruction to their homes and lives.	"Then we had to crack the windows and brace open bedroom doors to let the wind pass through freely since it was getting in anyway."
Physical and Emotional Loss	People lost possessions, resources, income, and lives as a result of the hurricanes.	"Few lost their lives, many lost their homes, but everyone lost a sense of normal living for quite some time."  "My mom's friend lost her husband during the disaster."
Life Adjustments	Students had to adjust their lifestyle to adapt to the changes around them.	"It drastically changed my way of living. School wasn't open, I had no current, and my eating and sleeping habits changed quickly."
Responses Suggestive of Trauma and Post-Traumatic Stress Disorder	Many people have painful memories of the hurricanes.	"I was tremendously affected by this hurricane. I honestly thought that I was going to die. I do think that I probably had PTSD, but not in a major way."

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Table 2. Four major categories of preparedness described by University of the Virgin Islands (UVI) students related to the 2017 hurricanes, Irma and Maria.

Code	Description	Example Quote
Survival Preparedness	Supplies were stockpiled for the purpose of survival. However, many people did not start stockpiling until after the hurricane hit.	"We had so much canned goods, plates, forks and other items that we didn't have enough room to store them."
Planning Preparedness	Students and loved ones made contingency plans, such as where to go if the house was destroyed, and how to share resources.	"...instructed our family members who live close by that if it gets worst I would have to go over to their house."
Structural Preparedness	People worked to reinforce their homes.	"None of our windows were broken because my dad boarded up the doors and windows with wood."
Emotional, Spiritual, and Social Preparedness	Some persons mentally prepared for the hurricanes to happen.  After Irma, people were worried for Maria because they were already emotionally exhausted. Directly after the storms, people celebrated together.	"However, after the wind slow down my family came out their shelter and they were hugging, kissing, crying, and then prayed to thank god that [they] did make it alive."