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The Lived Experience of Counseling Students in Natural Disaster

Amy Marie Sirocky-Meck

A dissertation submitted to the Graduate Faculty of

JAMES MADISON UNIVERSITY

In

Partial Fulfillment of the Requirements

for the degree of

Doctor of Philosophy

Department of Graduate Psychology

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FACULTY COMMITTEE:

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Dedication

This is dedicated to Steve and Marie Sirocky, my dear and beloved parents.

Thank you for always being my shelter from the storm and bridge over troubled waters.

Acknowledgements

I am truly grateful for this space so I may put into words the gratitude I carry in my heart for so many who provided support, friendship, guidance, flexibility, and encouragement along the way.

To begin, I would like to acknowledge the love and support of my family. To Mom and Dad: As you saw in the dedication, this one is for you! To my husband and best friend, John Meck: I love you and we made it! We survived my dissertation! Now let's go and live the life of our dreams together happily ever after! To Jack: I am never going to pass on an opportunity to acknowledge you and how much I love you; how proud I am to be your mom; how much joy you have brought to our lives; and how I wish you peace and wellbeing all the days of your life. To my brother Andy, sister-in-law Tracy, and niece Maddi: Thank you for being the Sirocky Dream Team!

I am fortunate to have been surrounded all my life by good friends and during this particular leg of my journey the friendship offered by the following people truly sustained me: Carrie Hrousis, Rosemary Lombardo, Terry Horner, Marta Bechtel, Jack and Amanda Garber, Lori Schrock, Bev London, and Wendy Lushbaugh: My thanks to each of you.

Juggling part time graduate study with full time work (and a family) is challenging and was only possible for me because of the incredible mentorship I received from my supervisor Donna Harper. I am forever grateful for the opportunity I have had over these years to work for you, Donna and to learn from you. To my colleagues Barbara Hetzel, Cole Seward, Laura Sider Jost, Art Dean, and Kim Moubray: Thank you for your flexibility and willingness to step in when I was away from the office.

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When conducting a qualitative study many people get to lend their time and expertise. This study was enriched by the contributions of Kyle Rose and Sarah MacDonald who helped with data analysis and Olivia Baumgartner, Sean Miller, Zenobia Lee Nelson, and Erica Farrell who assisted with the development of the interview protocol.

I have learned from so many amazing faculty members over the years like Anne Stewart, Lennie Echterling, and the late Ed McKee, who through their presence, their passion, their vast knowledge made a huge difference in so many of our lives. Thank you for believing in my ability to contribute to the field of counseling and for shaping who I am as a counselor educator. To Debbie Sturm, Renee Staton, and Robin Anderson: Thank you for the time and energy you put into being on my dissertation committee. I am truly honored.

My deepest gratitude to the 14 women who participated in this study and shared their experience so authentically. I hope that in these pages I have honored your courage, your spirit, and your lived experience.

Finally, I want to thank God, and in the words of Snoop Dogg, “I want to thank me for believing in me ... for doing all this hard work ... for never quitting” (Goldstein, November 20, 2018).

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Abstract

After natural disaster, survivors may experience moderate to severe signs and symptoms of emotional distress which may subside or worsen as time passes (Substance Abuse and Mental Health Services Administration, 2022). Adults pursuing higher education when natural disaster strikes experience an additional array of unique issues which may exacerbate symptoms of emotional distress (Wilkinson et al., 2013). To create and improve curricular and co-curricular structures that meet the needs of their students, educators in many health and mental health disciplines can draw from a variety of quantitative and qualitative studies, particularly those focused on how their disciplines' students navigate the experience of natural disaster while enrolled in a program of study (Henneman et al., 2020; Matthieu et al., 2007; Myhre et al., 2017; Szczygiel & Emery-Fertitta, 2021). However, there is little to no extant literature on counseling students' experiences of surviving natural disaster while enrolled in graduate study. Using a qualitative, phenomenological approach this study sought to fill this identified gap in the literature to inform future inquiry and application. Six themes emerged from data analysis that described participants' lived experience of natural disaster and perceptions of support offered by their program. The findings are discussed in the context of the research questions that framed the study. Implications for counseling and counselor education programs are presented along with limitations and recommendations for future research.

Chapter 1: Introduction

People who survive a traumatic event such as a natural disaster may experience moderate to severe signs and symptoms of emotional distress in the aftermath of disaster (Substance Abuse and Mental Health Services Administration, 2022). Adult survivors of natural disasters pursuing higher education when natural disaster strikes experience an additional array of unique issues which may exacerbate symptoms of emotional distress (Wilkinson et al., 2013).

After natural disaster, survivors may seek therapeutic support from professional counselors trained to provide evidence based care for trauma survivors (American Counseling Association, n.d.; Council for the Accreditation of Counseling and Related Educational Programs, 2016). Providing therapeutic support to trauma survivors may lead to clinicians experiencing vicarious, secondary, or shared trauma (Bell & Robinson, 2013; Culver et al., 2011; Powell et al., 2019; Tominaga et al., 2020). Counselors who experience vicarious, secondary, or shared trauma are more likely to be impaired in their ability to work effectively with clients and to experience burnout which may lead to an unplanned exit from the counseling profession (Bell & Robinson, 2013; Culver et al., 2011; Powell et al., 2019; Tominaga et al., 2020;).

Like other adult survivors, students who are enrolled in undergraduate or graduate programs to become allied health or mental health professionals may experience emotional distress in the wake of disaster (Prost et al., 2018). Academic disciplines such as social work and nursing have focused research on the lived experience of their students after natural disaster to inform curricular changes and to develop pathways to better

support future students who may find themselves in similar situations (Henneman et al., 2020; Matthieu et al., 2007; Myhre et al., 2017; Szczygiel & Emery-Fertitta, 2021).

Pre-service counselors identify graduate school as a time of intense emotional exhaustion and stress (Ohr et al., 2015). However, there is a gap in the research regarding how pre-service counselors perceive and navigate the experience of natural disaster while enrolled in graduate study. The purpose of this study was to utilize a qualitative approach to consider the impact of natural disaster on individuals enrolled in graduate counseling programs who experience natural disaster. A goal of this research was to enrich and improve how the mental health field responds to a unique population's experience of navigating natural disaster and to inform practice in counselor education programs.

Background of the Problem

Natural disasters are geological, hydrological, climatological, and meteorological events (International Federation of Red Cross and Red Crescent Societies, n.d.; World Meteorological Organization, n.d.) that occur on every continent, with varying degrees of predictability (United States Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, n.d.; United States Department of Homeland Security, n.d.), and result in severe damage and destruction of property, infrastructure, food and water sources, social systems, health care resources, and economic systems (Goldmann & Galea, 2014). In 2020, global economic losses due to natural disaster totaled \$210 billion (Center for Research on the Epidemiology of Disasters & United Nations Office for Disaster Risk Reduction, 2021). In the United

States of America, total economic losses due to natural disaster topped \$104 billion in 2021 (Kaplan & Tran, 2022).

Natural Disasters on the Rise

Natural disasters are happening around the world with increasing frequency and intensity (Center for Research on the Epidemiology of Disasters & United Nations Office for Disaster Risk Reduction, 2021). In 2020, around the world there were 26% more storms, 23% more floods, and 18% more flood related deaths than in previous years due to natural disaster (Center for Research on the Epidemiology of Disasters & United Nations Office for Disaster Risk Reduction, 2021). Between 2000 and 2009 there were 62 natural disasters in the United States that resulted in \$519 billion in economic losses and 3,091 deaths (Smith, 2021). Between 2010 and 2019 the number of natural disasters in the United States increased to 119 resulting in \$810.5 billion in economic losses and 5,217 deaths (Smith, 2021).

Natural Disasters and Mental Health

Living through a natural disaster can be a traumatic experience for people because of the inherent risk of experiencing severe injury or death, loss or injury of loved ones (American Psychiatric Association, 2013), loss or threat of loss of employment and income, displacement from home, separation from interpersonal supports, and massive physical destruction to property and the physical environment (Substance Abuse and Mental Health Services Administration, 2022). Immediately following disaster and throughout the recovery process survivors are likely to experience signs and symptoms of traumatic distress such as intense fear, constant worry, anger, sadness, difficulty concentrating, overwhelming feelings of hopelessness, numbness, problems maintaining

personal relationships, difficulty sleeping, digestive problems, and moderate to severe headaches (Bond et al., 2021; Carmassi et al., 2020; Makwana, 2019; Massazza et al., 2021; Substance Abuse and Mental Health Services Administration, 2022). For some survivors, symptoms of emotional distress will worsen and persist which may lead to diagnosis of post-traumatic stress disorder, major depression, anxiety disorder, or substance abuse disorder (Goldmann & Galea, 2018; Norris et al., 2002; Warsini et al., 2014).

An estimated 70% of the global population (Benjet et al., 2016) and as much as 90% of the United States population has experienced at least one type of traumatic event such as a natural disaster (Kessler et al., 1995). In 2020 alone, 98.4 million people around the world were directly impacted by natural disaster (Center for Research on the Epidemiology of Disasters & United Nations Office for Disaster Risk Reduction, 2021) and in 2021, 23.7 million were displaced from their homes as a result of natural disaster. (United Nations, 2022). Humanitarian crises such as natural disasters call for immediate, comprehensive response coordinated among local, regional, national, and international entities (International Federation of Red Cross and Red Crescent Societies, n.d.; United Nations & United Nations Human Rights Office of the High Commissioner, n.d.).

Factors that Impact Emotional Distress for Natural Disaster Survivors

With decades of research on the mental health impacts of natural disaster, there is general agreement among researchers that some disaster-related factors or characteristics are associated with onset of moderate to severe psychological distress for survivors of natural disaster (Bromet et al., 2017; Carmassi et al., 2020; Davis et al., 2012; Fernandez et al., 2022; Goldmann & Galea, 2014; Johar et al., 2022; Leiva-Bianchi et al., 2018;

Norris et al., 2004; Sastry & VanLandingham, 2009). These factors are proximity or level of exposure to natural disaster (Leiva-Bianchi et al., 2018; Norris et al., 2004); economic resource loss such as destruction of property and loss of income (Goldmann & Galea, 2014; Johar et al., 2022); interpersonal loss such as death of a loved one or loss of close personal relationships (Bromet et al., 2017; Carmassi et al., 2020); temporary or permanent displacement (Bromet et al., 2017; Sastry & VanLandingham, 2009); and experiencing multiple traumas before, during, or while navigating the natural disaster recovery process (Davis et al., 2012; Fernandez et al., 2020; Goldmann & Galea, 2014).

People whose needs are overlooked and excluded during disaster response experience circumstances and barriers to accessing relief in the aftermath of natural disaster which may intensify symptoms of emotional distress (Benevolenza & De Rigne, 2019). Women (Goldman & Galea, 2014; Yoshihama, 2021), children and adolescents (Maclean et al., 2016; Struckmeyer et al., 2021); people of retirement and advanced age (Kim et al., 2021; Maclean et al., 2016); racially and ethnically minoritized people (Ali et al., 2017; Elliot & Pais, 2006); immigrants (Adams & Boscarino, 2013; Vu & VanLandingham, 2012); people with cognitive and/or physical disabilities (Chakraborty et al., 2019; Zhou et al., 2015); people of low socioeconomic status (Bromet et al., 2017; Yari et al., 2021); and members of rural populations (Usher et al., 2020; Xiong et al., 2016) are among the populations who have needs that may not be considered during response planning and who may not receive needed support and relief after disaster strikes.

College and University Students and Natural Disaster

Undergraduate and graduate university and college students, like other adults, may experience signs and symptoms of traumatic distress after living through a natural disaster (Substance Abuse and Mental Health Services Administration, 2013) which may intensify and result in the onset and diagnosis of post-traumatic stress disorder, major depression, and anxiety disorder (Nolen-Hoeksema & Morrow, 1991). Additionally, college and university students may experience significant academic difficulties after experiencing a traumatic event like a natural disaster which adds an additional layer of stress to their recovery process (Wilkinson et al., 2013).

The Counseling Profession and Natural Disaster

Counselors are trained in the methods, practices, and protocols for providing therapeutic support to people who have survived traumatic events (American Counseling Association, 2013; Council for the Accreditation of Counseling and Related Educational Programs, 2016) and may play a key role in the recovery process of natural disaster survivors (Boulanger, 2013; Culver et al., 2011; Jacobs et al., 2011; Powell et al., 2019; Reybold et al., 2015). Professional community mental health counselors may volunteer in areas impacted by disaster to offer crisis intervention services and may work with survivors later after physical rebuilding has begun (Reybold et al., 2015). For some counselors, working with trauma survivors may result in experiences of vicarious or secondary trauma which can interfere with client recovery and lead to burn out in counselors (Tominaga et al., 2020). In many cases, the counselors who are treating natural disaster survivors are also residents of the same impacted community and are navigating their own recovery process while supporting their client's journey to recovery

(Bell & Robinson, 2013). In situations where the counselor and client share in the traumatic experience, counselors must be vigilant to maintain appropriate boundaries to avoid oversharing, neglecting the actual lived experience of the client, and experiencing emotional difficulties during session which compromise client care (Bell & Robinson, 2013; Culver et al., 2011; Powell et al., 2019).

Counseling Students

Adults who are enrolled in undergraduate and graduate programs to prepare for careers in a helping profession experience emotional, physical, and cognitive challenges after natural disaster that affect their wellbeing and ability to function in their academic programs, practicum, and internships (Prost et al., 2018). Logistical concerns such as difficulty accessing program information, difficulties reaching faculty, and lack of clear communication and direction from program leaders are associated with increased emotional distress for students enrolled in health, mental health and allied health profession programs (Henneman et al., 2020; Mathieu et al., 2007; Myhre et al., 2017; Szczygiel & Emery-Fertitta, 2021).

To create and improve curricular and co-curricular structures that meet the needs of their students, educators in social work, nursing, and other similar health and mental health disciplines can draw from a variety of quantitative and qualitative studies, particularly those focused on how their disciplines' students navigate the experience of natural disaster while enrolled in a program of study (Henneman et al., 2020; Matthieu et al., 2007; Myhre et al., 2017; Szczygiel & Emery-Fertitta, 2021). Curiously, there is little to no extant literature on counseling students' experiences of surviving natural disaster

while enrolled in graduate study. Using a qualitative approach this study sought to fill this identified gap in the literature to inform future inquiry and application.

Statement of the Problem

Literature from disciplines related to counseling such as social work offers insight into how students in those disciplines cope with humanmade and natural disasters while enrolled in graduate study (Henneman et al., 2020; Matthieu et al., 2007; Myhre et al., 2017; Szczygiel & Emery-Fertitta, 2021). Though such studies may offer some insight for counseling program leadership (in terms of structuring supports and resources for students in case of natural disaster), counseling is a distinct profession, and counselor education programs are intentionally structured to prepare students for this distinct profession (Council for the Accreditation of Counseling and Related Educational Programs, 2016). How counseling students navigate their academic program and even how they navigate distressing and difficult experiences may vary in some ways from students in other disciplines. As such, insight gained from research into the experiences of counseling students is best suited to inform programs and services designed to support counseling students.

Purpose of the Study

To establish a line of research inquiry and to inform education program practices, this study sought to address the problem by focusing on the lived experiences of counseling students who survived natural disaster while enrolled in graduate study. One goal of this study was to contribute to the disaster mental health literature to increase understanding of how natural disasters impact people. Another goal of this study was to contribute to and fill the gap in the extant counseling literature regarding the experience

of graduate counseling students who experience natural disaster while enrolled in their master's programs; with the intention of informing future research and efforts by counseling education program leaders to provide resources and support for counseling master's students impacted by natural disaster.

Research Questions

This study sought to contribute to the literature by examining two central research questions using a qualitative phenomenological approach for the purpose of creating a base of knowledge that counselor educators can draw from to inform future research and application. The full interview protocol that was used for this study is included as Appendix A.

Research Question One. What is the lived experience of master's level counseling students who experienced a natural disaster while enrolled in their training program?

Research Question Two. What were master's level counseling students' perceptions of support (or lack of support) from their program during and after their personal experience with a natural disaster while enrolled in their program?

Method

Qualitative methods were used to examine the lived experience of master's counseling students who experience natural disaster while enrolled in their graduate program. Qualitative methods have been used extensively by natural disaster researchers to understand the lived experience of natural disaster survivors in order to develop interventions targeted to survivors needs (Phillips, 2014). When conducting a qualitative study, the researcher assumes an open, curious, empathic, and nonjudgmental stance

(Hoffding & Martiny, 2015) approaching research participants as collaborators in the research process (Phillips, 2014) which is ideal when the focus of research is on sensitive and deeply personal experiences such as the experience of surviving a natural disaster (Meriam & Tisdall, 2016). Such an approach is also consistent with the values and mission of the counseling profession (Prosek & Gibson, 2021).

For this study the qualitative method employed was phenomenology (Merriam & Tisdell, 2016). Phenomenological methods seek to bring into consciousness aspects of lived experience that may not be detected through quantitative measures because nuanced and important aspects of experience may not have been reflected upon and categorized (Merriam and Tisdell, 2016; Osbourne, 1994; Prosek & Gibson, 2021).

Assumptions, Limitations, and Scope

Participants for this study were adults who experienced natural disaster while enrolled in CACREP accredited master's programs. The goal was to conduct interviews with a maximum of 15 participants or until saturation was reached. Saturation is the point at which new themes and ideas do not emerge from interviews (Whitley & Kite, 2013). Prosek and Gibson (2021) identify 15 as the average number of participants for phenomenological research studies in the counseling discipline. Interviews were conducted by the primary researcher and analyzed by a team in order to identify meaning units and emerging themes (Merriam & Tisdell, 2016; Prosek & Gibson, 2021).

Threats to Internal and External Validity

To protect and assure internal and external validity the researcher and team engaged in bracketing at specific intervals in the research process (Merriam & Tisdell). Bracketing in qualitative research refers to the active and intentional practice of

researchers naming and setting aside preconceived ideas, assumptions, and notions before participating in the data collection process and before conducting data analysis (Wertz, 2005). When using a phenomenological approach, bracketing is referred to as epoche (Merriam & Tisdell, 2016). After epoche and in the final stage of data analysis, the researcher then conducts an analysis of the data through the lens of knowledge and experience the researcher has acquired through study of the phenomena (Wertz, 2005). These steps are used to assure trustworthiness (Merriam & Tisdell, 2016).

Significance of the Study

This study is significant because it sought to fill an existing gap in the counseling literature by establishing an area of inquiry that promises to contribute to the counseling profession and overall body of natural disaster mental health literature. By employing a qualitative approach, the goal was to construct a rich, layered understanding of the impact of natural disaster in the lived experiences of people (Merriam & Tisdell, 2016).

Operational Definitions

The following operational definitions were used to inform participant recruitment and communication.

Natural disaster: The operational definition proposed for this study is from the Substance Abuse and Mental Health Services Administration website:

Large-scale geological or meteorological events that have the potential to cause loss of life or property. These types of disasters include: tornadoes and severe storms, hurricanes and tropical storms, floods, wildfires, earthquakes, drought (United States Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, n.d.).

Student: For the purpose of this research a student is an adult enrolled in a master's level counseling program accredited by the Council for the Accreditation of Counseling and Related Educational Programs.

Counselor: The operational definition proposed for this study is from the American Counseling Association publication, *What is a professional counselor:*

Professional counselors help people gain person insights, develop strategies and come up with real solutions to the problems and challenges we all face in every area of life. As trained and credentialed professionals, they accomplish this by getting to know clients. By building safe, positive relationships and suggesting tools and techniques they believe will benefit clients. (American Counseling Association, n.d., p.1)

Summary

Using a qualitative approach to understand the lived experience of counseling master's students who have survived natural disaster, the central aim of this study was to fill a gap in the existing literature for the purpose of informing future research and efforts focused on improving counselor education and preparation. The study sought to contribute to the mental health disaster literature by illuminating the experience of a population that has not been the focus of extensive research to date.

Organization

Chapter 1. The purpose of the study is introduced through a description of the problem, the questions that framed the study, and the significance of the study.

Chapter 2. In this in-depth review of the extant natural disaster mental health and counseling literature, attention is paid to seminal works, qualitative natural disaster mental health studies, and research on counseling education students.

Chapter 3. This chapter provides an explanation of the qualitative research method that was used for this research study including the specific steps that were taken in carrying out the research study. It includes the proposed instrument used for data collection, a phenomenological interview protocol.

Chapter 4. In this chapter the results of this qualitative phenomenological study are presented. The chapter also contains a description of study participants and the steps taken to achieve trustworthiness of results.

Chapter 5. This chapter discusses the results of the research study in the context of the research questions that framed all aspects of research and inquiry. The significance and implications for natural disaster mental health literature, counseling literature, and counselor education programs are presented. The chapter closes with recommendations for future research and a presentation of limitations of the study.

Chapter 2: Literature Review

The following review of the related scholarship establishes a context and platform for the research questions posed in the previous chapter. The topics explored in this review are the prevalence and costs of natural disasters; natural disasters' effects on mental health; how college and university students, particularly those studying counseling, are affected by natural disaster; and how postsecondary institutions respond to natural disaster, including how graduate programs in counseling and other academic disciplines support students post-disaster.

The Prevalence and Costs of Natural Disasters

Disasters are humanitarian crises that require coordinated, large-scale intervention and response (International Federation of Red Cross and Red Crescent Societies, n.d.; United Nations & United Nations Human Rights Office of the High Commissioner, n.d.). Some disasters are the result of human activity such as war and some disasters are the result of natural phenomena such as hurricanes (Leiva-Bianchi et al. 2018). Though disasters may have different origins and different impacts, Goldmann and Galea (2014) identified three key, common characteristics for all disasters which are the threat of mass injury and death; severe destruction that creates disruptions to social processes, networks, and communities; and secondary consequences such as physical injury, medical ailments, and mental health issues for those affected.

Traumatic Events

It is useful to situate the impact of disasters generally, and natural disasters specifically, in the literature related to trauma. Benjet et al. (2016) and Kessler et al. (1995) estimate that 70% of people worldwide and 90% of people in the United States

have experienced at least one traumatic event in their lifetime. According to a report written by Peterson and colleagues (2021) for the U.S. Centers for Disease Control, violence-related injuries such as car crashes, homicide, overdoses, and falls were among the top ten causes of death for Americans in every age group in 2019. These traumatic events resulted in \$69 billion in wages lost, \$327 billion in medical expenses, and \$3.8 trillion in mental health, mobility, transportation, and other expenses (Peterson et al., 2021).

The most current and widely accepted definition of traumatic events comes from the diagnostic criteria for post-traumatic stress disorder (PTSD) within the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; DSM-5):

Exposure to actual or threatened death, serious injury, or sexual violence in one of the following ways: directly experiencing the traumatic event(s), witnessing, in person the event(s) as it occurred to others, learning that the traumatic event(s) occurred to a close family member or close friend. In cases of actual or threatened death of a family member or friend, the event(s) must have been violent or accidental, experiencing repeated or extreme exposure to aversive details of the traumatic event(s) (e.g., first responders collecting human remains; police officers repeatedly exposed to child abuse). Such exposure can be through media if it is work-related. (American Psychiatric Association, 2013, p. 271)

The majority of people who experience traumatic events do not develop PTSD but are likely to experience acute emotional, cognitive, and physical symptoms that disrupt everyday functioning (Bonnano, 2004). In the aftermath of a traumatic event, people may

have nausea, fear, irritability, difficulty sleeping, and difficulty focusing (Centers for Disease Control and Prevention, n.d.).

Like Leiva-Bianchi et al. (2018), who classified disaster as either natural or human-caused, Benjet et al. (2016) considered the origins of traumatic events as either human (e.g., terror attacks) or natural (e.g., hurricanes). Benjet and colleagues (2016) organized traumatic events into six overarching categories—collective violence, witnessed/caused bodily injury, interpersonal violence, intimate partner violence/sexual violence, accidents/injuries, and other traumas—all of which may include events that impact as few people as one individual or family (e.g., interpersonal violence, personal injury) or as many as constitute entire populations (e.g., war, drought) (Benjet et al., 2016). Large-scale traumatic events are generally referred to as *disasters* or *hazards*.

Disasters on the Rise

Over a 20-year period, 7,348 recorded disasters affected 4.2 billion people around the world and resulted in \$2.97 trillion in economic losses (Centre for Research on the Epidemiology of Disasters & United Nations Office for Disaster Risk Reduction, 2020). Norris et al. (2002) estimated that a disaster occurs somewhere on the planet every day.

In the United States, about 14% of children have been impacted by disaster (Becker-Blease et al., 2010). This can include injury, witnessing injury or death of a loved one or friend, disruptions to education as the result of school closures, and disruptions in access to safe day care (Administration for Children and Families U. S. Department of Health and Human Services, Childcare Technical Assistance Network, n.d.; Samsel, 2017; Substance Abuse and Mental Health Services Administration, n.d.; Substance Abuse and Mental Health Services Administration, 2018).

In 2021 a record number of people—1% of the global population—were displaced either temporarily or permanently, within their own countries or forced out of their countries, as the result of exposure to human-caused or natural disaster; twice as many people were displaced in 2021 as compared to 2020 because of violence and conflict, and 23.7 million were displaced as a result of some form of natural disaster. More than half of people displaced were displaced due to conflict (United Nations, 2022). The United Nations Refugee Agency defines displacement as follows:

The movement of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence (whether within their own country or across an international border), in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters. (The United Nations High Commissioner for Refugees, The United Nations Refugee Agency, n.d.)

Natural Disasters

Driving the increase in disaster and displacement numbers is a sharp increase in the number of natural disasters (United Nations, 2022), which are extreme weather events that occur with little to no warning in different seasons, on every continent, compromising individual and community health, wellbeing, safety, and economic way of life (United States Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, n.d.; United States Department of Homeland Security, n.d.). Examples include winter storms, floods, hurricanes, tornadoes, earthquakes, wildfires, crop freeze events, droughts, and severe storms (United States Department of Health and Human Services, Substance Abuse and Mental Health Services

Administration, n.d.; United States Department of Homeland Security, n.d.). The term *natural hazard* may be used in place of *natural disaster* to describe geological, hydrological, climatological, meteorological, and biological events (International Federation of Red Cross and Red Crescent Societies, n.d.; World Meteorological Organization, n.d.). Geophysical hazards involve movement of solid earth matter and include earthquakes, volcanoes, and landslides (International Federation of Red Cross and Red Crescent Societies, n.d.). Hydrological hazards are water related events such as floods and avalanches (International Federation of Red Cross and Red Crescent Societies, n.d.). Climatological events are extreme climate events such as wildfires and droughts (International Federation of Red Cross and Red Crescent Societies, n.d.). Meteorological hazards result from weather conditions such as hurricanes, cyclones, tornadoes, and winter storms (International Federation of Red Cross and Red Crescent Societies, n.d.). Biological events such as disease outbreaks and insect/animal plagues are classified as natural hazards (International Federation of Red Cross and Red Crescent Societies, n.d.). *Ecological disaster* is another term used by researchers to define and describe natural disasters (Morganstein & Ursano, 2020). Human-caused environmental disasters are also typically included with examples of ecological disasters (Shultz et al., 2014).

Between 2000 and 2019 the number of recorded natural disasters doubled (Centre for Research on the Epidemiology of Disasters & United Nations Office for Disaster Risk Reduction, 2020). Flood accounted for the highest number of recorded disasters, followed by storms, and instances of drought, wildfire, and extreme temperature events also increased (Centre for Research on the Epidemiology of Disasters & United Nations Office for Disaster Risk Reduction, 2020). In 2020 there were 26% more storms, 23%

more floods, and 18% more flood deaths than in previous years (Center for Research on the Epidemiology of Disasters & United Nations Office for Disaster Risk Reduction, 2021). Between 2016 and 2020 the United States experienced an average of 16.2 natural disasters per year (Smith, 2021). A record number of statewide natural disasters were declared in the United States during 2021 (Kaplan, & Tran, 2022).

The majority of Americans live in places prone to one or more types of natural disaster (National Oceanic and Atmospheric Administration, National Centers for Environmental Information, 2022). Floods occur frequently throughout the United States (Flood Defenders, n.d.). Wildfires are also a common occurrence in many parts of the United States (Schweizer, 2021). Western states such as California, Arizona, and New Mexico, and eastern states like New Jersey and Tennessee have experienced significant wildfires well outside of the fire season (Schweizer, 2021). Winter wildfires, which used to be rare events, are becoming increasingly common around the country (Schweizer, 2021). With the proliferation of wildfires, many in California now consider fire season to be year-round (Frontline Wildfire Defense, n.d.). Nearly half of the U.S. population lives in a geographic area at risk for experiencing a major hurricane (National Ocean Service, National Oceanic and Atmospheric Administration, United States Department of Commerce, n.d.).

Like other types of traumatic events, natural disasters have severe impacts on people. The United Nations reports that 98.4 million people across the globe were affected in 2020 by a natural disaster, which resulted in \$210 billion in economic losses (Center for Research on the Epidemiology of Disasters & United Nations Office for Disaster Risk Reduction, 2021). The cost of natural disasters in the United States for the

year 2021 topped \$104 billion and resulted in 656 deaths (Kaplan & Tran, 2022). One out of every ten U.S. homes sustained some form of damage requiring repair as the result of natural disaster (Jacobson, 2022). Natural disaster survivors are likely to experience long-term issues that interfere with educational outcomes, employment stability, and interpersonal relationships (Tulane University School of Social Work, 2018).

The Effects of Natural Disaster on Mental Health

Natural disaster survivors face a complex road to recovery that requires them to harness their physical, emotional, cognitive, economic, and social resources to rebuild and reestablish shelter, employment, community, health, and safety while also dealing with the fallout of having confronted a life-threatening event which may have resulted in physical injury to themselves or death of a loved one (Substance Abuse and Mental Health Services Administration, 2022). Adding to the complexity of recovery is the very real possibility of delays in receiving assistance, which is typically the result of severe environmental damage that cuts disaster-stricken communities off from outside support (North, 2016). For these reasons a central goal of mental health disaster research is to identify the factors that contribute to emotional distress and those which may protect individuals from experiencing significant impairment in order to develop interventions that are tailored to and responsive to the needs of natural disaster survivors (North, 2016).

A number of physical, emotional, and cognitive symptoms of traumatic distress are common to survivors, such as excessive worry, constant fear, helplessness, hopelessness, sadness, irritability, anger, numbness, depersonalization, isolation, lack of interest in people and activities, difficulty regulating emotions, thoughts of harming themselves or others, intrusive flashback and lightbulb memories of the event, sleep

problems, eating problems, relationship problems, difficulties adjusting to work or school, difficulties establishing or maintaining a routine, unexplained body aches, headaches, migraines, nausea, and using food, alcohol, drugs, and other substances to cope or self-medicate (Bond et al., 2021; Carmassi et al., 2020; Makwana, 2019; Massazza et al., 2021; Substance Abuse and Mental Health Services Administration, 2022). Spirituality, hope, and resilience are associated with lower levels of psychological distress for disaster survivors (Long et al., 2020; Mosher et al., 2021).

Even though most survivors experience only mild or moderate levels of distress, it does not mean they are left unscathed (Morgsastein & Ursano, 2020; North, 2016; Raker et al., 2019; Reifels et al., 2015). Boasso et al. (2015) found that people who listen to fellow disaster survivor's narratives continue to experience elevated symptoms of emotional distress up to five years after the disaster they survived. Even those who experience relatively mild symptoms of emotional distress in the immediate aftermath of natural disaster may still develop delayed-onset PTSD up to five years after the event (Heir et al., 2021). According to Horney et al. (2021), survivors are more at risk of dying by suicide 24 months after disaster than in the immediate aftermath.

Common Mental Health Diagnoses

Similar to survivors of other types of traumatic events, natural disaster survivors are likely to experience clinically significant signs and symptoms of emotional distress; most commonly, this leads to a diagnosis of PTSD, major depression, anxiety disorder, or substance abuse disorder (Goldmann & Galea, 2018; Norris et al., 2002; Warsini et al., 2014). Natural disaster survivors who are diagnosed with PTSD are more likely than survivors diagnosed with other mental health disorders to be diagnosed with co-occurring

major depression, anxiety disorder, or substance abuse disorder (Goldmann & Galea, 2014). Diagnosis of PTSD after natural disaster is associated with sleep disruption, onset of severe headaches, migraines, smoking relapse, and increased risk of death by suicide (Alexander et al., 2019; Arcaya et al., 2017; Fitzpatrick & Spialek, 2020; Kim et al., 2021).

There is little consensus in the literature regarding prevalence of substance abuse disorders among natural disaster survivors. Norris et al. (2002) did not find significant rates of substance abuse disorder among disaster victims. However, Goldmann and Galea (2014) identified substance abuse disorder as the third most commonly diagnosed mental health disorder among survivors of disaster. Other studies, such as one conducted by Nordlokken et al. (2016) on the alcohol consumption habits of natural disaster survivors at 6 and 24 months post disaster, detected only minor effects on alcohol consumption with some survivors reporting decreased alcohol consumption after natural disaster.

Researchers do agree that natural disasters are traumatic events that result in survivors experiencing post-traumatic stress and other forms of emotional distress. However, there is not agreement on prevalence of mental illness among survivors or the method to be used to identify prevalence.

Severe Psychological Distress

Quantifying true prevalence of severe psychological distress among natural disaster survivors has presented challenges for mental health researchers. One such challenge is that the vast majority of peer-reviewed literature present in-depth case studies of a single group of survivors of a single event, at a single time-point post disaster, which hampers the ability to generalize (Norris et al., 2002). North (2016) and

Goldman and Galea (2014) identified that another challenge inherent in quantifying the number of natural disaster survivors impacted by mental illness is that in many studies, researchers report only the number of identified cases at the time research is conducted which then includes individuals who have pre-existing diagnosis and those whose symptoms originated from the specific disaster experience that is the focus of the research (Goldman & Galea, 2014; North, 2016).

Fortunately, during the past 30 years, a handful of researchers from various disciplines have attempted, primarily through meta-analyses of the peer-reviewed literature, to identify the overall prevalence of mental health disorders among natural disaster survivors. They have also identified common factors associated with increased likelihood of experiencing severe mental health distress post natural disaster. This handful of studies represent seminal works in the field that are routinely cited by researchers. A review of the most frequently cited is offered below.

Norris et al. (2002) conducted an empirical review of the disaster mental health literature published between 1980 and 2001 to identify the prevalence of severe psychological impairment among disaster survivors and to identify factors associated with protecting survivors from severe emotional impairment and those associated with contributing to severe emotional impairment. They chose 1980 as the beginning date because it is the first year PTSD appeared in the DSM. Since their work included only quantitative empirical studies that were published in peer-reviewed journals, all qualitative studies, dissertations, and conference papers were excluded. Also excluded were all works published in a language other than English. Even with these omissions, a body of literature remained that represented the experience of more than 60,000

individual disaster survivors from around the world. Their review found that 51% of the samples experienced moderate levels of impairment and prolonged stress, 21% experienced severe impairment, and 18% experienced very severe impairment consistent with criterion for diagnoses of PTSD. When compared by disaster type, samples who had experienced mass violence events were significantly more likely than survivors of other types of human caused disasters and natural disasters to experience PTSD. However, there was no significant difference in prevalence of severe psychological distress for survivors of human-caused disasters and natural disasters with a little more than a third of both samples experiencing severe and most severe levels of distress. For these reasons Norris et al. (2002) called for researchers to move away from focusing on cause of disaster to focusing on factors strongly associated with severe psychological impairment post disaster, such as extensive and severe property damage, severe and ongoing negative financial impact, and high injury and mortality rates. Protective factors identified include protection from severe exposure and loss, effective and equitable response by authorities, and presence of strong social support systems (Norris et al., 2002).

In 2008, Neria et al. (2008) published a systematic review of the literature intentionally designed as a follow-up to the Norris study. In addition to literature published between 1980 and 2001, the 2008 review included studies published between 2001 and 2007. As with Norris et al., Neria et al. found that overall prevalence of severe psychological distress in the form of PTSD was around 30–40% for the samples. After analyses to detect for prevalence of PTSD by disaster type, they concluded that among natural disaster survivors, prevalence of PTSD might be as low as 3.7% or as high as 60% (Neria et al., 2008).

Researchers have also used epidemiological approaches to quantify prevalence and identify factors associated with the onset of severe emotional distress post natural disaster. Bromet et al.'s (2017) analyses of the World Health Organization's World Mental Health Surveys used an expanded assessment of PTSD that provided great insight into prevalence of PTSD among survivors of human-caused disasters and natural disasters. They found that overall prevalence of PTSD for survivors of any kind of disaster was anywhere from 0% to 3.8% and that survivors of human-caused disaster were more likely to experience PTSD than natural disaster survivors. The only personal factors associated with increased risk of PTSD were severity of exposure, prior trauma exposure, and pre-existing mental health conditions (Bromet et al., 2017). In their review, Goldmann and Galea (2014) determined prevalence of PTSD among disaster survivors to be 30–40%. They identified major depression as the second most frequently occurring mental illness, and substance abuse disorder as the third most frequently occurring mental illness among survivors. However, they did not estimate prevalence for either of these disorders. In terms of risk factors, they proposed that, consistent with an epidemiological approach, risk factors should be situated in a pre-, peri-, and post-disaster context. They identified gender, young age, low socioeconomic status, social isolation, and pre-existing mental health diagnosis as pre-disaster risk factors. Greater or more intense exposure to disaster, experiencing a disaster with a large death toll, and experiencing other traumas during the disaster were identified as peri-disaster factors that increase risk of severe psychological distress for survivors. Post-disaster factors associated with increased risk of developing mental illness were job loss, property damage, relationship stress, displacement, and low social support (Goldmann & Galea, 2014).

Researchers have utilized psychosocial impact models to determine prevalence of and risk factors associated with severe psychological distress for survivors of natural disaster. Reviews by Warsini et al. (2014) and Leiva-Bianchi et al. (2018) provide additional insight on prevalence and risk factors. Warsini's group used an integrative approach to review the literature on natural disaster mental health impacts published between 2002 and 2012. They concluded that rates of PTSD for any type of natural disaster vary greatly and may range anywhere from 3% to as high as 80%. Prevalence of major depression and anxiety disorder also vary greatly. Variability was attributed to various factors such as level of destruction and severity of exposure (Warsini et al., 2014). According to Leiva-Bianchi's researchers, psycho-social functioning after disaster can be best conceptualized at the intersection of two independent variables: degree of exposure/protection with level of impaired/healthy functioning post-disaster, which creates four distinct sectors of experience. The four sectors are *sensible* (high level of protection and high level of emotional distress), *witness* (high level of protection and low level of emotional distress), *traumatic* (low level of protection and high level of emotional distress), and *resilient* (low level of protection and low levels of emotional distress) (Leiva-Bianchi et al., 2018).

Natural Disaster Circumstances

Despite debate about the prevalence of mental illness for survivors of natural disaster, there is agreement on this: In the immediate aftermath, and perhaps for months or years afterward, many survivors will experience severe emotional distress that will interfere with their ability to readjust to life after disaster. There is also agreement that a set of factors is associated with experiencing severe emotional distress post-disaster, and

another set of factors may protect from onset of severe emotional distress. These factors have been and continue to be areas of focus for research and a review of these common factors is offered here.

Proximity/Exposure to Disaster

Someone's *proximity*, or *level of exposure*, to a natural disaster is considered one of the greatest predictors of severe emotional distress post-disaster. Norris et al. (2004) found significantly higher reported rates of PTSD among natural disaster survivors living in a community directly impacted by a natural disaster than among people living in adjacent communities. Leiva-Bianchi et al. (2018) identified severity of exposure as a significant risk factor for impaired psychosocial functioning among natural disaster victims. Similarly, Bromet et al. (2017) concluded that severity of exposure predicted development of PTSD more than other disaster circumstances. According to Phillippe and Houle (2020), people who directly experience natural disaster not only experience more severe emotional distress post-disaster, but the manner in which survivors encode their disaster survival memories continues to exacerbate symptoms of emotional distress over the long term. After Hurricane Sandy, Barile et al. (2020) studied three communities where residents had experienced the same direct level of exposure to the hurricane but varying levels of property damage. They concluded there was no significant difference in levels of reported emotional distress among residents of the three communities, which suggests that direct exposure alone is a significant predictor of emotional distress (Barile et al., 2020). There is also evidence to support that the most directly exposed natural disaster survivors continue to experience emotional distress years after the disaster. According to Knez et al. (2021), even one year post-disaster, directly impacted survivors

continue to think and talk more about their natural disaster experience than less exposed survivors. More than two years post-disaster, residents of communities that are directly impacted continued to experience moderate levels of emotional distress, including intrusive thoughts and other symptoms of post-traumatic stress (Mayberry et al., 2020). Natural disaster survivors report continued post-traumatic stress as much as six years post-disaster (Johannesson et al., 2015).

In addition to post-traumatic stress, survivors who are most directly exposed to disaster report increased difficulties with anger and aggression and increased risk of suicidality (Cowlshaw et al., 2021; Fitzpatrick, 2020). People who directly experience natural disaster are more likely to experience financial hardship as a result of disaster, regardless of whether they experience property or job loss (Johar et al., 2022). Sima et al. (2017) found a significant link between vocational and avocational disruption and exposure to natural disaster regardless of whether or not survivors experienced any actual income loss or change to employment status.

Economic Resource Loss

Natural disaster survivors are often confronted with a variety of economic losses resulting in increased distress that can interfere with efforts to recover emotionally (Johar et al., 2022). Economic resource loss reliably predicts development of “psychological distress” (Freedy et al., 1992, p.451) among survivors and diagnosis of either PTSD or major depression (Freedy et al., 1992; Goldmann & Galea, 2014). Living in a community that sustains mass damage and destruction has been associated with higher levels of emotional distress among survivors (Norris et al., 2002). Takashi et al. (2021) found that adults who had experienced major property damage as a result of natural disaster showed

physiological signs of stress, whereas survivors who had sustained little to no property damage did not show the same physiological signs.

Though property destruction and economic losses may be endemic to the natural disaster experience, quick response by authorities to provide economic support to survivors can offset and even relieve symptoms of distress (Shultz et al., 2015).

Spirituality and dispositional optimism have been identified as factors that may reduce levels of emotional distress that occurs because of economic resource loss (Bakic & Ajdukovic, 2021; Fincham & May, 2021; Gero et al., 2021; Zhang et al., 2021).

Interpersonal Loss

Survivors of natural disaster may experience interpersonal losses such as death of a close friend or loved one, loss of relationships, loss of community, and disruption to social networks. Death of a loved one during a natural disaster is associated with increased risk of developing major depression and PTSD (Bromet et al., 2017; Carmassi et al., 2020; Norris et al., 2002). Johannesson et al. (2015) found that at one, three, and as many as six years after a natural disaster, survivors who had lost someone close to them during a disaster continued to experience significant levels of post-traumatic stress. The deleterious effects of losing a loved one is not limited to human deaths, either.

Abandoning a pet during evacuation is also associated with higher levels of traumatic stress after a natural disaster (Hunt et al., 2008).

Social isolation and low social support are factors associated with higher levels of emotional distress after natural disaster. According to Goldmann and Galea (2014), survivors who identify as socially isolated prior to a disaster are more likely than survivors who are socially connected to experience depression and post-traumatic stress

after a disaster. The presence of social support has also been identified as providing a buffering effect from the negative impact of property loss but not in the immediate aftermath of disaster (Cherry et al., 2021; Ibrahim & Hameed, 2006; Shigemoto & Kawachi, 2020; Tsuchiya et al., 2017). Lack of social support and cohesion is also associated with increased likelihood of experiencing economic distress and financial vulnerability post-disaster (Johar et al., 2022).

It is less clear whether a marital relationship provides protection from severe emotional distress or increases likelihood of experiencing severe emotional distress post-disaster. Benjet et al. (2016) found that being married is a significant protective factor for preventing exposure to traumatic events. Williamson et al. (2021) concluded that any benefits and protections for married couples exist only in the immediate aftermath of disaster when couples report growing initially closer together before returning to pre-disaster levels of closeness. Further, Hammett et al. (2022) found that experiencing a natural disaster had no impact on the frequency or intensity of aggressive and hostile conflict among married survivors, whereas Rao (2020) found that rates of intimate partner violence among natural disaster survivors varied according to socio economic circumstances.

Displacement

According to Bromet et al. (2017), displacement is a strong predictor of PTSD. Further, Goldman and Galea (2014) found that displacement post-disaster was associated with higher levels of severe emotional distress among survivors. In the immediate aftermath of disaster, evacuated and displaced survivors report higher levels of emotional distress than survivors who remain in the disaster zone (Norris et al., 2004;

Hansel et al., 2013). Even one year after a natural disaster, displaced survivors are more likely to report higher levels of post-traumatic stress and depression than survivors who were not evacuated (Sastry & VanLandingham, 2009). However, Najarian et al. (2017) found that 20 years after natural disaster, survivors who had been permanently relocated had the best overall recovery compared to people who had never been evacuated or had been temporarily evacuated. Wadsworth et al. (2009) identified four distinct trajectories for survivors displaced by natural disaster who were diagnosed with either PTSD or major depression, and they concluded that high levels of coping self-efficacy and adaptive coping were necessary for the best outcome post-disaster.

There is not consensus on whether social support buffers against severe emotional distress for displaced natural disaster survivors. Several studies assert that displaced survivors with lower levels of social cohesion and capital are more likely to experience elevated levels of emotional distress when faced with property destruction and other economic losses (Le et al., 2013; Mann et al., 2018; Tsuchiya et al., 2017;). However, McGuire et al. (2018) found that high social support was not sufficient for offsetting severe emotional distress among displaced natural disaster survivors.

Multiple Traumas

People who experience multiple stressors or traumas during a natural disaster are more likely to report significantly greater traumatic stress symptoms after a disaster than survivors who do not (Goldmann & Galea, 2014). Survivors who continue to experience stressors post-disaster are also more likely to be diagnosed with PTSD or major depression (Fernandez et al., 2020). Additionally, survivors with a trauma history are more likely to develop PTSD after a natural disaster than survivors with no previous

trauma exposure; the likelihood of being diagnosed with PTSD increases exponentially with the number of traumatic events an individual experiences (Bromet et al., 2017; Davis et al., 2012). Experiencing multiple traumas is also associated with increased likelihood of smoking relapse for natural disaster survivors (Alexander et al., 2019). Effective and timely post disaster response by authorities has been identified as a factor that protects survivors who have experienced multiple traumas from experiencing high levels of emotional distress following a natural disaster (Fist et al., 2022). Though Fitzpatrick (2020) found a link between increased risk for suicide among natural disaster survivors with a previous trauma history, Orui (2022) did not find such a link.

Vulnerable Populations and Natural Disaster

In vulnerable populations, personal characteristics are not what creates the risk for someone experiencing greater distress. Rather the risk is elevated by existing societal frameworks that are built on patriarchal and racist ideas that overtly and often covertly exclude and marginalize women, people of color, children, older adults, and people with disabilities, among others. At the intersection of particular identities, recovery from natural disaster is fraught as individuals attempt to navigate within systems and even response protocols that do not take into account life experiences beyond certain demographics (Benevolenza & De Rigne, 2019).

Gender. Women are more likely than men to experience severe emotional distress as a result of a natural disaster (Goldmann & Galea, 2014; Norris et al., 2002), and female intersections with other marginalized identities (such as those related to race, socioeconomic status, and age) increase their risk of experiencing severe emotional distress that impairs healthy functioning. Chen et al. (2020) found that women directly

exposed to natural disaster experience higher levels of subjective distress than similarly situated men. Post-trauma, women report experiencing higher levels of anger and aggressive anger than men, and they are more likely than men to experience a natural disaster event as more severe and longer lasting (Anderson & Manuel, 1994; Cowlshaw et al., 2021).

Factors that contribute to emotional distress for women who have experienced natural disaster include violence, displacement, pregnancy status, parental status, and caregiver responsibilities (Goldmann & Galea, 2014; Norris et al., 2002). Yoshihama et al. (2021) identified a number of social factors and processes that negatively impact women's mental health and wellbeing after a natural disaster, such as loss of employment (including in female-dominated employment sectors), evacuation with children, and increased dependent care responsibilities. Women who are displaced because of disaster have significantly higher levels of depression than women who are not displaced (Najarian et al., 2001). Female relief workers who have loved ones affected by natural disaster report higher levels of psychological distress than male relief workers who have the same experiences (Takeshika et al., 2020).

Women of childbearing age who survive natural disaster also face unique factors that negatively impact their mental health. According to Leyser-Whalen et al. (2011), women face significant difficulties accessing contraceptives and other sexual and reproductive health aids after a natural disaster, and women of color experience the greatest number of barriers to access. Women who experience high levels of distress after a natural disaster also report having less dietary diversity, which is associated with food insecurity and scarcity (Pomer et al., 2019). Mothers who experience elevated levels of

evacuation and post-disaster distress are more likely than not to experience symptoms of PTSD and difficulties managing their personal health (La Greca et al., 2022).

The emotional difficulties women face after natural disaster do not decrease with age. Older women in this situation are particularly vulnerable to experiencing PTSD, and issues they may encounter when forced to evacuate—such as loss of relationships, disruption to social connections, loss of independence, and forced abandonment of pets—can exacerbate mental health distress and impact daily living for many years (Hunt et al., 2008; Kim et al., 2021; Roberto et al., 2010).

Developmental Stages. Children and adolescents are more likely than adults to experience severe emotional distress as a result of natural disaster with signs and symptoms of distress continuing for months and even years after exposure (Norris et al., 2002). Prenatal maternal stress (PNMS) brought on by exposure in utero to natural disaster is associated with alterations in brain development, specifically hippocampal functioning, that persists into adulthood (Cao-Lei et al., 2021). Direct exposure to natural disaster before the age of 30 is associated with high levels of loneliness in advanced old age (Struckmeyer et al., 2021).

Experiencing one or more disasters by the age of five significantly raises odds of being diagnosed with anxiety disorder in adulthood (MacLean et al., 2016). Children and adolescent natural disaster survivors diagnosed with PTSD are also likely to experience long-term sleep difficulties (An et al., 2022; Lai et al., 2020). Silwal et al. (2022) found that young people living in communities severely impacted by disaster continued to experience depression and chronic PTSD as much as 31 months post-disaster, while, according to Adebak (2022), natural disaster survivors who are children and adolescents

at the time of disaster continue to contend with distressing and disturbing disaster memories even nine years after the occurrence.

Family dynamics and parental functioning are strongly associated with child and adolescent mental health functioning after a natural disaster. Children in families that experience food insecurity and economic distress before and/or after disaster are more likely to experience parental abuse and neglect in the wake of disaster (Seddighi et al., 2021). Children whose parents perceive inequities in natural disaster response have higher levels of depression than children from families that perceive natural disaster response and relief as equitable (Koyama et al., 2022). Steen et al. (2022) found that children in foster care whose foster families experienced a postponement or cancellation of court proceedings due to natural disaster were also more likely to experience higher levels of emotional distress than foster children similarly affected by natural disaster whose foster families faced no disruption to court procedures.

Family dynamics are also associated with protecting children and adolescents from experiencing severe emotional distress after natural disaster. Children whose mothers listened to their natural disaster narrative in an attentive and attuned manner were less likely to develop PTSD than children whose mothers would not listen or enter into conversation with their children about the disaster experience (Abel et al., 2021). Adolescents who experienced elevated levels of caregiver support after natural disaster were less likely than adolescents with low caregiver support to engage in binge drinking post-disaster (Hicks et al., 2020). Levels of resilience in children after natural disaster are directly correlated with the level of social support a mother receives during this time

(Arshad et al., 2020). Hausman et al. (2020) identified natural disaster as a neutral factor related to family functioning and child emotional distress post natural disaster.

For all of the reasons above, it is important for children to receive effective intervention as soon as possible after natural disaster. Screening for PTSD and depression at schools, as well as the provision of culturally informed interventions are effective in quickly detecting and treating signs and symptoms of emotional distress in children and adolescents (Galvan, 2021).

Advanced Age. Norris et al. (2002) identified advanced age as protective of psychological functioning post-disaster, while other researchers have identified advanced age as a significant risk factor for experiencing severe emotional distress after a natural disaster. Among those who experience property damage as a result of natural disaster, older adults are likely to experience higher levels of stress than younger adults (Kim et al., 2021; Takashi et al., 2021). Older adults are also more likely than younger adults to experience significant financial vulnerability in relation to natural disaster property destruction (Johar et al., 2022). When displaced due to disaster, older adults have greater difficulties than younger people with re-establishing social connections, community engagement, and hobbies (Mann et al., 2018). For older adults, establishment and/or resumption of informal social connections and community engagement is crucial for experiencing higher levels of wellbeing and lower levels of emotional distress after a natural disaster (Cherry et al., 2021; Hikichi et al., 2020).

Race and Ethnicity. Emotional and physical distress after natural disaster can be heightened by structural factors, such as racism and classism, that influence the formal and informal systems used by institutions and individuals to respond to survivors of

natural disaster (Elliott & Pais, 2006). Particular intersections of identity can serve to protect from experiencing higher levels of emotional distress, or intersectionality may greatly exacerbate emotional distress (Ali et al., 2017).

Difficulties accessing reproductive healthcare and contraception has been identified by women as a significant source of stress post-disaster (Leyser-Whalen et al., 2011), and in the United States, Black women experience significantly more barriers to accessing reproductive healthcare and contraception after natural disaster than White women (Leyser-Whalen et al., 2011). Black veterans are more likely than White veterans to experience PTSD after natural disaster (Davis et al., 2012). If they are undocumented, Latinx survivors of natural disaster are likely to experience significantly higher levels of traumatic stress post-disaster, more physical health concerns, and more barriers to accessing necessary care post-disaster than the general Latinx population. (Messias & Lacy, 2007).

Wadsworth et al. (2009) found that Black Americans who were displaced by natural disaster had significantly higher levels of emotional distress compared to Black American survivors who were not displaced, as well as White survivors, both displaced and not (Wadsworth, et al., 2009). However, one year post-disaster, rates of severe emotional distress for displaced and non-displaced Black American natural disaster survivors remained elevated in comparison to rates for displaced and non-displaced White American survivors (Sastry, & VanLandingham, 2009). Black Americans typically experience more physical health problems and greater property damage after natural disaster, which results in higher reported levels of depression than other racial and ethnic groups (Davidson et al., 2013; Fussell et al., 2010; Toldson et al., 2011). Black

Americans are also more likely than White Americans to reside in areas that are prone to natural disaster and to experience delays in receiving relief funds, which leads to delays in property repairs and returning home after displacement (Fox Gotham et al., 2017).

Spirituality and religious faith are associated with higher levels of reported resilience and lower levels of emotional distress post-disaster for Black Americans (Wadsworth et al., 2009).

Latinx natural disaster survivors experience higher levels of emotional distress, including PTSD and depression post disaster than White Americans (North et al., 2012). However, when compared with Black survivors, the results are mixed. Perilla et al. (2002) found that Latinx survivors experienced significantly greater post-traumatic stress than similarly situated Black survivors, whereas Davidson et al. (2013) found the opposite. In the aftermath of natural disaster, Latinx survivors typically experience health difficulties, sleep disturbances, hunger, food insecurity, and difficulties accessing physical and mental healthcare and relief services (Messias & Lacy, 2007). Friends and family have been identified as a valuable resource and source of support for Latinx individuals in terms of preparation for disaster as well as in helping survivors to recover post-disaster (Peguero, 2006; Rivera, 2012). Latinx adults diagnosed with PTSD after natural disaster experience significantly higher levels of post-traumatic growth compared to other racial and ethnic groups (Schneider et al., 2019).

According to Kulkarni and Pole (2008), Asian American disaster survivors are twice as likely as White American disaster survivors to experience PTSD. Asian Americans experience greater difficulties in securing employment after disaster than White Americans (Huang et al., 2020).

Immigration Status. Natural disaster can lead to increased emotional distress and physical health problems for immigrants; in particular, low acculturation is associated with increased anxiety and panic attacks among immigrants (Adams & Boscarino, 2013). Newer immigrants who are less acculturated to their country of residence are also more likely than more acculturated immigrants to experience new physical health issues after a natural disaster (Vu & VanLandingham, 2012).

Disabilities. People with cognitive and physical disabilities are more likely to live in areas prone to severe destruction due to natural disaster than areas that are more protected from severe destruction (Chakraborty et al., 2019). After disaster, people with disabilities need personalized assistance that is responsive to their needs (Chakraborty et al., 2019; Reinhardt et al., 2021). For example, after a natural disaster, survivors with intellectual disabilities are more likely to experience greater tangible loss and higher levels of post traumatic distress, and to need recovery assistance for longer periods of time (Stough, 2015). Survivors with visual impairments have greater difficulty than sighted survivors with mobility, place orientation, coping, and independence post-disaster (Good et al., 2016). In a follow-up survey conducted one year post-natural disaster, Zhou et al. (2015) found that close to 30% of respondents who identified experiencing PTSD symptoms also identified as having a physical disability. The provision of aid to survivors with disabilities is particularly important for preventing or at least lessening signs and symptoms of severe emotional distress (Finkelstein & Finkelstein, 2020). However, people with disabilities have higher levels of distrust in the ability of community, state, and national authorities to respond effectively to their needs (Finkelstein & Finkelstein, 2020). This is perhaps warranted: researchers such as Christensen et al. (2013) have

found gaps in the metrics that municipalities and other authorities use to determine when populations should evacuate because of pending disaster; more often than not, they do not take into account the complex cost-benefit analysis that people with disabilities and their caregivers use when making decisions about safety and welfare.

Socioeconomic Status. Though natural disasters strike large geographic areas and confer damage and destruction equally, people with fewer economic resources and those living at or below the poverty level are disproportionately likely to live in areas prone to natural disaster, to experience injury or death due to natural disaster, and to report higher levels of emotional distress and diagnosis of PTSD (Bromet et al., 2017; Brown et al., 2013; Goldman & Galea, 2014; Norris et al., 2002; Xiong et al., 2016; Yari et al., 2021). People with fewer economic resources report higher levels of awareness and greater concern regarding natural disaster impacts than people with more economic resources (Benevolenza & DeRigne, 2019). However, since there is a financial investment associated with most recommended disaster planning strategies—such as having an emergency survival kit, reliable transportation to evacuate, and means to access shelter and food despite disruptions in employment—this creates significant barriers to preparing for disaster for people who have low or inconsistent streams of income (Benevolenza & DeRigne, 2019; Morganstein & Ursano, 2020). Lack of income and lack of insurance represent significant barriers to accessing medical and mental health care for survivors after natural disaster (Wang, et al., 2008). Experiencing food insecurity and loss of employment after disaster is also associated with higher levels of diagnosed PTSD among natural disaster survivors (Hossain et al., 2021). Lack of response and inadequate relief

efforts may exacerbate emotional health distress for survivors of natural disaster with limited economic means (Sastry & VanLandingham, 2009).

Rural Populations. People living in geographically remote locations face unique challenges that can increase likelihood of experiencing higher levels of emotional distress and impede recovery from disaster. According to Usher et al. (2021), when natural disasters strike in mostly rural areas, which are more vulnerable to certain types of natural disaster, such as flood, drought, and wildfires, survivors contend not only with loss of personal property and housing destruction, but loss of livelihood when farms and ranches are destroyed and livestock is lost. Rural residents may be physically cut off from access to relief services, including mental health care, and that can exacerbate symptoms of severe emotional distress (Usher et al., 2021). Though people living in remote areas may be less likely to experience physical injury and disability related to a natural disaster (Leonardi et al., 2016), rural survivors are twice as likely as urban survivors to develop PTSD (Xiong et al., 2016). Extended disruption to and loss of essential services is associated with higher levels of depression and PTSD for natural disaster survivors living in rural areas (Gros et al., 2012). According to Shtob (2019), people living in rural and geographically isolated areas report feelings of anxiety and worry when contemplating the possibility of losing access to essential services and lower levels of trust in capacity of authorities to respond quickly and effectively to their needs (Shtob, 2019).

College and University Students Affected by Natural Disaster

Being a student is associated with increased likelihood of exposure to many types of traumatic events (Benjet et al., 2016). After a traumatic event such as natural disaster undergraduate and graduate college and university students may experience a variety of

emotional, cognitive, and physical symptoms of distress that can negatively impact their personal relationships, mental health, and academic success, such as heightened levels of anxiety, irritability, anger, sadness, and fear; trouble sleeping; lack of energy or mental focus; stomach aches; headaches; hyperactivity; numbness; confusion; isolation; and increased substance use (Substance Abuse and Mental Health Services Administration, 2013). For most college and university students, these symptoms of distress lessen over time and resolve (McCarthy & Butler, 2003). However, because of a variety of natural disaster and personal factors, some students may experience severe emotional distress in the form of PTSD, major depression, and anxiety disorders (Nolen-Hoeksema & Morrow, 1991).

Those who are directly exposed to disaster and experience personal loss and property destruction are at higher risk for experiencing PTSD than those who were not directly exposed to disaster and did not experience property loss (Pickens et al., 1995). Like members of the general population, college and university students who are displaced due to natural disaster experience more worry, more isolation, more symptoms of depression and financial strain than those who are not displaced (Coco, 2017; Davis et al., 2010). After a traumatic event, college and university students with previous trauma history and/or who have experienced racial discrimination while enrolled at college or university are also more vulnerable to experiencing mental health distress (Arbona et al., 2022; Boyce, 2021; Kumar & Cavallaro, 2018; Troung & Museus, 2021).

After a natural disaster, college and university students may be reluctant to seek support for how to deal with emotional distress (Shi & Hall, 2022). Among those who do, most seek help from family, friends, and mental health professionals (Shi & Hall, 2022).

Higher levels of social support, as well as material and emotional response, are factors associated with alleviating emotional distress for college and university students who have experienced natural disaster (Pickens et al., 1995; Yuan et al., 2021). College and university students with knowledge of natural disaster response strategies and who trust their institutions' capacity to respond to their needs have lower levels of anxiety regarding potential disaster than students who do not have the same level of knowledge or institutional trust (Lee & Lee, 2018; Tkachuk et al., 2018). Effective crisis management and disaster response by the college or university where they are enrolled is also associated with fewer reports of institutional betrayal among students (Adams-Clarke & Freyd, 2021).

College and university students may experience significant difficulties with academics after any trauma. Wilkinson et al. (2013) found that students who experienced a natural disaster close to a critical point in the semester reported higher levels of academic impairment than students who experienced a natural disaster at a less critical time in the semester. After natural disaster, the majority of college and university students experience short-term disruptions to cognitive functioning and sleep disturbances, lack of motivation to do work, lack of ability to focus and finish work; having assignments due in the immediate aftermath of natural disaster did not help them to feel more connected to their institution, and they had difficulties with their institutions' decisions to close and reopen (Collings et al., 2018; Rosenthal et al., 2014; Silva-Suarez et al., 2020). When instruction is moved online because of a large-scale traumatic event, college and university students report difficulty accessing course content because of unreliable equipment and Internet service, lack of clarity on assignments, and lack of

availability of instructors (Aaranyi, et al., 2022). Appropriate institutional response to students' needs after natural disaster is associated with minimizing delays in program completion and disruptions to student research projects DiPietro, 2018; (Johnston et al., 2016).

Related Professions

Because the literature on how counseling students are impacted by natural disaster is limited, this section includes the body of research associated with impacts of trauma, traumatic events, and natural disaster on people in related professions (elementary and secondary school educators, healthcare workers, first responders, professionals in similar helping disciplines, and counselors) and students enrolled in programs to become helping professionals in other fields. A discussion of the literature related to counseling students and trauma is also included.

K–12 Educators. In elementary and secondary schools, teachers and administrators provide support to their students and their students' families during and after natural disaster. Some function as first responders by providing for the welfare of their students when a natural disaster strikes during the school day and employ emotional regulation skills to suppress their own fear and anxiety (O'Toole, 2017). Often, teachers play a vital role in the natural disaster response and recovery process and provide significant emotional labor to students and students' families by serving as informal counselors (Edmeade & Buzinde, 2022; O'Toole, 2017). Disruptions to the school calendar and classroom routine, alongside having to attend to personal recovery after loss and destruction of property, are significant sources of distress that impair teachers' personal and professional functioning after natural disaster (Cannon et al., 2020). School

principals also take on a number of different roles after a natural disaster, which they identify as stressful, isolating, and pressure-filled, such as managing logistical decisions, assessing family needs, advocating for students and families in the community recovery effort, and serving as the primary source of communication about relief and recovery efforts for teachers, students, and students' families (Potter et al., 2021).

Healthcare Service Providers. Those working in the healthcare fields may experience feelings of uncertainty, hopelessness, helplessness, and practice challenges after natural disaster and benefit from the provision of emotional and psychological support, positive communication, and professional autonomy (Broussard, L. et al., 2008, Xue et al., 2020). When they have completed disaster and response training, they are more confident in their ability to function professionally under these circumstances (Sahebzadeh et al., 2020). Emotional intelligence, adaptability, and ability to manage scant resources are factors associated with resilience for healthcare providers responding to disaster (Xue et al., 2020).

Relief Workers and First Responders. Emergency personnel serving on the front lines of disaster response and recovery typically have lower overall rates of psychological impairment after disaster than other disaster survivors, they also report elevated levels of post-traumatic stress symptoms in the immediate aftermath of disaster (Norris et al., 2002; Takeshita et al., 2020). In particular, relief workers with less authority, those responsible for body recovery, and those whose families were directly impacted by natural disaster experience higher levels of post-traumatic stress than other relief workers (Takeshita et al., 2020). Relief and recovery workers, including first responders, who do not have adequate resources to carry out their duties and who directly

observe inequities and imbalances in the allocation of resources to natural disaster victims, experience significantly higher levels of fatigue and burnout than other recovery and relief workers (Weber & Messias, 2012). For first responders, pre-existing trauma history is associated with increased risk of developing major depression in the immediate aftermath of disaster and long term (Pennington et al., 2018).

Mental health service providers. After natural disaster, mental health service providers may experience symptoms of post-traumatic stress, such as intrusive thoughts, avoidance, and fatigue (Tominaga et al., 2020). These symptoms may manifest in professional practice through avoidance of processing a client's natural disaster narrative because of the similarity to the provider's experience and an inability to maintain appropriate professional boundaries with clients (Boulanger, 2013). Compared with their more experienced peers, newer and less experienced mental health service providers report that after a natural disaster, they have significantly higher levels of emotional distress, such and vicarious trauma, and lower levels of knowledge of effective coping strategies (Culver et al., 2011; Powell et al., 2019).

Strong personal wellness is considered a protective factor for reducing burnout symptoms such as compassion fatigue and vicarious trauma in mental health services providers (Puig et al., 2012). According to Hou and Skovholt (2020), mental health service providers who have strong interpersonal relationships, possess a strong set of personal and professional values, regularly attend to their own mental health, and desire opportunities to learn and grow are more resilient in overcoming emotional distress associated with mental healthcare work. Mental health service professionals skilled in using reflective practices as a strategy for personal and professional self-care report

improved mental health and better career satisfaction than professionals who do not utilize the same strategies (Curry & Epley, 2022). For example, those with a pre-existing trauma history are especially vulnerable to experiencing vicarious trauma and compassion fatigue while working with clients (Jordan, 2010). However, those with previous trauma history who practice mindfulness are able to deal effectively with these signs of physical, emotional, and spiritual depletion associated with their profession (Thieleman & Cacciatore, 2014). Mental health professionals play a significant role in responding to the needs of people who have been impacted by natural disaster (Nuttman-Shwartz, 2016). As Jacobs (2011) wrote, “Disasters affect individuals, families, communities, workplaces, and disaster responders. Thus, they require a multisystem analysis and response, which counseling psychologists can provide through their scientist-practitioner, strength-based approaches, supported by social justice values based in multicultural and vocational counseling” (Jacobs et al., 2011, p. 1070).

Counselors. Counselors and counselor educators are trained in systems theory, social justice perspectives, and vocational counseling in order to operate as multiculturally competent scientist-practitioners (Council for the Accreditation of Counseling and Related Educational Programs, 2016). Counselors are trained to approach all roles holistically, which is particularly important when working with clients who have experienced traumas such as natural disasters (American Counseling Association, 2014). Counselor educators apply this holistic perspective to teaching and training new professionals, which means they are also deeply conscious of the fact that they may be training individuals who themselves have navigated traumas such as experiencing a

natural disaster, to also provide trauma-informed, ethical, care to trauma survivors (Council for the Accreditation of Counseling and Related Educational Programs, 2016).

Professional counselors who respond to natural disaster navigate a number of professional identity and professional role issues that can be emotionally and cognitively challenging; these include visibility and invisibility, observing and doing, feelings of being an insider and outsider, and leave taking or staying (Reybold et al., 2015).

Counselors who live and work in communities impacted by natural disaster may serve in a first-responder capacity while also navigating their own recovery from disaster, which may result in signs and symptoms of shared trauma with clients and therefore may impede the counselor's ability to provide competent and ethical care (Bell & Robinson, 2013). Greater personal strain and lack of resources is a significant sources of occupation stress associated with burnout for counselors (Coaston & Cook, 2017; Lawson et al., 2020; Sowa & May, 1994). Post-graduate, pre-license counselors who experience professional difficulties and disruptions report higher levels of affective stress associated with burnout than counselors who do not have similar difficulties (Frye et al., 2021).

For school counselors, heavy caseloads, having to take on additional duties not related to counseling, lack of supervision, and operational difficulties at schools, which are all circumstances that school counselors may encounter after natural disaster, are associated with higher levels of burnout (Nayoung & Lambie, 2018). Litam et al. (2021) found that counselors with higher levels of resilience experience significantly lower levels of compassion fatigue and burnout when responding to disaster. Other personal qualities and factors associated with protecting professional counselors from higher levels of compassion fatigue, vicarious trauma, and burnout are emotional intelligence, altruism,

and post traumatic growth (Coleman et al., 2021; Gutierrez et al., 2019; Limberg et al., 2016). In addition, supervision that emphasizes counselor wellness is recommended as a tangible strategy for offsetting and even preventing vicarious trauma, compassion fatigue, and burnout (Blount et al., 2016; Hayden et al., 2015). Though regular monthly supervision is effective for preventing symptoms of compassion fatigue and burnout in school counselors, regular supervision may exacerbate reported feelings of vicarious trauma among mental health counselors in situations where the supervisee perceives that the supervisor was not equipped to offer the appropriate supervisory support (Frye et al., 2022; Rizkalla et al., 2021).

Students in Helping Profession Programs

Students enrolled in academic programs to prepare for careers in helping professions navigate a number of challenges after natural disaster (Prost et al., 2018). Because of the focus of their training in mental health, allied health, or medicine, students in those programs are typically involved in disaster response and recovery operations for impacted communities. Students report using a variety of active and health coping skills to process the emotional distress of relief work and typically identify the opportunity to volunteer and participate in relief efforts as more meaningful and valuable than other types of practical and academic opportunities (Prost et al., 2018; Sickora et al., 2020). However, students also experience elevated levels of emotional distress, which may impact their overall mental and cognitive health. Lemieux et al. (2010, 2020) found that social work students who had been directly impacted by natural disaster experienced significantly higher levels of post-traumatic stress, depression, and substance abuse than the general population of natural disaster survivors. Even one year after experiencing a

large-scale traumatic event, the majority of social work students continued to report significant mental health concerns (Bloomberg et al., 2022).

Students also report a variety of logistical program concerns, which are a significant source of stress for students who are in the midst of required field placements when disaster strikes. Among the logistical difficulties students report are difficulty accessing faculty and academic program information because of disruptions to internet and phone services, damage to infrastructure and transportation options which may leave them physically stranded or unable to access their program or field placement site, disruptions to services which may result in temporary or even permanent closure of a field placement site, forced terminations with clients and patients, significantly increased workloads, and having to rely more heavily on supervisors at their field placement because they are unable to access their program supervisor (Henneman et al., 2020; Mathieu et al., 2007; Myhre et al., 2017; Szczygiel & Emery-Fertitta, 2021).

Professional identity development may also be derailed or delayed by the experience of a natural or other form of disaster. According to Tosone et al. (2008), social work students who experienced disaster while enrolled in studies worried that their professional trajectories may have been permanently altered. Other professional identity development issues identified by students who have experienced disaster include concerns about professional competency and ability to meet the needs of other disaster survivors while they are struggling with personal issues, difficulty with carving out and maintaining personal and professional boundaries, feelings of isolation, and a heightened sense of burnout (Baum, 2004; Matthieu et al., 2007; Szczygiel & Emery-Fertitta, 2021).

Developmentally appropriate supervision, addition of trauma-informed and prevention

information in orientation, and additional academic program support have been identified as interventions that may offset professional identity issues and decrease emotional distress for students in helping disciplines (Lu et al., 2017; Richardson et al., 2015; Zosky, 2013).

Counseling Students. Though counseling students consistently report higher levels of overall wellness and ability to utilize wellness strategies than the general population, they identify graduate study as a time of acute emotional exhaustion and stress (Foster, 2010; Ohrt et al., 2015; Roach & Young, 2007). Following traumatic events, Counseling students report facing a number of emotional and cognitive challenges such as loneliness, isolation, loss of social support, feeling less connected to their program faculty and fellow students, difficulties with personal relationships, lack of focus, and lack of motivation for their studies (Suarez et al., 2022). High program and professional demands and lack of resources are factors associated with burnout for counselors in training (Um & Bardhoshi, 2022). Lee et al. (2018) found that risk for experiencing burnout while in training does not necessarily diminish as students progress through their programs either. Counseling students use a variety of experiential pathways to develop an understanding of and to cope with trauma (Dayal et al., 2021). For example, students who use mindfulness strategies, emotional regulation strategies, and social support to cope during graduate school experience higher levels of wellbeing than students who do not (Newton et al., 2020, Testa & Sangganjanavanich, 2016). Miller et al. (2011) found that counseling students who completed Dialectical Behavioral Therapy (DBT) as part of supervision while treating clients with complex presentation and trauma history had lower levels of physiological stress over the long term than students who did

not participate in DBT. However, other researchers found no such association between required therapy or wellness education during supervision and reduced levels of emotional distress and burnout in counseling students (Roach & Young, 2007; Ohrt et al., 2015).

As stated earlier natural disaster survivors who experience adequate response are more likely to be able to bounce back emotionally after disaster (Freedy et al. 1992). This is also true for college and university students who receive adequate levels of support from the schools where they are enrolled (Adams-Clarke & Freyd, 2021). This next section will focus on overall university response and academic program response.

How Institutions of Higher Education Respond to Natural Disaster

Colleges and universities may be severely impacted by natural disaster, compromising organizational capacity to protect the safety and welfare of students and employees and carry out the central educational mission. Such Institutions of Higher Education (IHEs) are expected to anticipate and respond quickly to the needs of students and employees before, during, and after disaster regardless of levels of damage, disruption, and destruction to infrastructure and operating systems, which requires large-scale organizational change (Planning and Management, 2017; Reddam & Azevedo, 2019). In addition to minimizing disruption to students' learning experiences, IHEs are also responsible for providing the following services to students post-disaster: campus safety; victim, survivor, and family relations; organizing memorial services; organizing counseling services; coordinating provision of medical care, shelter, and dining facilities; and attending to any and all logistical operations to keep the institution functioning (Leonard, 2005; Treadwell, 2016). For individual departments, this means simultaneously

attending to the recovery and sustainability of departmental and institutional operations (Prestamo, 2018). Responding quickly and effectively presents challenges that include difficulties with providing suitable space for learning, providing suitable and functional learning equipment, and reliable communication and Internet services (Piotrowski & King, 2020). This can be particularly challenging for IHEs because natural disasters often exacerbate pre-existing societal and organizational imbalances and vulnerabilities (Arriaza Westendorff et al., 2021). Faculty and staff members who are tasked with carrying out instruction and service in a disaster and crisis context benefit from institutional resources and support such as scheduling flexibility, access to technology, autonomy in choosing how to adapt services and instruction, and regular communication from campus leaders (Sparksman-Key et al., 2021).

Response Frameworks

IHEs can use any number of frameworks to develop a comprehensive disaster response plan. One example is a four-phase mitigation strategy detailed in the Federal Emergency Management Administration's Disaster Planning Manual for Colleges and Universities for involving all stakeholders and organizing resources, identifying potential hazards and conducting institutional risk assessment to identified hazards, developing a mitigation plan, and adopting and communicating the plan in detail to the college and university community in advance of any threat of disaster (Federal Emergency Management, 2003). According to Fifol et al. (2016), IHEs should conduct a Hazard Vulnerability Analysis to assess readiness and sustainability of institutional transportation, fire response, and police services. Each disaster has unique features that challenge institutional planning and response and, therefore, necessitate involvement of

all stakeholders and constituents in the response process (Sanders et al., 2021). IHEs implement strategies that actively involve all community members and take into account material as well as psychological needs. IHEs that are able to use resources effectively, engage intentionally in regular communication and processing of information with the campus community, and extend emotional and relational resources to employees are more resilient in responding to disaster than IHEs that do not (Fernandez et al., 2022; Foster & Smith, 2015). Faculty members, who are key to response and recovery, have varying levels of pre-existing knowledge about crisis and disaster response; the faculty in STEM disciplines, such as geology and engineering, generally possess the highest level of baseline knowledge about natural disaster response and recovery (Al-Amad & Alkawadeh, 2021; Gerdan, 2014). Wright and Wordsworth (2013) recommend IHEs fold student and instructor needs into crisis/disaster planning with a focus on preparing for immediate disruption, programmatic change, pedagogical change, regular communication, and response to psychological needs.

Academic Programs' Support of Students Affected by Natural Disaster

This section considers how counseling programs support students impacted by trauma and traumatic events. Relevant literature on how academic programs with mission similar to counseling support students who have been impacted by traumatic events is also reviewed.

Counseling Programs

Graduate programs in counseling are responsible for training students in the theories and practices of the counseling discipline to prepare them for careers as mental health professionals who provide competent and ethical care to people struggling with

mental health issues, including issues that result from direct exposure to trauma and traumatic events (Council for the Accreditation of Counseling and Related Educational Programs, 2016). The American Counseling Association (ACA) Code of Ethics and the standards adopted by the Council for the Accreditation of Counseling and Related Educational Programs (CACREP) provide direct and detailed instruction for academic programs to implement in order to teach students the theories and technical skills of the field including how to treat clients who are navigating the impact of a traumatic life events (American Counseling Association, 2014; Chatters & Peihuan, 2020; Council for the Accreditation of Counseling and Related Educational Programs, 2016). Counselor education programs have an affirmative duty to offer instruction to students on trauma and vicarious trauma and to teach students and supervisors how to detect for signs of vicarious trauma and to implement strategies to offset symptoms of fatigue and burnout (Sommers, 2008). Higher levels of competency and self-efficacy are associated with lower levels of impairment and vicarious traumatization for counselors in training and one way to increase knowledge and self-efficacy for students is through curriculum infusion (VanAusdale & Swank, 2020).

Approximately 62% of CACREP accredited counseling graduate programs currently offer a course focused on crisis and emergency response, 41% offer a course focused on trauma, 21% offer a grief counseling course, and 5.1% offer some sort of neurocounseling class (Montague et al., 2020). Counseling students report facing multiple significant stressors during graduate school because of curricular and practice demands, life experiences and circumstances, and financial pressures. Unforeseen occurrences such as natural disasters may increase stress levels (Foster, 2010). For these

reasons, counselor education programs also infuse wellness education and knowledge about counselor development into curriculum, supervision, and other program experiences. Merriam (2015) found that students with clinical supervisors who used a developmental and trauma-informed approach to supervision experienced lower levels of compassion fatigue than students whose supervisors did not use those strategies, which emphasized the purpose and activities of supervision. Education about wellness strategies, such as the Wellness Cube model, and education about vicarious resilience are associated with lower levels of vicarious traumatization for counselors in training (Foster, 2010; Ngadjui, 2021).

Other Programs

Academic programs with missions similar to those of counseling programs, such as social work programs, provide similar supportive measures for their students as they are navigating their educational experience post-disaster. Students who graduate from social work programs that integrate evidence-based practices for mediating stress (Gilin & Kauffman, 2015), such as journaling and mindfulness techniques, are better equipped to incorporate self-care practices as professionals (Shannon et al., 2014). Students who graduate from journalism programs that incorporate information on trauma journalism into the curriculum report lower levels of on-the-job trauma and burnout than graduates of programs that do not cover the topics (Steyn et al., 2020). In the midst of and in the immediate aftermath of disaster, students enrolled in social work programs that incorporate trauma-informed methods into post-disaster curricular changes and transitions to online learning report feeling a greater sense of safety and connection to their programs as well as a feeling of empowerment. Students also report perceiving their

academic program as more inclusive and culturally responsive (Barros-Lane et al., 2021; Sherwood et al., 2021).

Conclusion

Natural disasters are dynamic events that can cause disruption and destruction to individuals and communities. The mental health field can draw on a rich body of literature to better understand the mental health impacts of natural disaster on people. Counselor educators and academic leadership within the counseling profession recognize that disasters are likely to have a profound impact on the functioning of students in their communities. The purpose of this study was to examine the lived experience of counseling students who have survived natural disasters and to gauge their perception of support by their graduate programs. This study aimed to contribute to the literature and to inform counseling program leaders on how to support the needs of students impacted by natural disasters.

Chapter 3: Method

To examine the lived experiences of students who have survived natural disasters while pursuing master's degrees in counseling, and to gauge their perception of support by their graduate programs, a qualitative study using a phenomenological approach to analyze data collected from semi-structured interviews was used. These were determined to be appropriate methods because the goal of qualitative research—to examine rich descriptions of lived experiences and thereby construct meaning and build understanding to inform future research and application (Whitley & Kite, 2013)—is consistent with the goal of understanding the emotional aspects of navigating a natural disaster experience. The method and steps undertaken in this research are detailed below.

Purpose of the Study

Natural disasters such as hurricanes, tropical storms, winter storms, droughts, earthquakes and floods occur throughout the year, across the globe and result in mass destruction and disruption to the health, safety, and wellbeing of the people impacted (United States Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, n.d.; United States Department of Homeland Security, n.d.). Immediately following a natural disaster people may experience heightened feelings of fear, sadness, and anger (Bond et al., 2021; Carmassi et al., 2020; Makwana, 2019; Massazza et al., 2021; Substance Abuse and Mental Health Services Administration, 2022). They may have difficulties concentrating, sleeping, eating, and may experience unexplained headaches (Bond et al., 2021; Carmassi et al., 2020; Makwana, 2019; Massazza et al., 2021; Substance Abuse and Mental Health Services Administration, 2022). For some those feelings and experiences will lessen and subside

in the weeks and months following disaster and for others these feelings and experiences will worsen, leading to long term difficulties recovering and resuming every day activities (Bond et al., 2021; Carmassi et al., 2020; Makwana, 2019; Massazza et al., 2021; Substance Abuse and Mental Health Services Administration, 2022).

College and university students, like other adult natural disaster survivors may experience short term difficulties managing their emotions and their health (Substance Abuse and Mental Health Services Administration, 2013). For most students these difficulties will subside, but for others difficulties will intensify, resulting in diagnosis of post-traumatic stress disorder, major depression, anxiety disorder, or substance abuse disorder (Nolen-Hoeksema & Morrow, 1991).

People enrolled in pre-service academic programs for careers in helping professions navigate a number of emotional and academic challenges following a natural disaster. In the wake of disaster students report difficulties accessing faculty and academic program information, difficulties with internet access, and worries that they will not be able to successfully complete field experiences because of agency closures (Henneman et al., 2020; Matthieu et al., 2007; Myhre et al., 2017; Szczygiel & Emery-Fertitta, 2021). In addition, students who volunteer to provide mental health services to natural disaster survivors report experiencing high levels of emotional distress, physical health difficulties, and difficulties focusing and concentrating (Bloomberg et al., 2022; Lemieux et al., 2010, 2020).

Though these insights about students in related fields may be informative for counselor educators, further and more targeted study is needed, as little to no research has yet been conducted with graduate students of counseling who have lived through a

natural disaster. By examining the lived experiences of a sample from this population and gauging their perception of support by their graduate programs, this study aimed to contribute to the literature and to inform counseling program leaders on how to support and address the needs of students impacted by natural disaster.

Research Questions

This study sought to contribute to the literature by examining two central research questions using a qualitative phenomenological approach for the purpose of creating a base of knowledge that counselor educators can draw from to inform future research and application. The full interview protocol is included as Appendix A.

Research Question One. What is the lived experience of master's level counseling students who experienced a natural disaster while enrolled in their training program?

Research Question Two. What were master's level counseling students' perceptions of support (or lack of support) from their program during and after their personal experience with a natural disaster while enrolled in their program?

Method

Qualitative Inquiry

Qualitative methods are well suited for social science research because “the power of qualitative research is that meaning and theories are derived from the individuals who lived the experiences” (Prosek and Gibson, 2021, p. 167). Qualitative approaches are viable and culturally relevant strategies for social science research in circumstances where the research that informs existing theory and understanding has been conducted predominantly with a majority group. The inductive approach inherent in

qualitative methods may better illuminate the lived experiences of individuals who have previously been excluded or for whom their intersectional identities or complex stories cannot be fully illuminated through a traditional deductive approach (Merriam & Tisdell, 2016). To yield results that accurately reflect and give voice to lived experiences, qualitative researchers attend to the theoretical framework informing the method to be used, the biases of the assembled research team, and the accuracy of information gathered as determined by the researcher in collaboration with participants (Merriam & Tisdell, 2016).

In the field of disaster research, qualitative methods have been employed since the 1920s (Phillips, 2014). One reason for this is that these methods are most suitable; it would be unethical and impossible to replicate a disaster in a lab situation (Phillips, 2014). As such, much of what natural and social scientists have come to know and understand about human-made and natural disasters has been gleaned from case studies of individual disasters (Phillips, 2014). Qualitative methods are also considered viable for disaster research because such methods minimize harm; through the employment of data collection methods such as a semi-structured interview, the interviewer takes the stance of an empathic, non-judgmental presence (Hoffding & Martiny, 2015), and the participant “may experience benefits from talking about their experience, seeing contributions they have made, and helping to produce scientific knowledge of value to the broader society” (Phillips, 2014, p. 539).

Many similarities exist between the ethos of qualitative inquiry and the ethics and values of the counseling profession (Prosek & Gibson, 2021). Qualitative inquiry invites the researcher to use a flexible and cooperative approach that honors the agency and

autonomy of research participants who are the expert of their experience (Prosek & Gibson, 2021). The researcher and participant actively engage as partners and co-creators in a manner that is respectful of subjective experience (Prosek & Gibson, 2021).

Phenomenology

Since the focus of this study was on a specific lived experiences that had not previously been the focus of research, I used a phenomenological approach. When using the phenomenological approach, the researcher seeks to “get at the essence of basic underlying structure of the meaning of an experience” (Merriam & Tisdall, 2016, p. 26). Phenomenological approaches are used when the goal of the research is to describe the essence of meaning of an experience as opposed to how individuals make sense of their experiences (Prosek & Gibson, 2021). The philosophy of phenomenology emphasizes how the act of experiencing something is transformed into consciousness (Merriam & Tisdell, 2016). Growing out of the existentialist tradition, “phenomenological philosophy was intended to be a science of consciousness” (Osbourne, 1994, p.169). Phenomenological researchers seek to explore the “primal, pre-reflective, pre-predictive meaning of an experience” (from VanManen, p. 776, 2017, in Prosek & Gibson, 2021). Before collecting data, researchers first explore their own experiences, ideas, assumptions, and prejudices regarding the phenomena and then seek to bracket these factors to minimize the potential for the factors to influence any inferences the researchers may make (Merriam & Tisdell, 2016).

Though bracketing is a practice employed when conducting any type of qualitative research, the act of bracketing has special significance when undertaking a phenomenological study (Merriam & Tisdell, 2016). For a phenomenological researcher,

the act of bracketing or setting aside any preconceived ideas and knowledge about a phenomenon is referred to as *epoche* (Merriam and Tisdell, 2016, p. 27). Researchers engage in *epoche* in two phases (Wertz, 2005): at the beginning and prior to data collection when researchers set aside their own lived experiences to assume an empathic stance and enter into the lived experiences of the participant, and when beginning the work of analyzing data for meaning and themes (Wertz, 2015). The practice of bracketing also contributes to trustworthiness (Whitley & Kite, 2013). Trustworthiness is the term used in qualitative research in place of validity and reliability and is achieved through processes such as triangulation and bracketing (Merriam & Tisdell, 2016).

The semi-structured interview is a preferred method of data collection when using the phenomenological approach because of the ability of the researcher to phrase questions in a manner that invites participants to share their *what* and *how* without filtering their expression through writing or ideas about what the researcher may be expecting to hear (Hoffding & Martiny, 2015).

This section has provided a brief history and rationale for the choice of a qualitative study using phenomenology as the chosen method. The rest of this chapter will focus on the detailed steps of how this methodology was employed to address the research questions that are the focus of the study.

Research Design

Sample Size and Type

After obtaining Institutional Review Board approval for this study (Appendix B), purposeful or non-probability sampling was used to recruit research participants. Merriam and Tisdell (2016) identify nonprobability sampling as the most appropriate

method for recruiting a sample of participants for a qualitative research study because the goal is not to measure frequency but rather to understand, “what occurs, the implications of what occurs and relationships linking occurrences” (Honigmann, 182, p. 84 in Merriam & Tisdell, 2016, p. 96). To do this the researcher must identify participants who have in-depth knowledge of a set of phenomena through their lived experiences (Merriam & Tisdell, 2016). Purposeful or purposive sampling is an example of a nonprobability sampling method that is regularly utilized for recruiting research participants for qualitative research studies (Merriam & Tisdell, 2016).

For this study the purposeful sample identified was adults enrolled in a master’s counseling programs who experienced a natural disaster while enrolled in graduate study. I recruited individuals enrolled in programs accredited by The Council for Accreditation of Counseling and Related Educational Programs. To do this I utilized the list of CACREP-accredited programs publicly available on the Council’s website and cross-referenced it with the Federal Emergency Management Administrations list of declared natural disasters for the years 2017 to 2022. I sent an email letter of introduction to coordinators of CACREP-accredited programs geographically located in areas that experienced a declared natural disaster between 2017 and 2022 (Appendix C), along with a recruiting flyer (Appendix D) explaining the study and a request that they share information about the study with enrolled students. I also had a plan to incorporate snowball sampling methods by asking colleagues and participants if they knew of individuals who met the sample criteria (Appendix E). Snowball sampling is also commonly used when conducting qualitative research as a method for recruiting expert participants (Merriam & Tisdell, 2016). An incentive was offered to people who

participated in the interview. The incentive, a professional development resource (such as a book of play therapy activities, mindfulness techniques, counseling activities, etc.) was sent directly to participants who provided a mailing address.

Qualitative research is concerned with the production of rich, nuanced description of experience to inform and build understanding, which means that research sample size is typically small (Whitley & Kite, 2013). In conducting a qualitative study, researchers seek saturation, which is the point at which “additional interviews do not produce new information beyond what was obtained in previous interviews in the study” (Whitley & Kite, 2013, p. 425). Time constraints and research participant availability also influence sample size, and, therefore, some studies may have as few as four participants (Whitley & Kite, 2013). According to Prosek and Gibson (2021), the average number of participants for a phenomenological study is 15. Lu, Zhou, and Pillay (2017) had a sample of eight graduate counselor education students for their phenomenological study of counselor education students’ exposure to trauma during their master’s program. Treadwell (2017) had a sample of 11 senior-level student affairs administrators for a phenomenological inquiry regarding student affairs leadership in the wake of a campus disaster. For a phenomenological study of how social work students cope with terrorist events, Baum (2004) used a sample of four participants. The goal for this study was to conduct 10–15 interviews or until saturation was reached. The actual number of interviews conducted was 14.

In addition to the recruiting letter, which contained information about the purpose of the study and information about the researcher, participants were directed to a link to an online form (Appendix F) where they could sign up for an interview. I also put a QR

code in the recruiting flyer that interested participants could scan and that took them to the online sign-up form. Upon receipt of the form, I responded to confirm the date and time for the interview (Appendix G), provide a Zoom link for the interview, and the informed consent form (Appendix H) which I asked them to sign and return prior to the interview. I created a meeting in Zoom for each participant so that participants each had their own Zoom link, which only they could use for the purpose of the meeting. I sent the link to the participant via my institutionally issued email address and sent a reminder email to the participant the day before the interview.

The Researcher

One of the fundamental characteristics of qualitative methods is the role of the researcher as “the primary instrument of data collection and analysis” (Merriam & Tisdell, 2016, p. 15). From a phenomenological perspective, to carry out this important role, the researchers must acknowledge all ideas, notions, and biases and articulate a plan for bracketing their position during the research process (Merriam & Tisdell, 2016). In phenomenology this is referred to as *epoche* (Wertz, 2005). As the primary researcher, I am aware of intertwining factors that needed to be named and accounted for so that the research could be carried out in a manner that produced thick descriptions and subsequent trustworthiness (Whitley & Kite, 2013, pp. 416-17). I have worked in higher education for 28 years. For the past 20 years I have served as an instructor in a master’s program in a counseling affiliated discipline. I have also served as an academic advisor for counseling master’s students. Over the years I have provided advice, support, and a safe place to sit and be seen while they navigate personal, campus-wide, and large-scale traumatic events. I am aware that for approximately 12 months, I have been actively

engaged in learning all that I can about natural disasters and the mental health impacts of experiencing a natural disaster. Though I am a higher education professional, I am also a student. My student identity is associated with vulnerability. I believe personally engaging in the act of bracketing made me more available to participants and increased the level of trust they felt in sharing their experiences with me. In addition to engaging personally in epoche prior to interviews, and prior to data analysis, I also enlisted two other readers to assist with analyzing data.

Data Collection

Data was collected using a semi-structured interview protocol (Appendix A). Semi-structured interviews are a preferred method for data collection when using qualitative approaches because they utilize an open, conversational approach that is consistent with the collaborative nature of qualitative inquiry (Merriam & Tisdell, 2016). Great care was taken in the wording of questions so as not to lead the participants in any particular direction (Osborne, 1994). For each main question, follow-up questions were added for the purpose of inviting the interviewee to continue to share the pre-reflective experience (Osborne, 1994). A primary rule of qualitative approaches and the reason they are ideal for the exploration of highly sensitive phenomena is that researchers are tasked with rigorously vetting questions in advance of any interview to determine if the question has the potential to serve the participant or is being asked just out of curiosity (Merriam & Tisdell, 2016). In addition to review and approval by my dissertation committee, I also discussed the questions and received feedback on the wording from graduate students enrolled in the College Student Personnel Administration program at James Madison University.

Interviews were conducted with 14 participants who consented to participate in the study on Zoom from my university-issued Zoom account on a password-protected, encrypted computer during the first two and half weeks in February. The audio recordings produced in Zoom were immediately downloaded to a to a password-protected, encrypted device and then permanently deleted from the Zoom cloud. Upon completion of interviews, the audio recordings were sent to AZUR Captions, a vetted, confidential qualitative transcription service. Upon receipt of interview transcripts with identifiable data removed, audio recordings were permanently deleted and the transcripts were uploaded to a secure JMU Share Point document library for the duration of the study. Though the interviews were conducted using video, no video recording were made. Prior to beginning the interview, I reviewed the purpose of the study, confirmed participant consent to participate, and asked the participant for permission to record. All participants chose to be audio recorded. If a participant had chosen not to be recorded, I would have taken copious and thorough notes of the interview. To protect identity, a code was assigned. The key which included the list of participants, relevant contact information such as an email address, a mailing address (if provided for mailing the incentive), and their assigned code was maintained in a secure and locked file drawer that only I had access to. At the end of the study the key was permanently destroyed.

Data Analysis

The data produced for analysis was written transcripts. The researcher and a team of two colleagues who had experience with qualitative methods and had completed IRB training, read and analyzed transcripts using an inductive and comparative analysis strategy (Merriam & Tisdell, 2016). One member of the analysis team was a first-year

counseling doctoral student and a full time practicing counselor; the other member of the team was a full time higher education administrator who had completed a doctoral program in assessment and measurement. Before reading transcripts, each reader engaged in epoche, thereby accounting for any ideas and preconceived notions or knowledge and setting them aside to approach the transcript from a state of open curiosity (Wertz, 2005). The transcript was first read through in its entirety to learn the interviewee's modes of expression and meaning and without thought to the research objectives (Wertz, 2005). The next step involved reviewing the transcript to identify themes or meaning units that could be used to organize data and to eliminate redundancy (Wertz, 2005).

Upon completion of independent analysis of four interview transcripts by each team member, the team met to discuss the transcripts and our independent findings to identify convergent and divergent meaning units and themes (Wertz, 2005). Additionally, imaginative variation was employed so that data would be viewed from a variety of different perspectives (Merriam & Tisdell, 2016). We did this through discussion of independently identified meaning units and discussion of the various nuanced meanings that participants may have been conveying through their word choice. Prior to each meeting I sent an agenda to the other two team members and we followed the agenda to make sure we remained focus on discussion of our analysis of transcripts. To aid us in our discussion process I used the "whiteboard" feature in Zoom where we each typed in the themes we had identified. This allowed us to see the variation as well as consistency in how, as a team, we were cataloging the meaning units or themes. One of the team members chose to code meaning units using single words, another team member and I used phrases to code meaning units. However, there was distinct consistency and overlap

in the single words and phrases used. This method of triangulation was used to increase credibility and contribute to trustworthiness (Whitley & Kite, 2013). The team met twice. I typed up process notes from each of our meetings, which I then referred to when conducting the next phase of analysis.

In my role as primary researcher I then reviewed all of the themes that each of the three of us independently identified and discussed during our meetings and consolidated the meaning units into themes. I then organized the themes into categories that corresponded to the sections of the interview protocol. Additional analysis was then conducted where, I “deliberately abandon[ed] the epoche and interrogate[ed] the situation in view of previously posited concepts and theories [in order to] reveal aspects of the material that were or were not yet previously evident” (Wertz, 2005, p. 172).

Summary

The purpose of this research study was to learn about the lived experiences of master’s counseling students who have survived a natural disaster while enrolled in their graduate program. The study was intended to address an identified gap in the literature and inform future research as well as practices employed by counseling program leaders to support their students. Phenomenological methods are the preferred approach to research when the goal is to introduce an area of inquiry, which is why this method was selected for the present study. In the following chapter the results of the research study are presented along with a description of study participants, and review of steps taken to achieve trustworthiness of results.

Chapter 4: Results

The purpose of the study was to examine the lived experience of master's counseling students who experience natural disaster while enrolled in graduate study to better understand their perceptions of support by their graduate programs and to inform counseling program leaders on how to support their students under similar circumstances. A qualitative approach using phenomenological methods was selected; because qualitative approaches are preferred when researching topics which may be emotionally intense; because the ethos of phenomenology, which positions individual lived experience as essential to understanding phenomena, is consistent with the values of the counseling profession; and, because there is an existing gap in the counseling literature on this topic indicative of a need to strengthen the research base.

This chapter presents the results of this qualitative phenomenological study. It begins with a description of participants, followed by presentation of the findings that emerged from analysis, and an overview of steps taken to assure trustworthiness. A brief summary is offered at the end of the chapter for the purpose of transitioning to the final chapter which focuses on a discussion of findings, limitations, and recommendations for future inquiry.

Description of Participants

Utilizing the recruitment process detailed in chapter 3, a total of 22 people who had experienced a natural disaster while enrolled in a CACREP accredited master's counseling program responded to express interest in participating in the research study. Recruitment and all interviews took place during the first two and half weeks of February in 2023. Interviews were scheduled with the first 15 people who responded and the

remaining people were placed on a waitlist. When one participant dropped out prior to the scheduled interview, one person from the waitlist was contacted and scheduled for an interview bringing the total number of scheduled interviews scheduled back to 15.

However, participant 15 did not show for their interview. Because 14 interviews had been conducted at that point, no additional interviews were scheduled. An email was sent to those on the waitlist to thank them and to inform them that data collection had concluded.

The 14 participants who were interviewed all identified as female and had experienced a hurricane or hurricane related flooding sometime between August 2020 and October 2022, while residing in the gulf coast region of the United States and enrolled in a CACREP accredited master's counseling program. All participants were enrolled in graduate classes at the time interviews were conducted. Additional information about participant characteristics is presented in the findings section.

As described in the previous chapter, participants who provided informed consent were interviewed using a protocol comprised of a series of open ended questions designed to explore the central research questions through participant description of their lived experience. Each of the 14 participants were responsive to communication and scheduling, logged in early or on-time for their interviews, and expressed a keen interest in sharing their perspective. All participants received and responded to questions in a manner that conveyed authenticity and a level of comfort and safety sharing their perspective. Three participants began to cry while recalling their experience, some chuckled, and others shared frustration and anger. All participants expressed gratitude for the opportunity to share their perspective and at least two found the experience to be helpful and uplifting.

Findings

The methods discussed in chapter 3 were employed to analyze each of the 14 transcripts in order to identify meaning units that were then organized into themes. The six themes that emerged and are presented here were; roles, preparation, cognitive and emotional impact, coping, relational outreach and communication, and flexibility.

Roles

During their interview, participants were invited to share about identities that they held at the time of the disaster that they believed were important to be known and understood in the research. A second open ended question was asked inviting participants to share about their personal circumstances at the time of the natural disaster that they believed informed what the disaster was like for them. This was done purposely to maintain the spirit of open inquiry and construction of meaning through lived experience. The theme that emerged was roles which encompasses personal and professional roles participants described as important and salient to their identity and how they lived the natural disaster experience.

As participants reflected on their personal and professional roles, they described the ways they carried multiple roles at the same time and a process of setting down certain roles in order to focus on others during the natural disaster. Participant 4 described the process in this way:

I mean, first and foremost, I feel like I was a daughter at that time ... And a student, absolutely a student. I was also a student counselor at the time; still am right now. So not only was I a student trying to work on all this stuff with school, but also with internship and being a student counselor and having clients ... The

daughter one was big. All the other stuff kind of got pushed to the side right before ... and then during the hurricane. And then, slowly, once things started to come back to some semblance of normal, that was when it was more putting back the roles of being a student and a student counselor.

Participants like participant 13 described how their roles influenced their thoughts and feeling in the context of natural disaster:

I have a very close relationship with my family so the worries about school and all the responsibilities ... And I had just a weight on me. So I wanted just to be responsible but at the same time, I needed to be aware of my surroundings, and what my neighbors and I were going through. So my identities ... Yeah, I've been a student. I was vulnerable. A wife. I just had a puppy too. And at that point, I feel I had to be strong not only [for] my puppy, but I have to keep myself together.

Participants 8 described how she carried her roles during that time as a “dichotomy”:

I have a full-time job, so I'm an employee; I'm a manager. So, a lot of that was making sure that my team was okay. I had some people that were fine; I had some people who [were not fine] ... So, as a manager, helping my team, and as a worker, making sure that my job was still getting done. And then also, as a student, trying to find footing in that regard as well to make sure, you know, that we're still moving along and doing the things that we need to do for that. Those are probably the biggest ones that I felt during that time.

Participant 9 described the weight and concern as an “identity crisis:”

I guess just “student” was a pretty important identity, because I sort of went through this identity crisis when all of the natural disasters started happening where I became really afraid of what I was if I was not a student ... every time ... I would be like, “Oh, gosh, how long am I not going to be a student?” because I didn’t know what to do outside of going to school.

Participants most frequently identified personal relationship and professional roles as the most salient identities that informed their lived experience of natural disaster. Other less prominent themes around identity and context that emerged from analysis were; geographic identity (being from the area or being from another area) personal characteristics (such as socioeconomic status, ethnicity, and physical and mental health issues), and previous natural disaster experience.

Preparation

All participants spoke to some aspect of preparation when describing their natural disaster experience. Preparation was also a theme that elicited strong emotions among participants. Participant 7’s description is an example of how participants described how a sense of being prepared made them feel:

We didn’t lose any power, and we did prepare ... So, I think I felt pretty comfortable at first. Once I actually had started doing some of the preparations, I was a little bit nervous not being around [family], especially when I had started thinking about like, how things were already affecting [the area] ... But I was feeling fairly confident that even if we got the worst of it ... that I was going to be okay and that as long as I can call my family, I had their support ... So, they were all asking, like, “Are you prepared?” and I told them everything that I did and

they're like, "Oh, you're set. Like, you're good. You're better than most other people with your preparations." So, that also was I guess - well, I didn't really talk about my feelings there, so I don't know if that's relevant, but that did make me feel comfortable, though.

Participant 12 described the thoughts and feelings that emerged for her related to a feeling of not being prepared:

I think the one thing that just pops to into my head is chaos. It felt like we were so unprepared for [the hurricane]. You've probably seen it a couple of times on like social media, people [who live in this area] we don't take a lot of things very seriously. And then when this hurricane was heading our way, it was very downplayed, I feel like, and then the models were indicating [it] going somewhere, 300 miles away from us. And then went from one day to the other. It was like, "oh, no, it's coming here." And yeah, so it's chaos, and disorganization, and so unprepared. Those are the words that come to mind. We were not expecting it to come.

Participant 11 also described how previous hurricane experience intersected with preparation decisions:

So it's not like, "oh, wow, a hurricane is coming, I am so shocked." Because a lot of times, it's like a boy who cried wolf situation. They'll amp you up Okay, you have to go. And then people evacuate, and then nothing happens. And you lose money buying hotels, paying for hotel rooms or motel rooms or accommodations and stuff. And they're not always good about getting that money back to you.

For many participants their hurricane experience left them feeling they would know better how to prepare for future hurricanes because of what participant 6 described as a change in “perspective:”

Well, I am new to the area. So I had never experienced a hurricane, and especially not of that gravity. I feel like that was very new. That was very scary. I'm used to earthquakes where I'm from. It's very different. So the hurricane was certainly new. I heard from the news what you're supposed to do, how to be prepared. But it feels like having lived it's very different. Yeah, your sense of safety, I think, changes. You get a better perspective of where you're at in the world. And it's like, oh, Mother Nature is strong. So I think that was very evident at that time.

Participant 10 described how resiliency emerges from engaging in the “preparedness cycle:”

A complete psychological posture of resiliency. So you prepare. You train as part of the preparedness cycle. You plan, that's a sub-cycle. And then I respond. And when I have one of those moments - “I should have thought of that but I didn't” – you adapt. And then you mitigate, once you've recovered so that you can make a different error next time. [Laughs] ... it's ... a personal way of life.

Though participant 11 also described hurricanes as “way of life” she did not feel that each hurricane experience prepared people for future hurricanes:

If this has been your life, and natural disasters are just kind of a part of the environment that you live in, I think just realizing that doesn't make it easier as time goes on. And I think that it's the expectation that with every hurricane you're more prepared or your more numb to it. And I think that's just not really accurate

just because hurricanes hit differently at different times. And you could be in one financial place or emotional place one year and it's not that big of a hit, no pun intended. Or it's the complete opposite and it's devastating. You just never know. And just because it wasn't necessarily devastating for you one year, that same year somebody else could have lost their whole house. It's not uniform in how it happens. It's not like every time a hurricane hits, it's the same equation. There's just so many different factors. And that's why you don't really get used to it. It's kind of just a looming anxiety in the distance.

Participants were also eager to share their perspective on how to prepare for a hurricane. They offered concrete advice such as what was offered by participant 5:

Tell them to assess what kind of hurricane is it? Is it a category four? How big is it? Really pay attention to the situation. If you've never been in a hurricane before, if say this is your first time in a hurricane, have a generator. Have lots of water. Have gas if you can. If it's too late for that then you may just have to wait it out.

Finally, participants felt it was important for people to understand that a number of factors impact how people prepare or do not prepare and that people should not judge people for their decisions. Participant 6 described it this way:

I think when you tell people like, "oh, you should have prepared." You know a hurricane is coming. It's like, "Yeah," but you don't know what's going to happen, specifically to your area ... Don't shame people, because they didn't prepare enough to your standards, or whether they prepared or not. And things still happen. Damage still happened, people were still displaced. It's like, "oh, well, it's kind of your fault, because you didn't prepare enough."

Participant 10 expressed frustration about people not preparing but also saw an “opportunity” to increase education and awareness about the importance of preparing:

And there are checklists. We can't do anything for you if you're not going to pull your head out of your hip pocket and pay attention ... All these things, if I let it be negative for me, I would be so frustrated. But I look at it the other way. Here's an opportunity... The opportunity is to properly educate the society. No one's coming to help you. Period. I'm sorry, I'm getting passionate about it.

For participants preparation had many meanings. For all participants preparation was associated with strong feelings and ideas that were woven into their lived experience of natural disaster.

Cognitive and Emotional Impact

Participants described their natural disaster experience as a complex mix of ongoing emotional overwhelm and cognitive complexity that begins prior to the actual disaster itself and continues long after the storm passes. Participant 14 described it this way:

But the build-up is the news is flooded with the information and social media and everywhere you go everyone's talking about it. And the grocery stores are busier and gas stations are busier. And ... you're still having to live your life, kids are still having to go to school, you're still having to go to work. And you're also preparing for what if we lose power for three weeks ... So you have to think about what if that happens ... And then you have out of state family calling to check in on you, “Are you okay?” And you're like, “Yes, I'm okay. I'm not really okay but I'm okay.” And then it happens ... And your body is constantly in this mode of

tension ... and your attention is piqued for days. And then it just stops. And like I said, you figure out if you still have electricity. You're thinking, "Can we clean our house? Can the water be vacuumed? Is mold going to grow? Do we have internet? Do we have enough gas to last us, if we lost power, for four days?" ... So it's just like this constant feeling of being on edge for a week, week and a half and it just does something to your body.

Participant 6 described this cognitive and emotional load as "hurricane brain," a term she had heard a faculty member use:

And my professor called [it] a hurricane brain. He's like, "Okay, does everybody have a hurricane brain right now?" Because when you really couldn't focus on anything else, other than are we going to be okay? And how long is it going to be until we rebuild, if it comes to that? So, really, there was no reason for us to go to class ... it's just a lot of worrying about your family, your safety, being prepared. And then just overthinking and over feeling things like anxiety and stress. And then you're thinking of your responsibilities of I still have to go to work unless they say not to and I still have to-- my assignments are still due. And even though I have no electricity or water I still have responsibilities and I still have due dates. So that was stressful ... I didn't know that outside the wind and the rain and everything was going to be so loud. And right outside my house, there's a huge tree that kept smacking the roof. So I thought this is not conducive to a nice learning environment. And with hurricane brain, I cannot really think.

Participant 11 described learning to "carry" the emotions:

I think that I just carried it. There's not really much in my control right now. All I can do is stay where I'm at and not get on the road and drive and hope the roof stays on. I think that you just carry it because you have to ... There's no one to put it on. We're all here going through the same thing. There's no shelf to really place it, you just have to. It becomes a part of you, essentially.

Participant 14 also described how the thoughts and feelings persist:

And so you start to think-- from May to November you're wondering, "Okay what's our best plan, what's our best scenario," and go with that. Also knowing that you have zero control over anything and you just have to try to survive it the best you can physically, emotionally mentally. And take care of yourself too, absolutely take care of yourself.

Participants also recalled a number of sensory or physical experiences that added to feelings of confusion and fear. One factor that participants, such as participant 8 described that added to confusion was noise:

Yeah, and I mean, quite honestly with the shutters on your windows and things, it sounds worse than it is, I think. I mean, I don't have a perspective on what it sounds like on the outside, but on the inside you're protected with the shutters on your windows and doors but it also - the sounds. It's loud. The wind is so strong and coming so fast that it's hitting these shutters. They're bolted in, but they move. So you can hear - it's just loud. It's loud in the house with the wind and there's rain, and it just kind of goes - it comes and goes and you aren't really sure, "Are we in the eye? Are we through the eye?" You know, that kind of thing. So, that's kind of the unknown factor.

Other factors that added to distress were heat and concerns about hunger. Participant 9 described it this way:

It was very hot ... and yeah, I just remember it being hot and being really concerned about how I was going to get food ... We couldn't cook with anything because all my appliances were electric [and electricity was out], so I was having to eat cold stuff and once you run out of your cold stuff, you're like, "What am I going to do?"

Participant 12 used the words "terrifying" and "heartbreaking" to describe the experience:

And then the day of, that was terrifying. I just leave it at that, it was terrifying. [sobs] And then afterward coming outside and seeing so much destruction ... it was a lot. I don't think anyone anticipated it to go as bad as it went. I am I'm sure you've seen the videos and pictures of some of the areas. You know how devastated some of the areas were but it was really sad, extremely sad. I don't think I had ever been so sad. I was just seeing so much destruction. I don't even know how to describe it. It was really sad. It was heartbreaking. I think that's the right word. It was heartbreaking.

Participant 3 discussed feeling "drained:"

But I haven't really had sort of that an event that was so big that I haven't been able to pretend like nothing was wrong, and kind of keep going until it was better. It was just like there's nothing for you to do. So you can't keep going, you can't occupy yourself. You're just drained. And so I sort of had to wait for things to get

going. And then once they did, and I could do my routines. And all of those things, it took me a while to catch up.

For participants such as participant 13, feelings of gratitude were comingled with feelings of loss, grief, and guilt:

So our house didn't suffer as much damage as other people. That I feel very lucky. Because we lost a couple of things, one branch and trees and that, but we we're alive. We didn't [have] major damage on our property. But it still was just like we could have. We're safe now but-- I don't know ... I was deeply grateful; we survived. And we were blessed and privileged at certain point, but at the same time was this mourning feeling where we lost --or whatever we knew as it was before, it was just different.

Participant 1 described feelings of guilt in this way:

It was also a little bit of guilt, honestly, coming from someone who is more privileged, being able to leave, having enough gas in my car and being able to stay with my partner's parents during the time ... So, being able to stay out of the area for that period of time. I returned about two to three days after, so I still had to deal a little bit ... but it wasn't to the point where other people were experiencing it. It was definitely a lot of guilt, because I was able to leave and a lot of others weren't.

When recollecting their natural disaster experience all participants described aspects of isolation, disconnection, and not knowing what was going on. For each participation the experience of separation-whether it was from people they cared about or

information about what was actually happening during the storm-was a source of distress and fear. Participant 8 described it as the “unknown:”

I think a lot of it also is the unknown. When you're in the middle of the hurricane - and I'm lucky, because where I live is a newer community that has underline powerlines and things like that, so we never even lost power. But you also don't have like, access to what's going on, so when you're in the hurricane - I mean, your house is shuttered up. You have no light coming in the from the outside, and you're sort of like, just shut in and cut off from everything in the outside world. You don't really have access. You don't have internet. Some people don't have power. It's just this very isolating experience. You're in there and you like to think, "I'm safe in here," but not really knowing, and not really knowing what's going on ... and wondering - you know, like those friends of mine, ... I couldn't get a hold of [them] ... it very much was on my mind of like, are they okay? You know, and wondering and not being able to reach people. So, just very isolating and even in days after, not having cell phone service and things like that, not being able to communicate with people and loved ones and family. The experience is very isolating.

For participant 3 being cut off from her strongest connections and knowing she was isolated was described as very “distressing”:

The most distressing thing was that I was completely cut off from the outside world because I didn't get any reception in my house. So I relied entirely on Wi Fi. And when the power went out, I didn't have Wi Fi anymore. And so I couldn't contact anybody... But for this one, I was completely alone, nobody around.

Nobody really in a good place to come get me. And beyond that I was isolated from my strongest connections. I couldn't drive anywhere because the roads had to be closed for emergency response vehicles and for flooding concerns. And there was nothing I could do whatsoever. Afterwards, I just had to sit in place and wait for things to get better.

Participants felt it was also important for people to understand that the emotional and cognitive impact of natural disaster lingers well after the storm has passed and that personal issues that were present prior to a natural disaster do not go away because a disaster is coming. Participant 14 described it this way:

We're all traumatized in some way whenever we experience these natural disasters like this ... they're not just two-day events. They are sometimes a month, month, and a half long life-changing events. In ways that we might be going to work and yeah, I'm showered, I've got my clothes on, I'm doing my job. But at home, I'm living in destruction or I'm living in boxes. I'm trying to figure out where to move. And so I think it's important for people to know that it's not just a two-day weather event. It is a long-term event that has a wide-sweeping impact on every aspect of your life.

Similarly, participant 5 wanted people to understand how personal issues intersect with the natural disaster experience:

Right, long-standing issues with other people, I think, just tend to amplify when we go through traumatic experiences or stressful experiences ... It's not necessarily connected, but it doesn't help. It didn't cause the problem, but it

doesn't help ... Yeah, I would have taken the hurricane just by itself. I would have been okay. I would have been able to handle that.

Participants navigated a range of emotions leading up to, during, and after natural disaster. They also described feelings of physical exhaustion and being consumed and preoccupied with thoughts and concerns. To deal with the mental and emotional distress, participants used different coping strategies which are described in the next section.

Coping

As they described their natural disaster experience, participants recalled strategies they used to cope with the disruption of the natural disaster. During the disaster participants identified focusing on and supporting the people they were with as a means of dealing with the distress brought on by the natural disaster. After the storm, being able to connect with supportive others, return to routine, and being able to help other natural disaster survivors were important for being able to move forward.

Participants described focusing on the needs of others as a source of coping before, during, and after disaster. Participant 8 described how her role as a mom influenced her natural disaster experience:

So, it was the feeling of like, "I'm the mom. I'm supposed to protect my kids and take care of my kids," and that's what it felt like ... You know what I mean? So, that's what comes up for me when I think of that.

Participant 14 described it this way:

So yeah it was stressful and frightening. And also trying to stay calm so that the kids are calm is interesting because you really have to internalize a lot of what

you're feeling as not to have everyone to be afraid ... We just tried to make the best out of a really, really, yucky situation.

Participants coped by attempting to stay connected with people during the natural disaster and when that was not possible, attempting to reconnect as soon as they could after the hurricane had passed. For many participants there was a strong need to reconnect to their support systems. Participant 4 described the need in this way:

I wanted to be able to connect with my support system, outside of just my [parents] ... And that I was able to do ... And little by little, I was able to make contact with my support group. And that really helped. People outside of here who weren't there, and then people here who are my support group, who are also in the program with me. That was really helpful.

For participant 3 being able to access power temporarily in order to reconnect with family and friends was a significant source of relief and coping:

But it was really amazing to have that and be able to call my parents and call friends and work through things with them ... It was a relief. I mean, there were times where I was just having meltdowns to the point where I couldn't see because I was crying so hard. And to be able to call my parents and check in with them it was anchoring.

Participants also wanted to connect with their communities and to help out as a form of coping. Participant 1 described a sense of "comfort" that came from opportunities to connect with the larger community:

[It] was a really good feeling, because I know even after the fact people today are still very much like "We went through this together," and while I'm not happy

about what happened to build that community, I know that just being able to have that was a really – not a good experience, again, because of the reason why it happened, but it was very comforting and supportive after the fact.

Participants, such as participant 2 discussed a strong feeling of needing to help with disaster relief effort and frustration connecting with opportunities to help out:

Everything's gone and now we feel like we need to help. But how do we help? And so we started going to shelters, and we were giving out-we had air mattresses and, and we were like "Here's our air mattress... Here's food, here are clothes that we have" because people lost everything. And so that's how we were trying to help. And what was sad was the news kept saying "we need volunteers. We need volunteers to help" and every time we tried to volunteer somewhere to assist people, make meals, anything. We weren't getting responses because everything was just a mess.

Participants, like participant 8, discussed a need to balance wanting to help with existing personal and professional obligations:

And there was a little bit of this like, seeing other people actively going out into the community and doing things to help, to clean up and to, you know - and from where I was at, I wasn't in a place to do that, even though I wanted to, but there just wasn't the capacity with all the things going on and things that I had to do to take care of my family to do those kinds of things... So, I had to do some work within myself about, you know, "I'm taking care of myself and my family. That's my first priority and once those things are taken care of, then I can take care of

other people, but if I just go out and take care of other people and not take care of my family, I'm doing them a disservice."

Participants identified returning to routine as an important way of coping.

However, returning to routine, though helpful was also experienced as "jarring."

Participant 1 described it in a way that captured what this was like for participants:

About two weeks after the fact, everyone was kind of just moving on with their lives, which I guess is normal. It's not healthy to kind of stick on it too much, but I feel like for the majority of my clients, that two-week mark with professors and stuff like that wasn't really enough, and I feel like it's very similar with me. My professors were amazing, though, but kind of going back and doing normal things afterwards like nothing ever happened – I guess it was a little bit jarring. So, I think I would have appreciated a little bit more of like, a slow entrance into going back to normal, but being back to normal did help me kind of create that sense of normalcy and help me kind of focus less on what had just happened and kind of helped me heal from it. So, I guess a little bit of a slower entrance into to normal day-to-day activities.

Participants were confronted with and navigated a complex array of thoughts and emotions before, during, and after disaster and found ways to cope. Additionally, while reflecting on their natural disaster experience, participants discussed feelings of hope and resilience which participant 6 described this way:

And I just want to say that it's difficult, but it's doable. We are very resilient people, as human beings. We can heal. And we can be nice to one another and we

can get through it together. As humanity, we have gone through, you know many things like this so we can carry on.

Relational Outreach and Communication

Participants wanted to feel connected to their program faculty and peers. For participants outreach by program faculty that was perceived as being caring, acknowledging the difficulty of the situation, and offering tangible, practical support was perceived as helpful and supportive. It also served to alleviate distress for some and served to offset any distress caused by lack of communication or clarity from the larger institution. Opportunities to process their disaster experience with faculty and peers were crucial to being able to return to routine and to feeling less isolated.

Participants appreciated communication and outreach from their faculty that was what participant 4 described as “empathetic:”

And the way they phrased the emails, it sticks out to me because-- I remember one, our clinical director saying, “I hope all is well, even though I'm sure that we're all tired,” and we're all this and we're all that. And I liked how she added the we into it because it really emphasized that she went through this too. And not in a glorifying way, but just in an I'm here with you in this in an empathetic way, I think. So I just really appreciated those emails and how they reached out in that way. And that that probably exceeded my expectations. I expected the email to be more like, here's information on what's happening in the program. And when we're going to be starting classes up and stuff like that.

Participant 4 also described what it was like to “know” she would be supported by her program in that way:

I knew they were going to support us. So I didn't even worry. On the front end, I was just like, "push it aside" ... I'm like, "They're going to be fine. They're going to support us, they're going to." I wasn't anxious about that part at all ... Because going into it, I felt I was going to be supported. And I was supported.

Participant 4 attributed her level of expectation and confidence to, "definitely the relationships that they built beforehand."

Conversely, this expectation was still spoken to when students did not feel they were receiving appropriate support. As participant 11 stated:

But I think having them kind of put that out there would have been really comforting. And for them to pick it out. Because, like I said, they kind of have that knowledge and experience that I really didn't have at the time, like, it would have meant a lot more.

For participant 10 the expectation that faculty and program administration would know how to respond was described as a professional duty:

If you can't handle this student load, if you can't handle a hurricane and understanding that your people are saying one thing and then you're saying it's closed and then you're not supporting your students. You're not considering where they-meet your client where they exist. It's a founding ethical principle established in the code of ethics for the American Counseling Association. And yet the school that is teaching us this is not doing it.

For other participants, such as participant 13, having faculty reach out to them to provide information about tangible resources like shelter, food, and options for receiving monetary support was perceived as supportive:

[My program] was very supportive and understanding and they also helped us. They evaluated our situations, and they helped us monetarily with some sorts of resources that helped a lot. They were opening the campus doors to go shower, have a warm meal. So I believe that was a great resource. They were [not] putting pressure [on us] and [were] like ... Don't worry about it. Don't worry about whatever your worries are we're just trying to get through it.

Participant appreciated receiving communication from their schools but wanted communication from their program faculty. Participant 11 described wanting to hear from her faculty sooner:

But I think that I really would have liked to be able to talk to my professors more and to have had them kind of reach out a little bit sooner. Which they have families too, I understand that. I don't want to be not sympathetic towards that. But I guess just more reassurance that everything in terms of schooling and class and stuff, we're going to have time to make things up and it's going to be okay. I feel like there was just a period of two or three weeks where I was just like, I don't even know if I'm going back, what's going on. We didn't really hear from anybody. We had heard from the president of the university; it was a mass email. But we hadn't heard specifically from the counseling department. And I don't really know the reason, maybe it's because they were waiting for a message from higher up. I don't know.

When communication from the larger university was not clear, efforts by program administrators and faculty to provide clarification was appreciated and alleviated confusion. As participant 4 stated:

The way that my school, as a whole handled the letting people know how they were going to make up classes was very confusing. And I still don't think I understand it to this day. It didn't really apply to us, though, because we're graduate students. And so our program was kind of like, "No, this is what we're going to do and we'll talk to you about it in class in person, and we're going to accommodate." And that was way better. But the email that came from [The school] and the way they did it, I was just completely confused. And basically, students had to make up on [weekends] and then evenings and people were really upset about that because of work and stuff. So I think that was the only thing that wasn't really helpful. But I think they did their best given the circumstances. I'm sure they had to please so many opposing forces and trying to find the balance in between all that. Because all of us didn't want to push back a semester. We wanted to be able to graduate on time and not have the hurricane derail us so much, in that sense.

Participant 14 did not recall outreach from her school or program after the natural disaster but was appreciative of how understanding one faculty member was when Participant 14 reached out to request an extension:

Regarding school, nobody really checked to see if did everyone make it okay? Is everyone fine? Do you have electricity? Do we need to delay turning a paper in? Tell me what you need. I did have one professor that I had to reach out to and said, "Hey, this is what's going on and I don't have Wi-Fi, I don't have a way of doing this at all." And she was gracious and allowed me to turn my paper in late, thankfully.

In general, participants identified opportunities to process with faculty and peers as crucial to being able to returning to the routine of being a student, feeling less isolated, and to being able to resume their role as a student clinician. For participant 1, having a faculty member intentionally set aside time during class for people to process their experiences was “amazing” and increased her confidence that she was ready to resume working with clients:

[It] was amazing. No other professor has ever done that, so I thought that was amazing ... It was kind of a small group, and we were able to just kind of-very group therapy processing ... and we were able to talk about our experiences and feel closer to each other ... I noticed after that-it wasn't even that long, maybe a 40 minute class-I was better able to handle and go into counseling a lot better with clients who were really experiencing the aftereffects of [the hurricane].

For participant 3, the space to process was experienced as “validating” and “collaborative:”

I would say... maybe two out of three [professors] set aside time in class at the beginning to process what had happened as a group, and give space for those concerns to [be] heard and validated collaborated ... as a group and as a cohesive unit ... because for me it's important that my professors knew how it was impacting us, and that they cared ... one of my professors did a word cloud, where anonymously you type in what's one word or three words that describes your feelings or describes this event. And that was really good because a lot of people had similar things.

For some, the absence of opportunity to process was noted and identified as something that they believe would have made a difference for their wellbeing at the time. For participant 9 the lack of processing was perceived in the following way:

[Making it], easy [for the program] to be like, “Okay, let’s move on” [because] They were like, “Hey if you want to talk about it we’re here,” but no one really talked about it after that. They were just sort of like, “Oh, no, that happened. Let’s go back to classes.”

Participant, like participant 2, appreciated opportunities to connect with their peers:

I didn't find myself needing counseling for support, going to counseling myself, I just felt like I needed the people in my cohort who I spend 12 hours a day with-- I needed their support, and they needed my support. And I really did find that in them.

For participant 13 an impromptu opportunity to connect with a classmate brought with it a sense of emotional relief:

And she [my classmate] said, “I don't know how you're feeling, but I just feel like you have it all together and I am not doing well.” I said to her, “I'm not doing well. I don't have anything together. I am feeling that I'm not understanding whatever is being taught right now. I'm just going because I just need to. I don't have anything discovered. I don't.” And she said, “I was talking to another classmate and she said she was feeling the same way. So it's almost like impostor syndrome. And yes, I've experienced it and I'm there too.” And after that she sent me a text message, two days or later, where she said, “I'm sorry, for just assuming how you were feeling. I know you're doing great. You're going to do great. And

we're going to go through this.” ... It was a relief that I wasn't the only one. There were shared experiences that we were all living in our best way possible.

After she had an opportunity to connect with one classmate, participant 13 connected with more classmates. The experience led her to reflect on how in the area she was living in that the experience of the hurricane was being carried as an individual experience and not a collective experience:

And then also made me understand, of course, there's this individuality mindset that we have in this area. But there's also where I come from the collective is more important. So that's what I felt, like everybody was trying to go through their own process of grief as individuals, but not as a collective. That's what I felt was missing too. Individually, I got the chance to talk with at least six classmates about what they were going through. And we have so many common experiences that I think it [would have] been very beneficial if we would have shared as a group. Let's have a time to just pause on top of what we went through. And just live the moment and then support. “What are you needing? Is there anything we can do for you?” All that.

Participants wanted to connect to peers both during and after the natural disaster because of the depth and strength of the relationship they had created with peers. As participant 5 stated:

And there's only so much you're going to share with a professional. So unless you're required to disclose a lot of people are in the situation with like, I'm good. You're more likely to-- that's just the way it is. You're more likely to respond to a student texting you. I remember I was texting back and forth with other

classmates. And so you have a stronger relationship with your classmates than you do with your professors ... I told my story to my classmates ... and so I was able to talk with everybody. But just, I felt like I was able to get more personal or feel like I could connect with them as a result. And expressing sympathies and stuff like that. And so those are the people that [I am] connected pretty well with.

Like other participants, participant 3 felt it was possible to feel a sense of close connection to her classmates because her cohort had forged close and supportive relationships before the natural disaster:

Well, our cohort is actually already pretty close... We were kind of an outlier, according to my professors in how close we were. We would post events. We had just done a cohort [get together]. We just did stuff as a cohort. We were constantly in communication with each other. Almost everybody participated in the group chat. We had a great community beforehand.

When reflecting on their program experience, participants also spoke to what it was like to lose contact with classmates and peers, who for a variety of reasons, were no longer present in class. As participant 6 stated:

But I know that some of my peers from my cohort had to move ... So they are now not with us in our program. So it's hard to ignore that. That it's like, oh, we're missing two people in a class of 10. So it still has an impact because it affected my cohort and my group of people who I see several times a week and who we started this journey of graduate school together. So it's like, oh, we're probably not going to end up together, huh? So it's just hard to accept that it's out of your control

For participant 6 the absence of classmates was difficult because:

I appreciate their lived experience, their insights, what they brought to the conversation. When we were talking about any topic they have very good things to say. They have excellent communication skills and their unique perspective of things, we need that ... so they have a lot of experience with it ... Yeah, because I feel like the rest of the group also misses them too. They're like, I haven't worked before, or they're like, oh, I don't know what it's like ... So they would have been able to provide their outlook on things.

Similarly participant 9 described what it was like not to be able to connect with her classmates during and after natural disaster:

I really wish I could have talked to other people in my graduate program. I didn't have any of their contact information. I just wanted to be like, "Hey, guys, how are you taking this test? Hey, guys, do you have internet yet?" You know, my friends at the time weren't very supportive just because they didn't understand it.

Participants valued receiving communication from their faculty that was clear, well, timed and relational. Additionally, they wanted and benefitted from opportunities to connect with faculty and peers.

Flexibility

All participants spoke about a need for flexibility in meeting program because of the natural disaster. For most participants flexibility was about having additional time to complete assignments and flexible due dates. For others flexibility related to attendance and being able to participant in class online. Participant 14 described the need for

flexibility in a way that captured why flexibility was perceived by participants as important:

And you know that there are professors who will give grace like the one that I had. And then you know that there's professors that are like, "Well, you should have worked on your paper three weeks ago or while you knew it was coming." And maybe they have never had that experience to know what that feels like, what that buildup feels like. You can't think of a lot of other things during that time. And most people I feel like in grad programs also are having to work and a lot of us have families. And so considering the overall impact that might have on every part of your life, rather than just it's affecting this campus, or we're closing this campus down for a little bit. The campus is fine so we're reopening. It's tough, it feels like very insular thinking sometimes and not necessarily a broad let's really check in on the students that we know live in areas that could be harder impacted.

For participants like participant 6, the willingness of faculty to extend deadlines was perceived as recognition that faculty understood the difficult circumstances students were navigating:

Yes, how flexible all of my professors were with the deadlines. They just extended everything. I thought that was amazing. And I just like how everybody had a sense of unity and a sense of togetherness. It wasn't like there was one professor who didn't budge. It was everybody was very supportive, and they just understood the severity of the situation. So what they did was extended the

deadlines, and they let us know if you cannot come to class, that's completely acceptable, and we're just here to support you and make it through the semester.

Flexibility was important for participants because they did not feel ready to get back into the routine of school work and saw flexibility as a way that their programs communicated care and understanding. For participants, like participant 3, the acknowledgement and flexibility was crucial:

And so having the experience that I did with my professors and giving me the room to say I can't do it right now. Do I have the time? Yes. Is my laptop working? Yes. Can I sit down and write an essay? No. Can I sit down and do literally anything else? Yes. And so it was the first time that people had allowed me to take a step back from my responsibilities and give myself time to heal. And so having that experience was really important because before then [its] always just been figured out a way to push through.

Some participants felt that their programs could have done more to either provide flexibility or more clearly communicate what type of flexibility was actually available.

As participant 9 stated:

They didn't really seem to be that organized with having that plan in place. Like I said before, the area that I was living in is very hurricane prone, is very flood prone and there wasn't really any plan for what happens if the majority of our students can't come to campus or log on for two weeks. Do we try and email them assignments? Do they get an incomplete? There was none of that. I do commend them on keeping us in class throughout all of the disasters that happened, but I also feel like they could have at some point been like, "Okay, maybe everyone

whose currently enrolled, you get a passing grade and we'll reconvene next semester when all of this is done, or we'll reconvene whenever we can actually show up to physical campus."

In the wake of natural disaster, participants expressed a need for flexibility when it came to sitting for important exams and meeting practicum and internship hour requirements. Participant 12 described a need for flexibility related to taking an important exam:

And then our testing period started... It was two weeks after the hurricane and we were supposed to be taking that exam. And so I remember them sending a blast email saying something along the lines of "we're talking to"-- I can't remember the name of the test makers or whatever. "And we're trying to get an extension for you guys. Blah, blah, blah, blah, blah." But then it just like, they said, "We're going to get an extension," but nobody ever really got back to us. The delay in communication was really bad. And so we all felt like, "well, you didn't say if we got the extension or not." And I honestly don't have the money to go and retake this test ... I remember I emailed the faculty who was in charge of scheduling those exams for us, and I was like, "I'm going to be very frank. I don't think I should be taking this test right now" ... And then I remember I ran into him a few days after that email and he was like, "Yeah, I read your email, just let us make sure that you were able to push the exam back or whatever." But didn't hear from him. So we were like, I'm just going to go take it. It is what it is. Right? What is it? It can't get any worse than this. Like, honestly. My brain performed because I ended up passing anyway.

Participant 2 appreciated program faculty responding in an agile and flexible way in order to assist students in the midst of practicum and internship with getting the hours they needed to successfully complete their requirements:

And then they really helped us with our internship advanced practicum hours because that was a big stressor. Okay, so we lost our community, but now we need to get our hours. How's that working? And they were able to provide a lot of support with hours because people lost their internships-- because those were gone. And they had them go to their private practice and be supervised or to someone else and get their hours through that. Or just connecting them with different people so they could get their hours, which was a huge relief.

Flexibility was important to participants. Efforts by program faculty and administrators to provided flexibility were perceived as supportive.

Trustworthiness of Results

To achieve trustworthiness, strategies commonly used in qualitative research employing phenomenological methods were used. These strategies were described in more depth in chapter 3 but are also reviewed here.

As the researcher, I engaged in bracketing which is the process of setting aside or bracketing preconceived ideas and objective knowledge in order to enter into interviews with participants in a state of openness. I repeated this process before reading and analyzing transcripts and at the beginning of meetings with the two individuals who also independently analyzed transcripts for themes. The individuals, who are described in chapter three, who were involved in identifying themes with me and meeting to discuss themes also engaged in bracketing before reading and analyzing transcripts or engaging

in our team meetings. The purpose of enlisting two individuals to be involved in the analysis process was to engage in an inductive and reflexive process, to interrogate potential themes from multiple perspectives for the purpose of triangulating data and discerning rich and nuanced understandings of themes. This process of triangulation was critical to the next phase of analysis I conducted which involved distilling the meaning units into themes and distributing them among the three major categories.

Summary

The purpose of this study was to explore the lived experience of master's counseling students who experience natural disaster while enrolled in graduate study to better understand how counseling program leaders can support students in similar circumstances. By approaching the study from a phenomenological lens utilizing a semi-structured interview protocol, 6 themes emerged to describe participants lived experience of natural disaster and their perceptions of support from their programs. The next chapter focused on a discussion of findings. Limitations and recommendations for future research are also presented.

Chapter 5: Discussion

This qualitative study employed phenomenological methods to explore the lived experience of master's level counseling students who experience natural disaster while enrolled in their program of study to identify ways counseling program faculty and administrators can offer support to students navigating similar circumstances. In the first chapter the two research questions which framed the study were presented along with the rationale for the study. The second chapter presented a comprehensive review of the extant relevant literature for the purpose of situating the study within the appropriate lines of scholarly inquiry. Chapter 3 introduced the qualitative research approach utilized for this study by detailing the methodological steps undertaken in data collection and analysis. In chapter 4 a description of study participants and study findings were presented. The purpose of this final chapter is to discuss the findings in the context of the two research questions which framed the study. Implications for natural disaster mental health research, counseling literature, and the field of counselor education are presented along with limitations of the study and recommendations for future research.

Discussion

There were two questions that framed the research study and were used to design the semi-structured interview protocol which served as the data collection instrument. Six themes emerged from data collection and analysis; roles, preparation, cognitive and emotional impact, coping, relational outreach and communication, and flexibility. These themes are discussed here in the context of the two research questions.

The first research question this study sought to address was: What is the lived experience of master's level counseling students who experienced a natural disaster while

enrolled in their training program? Participants described their lived experience as one of managing multiple important roles while navigating complex cognitive and emotional circumstances. They employed a variety of strategies before, during, and after disaster in order to cope and function. They felt valued, cared for, and supported when they received clear, relational, well-timed communication from their program faculty. They wanted flexibility when it came to meeting program requirements in the wake of large scale damage to infrastructure. They appreciated opportunities to process their experience with faculty and peers and credited those connections with being essential to their personal and professional wellbeing.

Participants in this study described experiencing a complex and interweaving array of persistent thoughts and emotions of varying levels in the days before the natural disaster, during the natural disaster, and in the weeks and months following their natural disaster experience. The words they used to describe their feelings and thoughts were fear, guilt, worry, sadness, heartbreak, numbness, confusion, distressing, anxious, freaking, isolated, angry, frustrated, exhausted, hot, hungry, constantly going, unsafe, not able to focus, being on alert, feeling like they were not doing enough, and feeling rushed. These are all thoughts and feelings that have been documented in natural disaster mental health research and are considered typical cognitive and emotional responses for survivors (Bond et al., 2021; Carmassi et al., 2020; Makwana, 2019; Massazza et al., 2021; Substance Abuse and Mental Health Services Administration, 2022). Participants in this study described themselves as experiencing varying levels of emotional and cognitive distress as well as varying levels of resource loss from the disaster. Participants' descriptions of emotional and cognitive distress did not consistently,

positively correlate with level of exposure to the disaster or even resource loss. This is consistent with research conducted by Leiva-Bianchi et al., (2018) who found that level of distress is not consistently positively associated with level of exposure and resource loss (Leiva-Bianchi et al., 2018).

Participants in this study described in rich detail the cognitive and emotional impact of experiencing natural disaster such as persistent, preoccupying thoughts, state of constant worry, exhaustion, and inability to concentrate. One participant referred to it as “hurricane brain.” In their study, Massazza et al., (2021) refer to this as cognitive overload.

Participants described how personal relationship roles influenced decision making, preparation, thoughts, and fears. Participants also described how relationships and relationship roles were a source of coping in the aftermath of natural disaster. This theme is consistent with Massazza et al., (2021) study which found that in the midst of disaster people focused on the needs of others in order to cope with the distress they were feeling during natural disaster and that fear for the safety of others and disconnection or isolation from others during disaster was a significant source of distress (Massazza et al., 2021). How participants in this study described their need in the wake of disaster, to help others recover from disaster and/or the feelings of release and relief that came from reconnecting with family, friends, and other community members is consistent with what Massazza et al., (2021) described in their study as social support needs of natural disaster survivors (Massazza et al., 2021).

The program related concerns participants in this study described are consistent with findings from similar studies of concerns raised by counseling students and students

in related disciplines who experience traumatic events. Participants in this study who were engaged in practicum and internship when the natural disaster struck described counseling practice concerns that included such things as wondering if they would be able to provide effective care for fellow disaster survivors, worrying about meeting required hours in the wake of massive destruction, and identifying opportunities to process with faculty and peers as necessary for being able to function as an effective clinician. These concerns are consistent with the concerns voiced by students in counseling, social work, and allied health professions who have experienced academic disruptions because of a large scale traumatic event such as natural disaster (Baum, 2004; Henneman et al., 2020; Matthieu et al., 2007; Myhre et al., 2017; Szczygiel & Emery-Fertitta, 2021; Tosone, 2008).

Participants in this study described the importance of wanting to process their disaster experience with faculty and of opportunities to reconnect with their peers. They also described needing their faculty and program administrators to communicate that they cared about students and that they would provide flexibility and support with meeting program requirements in the wake of disaster. This is consistent with the work of Suarez et al. (2022) and Barros-Lane et al. (2021) who found that in the wake of the COVID -19 pandemic, counseling and social work students described a similar need to connect with faculty and peers and receive flexibility and support in meeting program requirements.

It is worth mentioning as well in this discussion that only three participants made any mention of the COVID-19 pandemic when describing their experience of natural disaster. While putting together the interview protocol the decision was made not to ask questions about COVID-19 because there were no a priori presumption about factors that

could influence participant's lived experience. However, given how all-encompassing and disruptive the pandemic has been for higher education, it was surprising how little participants mentioned the pandemic. Participants used previous experience with hurricanes or other natural disasters as a point of comparison but did not mention the COVID-19 pandemic as a comparison point. Two participants mentioned the pandemic as a type of time marker because they experienced natural disaster in 2020 or 2021 but did not compare their pandemic experience to the natural disaster or discuss any interaction between their emotional and cognitive functioning and COVID-19. For one of the participants the pandemic was mentioned in the context of confusion as to why her program was not able to move classes online swiftly after disaster. A third participant speculated that COVID-19 might be reason that the general population seems to be more "socially awkward than they used be" and therefore less equipped to offer appropriate emotional support to people.

When considering the first research question that framed this study, based on participant descriptions of their experience of natural disaster, what emerged are themes that capture how they lived the experience in terms of a rich array of personal and environmental factors. The many themes that emerged to create this nuanced understanding are consistent with factors and themes discussed in natural disaster mental health and counseling research and literature. This lends credibility to the trustworthiness of results.

The second research question that framed this study was: What were master's level counseling students' perceptions of support (or lack of support) from their program during and after their natural disaster experience while enrolled? All participants recalled

efforts by their programs to respond in some way to students needs after natural disaster. For some participants support came from all faculty in the program and in some cases extended to a feeling of being supported by the larger university as well. Other participants perceived support as only coming from a limited number of faculty or only from the university. Participants perceived relational outreach, flexibility, clarity, and opportunities to connect with peers and faculty as helpful. Confusion regarding procedures and expectations, lack of communication from faculty, feeling rushed to get “back to normal”, and a perceived lack of understanding by the school or faculty regarding students’ circumstance left students feeling isolated and compromised their trust in their faculty and program. Participants were more concerned with receiving support from their program than they were from their university. The findings around participants perceptions of support are consistent with findings from two recent studies about the experience and support needs of counseling students (Suarez et al., 2022) and social work students (Barros-Lane et al., 2021) in response to the COVID-19 pandemic.

When participants described their perceptions of support (or lack of support) by their programs they often used language that indicated they had a pre-existing expectation that their program faculty would know how to respond because of their faculty’s training in crisis, trauma, and disaster mental health response. Another factor that influenced participants feelings were pre-existing levels of trust. Participants who had experienced feeling supported by their program faculty prior to disaster described “knowing” they would be supported in the wake of disaster. For participants who did not have that foundation of trust or who described themselves as losing trust in the program for other reasons prior to the disaster, any efforts by the program to respond were not well

received. This is consistent with findings from Suarez et al., 2022 of counseling students support needs during the COVID-19 pandemic. Students expressed an expectation that their faculty would be able to respond appropriately to their needs and experienced a loss of trust when such efforts were not forthcoming.

Clear and consistent themes emerged in this study to answer the question of how counseling students perceived support (or lack of support) from their programs and faculty. The themes that emerged are consistent with results of other research studies of counseling students perception of support by their programs in the wake of other types of traumatic events and the research of the experiences and needs of students in related disciplines in the wake of traumatic events such as natural disaster which lends to the trustworthiness of the results.

Limitations

This study has some limitations which may prevent the findings from being generalizable to a larger population. The sample for this study consisted of 14 participants. Though Prosek and Gibson (2021) identify 15 as the average number of participants for a phenomenological study in counseling research, caution should be applied when considering whether any of the findings could be generalizable to a larger population. All of the individuals who participated in the study identify as female and lived and went to school in a gulf coast state during the time of the hurricane/hurricane related flooding they experienced. Twelve of the participants resided in the same state and had experienced the same hurricane approximately four months prior to the launch of the study. Two participants were enrolled in online master's programs and the other 12 were all enrolled in programs that were primarily in person. As a result of these

demographic limitations, though it provides a rich and nuanced picture of the hurricane experience for female counseling students residing and going to school on the gulf coast, it may not inform our understanding of the lived experience of counseling students of other gender identities; students living and going to school in different regions of the country; and/or those who have experienced other types of natural disasters.

Purposeful sampling methods were used which means the sample was not random. Response to the recruitment emails was strong. I was able to recruit a full slate of participants and begin a waitlist before sending out all planned recruiting emails.

Another limitation of this study relates to the method of interviewing. For the convenience of participants and to produce an audio recording, interviews were conducted using Zoom. Though use of videoconferencing technology for educational purposes, interviews, and provision of mental health care is more wide spread than three years previously, it has limitations. For qualitative research, the non-verbal cues expressed by participants are considered relevant to understanding lived experience and it can be difficult to detect nonverbal cues in Zoom.

Implications and Recommendations

This study contributes to counseling, counselor education, and disaster mental health literature and has important implications for the field of counselor education. This study makes an immediate contribution to the counseling and counselor education literature because it expands a line of inquiry while strengthening the field's understanding of how counseling student navigate natural disaster. The study contributes to natural disaster mental health literature because it continues the long line of qualitative inquiry which has enriched the field's understanding of the emotional and cognitive

impact of natural disaster. This is because qualitative methods bring to light what Massazza et al., (2021) refer to as a “more nuanced and complex range of experiences to those identified in the [quantitative] peritraumatic literature” (Massazza et al., 2021, p. 324). In this study participants described persistent, preoccupying thoughts, a state of constant worry, exhaustion, fear, and inability to concentrate which one participant labeled “hurricane brain.” This type of description and terminology reveals a level of nuance that might not otherwise be detected if a quantitative approach had been used.

Recommendations for Counseling Programs

This study has implications for counselor education and counselor training programs because it offers insight into students perceptions of support offered by their programs during times of crisis. Participants’ observations and ideas about what they perceived as helpful were consistent and concrete and are offered here as ideas that counseling program faculty and administration may want to consider with the understanding that there are a number of important factors that faculty and administration are simultaneously carrying and juggling both personally and professionally that ultimately inform what can be offered and how. Participants appreciated how difficult the circumstances must have been for their faculty members who were also coping personally with disaster while having to navigate the needs of their students and this recognition served to underscore their appreciation of any and all attempts by their programs to offer support. As such these recommendations are offered with that same spirit of gratitude, humility, and recognition of all that counselor educators do to educate and support future counseling professionals:

- Counselor education program faculty recognize and regularly create opportunities for students to process disruptive events in class, group supervision meetings, and individual supervision sessions. Participants spoke of how much they felt they benefitted from these opportunities to process their natural disaster experience in the presence of faculty and with peers in a manner that was respectful of the varied experiences of everyone present. One recommendation for programs to consider is to continue to incorporate these opportunities for students to process. An additional idea programs may want to consider, if they have not done so, is having some general parameters or guidelines for how and when these types of things occur and whether it would be more beneficial to students and faculty to have a facilitator come in who was not directly impacted by the disaster in recognition of faculty's emotional support needs.
- Participants appreciated when their faculty reached out to them via email in a way that acknowledged the difficult circumstances; offered practical and detailed information on how to access to relief services; and provided information on how academic matters such as class attendance would be handled in the wake of disaster. This type of communication, though highly valued, can be difficult for programs to plan for because each program is embedded in a larger institution which likely has disaster response protocols which may dictate who communicates and how. One way this could be navigated would be to explore what options may exist for counselor education faculty to serve on larger university disaster

response planning teams where they could offer their expertise in disaster and crisis response and assist with greater coordination of communication to the benefit of counseling students and the larger university community.

- Participants appreciated efforts by their program faculty to advocate for their needs at internship sites and to pivot to help students find new sites for internship and practicum when their assigned sites were not able to operate. Where and when possible, such efforts to pivot should continue. However, depending on the level of destruction, timing, and availability of qualified supervisors, such alternatives may not exist. Much of the burden for this type of pivot fell to program faculty and administration, which is understandable since the affected agencies were dealing with how they were going to be able to even reopen their doors in the wake of disaster. Though an aspiration for programs may be to develop and implement a disaster response protocol specifically for students who are engaged in practicum and internship, a practical and short term recommendation is for licensing and accrediting entities to continue to offer some flexibility for completion of hours under these types of circumstances.
- Finally, there are implications for counselor education programs as it relates to flexibility and expectations. Participants in this study needed, wanted, and expected flexibility from their program faculty and received flexibility as a sign that programs cared and valued them. Related to the theme of flexibility is expectations. As discussed earlier, participants had expectations that because their faculty are also mental health

professionals, the faculty would respond appropriately in the wake of disaster. This may mean that students are holding their counseling program faculty to very high standards which may be difficult to meet during times of large scale crisis and turmoil. It is recommended that perhaps there could be a larger discussion among program faculty and within professional organizations about these expectations and how to provide for the emotional support needs of faculty during a crisis when students are looking to them for support. The participants who experienced receiving appropriate support from their faculty were extremely grateful. They credited the support with being essential to helping them cope with the disaster.

Recommendations for Future Research

This study sought to fill a gap in the extant counseling and counselor education literature by establishing and strengthening a line of inquiry and this study delivers on that goal. Since counseling students' experience of natural disaster and their perceptions of support from their training programs has not been the focus of previous research, a recommendation for future research is to conduct similar studies. For example, the exact same interview protocol used for this study could be used in future studies with other master's level counseling students who have experienced a natural disaster. Given the level of interest this study generated, it should not be too difficult to find other counseling students who would like to talk about their natural disaster experience. This study happened to draw a sample of participants who all identify as female and had experienced a hurricane or hurricane related flooding in a specific geographic region which means the

immediate need would be to expand the demographics of the sample as well as the type of disaster experienced in order to see if similar themes emerge and to detect for different themes. Another recommendation would be to conduct a similar study with counseling program faculty to gauge their experience of natural disaster, how they perceived themselves and their programs as offering support to students, and to find out what support and assistance faculty describe as needing for themselves in the aftermath of natural disaster.

All participants spoke to a need for flexibility which in many cases related to being able to attend classes online or to receive flexibility with due dates, exams, and hour requirements. This may be something that students want only in the aftermath of large scale traumatic events. It may be something that students are seeking in response to more personal or private traumatic or distressing events. It may also be a general expectation that students have because of advances in videoconferencing and other online learning technology. There could be value in conducting research related to this theme.

Finally, even though qualitative methods are used extensively in counseling, counselor education, and natural disaster mental health research, there would be value in taking a mixed methods approach to this research or a strictly quantitative approach to measure perceived levels of distress among participants as well as perceived levels of support.

Conclusion

The purpose of this qualitative, phenomenological study was to explore the lived experience of counseling master's students who experience natural disaster while enrolled in their training program in order to understand how they perceived support (or

lack of support) offered by their program faculty in order to provide counseling programs with ideas for how to better support their students under similar circumstances. After receiving IRB approval for the study, participants were recruited using purposeful sampling methods. Fourteen master's level counseling students who had experienced a hurricane or hurricane related flooding between September, 2020 and October, 2023, consented to participate in an individual semi-structured interview. Transcripts of the interviews were analyzed following qualitative and phenomenological protocols to achieve trustworthiness. Six themes emerged from analysis to describe how participants experienced natural disaster and perceived supportive efforts from their training programs. These themes were; roles, preparation, cognitive and emotional impact, relational outreach and communication, and flexibility. The study fills a gap in the counseling and counselor education literature because it establishes a line of inquiry and strengthens understanding of how counseling students navigate traumatic events while enrolled in their programs of study and offers practical, tangible, and low cost recommendations for how programs can support students in similar circumstances.

Appendices

Appendix A: Interview Protocol

Semi-Structured Interview Questions

1. Brief Introduction

Provide purpose of the interview; interest in understanding all aspects of master's counseling student experience of natural disaster while enrolled in program of study in order to help graduate programs strengthen and create support options for students in similar situations.

Thank participant for their time and willingness to contribute.

2. Permission to Record and Informed Consent Review

Ask for permission to create an audio recording of the interview. Review signed informed consent; steps being taken to assure participant privacy and confidentiality; participation is voluntary and participant may withdraw or end the interview at any time without penalty.

3. Introductory Questions

- A. What identities that you held at the time and were important to you would you like for me to know and understand in this research?
- B. What circumstances surrounding the natural disaster such as your context with it do you feel are important for me to know?

4. Natural Disaster Questions

- A. As you look back on your experience of natural disaster what comes up for you and what sticks out for you?
 - i. What do you recall feeling and experiencing at the time?

- B. What do you remember the disaster being like for others around you and for those you were in close relationship with?

5. Resource and Support Questions

- A. What kind of help and support did you find yourself wanting during that time?
- B. Who and what did you experience as providing or attempting to provide help and support?
- i. Did you feel like the help and support was enough and that it was helping?
 - ii. What fell short and went unattended in terms of help and support you were wanting during that time?
- C. In what ways did your program and/or faculty acknowledge or not acknowledge you were going through and experiencing related to the natural disaster?
- i. Were there things your program or faculty did that met your expectations or even exceeded your expectations? How was that for you?
 - ii. Were there things that fell short or were missing altogether? How was that for you?
- D. Who were people that you recall telling about how you were feeling and what you were going through and how did you share your experience with them?
- i. What did it feel like to share your experience?

6. Closing

- A. What advice would you have someone who found themselves in the same circumstances as you?
- B. What else would you like to share with me about your experience?

7. Wrap Up

Thank participant for participating and sharing. Review again procedures for how confidentiality and privacy will be protected, voluntary withdrawal procedures, and how participants can get in touch with me or my dissertation advisor with any questions or concerns.

Appendix B: IRB Approval



JAMES MADISON
UNIVERSITY®

NOTICE OF APPROVAL FOR HUMAN RESEARCH

DATE: January 23, 2023

TO: Amy Sirocky Meck, M.Ed., Dept of Graduate Psychology Deborah Sturm, Dept of
Graduate Psychology

FROM: Lindsey Harvell-Bowman, Associate Professor, IRB Panel

PROTOCOL TITLE: Graduate Counseling Students Lived Experience of Natural Disaster

FUNDING SOURCE: None

PROTOCOL NUMBER: 23-3811

APPROVAL PERIOD: Approval Date: January 23, 2023 **Expiration Date:** January 22, 2024

The Institutional Review Board (IRB) for the protection of human subjects has reviewed the protocol entitled, "Graduate Counseling Students Lived Experience of Natural Disaster," under 45 CFR 46.110 Expedited Category 6, 7. The project has been approved for the procedures and subjects described in the protocol.

If your study requires any changes, the proposed modifications will need to be submitted in the form of an amendment request to the IRB. Any changes require approval before they can be implemented as part of your study. If there are any adverse events and/or any unanticipated problems during your study, you must notify the IRB within 24 hours of the event or problem.

This approval is issued under James Madison University's Federal Wide Assurance 00007339 with the Office for Human Research Protections (OHRP). If you have any questions regarding your obligations under the IRB's Assurance, please do not hesitate to contact ORI.

Please direct any questions about the IRB's actions on this project to the IRB Chair:

Dr. Lindsey
Harvell-Bowman
harve2la@jmu.edu
(540) 568-2611
Lindsey Harvell-Bowman

OFFICE OF RESEARCH INTEGRITY

MSC 5738
HARRISONBURG, VA 22807
540.568.7025 PHONE

Appendix C: Recruitment Letter

Sample of letter to be sent to coordinators of CACREP accredited graduate counseling programs

Dear

My name is Amy Sirocky-Meck. I am a graduate student enrolled in the Ph.D. program in counseling and supervision at James Madison University (JMU). I have received JMU Institutional Review Board approval to conduct a research study on the lived experience of *master's counseling students who survive natural disaster while enrolled in graduate study* so that graduate counseling programs can better understand how to support students during similar crises. I am in the process of recruiting participants for the study and am writing to you specifically because of recent (**type of natural disaster**) and other types of natural disasters that have occurred in and around your area to see if you would be willing to share this email and the attached recruitment flyer with your students and alumni who may be interested in participating in a single 60-90 minute Zoom interview with me to share their experience.

Individuals who complete an interview with me and provide a valid mailing address when they sign up for the interview will receive their choice of one of the following counseling resources:

Art Therapy Activities for Kids, by Erica Curtis

The Mindfulness Toolbox, by Donald Altman

101 Trauma-Informed Interventions, by Linda Curran

Counseling Activities Workbook, by Wilma Schroader

To learn more and sign up for an interview anyone who is interested in participating can go to this online interest form: <https://jmu.questionpro.com/t/ARqJRZwFQA>

Upon receipt of a completed interest form, I will email the individual to confirm a date and time for the interview, provide a Zoom link for the interview, and provide the informed consent form which individuals will need to sign and return prior to the interview.

I know that you are incredibly busy and so I want to assure you that the only thing I am asking is if you would consider please sharing this request. If you have any questions or if I can provide additional information, please do not hesitate to contact me directly. Again, thank you so much for considering this request.

This study has been approved by the IRB, protocol #23-3811

Sincerely,

Amy M. Sirocky-Meck

James Madison University

sirockam@jmu.edu

540-568-5214

Appendix D: Recruiting Flyer



Participants Wanted

Participants wanted for a study examining the lived experiences of master's counseling students who have been through a natural disaster while enrolled in graduate study.

How **You** Can Help

If you are currently enrolled or were enrolled in a CACREP-accredited master's counseling program and you experienced a natural disaster while enrolled and prior to graduation, I would like to interview you. We will spend 60-90 minutes together on Zoom so I can learn about your experience. The interview will be audio-recorded.

- *Participation in this study is voluntary and you may withdraw at any time without penalty.*
- *An incentive of a counseling activities resource book (valued at \$15-\$30) is offered to individuals who complete an interview with the principal investigator*

This study has been approved by the IRB,

protocol #23-3811

About the Principal Investigator
I am Amy Sirocky-Meck, the Principal Investigator. A graduate student enrolled in the Ph.D. program in counseling and supervision at James Madison University, I am conducting this research for my dissertation in partial fulfillment of my degree.

The Goal

The goal of this Institutional Review Board-approved qualitative study is to contribute to filling a gap in the research by identifying ways that graduate counseling programs can support their students during crises similar to what you experienced.

<https://jmu.questionpro.com/t/ARqJRZwFQA>

sirockam@jmu.edu

To Find Out More and Sign Up



Appendix E: Snowball Sample Letter

Dear

My name is Amy Sirocky-Meck. I am a graduate student enrolled in the Ph.D. program in counseling and supervision at James Madison University. I have received JMU Institutional Review Board approval to conduct a research study on the lived experience of graduate counseling students who survive natural disaster while enrolled in graduate study to better understand how graduate counseling programs can support students during similar crises. I am in the process of recruiting participants and am wondering if you would be willing to share this email and/or the attached recruitment flyer with people you know who may be interested in participating in a single interview with me to share their experience. I am conducting interviews on Zoom to produce an audio recording and the time commitment would be 60-90 minutes.

Individuals who complete an interview with me and provide a valid mailing address when they sign up for the interview will receive their choice of one of the following counseling resources:

Art Therapy Activities for Kids, by Erica Curtis

The Mindfulness Toolbox, by Donald Altman

101 Trauma-Informed Interventions, by Linda Curran

Counseling Activities Workbook, by Wilma Schroader

To learn more and sign up for an interview go to this online interest form:

<https://jmu.questionpro.com/t/ARqJRZwFOA>

Upon receipt of a completed interest form, I will email the individual to confirm a date and time for the interview, provide a Zoom link for the interview, and provide the informed consent form which individuals will need to sign and return prior to the interview.

If you have any questions, please feel free to reach out to me at this email address sirockam@jmu.edu or by phone at 540-568-5214.

This study has been approved by the IRB, protocol #23-3811

Sincerely,

Amy M. Sirocky-Meck
James Madison University

Appendix F: Online Interest Form

JAMES MADISON UNIVERSITY

You are being asked to participate in a research study conducted by:

Amy Sirocky-Meck from James Madison University sirockam@jmu.edu, 540-568-5214.

The purpose of this study is to understand the lived experience of master's counseling students who go through a natural disaster while enrolled in their program of study so that graduate counseling programs can better understand how to support students during similar crises. This study will contribute to the researcher's completion of her doctoral dissertation. Should you decide to participate in this research study, you will be asked to sign an informed consent form once all your questions have been answered to your satisfaction. This study consists of a 60-90 minute interview that will be administered through the online videoconferencing platform Zoom. The interviews will be audio recorded. You will be asked to provide answers to a series of questions related to how you experienced natural disaster as a graduate counseling student.

The investigator does not perceive more than minimal risks from your involvement in this study (that is, no risks beyond the risks associated with everyday life). Potential benefits from participation in this study include opportunity to contribute to what is known about the natural disaster experience and to improve levels of response for survivors. This also provides an opportunity to contribute to the counseling profession and counselor education preparation programs specifically.

A counseling activities resource book is offered as an incentive for individuals who complete an interview with the principal investigator.

The results of this research will be presented to the James Madison University graduate psychology department in partial fulfillment of a doctoral degree in counseling and supervision. If accepted, the research will be published by James Madison University. The results of this project will be coded in such a way that the respondent's identity will not be attached to the final form of this study. The researcher retains the right to use and publish non-identifiable data. While individual responses are confidential, aggregate data will be presented representing averages or generalizations about the responses as a whole. All data will be stored in a secure location accessible only to the researcher. Upon completion of the study, all information that matches up individual respondents with their answers including audio recordings will be destroyed. Final aggregate results will be made available to participants upon request.

Your participation is entirely voluntary. You are free to choose not to participate. Should you choose to participate, you can withdraw at any time without consequences.

This study has been approved by the IRB, protocol #23-3811

Start

Contact Information

First Name

Last Name

Phone

Email Address

Add Question

Page Break

Separ

Name of college or university where you were enrolled at the time of the natural disaster

Answer text

Add Question

Page Break

Separ

Name of program of study

Answer text

Add Question

Page Break

Separ

Please indicate the days of the week (All times are Eastern Standard) that you are regularly available for a 60-90 minute interview. Check all that apply

- | | | | | | |
|--|--|---|---|--|--|
| <input type="checkbox"/> Monday 9:00am-12:00pm | <input type="checkbox"/> Monday 12:00pm-3:00pm | <input type="checkbox"/> Monday 3:00pm-6:00pm | <input type="checkbox"/> Monday 6:00pm-8:00pm | <input type="checkbox"/> Tuesday 9:00am-12:00pm | <input type="checkbox"/> Tuesday 12:00pm-3:00pm |
| <input type="checkbox"/> Tuesday 3:00pm-6:00pm | <input type="checkbox"/> Tuesday 6:00pm-8:00pm | <input type="checkbox"/> Wednesday 9:00am-12:00pm | <input type="checkbox"/> Wednesday 12:00pm-3:00pm | <input type="checkbox"/> Wednesday 3:00pm-6:00pm | <input type="checkbox"/> Wednesday 6:00pm-8:00pm |
| <input type="checkbox"/> Thursday 9:00am-12:00pm | <input type="checkbox"/> Thursday 12:00pm-3:00pm | <input type="checkbox"/> Thursday 3:00pm-6:00pm | <input type="checkbox"/> Thursday 6:00pm-8:00pm | <input type="checkbox"/> Friday 9:00am-12:00pm | <input type="checkbox"/> Friday 12:00pm-3:00pm |
| <input type="checkbox"/> Friday 3:00pm-6:00pm | <input type="checkbox"/> Friday 6:00pm-8:00pm | | | | |

Other information about availability you wish to provide the researcher:

Multiple Row Answer text

Add Question

Page Break Separator

As an incentive, participants who complete an interview with the principal investigator and provide a valid mailing address will have the option of receiving their choice of one of the following counseling resources:

- Art Therapy Activities for Kids*, by Erica Curtis
- The Mindfulness Tool Box*, by Donald Altman
- 101 Trauma-Informed Interventions*, by Linda Curran
- Counseling Activities Workbook*, by Wilma Schroeder

Add Question

Page Break Separator

If you wish to receive the incentive please indicate a valid mailing address

Address Line 1

Address Line 2

City

State

Zipcode

Add Question

Page Break Separator

Appendix G: Confirmation Letter

Dear

I am writing to confirm receipt of the interest form you completed to participate in the research study I am conducting on the lived experience of counseling master's students who experience natural disaster while enrolled in their program of study. Based on your availability, I have tentatively scheduled us for a 60-90 minute Zoom interview on (DATE) (TIME). Please email me back to confirm your availability for this date and time. Once I receive your response, I will send you a link for a Zoom meeting.

I have attached an informed consent form which includes more information about the study. Please review, sign, and return it to me prior to your interview. You may print, sign, scan and email it back to me, or if you prefer you may print, sign, and photograph it and send the photograph to me at this email address.

If the time selected no longer works for you, would you please email me some alternative dates and times that could work for an interview.

I am also attaching a copy of the recruitment flyer. Please feel free to share it with individuals who you believe may be interested in participating in an interview with me. The flyer includes a QR code which, if scanned, will take individuals to the online interest form you completed.

Thank you so much for your interest in participating. I am incredibly grateful for your willingness to share your experience and insight on this very important topic.

This study has been approved by the IRB, protocol #23-3811

Sincerely,

Amy M. Sirocky-Meck

Appendix H: Informed Consent

Consent to Participate in Research

Identification of Investigators & Purpose of Study

You are being asked to participate in a research study conducted by Amy Sirocky-Meck from James Madison University. The purpose of this study is to understand the lived experience of master's counseling students who go through a natural disaster while enrolled in their program of study so that graduate counseling programs can better understand how to support students during similar crises. This study will contribute to the researcher's completion of her doctoral dissertation.

Research Procedures

Should you decide to participate in this research study, you will be asked to sign this consent form once all your questions have been answered to your satisfaction. This study consists of an interview that will be administered through the online videoconferencing platform Zoom. **The interviews will be audio recorded.** You will be asked to provide answers to a series of questions related to how you experienced natural disaster as a graduate counseling student.

Time Required

Participation in this study will require 60-90 minutes of your time.

Risks

The investigator does not perceive more than minimal risks from your involvement in this study (that is, no risks beyond the risks associated with everyday life).

Benefits

Potential benefits from participation in this study include opportunity to contribute to what is known about the natural disaster experience and to improve levels of response for survivors. This

also provides an opportunity to contribute to the counseling profession and counselor education preparation programs specifically.

Incentive

As an incentive, participants who provide complete an interview with the principal investigator and provide a valid mailing address will have the option of receiving their choice of **one** of the following counseling resources *:

Art Therapy Activities for Kids, by Erica Curtis

The Mindfulness Tool Box, by Donald Altman

101 Trauma-Informed Interventions, by Linda Curran

Counseling Activities Workbook, by Wilma Schroader

*In the event the selected title is no longer available, the principal investigator will select a similar publication.

Confidentiality

The results of this research will be presented to the James Madison University graduate psychology department in partial fulfillment of a doctoral degree in counseling and supervision. If accepted, the research will be published by James Madison University. The results of this project will be coded in such a way that the respondent's identity will not be attached to the final form of this study. The researcher retains the right to use and publish non-identifiable data.

While individual responses are confidential, aggregate data will be presented representing averages or generalizations about the responses as a whole. All data will be stored in a secure location accessible only to the researcher. Upon completion of the study, all information that matches up individual respondents with their answers including audio recordings will be destroyed. Final aggregate results will be made available to participants upon request.

Participation & Withdrawal

Your participation is entirely voluntary. You are free to choose not to participate. Should you choose to participate, you can withdraw at any time without consequences of any kind.

Questions about the Study

If you have questions or concerns during the time of your participation in this study, or after its completion or you would like to receive a copy of the final aggregate results of this study, please contact:

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Questions about Your Rights as a Research Subject

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Giving of Consent

I have read this consent form and I understand what is being requested of me as a participant in this study. I freely consent to participate. I have been given satisfactory answers to my questions. The investigator provided me with a copy of this form. I certify that I am at least 18 years of age.

I give consent to be audio recorded during my interview. _____ (initials)

Name of Participant (Printed)

Name of Participant (Signed)

Date

Name of Researcher (Signed)

Date

This study has been approved by the IRB, protocol # 23-3811.

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