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**The Assessment of Emergency Preparedness Among
University Students**

BY

Arliah Cox

A Thesis Submitted in Partial Fulfillment of the

Requirements for the Degree of

MASTER OF SCIENCE

In

COMMUNITY HEALTH EDUCATION

at

Minnesota State University, Mankato

Mankato, Minnesota

May 2022

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The Assessment of Emergency Preparedness Among University Students

Arliah Cox

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MINNESOTA STATE UNIVERSITY, MANKATO
MANKATO, MINNESOTA
May 2022

ABSTRACT

University students have been an understudied population when it comes to the topic of emergency/ disaster preparedness. While there have been a few studies carried out to examine students' perceptions of preparedness, the level of preparedness must be determined to be able to close the gap when it comes to barriers preventing them from being prepared. One hundred and eighty-seven undergraduate participants at a Midwestern university completed both online and in-person surveys in March 2022. The survey included questions regarding emergency/ disaster preparedness, perception of being prepared, and barriers which can prevent preparedness. Results showed that a lack of time was one of the most common barriers for students in regard to preparedness. Further emergency/ disaster supplies possessed by participants were everyday household items. The data also suggests that students were not being taught about emergency/disaster preparedness by instructors. As results indicate there are many barriers to emergency preparedness among university students which is why continued

research on the relationship between emergency/disaster preparedness, behavior, and personal responsibility is critical in the future

Chapter I

Introduction

A disaster, according to the Center for Research on the Epidemiology of Disasters (CRED) (2015), is a situation or event that exceeds local capacity, requiring a request for external support at the local or global level. This is often an unexpected and sudden incident that causes substantial damage, obliteration, and suffering in the world. According to the International Emergency Events Database (EM-DAT) (2009), disasters can be divided into two groups.

Natural catastrophes fall into the first group, which includes biological, geological, climatic factors, hydrological, and weather events. Tech catastrophes fall under the second category, which includes workplace accidents, vehicle accidents, widespread violence, and other tragedies such as human-made detonations. Global trends throughout the last ten years have indicated an increase in the frequency and intensity of natural and digital threats. (Levac, Toal-Sullivan & O`Sullivan, 2012). Minnesota experienced 63 catastrophic disasters between 1953 and 2019, with floods and strong storms being the most common, according to the Federal Emergency Management Agency (FEMA) (n.d.).

According to the New York State Department of Health (2008), the efforts taken to guarantee safety before, during, and after an emergency or natural disaster are referred to as emergency preparedness. These precautions are essential for safety in both natural and human-made disasters.

There are many online resources that offer an array of tips and guides to prepare individuals, companies, families and more about what to do and how to prepare for emergency situations such as the U.S. Department of Health and Human Services National Institutes of Health Division of Emergency Management (n.d.) or the Nevada Division of Emergency Management/ Homeland Security (2021). These resources talk about food storage, water storage, creating and practicing emergency evacuation plans to help ease panic in the event of actual situations as well as give information about places of refuge and organizations that are established to assist in those unfortunate times. Many universities are not fully compliant with requirements, despite the fact that many organizations have been established to assist campuses in the event of an emergency (Connolly, 2012). Because it is a challenge to map out a plan for all hazards and threats, institutions routinely find themselves preparing for historical events, which can result in them reacting to a crisis for which they are unprepared (Zdziarski, Dunkel, Rollo, & Associates, 2007). The Department of Homeland Security (DHS) established the National Incident Management System (NIMS) and the National Response Framework in 2004 to streamline catastrophe preparation and processes (DHS, 2008).

It is no surprise that as time passes by, the increase of disasters continues to rise, due to an array of reasons such as climate change or new scientific discoveries about bacteria and viruses that may contribute to global pandemics. Whatever the reason for the disaster, natural or human-made, the most important factors are, are we prepared and what can we do to prepare?

Statement of the Problem

The wise words once said by Benjamin Franklin which state “If you fail to plan, you’re planning to fail” have never rung truer than in the year 2020. According to Tanner and Doberstein (2015), natural catastrophes are a global issue. Within the last ten years, natural catastrophes have cost the world's economy an estimated \$190 billion each year. Due to the magnitude of damage caused by natural catastrophes, efforts have been made to reduce catastrophic risk and improve emergency preparedness through study and application. University students, on the other hand, have been understudied, despite the fact that they are assumed to have a lower level of resilience than that of the wider population, due in part to the absence of preparation mindsets (Kapucu & Khosa, 2013) which in turn increases their vulnerability. Living in close quarters, low incomes, no or little exposure regarding disasters, early age, not considering themselves as in imminent danger, and having exaggerated self - confidence that they are at a lower chance of being involved in a disaster are all factors that lead to vulnerability (Koskan, Foster, Karlis, Rose, & Tanner, 2012; Tanner & Doberstein, 2015; Suls, Rose, Windschitl, & Smith, 2013)

The ability to determine the level of preparedness of university students, a demographic whose aim is to develop expertise, experience and understanding in order to prepare them for success in life and employment, allow researchers to identify preparedness gaps and provide an opportunity for targeted change.

Significance

According to Seo, Torabi, Sa, and Blair, (2012), the size of a university's enrolment has an impact on disaster preparedness levels. According to The U.S. Department of

Education, National Center for Education Statistics (NCES) (2021) there were 19.4 million students enrolled in college in Fall of 2020. Schools with a larger student body of anywhere between 10,000-30,000 are more likely to have effective emergency policies and strategies. There's a vast majority of traditional university students who continue to rely on others to support them in some capacity. Most university students lack certain life experiences and have only just begun making responsible choices for themselves (Collins et al., 2009). When enrolling students, universities subconsciously take on a "parenting duty," which entails ensuring that students are aware of and equipped with knowledge, understanding, and resources to be prepared in the case of a catastrophe or tragedy. With university students being a highly understudied group, it is imperative to concentrate on them to gain insight and get a better understanding, being that they are one of today's most vulnerable groups of people in society. There are very few studies that have explored this particular group of students, and this is an ever-growing population which needs to be addressed.

Purpose of the Study

The purpose of this study was to evaluate the level of emergency preparedness as well as barriers to preparedness among university students

Research Questions & Hypothesis'

What are barriers preventing students from engaging in emergency/disaster preparedness?

What are common emergency/disaster preparedness resources or training accessed by university students?

What is the current level of emergency/disaster preparedness among selected university students?

To what extent has the university assisted or enabled students to prepare for emergency/disaster situations?

Assumptions

Participants in this study answered the survey questions honestly and to the best of their ability.

Limitations

Being that nearly 70% of the participants were females, the generalizability of this study may be affected. Another effect on this study was that the data was obtained through a convenience sample of undergraduate students at one midwestern university.

Delimitations

This study was limited to undergraduate students at a midwestern university ages of 18 and older that were actively enrolled in the 2021-2022 academic year that were taking courses within the health sciences department.

Definitions

Disasters: A situation or event that exceeds local capacity, requiring a request for external support at the local or global level. This is often an unexpected and sudden incident that causes substantial damage, obliteration, and suffering in the world (CRED, 2015).

Emergency Preparedness: The efforts taken to guarantee safety before, during, and after an emergency or natural disaster (CRED, 2015).

Emergency Medicine: The medical specialty dedicated to the diagnosis and treatment of unforeseen illness or injury. It encompasses planning, oversight and medical direction for the community emergency medical response, medical control and disaster preparedness (American College of Emergency Physicians, 1994).

Chapter II

Literature Review

Disasters

Disaster response success is largely determined by current levels of disaster preparedness (Al-Ziftawi, Elamin, & Mohamed Ibrahim, 2020). Al-Ziftawi et al. (2020) define disaster preparedness as efforts designed to prepare for catastrophes and mitigate their impacts. That is, to anticipate and, when feasible, avert catastrophes, to limit crises' impact on vulnerable individuals, and to react to and effectively handle disasters' outcomes. As a result, Al-Ziftawi et al. (2020) argue that disaster preparedness is clearly a procedure, with understanding, perception, and action as the core elements. To maintain the highest standards of preparedness for emergency medicine, health care practitioners should have high levels of understanding, perception, and action in the context of health systems.

Impacts of Disasters

According to the United Nations Office for Disaster Risk Reduction, disasters have resulted in substantial economic setbacks in low- and lower-middle-income nations (UNISDR, 2009). Between 1998 and 2017, disasters claimed the lives of approximately 1.3 million people. In addition, catastrophes have left 4.4 billion people wounded, homeless, or in need of humanitarian aid. According to the Insurance Information Institute (2018), 327 disastrous events happened in 2016, with 136 (42%) of them being human-made events. Emergency medicine treats those who have been affected by natural and human-made disasters. This form of medicine has an impact on the physiological, medical, and psychological effects of catastrophes, as well as disaster mitigation.

There were 11,755 deaths, 95 million people impacted, and 103 billion dollars in economic costs worldwide as a result of these extreme weather events according to CRED (2015). However, CRED (2015) continues to explain that impact of such events was not distributed evenly, with Asia bearing the brunt of it, accounting for over 40% of catastrophic events, 45% of deaths, and 74% of those affected. India was also hit hard, accounting for nearly 20% of all deaths and 24.5 % of the total number of persons impacted. Floods were the deadliest form of disaster, accounting for 43.5% of all deaths, followed by severe temperatures (due mainly to extreme heat that hit Europe) and storms (which accounted for 21.5%). Storms were the most common cause of death, accounting for around 35% of all fatalities, followed by floods (33%), and droughts (31%). In 2019, 4.1 billion people were at risk of being affected by natural catastrophic events around the world. When analyzed, the numbers of people who could be left vulnerable in comparison to the different types of disasters were significantly different (CRED, 2015). While floods and storms can damage large amounts of land and potentially affect 2.9 and 1.9 billion people worldwide respectively, earthquakes, which harm 142.9 million people, and wildfires, which affect 91 million people, both impact more specific regions. Wildfires had the most destructive economic effect on the United States of America in 2019. This form of natural disaster had a significant impact on California (CRED, 2015).

University Students

In comparison to the broader population, college students are much more susceptible to the negative impacts associated with disastrous incidents (Tanner & Doberstein, 2015). Close quarters, lower incomes, no or little experience with disasters,

young age, not viewing themselves as in imminent danger, and having unrealistic optimism that they are at a lower risk of being involved in a disaster are all factors that lead to vulnerability (Koskan, Foster, Karlis, Rose, & Tanner, (2012); Tanner & Doberstein, (2015); Suls, Rose, Windschitl, & Smith, (2013)).

Koskan et al. (2012) found that college students seek information in a different way than the broader public. There are four different notification systems on most campuses. Email, website, text message, and landline phones account for the biggest percentage of techniques used (Schafer, Heiple, Giblin, & Burruss, 2010). Guth (2013) found that 75% of institutions have emergency information on their websites. Only 15% of the websites, on the other hand, had emergency information in an easily accessible location (Guth, 2013).

Tanner and Doberstein (2015) as cited by Tan et al. (2016), found 53.4% to 91.2% of college students performed poorly in disaster coping awareness and abilities examinations, and 65.6% to 88.5% of students seemed to have no prior disaster rescue training. According to a study by Tan et al. (2016) the biggest issue in terms of disaster preparedness among participants was dealing with fire. Training is a crucial part of improving disaster preparedness for college students, and disaster preparedness should be a core component of the standard curriculum. In China, as in many other nations, the current state of disaster training and education at the university level is unknown. Tan et al. (2016) explains that the majority of disaster preparedness academic studies have concentrated solely on health-care students and students from other sectors beyond healthcare are poorly understood. Health professionals don't know how many

individuals have prior catastrophe experience or what information and capabilities learners will need to acquire.

While research is scarce, available studies suggest that university students are a section of the population that is especially susceptible to disaster-related negative consequences (He et al., 2007). In addition to the stress and difficulties that come with the acclimation to university life (Kline & Lu, 2005), university students, especially international and out-of-state students, are exposed to a variety of identified risk factors that come in the form of familiarity with their environment, life experience, crisis experience, financial difficulties, disrupted social networks, language obstacles, and cultural differences are among the aspects mentioned by He (2007).

The highest demanded rescue skills within society with regard to preparedness, in a study conducted by Tan et al (2016) were found to be injury triage, fracture fixation, wound management, and self-reliance rescue capabilities, followed by hemostatic procedures and injured shunt. Surprisingly, cardiac resuscitation was not required (CPR). Many schools, offer classes or seminars to teach CPR techniques to students, but they are inexperienced with other skills. Fracture fixation, hemostatic treatments, and injured shunts, on the other hand, are more commonly utilized in disaster rescue. These emergency education programs should not only cover CPR but also offer ways of dealing with injured people in a crisis. The most difficult component of disaster education, in terms of practicality, is acquiring rescue skills, which must be overseen by experts and entail some hands-on practice. Tan et al. (2016) states that to some extent, students appear to be able

to learn rescue skills by enrolling in classes focused on conceptual understanding or by self-learning information through the internet.

Vulnerability Within the Community

Levac, Toal-Sullivan and O'Sullivan (2012) explains how populations are more sensitive to the negative effects of a disaster due to the nature and severity of the risk and circumstances, such as population and density expansion, rising levels of poverty and displacement, global warming, and more globalization. As a result of disaster-related human and economic casualties, various segments of society have become more aware of the need to reduce vulnerability to hazards. Levac et al. (2012) describes danger as the link between the probabilities of a threat and the potential for human, economical, societal, and physical costs in a population or community. Levac et al. (2012) states that the concept of 'vulnerability' refers to one's propensity to damage or interruption as a result of hazard action. It's a broad word that recognizes that a person's or a family's susceptibility is influenced by their decisions and actions, as well as biological, cultural, socioeconomic, historic, and societal factors. As a result, vulnerability varies depending on the interaction between social determinants of health, relevant operational deficits, and the nature of the crisis.

Although it is critical to recognize components that help to establish vulnerability, Paton and Johnston (1998) caution that those same factors can have a significant effect on a person's vulnerability, depending solely on the relationship between the person and the context. As a result of inequalities in social determinants of health as well as disparities in the dispersion of these socioeconomic factors, the term 'high-risk' is used in a study by

Levac, Toal-Sullivan & O'Sullivan (2012) to refer to individuals and families who may be more prone to have experienced negative effects during catastrophic events.

Disaster impacts have different effects on people depending on the group being studied and the existing level of preparedness for certain crisis situations among the participating group. However, there is a lack of consensus in the research on the factors that lead to disaster preparedness. Levac et al. (2012) lists age, sexuality, schooling, and ethnic background are all factors that combined with level of emergency preparedness contribute to health disparities in different areas and have been identified as essential components of coping with disastrous events. To conceptualize people's abilities and susceptibilities to disasters, the Canadian Red Cross (2008) promotes social determinants of health centered approach. Ten high-risk groups have been identified: seniors, indigenous people, low-income people, people with low levels of literacy, transient populations, people with disabilities, people with medical dependence, kids and young adults, women, immigrants, and minorities are among the groups. Other conceptualizations of high-risk categories include single-parent homes and those responsible for extended families. According to a study by Eisenman et al. (2009) characteristics such as a lack of economic stability, handicap, or minority identity all contribute to low disaster readiness. Several of these characteristics are found in close proximity, heightening the danger (Anderson-Berry & King, 2005).

According to Levac et al. (2012), those who are most susceptible during a crisis are also the ones who are less prepared to care for themselves thereafter. It's not so much a particular trait that renders someone at a disadvantage as it is how that trait affects their interaction

with society, limiting access to the public, financial, and material resources that safeguard people in times of crisis and on a daily basis. This emphasizes the importance of not just enhancing but also reinforcing disaster preparation activities among high-risk populations. Resilience is described by Martin (2009) as an individual's or a system's ability to cope with and sustain positive functionality in the face of considerable tragedy or hazard. It is a key component of disaster preparation.

Emergency Preparedness

Perry and Lindell (2003) state that being prepared for disasters is not constant, but rather is changing as social contexts shift, requiring revisions and modifications. For instance, caregiving or medical considerations may affect the needs of the household temporarily or permanently. Proper household emergency preparation is a substantial strategy to reduce the impact of a disaster is (Falkiner, 2003). Identifying the dangers specific to a region, developing a contingency plan, and supplying a home survival kit with 72 hours of nutrition, water, and medical aid for sheltering in place are all part of emergency preparedness. In addition to drafting a contingency plan and understanding emergency housing and evacuation tactics for public response, the American Red Cross (2004) says that preparation frequently includes exercising the plan alongside family members. Public Safety Canada (2011) emphasizes the interconnectedness and necessity for continuity throughout all phases of a crisis: prevention, preparedness, response, and recovery.

According to Tanner and Doberstein (2015), approximately 30% of college students carry emergency kits however any disaster preparedness supplies that student may

have, are purely coincidental because they are common household stuff (Tanner & Doberstein, 2015). Over half of students had at least three days' worth of food and a first-aid kit, according to Claborn (2010), but less than a third had a radio, generator, or extra supply of medication (Claborn, 2010). There are significant gaps in disaster preparedness awareness among college students, with only 2% being able to name the nearest emergency shelter and only 8% holding emergency supplies (Simms, Kusenbach, & Tobin, 2013).

Mann (2007) argues that there's a lack of emergency planning training and education. According to estimates, between 28 and 73% of colleges participate in emergency drills (Cheung, Basiaga, & Olympia, 2014; Connolly, 2012). If successful, training exercises demonstrate readiness, while failure reveals areas for growth (Jackson & McKay, 2011). During student orientation, however, just about half of students receive information or training on disaster preparedness (Cheung et al., 2014). Videos about emergency preparedness could be a good method to raise emergency planning awareness. Students who watched an emergency preparedness film were more confident in their university, their capacity to respond to a campus disaster, and their knowledge of emergency information (Sattler, Kirsch, Shipley, Cocke, and Stegmeier, 2014).

According to Lemyre, Lee, Turner and Krewski (2007) one common way to assess the emergency preparedness of a household is by evaluation of the quantity of disaster supplies on hand. Findings from experiments conducted by Falkiner (2003) show that people are underprepared for catastrophes. Numerous individuals tend to overestimate their capacity to cope with a crisis in the near future and believe that they can depend on emergency aid. According to the American Red Cross (2004) within their Institute for

Catastrophic Loss Prevention, there is a relative absence of residential disaster preparation in both the United States and Canada. According to Falkiner (2003), respondents from a 2001 poll in Kingston, Ontario, had typically poor levels of readiness for typical Canadian catastrophes such as winter power failures, fires, and health-related emergencies. Only 27% of respondents said that household disaster preparation is an individual responsibility, while 53% agreed that it is a governmental obligation. Despite the fact that the study was confined to a single region, the findings are consistent with earlier studies that demonstrate Canadians are ill-equipped to deal successfully with emergencies. According to Lemyre et al. (2007), Canadian organizations are considered somewhat equipped for a catastrophe, and individuals don't really take appropriate precautions to prepare for terrorist incidents in general. They also discovered that women were less interested in readiness exams than men.

Factors Influencing Emergency Preparedness

The anticipated risk of a hazard turning into an actual catastrophe is another important aspect in disaster preparation (Anderson-Berry & King, 2005). Certain characteristics, such as the incident's predictability, duration, and sequence, the number of fatalities or degree of injury incurred, and the accessibility of preventative care, danger or protective variables which are used to assess the psychosocial effects and risk perception (Diekman, Kearney, O'Neil & Mack, 2007). An individual will take preventive action if they believe the danger is relevant to them or if they are motivated by other factors such as caring for children or elderly people (Levac et al., 2012). The existence of a pet in the home, as well as the location and style of the home, have an impact on motivation. Those

who reside in inner-city areas or in apartments with more than five stories are more inclined to participate in preparation operations. According to Mulilis, Duval and Bovalino (2000) landowners are usually better prepared than homeowners, who are better equipped than student tenants.

Although the media can be useful in promoting disaster preparedness, there are still issues which remain with how information is distributed. Disaster/ emergency information distributed via the media (e.g., social media outlets, Facebook, Instagram, Twitter etc.) may be unreliable and tweets that are misleading are troublesome, often attracting rumors and misinformation. Direct, constant, and dependable communication that can be comprehended by those with low literacy levels is critical during all phases of emergency planning. There is also a need to guarantee that every household has the requisite equipment before and during a disaster to receive emergency messages. Radio was perhaps the most generally accessible resource for information following natural catastrophes, according to Cretikos et al. (2008), even for houses that did not lose power.

While more current data may reveal evolving communication habits, it is critical to emphasize that urgent information delivered via various communication mechanisms should be replicated in multiple ways (Levac et al., 2012). Balluz et al. (2000), contrastingly, discovered that news broadcasts and alert sirens were the most effective means of giving tornado alerts. These findings may have evolved as a result of the increasing popularity of social media, such as the internet.

Summary

Disasters have made a significant impact on the world and the economy over the years. These natural or human-made catastrophic events are not always easily predictable and can strike at any moment. University students are among those vulnerable populations that can be significantly affected by these events. With this population being so understudied some of the factors that influence their emergency preparedness are not fully known and understood. Whether it be in a community setting or on a university campus, the intentional act of preparing for emergencies is necessary to mitigate the negative impacts from disastrous events.

Chapter III

Methodology

Purpose of the Study

The purpose of this study was to evaluate the level of emergency preparedness as well as barriers to preparedness among university students.

Research Questions

What are barriers preventing students from engaging in emergency/disaster preparedness?

What are common emergency/disaster preparedness resources or training accessed by university students?

What is the current level of emergency/disaster preparedness among selected university students?

To what extent has the university assisted or enabled students to prepare for emergency/disaster situations?

Research Design

A descriptive, cross-sectional research design was used for this study. A survey was used to collect data and data was analyzed to assess the participant's existing thoughts, feelings, and behaviors about disasters, vulnerability, and preparedness for emergencies. Using this kind of research has the advantage of allowing researchers to

obtain a significant quantity of data through explanation. It's also useful for figuring out what elements to look for in future studies (Southern Utah University, n.d.). Furthermore, descriptive studies can yield a glimpse of what is happening at any one time (Stangor, 2012).

Being that the research was collected at one point in time, in addition to the limited time to review and collect data as well as a limited budget, a cross-sectional design was used.

Sample Selection

This study included a convenience sample of undergraduate students, ages 18 years of age and older, who was enrolled at a midwestern university in the spring semester of 2022. The data collection took place during the month of March 2022. The student researcher contacted professors/instructors from various courses at a midwestern university by email or phone call for permission to distribute surveys in their respective classes.

A selection of courses was obtained through public domain information from the university website. Courses containing large numbers of students with a high probability of having students from diverse backgrounds was selected. The courses were chosen based upon the required general education classes at a midwestern University.

Instrument and Procedure

The research was conducted via Qualtrics online (<https://www.qualtrics.com>) survey and hard copy surveys were distributed to students at a midwestern university by collecting data from participants enrolled in selected classes, during class time, throughout the university. The survey was developed based on a review of information from the

Federal Emergency Management Agency (FEMA, 2009) findings from the Citizen Corps National Survey.

This survey was comprised of various question types. The survey contained sections intended to assess demographic information of the participants including age, gender, and whether they are a part-time or full-time student. This survey also contained questions which were intended to measure the participants' beliefs in regard to disasters and emergency preparedness. Those questions were comprised of a mixture of multiple choice, open-ended and modified Likert-type questions. Within this survey there were also questions which assessed preparedness, that was intended to measure the level of preparedness among the participants. Those sections were comprised mainly of Likert-type questions with a few multiple-choice questions incorporated as well. Other questions evaluated the current level of disaster education in terms of resources and competence.

Data Analysis

Data was analyzed using SPSS version 27 (<https://www.ibm.com/support/pages/downloading-ibm-spss-statistics-27>). Participant answers to individual items were evaluated using descriptive statistics including the use of frequency tables.

Summary

Data was collected from a self-report instrument from a convenience sample of university students to assess their thoughts, feelings, and behaviors about disasters, vulnerability, and preparedness for emergencies. The survey was intended to determine the

participant's understanding of their level of preparedness, level of risk, disaster tolerance, preparedness barriers and their desire for education in disaster preparedness.

Chapter IV

Results

Overview

Data was analyzed using SPSS version 27. Frequency tables were populated which shows participant results as well as demographics.

Demographics

Participants ($N=187$) were comprised of approximately 27% male ($N=41$), 69.5% female ($N=130$), approximately 2% Non-binary ($N=4$) and 1.1% that describes themselves as other ($N=2$) than the options listed. Demographics showed that in regard to age 21.1% of participants ($N=47$) were 18 years old, 36.9% of them ($N=69$) were 19 years old, 17.6% of them ($N=33$) were 20 years old, 9.1% of them ($N=17$) were 21 years old and 11.2% of them ($N=21$) were 21 years and older (Table 1).

Table 1

Participant Demographics & Information

		N	%
What is your age?	18	47	21.1%
	19	69	36.9%
	20	33	17.6%
	21	17	9.1%
	22+	21	11.2%
How do you describe yourself?	Male	51	27.3%
	Female	130	69.5%
	Non-binary	4	2.1%
	Other	2	1.1%
What best describes your student status?	Full-time	183	97.9%

		N	%
	Part-time	4	2.1%
Have you signed up to receive text messages from your university's early warning system?	Yes	64	34.2%
	No	64	34.2%
	I don't know	58	31.0%

Research Question 1. What are barriers preventing students from engaging in emergency/disaster preparedness?

Results showed that approximately 55% of the participants ($N=103$) identified not having time as the primary barrier. Similarly, approximately 50% of the participants ($N=95$) indicated that they are unsure of what supplies to purchase. Approximately 43% of participants ($N=81$) indicated that they don't know where to obtain training or education materials and 37.3%, ($N=70$) stated that the supplies are too expensive (Table 2).

Table 2

Barriers

	N	%
I don't know what I'm supposed to do	72	38.5%
I haven't had the time	103	55.1%
I don't think it will make a difference	24	12.8%
I don't want to think about it	63	33.7%
It costs too much	32	17.1%
I think that emergency responders, such as the police will help me	48	25.7%
I don't know where to obtain training and education materials	81	43.3%
Trainings and educational opportunities are not offered in my area	21	11.2%
I don't know what supplies to buy	95	50.8%
The supplies are too expensive	70	37.4%
The supplies are not available in my area/ community	6	3.2%
In a disaster situation, others will give me the supplies I need	11	5.9%
I don't have room to keep supplies in my residence	56	29.9%
I don't know where to obtain supplies	36	19.3%

Note: Questions taken from the Federal Emergency Management Agency (FEMA, 2009)

Research Question 2. What are common emergency/disaster preparedness resources or training accessed by university students?

Results showed that approximately 51% of participants ($N=96$) have completed CPR training, 46% have completed first aid training ($N= 86$), 36.9% have read material on how to prepare for disasters ($N=69$), 31% have visited websites to educate themselves on how to prepare for disasters ($N=58$), 26.2% have talked about getting prepared for disasters with others in their community ($N=49$) and 13.9% have attended a training, meeting, conference or webinar on how to better prepare for disasters ($N=26$) within the past two years (Table 3).

Table 3

Emergency Preparedness Resources/ Training.

In the past two years have you:		N	%
Attended a training, meeting, conference or webinar on how to better prepare for disasters?	Yes	26	13.9%
	No	161	86.1%
Completed CPR training?	Yes	96	51.3%
	No	91	48.7%
Completed first aid training?	Yes	86	46.0%
	No	101	54.0%
Talked about getting prepared for disasters with others in your community?	Yes	49	26.2%
	No	138	73.8%
Read material on how to prepare for disasters?	Yes	69	36.9%
	No	118	63.1%
Visited websites to educate yourself on how to prepare for disasters?	Yes	58	31.0%
	No	129	69.0%

Note: Questions taken from the Federal Emergency Management Agency (FEMA, 2009)

Research Question 3. What is the current level of emergency/disaster preparedness among selected university students?

Results showed that of the disaster preparedness items listed, 62% participants had packaged or non-perishable food ($N=116$), approximately 75% had the necessary utensils to prepare non-perishable foods ($N=140$), 70% had a flashlight ($N=131$), approximately 67% had a first aid kit ($N=126$), of those that took medication 54% had enough to last 3 days ($N=101$) and 93% of them had a face mask ($N=174$) in their current residence (Table 4).

Table 4

Disaster Preparedness Supplies

In your current residence, do you have:		N	%
A supply of bottled water (approximately 3 gallons)? *Note this does not include water you get from the tap	Yes	55	29.4%
	No	120	64.2%
	I don't know	12	6.4%
A supply of packaged or non-perishable foods (three days' worth)?	Yes	116	62.0%
	No	65	34.8%
	I don't know	6	3.2%
Utensils and supplies necessary to prepare non-perishable foods, such as a can opener, pots and pans?	Yes	140	74.9%
	No	41	21.9%
	I don't know	6	3.2%
A flashlight?	Yes	131	70.1%
	No	50	26.7%
	I don't know	5	2.7%
A portable, battery-powered or hand-crank radio?	Yes	38	20.3%
	No	141	75.4%
	I don't know	8	4.3%
Batteries for all disaster preparedness supplies that require batteries (e.g. flashlight)?	Yes	85	45.5%
	No	81	43.3%
	I don't know	21	11.2%
A first aid kit?	Yes	126	67.4%
	No	46	24.6%
	I don't know	13	7.0%

		N	%
Enough of essential medications to last 3 days? *	Yes	101	54.0%
Skip this question if you do not require medications	No	14	7.5%
	I don't know	17	9.1%
	A face Mask?	Yes	174
	No	8	4.3%
	I don't know	5	2.7%

Note: Questions taken from the Federal Emergency Management Agency (FEMA, 2009)

Research Question 4. To what extent has the university assisted or enabled students to prepare for emergency/disaster situations?

When asked “In the past year how many of your professors/ instructors have discussed disaster preparedness during class” approximately 71% of students have not had any professors discuss this with them ($N=133$), 11.8% had at least one professor discuss this topic ($N=22$), 9.6% had two professors discuss this topic ($N=18$), 3.7% had 3 professors discuss this topic ($N=7$), 1.1% had 4 professors discuss this topic ($N=2$) and 1.6% ($N=3$) had 5 or more professors discuss this topic (Table 5).

Table 5

University Assisted or Enabled Preparedness.

	N	%
0	133	71.1%
1	22	11.8%
2	18	9.6%
3	7	3.7%
4	2	1.1%
5+	3	1.6%

Perceptions and Emergency Preparedness

When looking at participants beliefs on the likelihood of events, results showed that in regard to natural disasters occurring within their community, 43.9% of participants ($N=82$) felt as though it was unlikely to happen. In regard to violence, 36.4% of participants ($N=68$) felt as though this act was unlikely. In regard to disease outbreak prior to COVID-19, 38.5% of participants ($N=72$) felt as though it was unlikely to happen. However, when asked the likelihood of a disease outbreak reoccurring, 46.5% of participants ($N=87$) felt as though this was a likely event to happen again (Table 6).

Table 6

Likelihood of Events

		N	%
How likely do you believe that some type of natural disaster will ever occur in your community?	Very Unlikely	17	9.1%
	Unlikely	82	43.9%
	Neutral	42	22.5%
	Likely	37	19.8%
	Very Likely	9	4.8%
How likely do you believe that some type of violence (such as a terrorism event or active shooter situation) will ever occur in your community?	Very Unlikely	13	7.0%
	Unlikely	68	36.4%
	Neutral	62	33.2%
	Likely	37	19.8%
	Very Likely	7	3.7%
Prior to the start of the COVID-19 pandemic, how likely did you believe that some type of disease outbreak would ever occur in your community?	Very Unlikely	59	31.6%
	Unlikely	72	38.5%
	Neutral	35	18.7%
	Likely	18	9.6%
	Very Likely	3	1.6%
How likely do you believe that some type of disease outbreak (COVID-19 or other) will ever occur in your community again?	Very Unlikely	4	2.1%
	Unlikely	23	12.3%
	Neutral	52	27.8%

	N	%
Likely	87	46.5%
Very Likely	21	11.2%

Note: Questions taken from the Federal Emergency Management Agency (FEMA, 2009)

When evaluating perceived confidence participants were asked “prior to the start of COVID-19 how confident were you in your own ability to prepare for disaster”, 36.4% of participants ($N=68$) stated that they were moderately confident and their ability to prepare. When asked about their current level of confidence to prepare for a disaster 34.8% of participants ($N=65$) stated that they were moderately confident in their current abilities to prepare for a disaster. When asked about the confidence level of their ability to react within the first five minutes of an act of violence 30.5% of participants ($N=57$) stated that they were slightly confident in their abilities. When asked “how confident are you in your own ability to react within the first five minutes of a sudden natural disaster”, 32.1% of participants ($N=60$) stated that they were moderately confident in their abilities (Table 7).

Table 7

Perceived Confidence

		N	%
Prior to the start of the COVID-19 pandemic, how confident were you about your own ability to prepare for a disaster (natural, act of violence, and/or disease outbreak)?	Not at all Confident	16	8.6%
	Slightly Confident	62	33.2%
	Moderately Confident	68	36.4%
	Confident	37	19.8%
	Very Confident	4	2.1%
Currently, how confident are you about your own ability to prepare for a disaster (natural, act of violence, and/or disease outbreak)?	Not at all Confident	5	2.7%
	Slightly Confident	41	21.9%
	Moderately Confident	65	34.8%
	Confident	66	35.3%
	Very Confident	10	5.3%

		N	%
How confident are you in your own ability to safely and properly react within the first 5 minutes of an act of violence, such as a terrorist act or an active-shooter situation?	Not at all Confident	32	17.1%
	Slightly Confident	57	30.5%
	Moderately Confident	43	23.0%
	Confident	37	19.8%
	Very Confident	18	9.6%
How confident are you in your own ability to react in the first 5 minutes of a sudden natural disaster, such as an earthquake or tornado that occurs without warning?	Not at all Confident	17	9.1%
	Slightly Confident	53	28.3%
	Moderately Confident	60	32.1%
	Confident	40	21.4%
	Very Confident	16	8.6%

Note: Questions taken from the Federal Emergency Management Agency (FEMA, 2009)

When evaluating the perceived level of preparation participants were asked “prior to the start of COVID-19 pandemic which best represents your previous level of preparedness”, results showed that, 34.2% of participants ($N=64$) stated that they were slightly prepared. When asked about their current level of preparedness, 36.9% of participants ($N= 69$) stated that they were mostly prepared (Table 8).

Table 8

Level of Perceived Preparation

		N	%
Prior to the start of the COVID-19 pandemic, which best represents your previous level of preparedness?	Not at all Prepared	52	27.8%
	Slightly Prepared	64	34.2%
	Mostly Prepared	45	24.1%
	Prepared	24	12.8%
	Very Prepared	1	0.5%
Which best represents your current level of preparedness?	Not at all Prepared	12	6.4%
	Slightly Prepared	32	17.1%
	Mostly Prepared	69	36.9%
	Prepared	61	32.6%
	Very Prepared	12	6.4%

Participants were asked “during a disaster how much do you expect to rely on the following” and 35.8% of participants ($N=67$) stated that they expect to rely on somewhat other household members/ roommates, 36.4% ($N=68$) stated they expect to rely much on parents/ guardians, 35.3% of participants ($N=66$) stated they expect to rely on a little people in their neighborhood, 27.8% ($N=52$) stated they expect to rely on a little, nonprofit organizations, 32.1% of participants ($N= 60$) stated that they would expect to rely on much as well as a great deal fire police and other emergency personnel and 40.6% of participants ($N=76$) stated that they expect to rely on a great deal medical personnel (Table 9).

Table 9

Participant Reliance On Others

During a disaster how much do you expect to rely on:	N	%	
Other household member(s)/ roommates(s)?	Do not expect to rely on at all	17	9.1%
	Expect to rely on a little	45	24.0%
	Expect to rely on some-what	67	35.8%
	Expect to rely on much	38	20.3%
	Expect to rely on a great deal	20	10.7%
On your parent(s) / guardian (s)?	Do not expect to rely on at all	9	4.8%
	Expect to rely on a little	12	6.4%
	Expect to rely on some-what	44	23.5%
	Expect to rely on much	68	36.4%
	Expect to rely on a great deal	54	28.9%
People in your neighborhood?	Do not expect to rely on at all	58	31.0%
	Expect to rely on a little	66	35.3%
	Expect to rely on some-what	35	18.7%
	Expect to rely on much	22	11.8%
	Expect to rely on a great deal	4	2.1%
Non-profit organizations, such as the American Red Cross or the Salvation Army?	Do not expect to rely on at all	38	20.3%
	Expect to rely on a little	52	27.8%
	Expect to rely on some-what	49	26.2%
	Expect to rely on much	32	17.1%
	Expect to rely on a great deal	15	8.0%

		N	%
Fire, Police, or other emergency personnel (EMTs)?	Do not expect to rely on at all	7	3.7%
	Expect to rely on a little	19	10.2%
	Expect to rely on some-what	41	21.9%
	Expect to rely on much	60	32.1%
	Expect to rely on a great deal	60	32.1%
Medical personnel (e.g. doctors and nurses)?	Do not expect to rely on at all	5	2.7%
	Expect to rely on a little	14	7.5%
	Expect to rely on some-what	34	18.2%
	Expect to rely on much	58	31.0%
	Expect to rely on a great deal	76	40.06%

Note: Questions taken from the Federal Emergency Management Agency (FEMA, 2009)

In evaluating whether or not participants participated in emergency drills, 51.9% of participants ($N=97$) said “Yes” to home/ resident evacuation drills, 87.2% ($N=163$) stated “No” to an in-home shelter in place drill, 54% of participants ($N=101$) said “Yes” to school evacuation drills and 80.2% of participants ($N=150$) said “No” to a school shelter in place drill (Table 10).

Table 10

Emergency Drills

In the past 12 months have you:		N	%
Participated in a home/current residence evacuation drill (e.g. fire drill or other drill that would require you to quickly exit your residence)?	Yes	97	51.9%
	No	89	47.6%
Participated in a home/current residence shelter-in-place drill (not counting COVID-19 stay at home orders)?	Yes	23	12.3%
	No	163	87.2%
Participated in a school evacuation drill (not counting school cancellation due to COVID-19)? This could include fire drills or other drills that would require you to quickly leave a university building or campus.	Yes	101	54.0%
	No	85	45.5%
Participated in a school shelter-in-place drill?	Yes	35	18.7%
	No	150	80.2%

Note: Questions taken from the Federal Emergency Management Agency (FEMA, 2009)

When asked about the expected source of information within their community 88.2%, a majority of the participants ($N=165$), stated that local media is where they expect to receive emergency information, 76.5% of participants ($N=143$) also felt as though school is another source where they expect to receive emergency information, as well as 71.7% of participants ($N=134$), look to their local government officials (Table 11).

Table 11

Source of Information

From which of the following organizations in your community do you expect to receive emergency info:	N	%
Local Media	165	88.2%
Local Government officials	134	71.7%
Healthcare providers	30	16.0%
Neighborhood Association	104	55.6%
Faith-based Organization	25	13.4%
School	143	76.5%
Workplace	73	39.0%
Other	7	3.7%

Note: Questions taken from the Federal Emergency Management Agency (FEMA, 2009)

Participants were asked, “prior to the start of the COVID-19 pandemic how familiar were you of your university's emergency response guide or plan” and 58.3% of participants ($N=109$) stated that they were “Not at all familiar” with these plans/ guides. When asked about the current familiarity of their university’s emergency response guide/ plans 29.9% of participants ($N=56$) stated that they were “Not at all familiar” currently with these plans/ guides (Table 12).

Table 12

Familiarity with University Emergency Procedures

		N	%
Prior to the start of the COVID-19 pandemic, how familiar were you of your university's emergency response guide(s)/ plan(s) (including shelter-in- place procedures)?	Not at all Familiar	109	58.3%
	Slightly Familiar	39	20.9%
	Moderately Familiar	26	13.9%
	Familiar	10	5.3%
	Very Familiar	0	0%
Currently, how familiar are you of your university's emergency response guide(s)/ plan(s) (including shelter-in-place procedures)?	Not at all Familiar	56	29.9%
	Slightly Familiar	49	26.2%
	Moderately Familiar	50	26.7%
	Familiar	21	11.2%
	Very Familiar	9	4.8%

When evaluating the way in which students receive emergency preparedness information from their university, participants were asked “How have you received information from your university?”. Results showed 51.9% of participants ($N=97$) stated that they received information through “Email or Internet”, 33.7% of participants ($N=63$) stated that they “Have not received information on disaster preparedness from their university at all” (Table 13).

Table 13

University Emergency Preparedness Information

How have you received information from your university?	N	%
Pamphlets or Fliers	25	13.4%
Verbal Communication from university officials (including professors/instructors)	42	22.5%
Email or Internet	97	51.9%
Television or Radio	10	5.3%
I have not received information on disaster preparedness from my university	63	33.7%
Other	10	5.3%

A finding of interest is that for the survey question that asked “In a natural disaster, such as an earthquake, hurricane, flood, tornado or wildfires, which of the following best represents your belief” approximately 86% of the participants ($N=161$) stated that preparation, planning and emergency supplies will help them with the situation however when asked “In an act of violence, such as a terrorism or an active shooter situation, which of the following statements best represents your belief” approximately 52% of participants ($N=99$) felt that preparation planning and emergency supplies will help them with the situation (Table 14).

Table 14

Emergency Preparedness Beliefs

		N	%
In a natural disaster, such as an earthquake, hurricane, flood, tornado, or wildfires, which of the following best represents your belief?	I can handle the situation without any preparation	16	8.6%
	Preparation, planning and emergency supplies will help me handle this situation	161	86.1%
	Nothing I do to prepare will help me handle the situation	10	5.3%
In an act of violence, such as a terrorism or an active shooter situation, which of the following statements best represents your belief?	I can handle the situation without any preparation	23	12.3%
	Preparation, planning and emergency supplies will help me handle this situation	99	52.9%
	Nothing I do to prepare will help me handle the situation	65	34.8%
Prior to the start of the COVID-19 pandemic, in regard to a severe disease outbreak, which of the following statements best represented your previous belief?	I can handle the situation without any preparation	51	27.3%
	Preparation, planning and emergency supplies will help me handle this situation	104	55.6%
	Nothing I do to prepare will help me handle the situation	32	17.1%

		N	%
In a severe disease outbreak (COVID-19 or other), which of the following statements best represents your current belief?	I can handle the situation without any preparation	16	8.6%
	Preparation, planning and emergency supplies will help me handle this situation	161	86.1%
	Nothing I do to prepare will help me handle the situation	10	5.3%

Summary

Data was analyzed using SPSS version 27. Frequency tables were populated which shows participant results as well as demographics. In addressing the first research question results indicated that a majority of participants identified the lack of time as being the most common barrier to them being prepared (Table 2). For research question 2, First Aid and CPR training is the most common resource and training accessed (Table 3). In regard to research question 3 disaster supplies in which a majority of participants had were either non-perishable food items, a first-aid kit, flashlight, 3-day supply of medication and a face mask (Table 4). For the fourth research question, a majority of participants indicated that they had no professors or instructors discuss emergency preparedness during class (Table 5). It was interesting to find that overall either don't feel as though they can handle themselves in emergency situations or are not equipped with the necessary skill and supplies to survive in the event of an emergency situation (Table 14).

Chapter V

Interpretation of Findings

Discussion

It was interesting to discover that many students felt that planning and preparation could help them when it comes to natural disasters but not as much in situations that contain acts of violence such as terrorist attacks or active shooters. There are many reasons as to why this could be. According to a study conducted by Weber, Schulenberg, and Lair, E. C. (2018), university staff who had previously encountered school shootings, terrorist attacks, bomb scares, or other forms of violence on university premises were more prepared when their risk perception to these incidents was greater. As these staff members at one point in time or another may have been university students, this supports the theory that threat interpretations are influenced by threat messages (e.g., previous experience with mass violence) on emergency preparedness activities. Another factor that could've influence these results is the fact that women made up nearly 70% of the participants within this study. According to Weber, Schulenberg, and Lair, (2018) women were more inclined to exhibit high perceived sensitivity to both natural catastrophes and acts of mass violence, even though perceived susceptibility was not linked to true preparedness actions. While women are more likely to perceive danger than men with similar catastrophe experience, they are also more likely to express lower levels of self-efficacy, according to the findings of Weber et al. (2018). As a result, self-efficacy is considered to be a significant factor in motivating people to engage in preparedness practices, particularly among women. It's also

worth noting that the difference in perceived sensitivity among males and females could imply that women's threat perceptions are more precise, whereas men underestimate disaster risk. Women's perceived risk and terror expressions are generally higher than men's, due to their societal duties as emotion workers, nurturers, and caretakers for children (Fothergill 1996; Fothergill 1999b; Honeycombe 1994).

In a literature review on natural catastrophes and technological threat preparation, Wachinger, Renn, Begg, and Kuhlicke (2013) described a "risk perception paradox," in which individuals who perceive vulnerability to hazards to be high do not automatically begin to make preparations for themselves or minimize the potential effects of a disastrous event. This paradox is shown greatly when viewing the barriers that participants identified. Greater than 50% of the participants identified a lack of time as a barrier to their being prepared. If participants don't perceive their vulnerability to disasters to be high, then they may not prioritize making preparations. The frequency of such disastrous event may play a role in participants perceived urgency in taking action. Many participants indicated that they felt it was unlikely for an act of violence or a natural disaster to occur within their community.

When looking at results on the current level of preparedness and having an understanding of the aforementioned "risk perception paradox", it can be noted that many of the disaster supplies that majority of participants had were supplies that could be utilized in everyday life or has recently been required for everyday living (i.e. cooking utensils and face masks). This can be considered circumstantial, or it can be an act of preparation. Despite being conscious of the risks, Lovekamp and McMahon (2011) discovered that

students at a Midwestern university did nothing to begin preparing for a crisis. Students listed their essential items, which were mostly comprised of everyday items such as flashlights, water, and a first-aid kit. While it is great and beneficial to have these supplies, being intentional about having supplies specifically for emergencies can potentially allow for better mitigation of the impacts of disasters.

The majority of the participants' ages ranged from 18 to 20 years old, which was substantial in this study. Age can play a role in experience as well as exposure to various types of emergencies and disasters. According to Elkind (1970), invincibility is a normal stage of teenage social and cognitive development marked by egocentric reasoning in the search for identity. Duncan et al., (2002); Giesbrecht, (1999); Gray, (1998); Greene, Krcmar, Walters, Rubin, & Hale, (2000); Moffat & Johnson, (2001) have linked a predisposition for young individuals to participate in risky behavior to their perception of invulnerability or invincibility. With the results depicting those participants are not as eager to participate in disaster training or gather emergency supplies may suggest that “personal fable” was present. According to a study conducted by Wachinger et al. (2013), the relation among both direct experience of a natural catastrophic event and perceived risks may appear trivial, however the findings of their study depicted that the causal processes seem to be more intricate than the proposition of a direct relationship between experience and preparedness. Individual freedom to act, views of disaster cycles, time between past events, and other considerations all have a role. In the actual world, these complex relationships have various implications for risk mitigation.

Conclusion

This study has shown that while participants are aware of various types of disasters, there are still many barriers they face when it comes to being prepared. Universities need to ensure that emergency/disaster preparedness education is being taught to students. Continued research on the relationship between emergency/disaster preparedness, behavior, and personal responsibility is critical in the future. Universities are densely populated areas, posing a significant risk. When enrolling students, universities take on a "parenting duty" in part, which entails ensuring that students are aware of and equipped with knowledge, understanding, and resources to be prepared in the case of a catastrophe or tragedy. As a result, it's critical to keep looking into college student knowledge and readiness in larger groups at various universities with varying catastrophic events and demographic diversity, as well as speaking with university security officers or emergency responders to assess current thresholds of preparedness at an administrative level (Lovekamp & McMahon 2011).

Implications for Future Research

While this study has provided a glimpse of emergency preparedness among university students at a Midwestern University, more research must be done. It is imperative for the success of instilling knowledge and wisdom upon university students that a deeper analysis is conducted to determine what students feel as though they should know about emergency preparedness and what they currently know. There must also be an assessment at an administrative level to determine what procedures are in place and where the university is falling short when it comes to providing comprehensive emergency

preparedness education and training. With taking a deeper dive into truly understanding the level of emergency preparedness established within a university, only then can there be changes to procedures and curriculums to keep faculty, staff and students prepared in the event of a disaster.

Implications for the Profession

As health professionals, understanding that emergency preparedness encompasses all of the aspects of what it means to have good health is imperative. Health professionals must keep promoting change within organizations to equip the public with necessary skills and knowledge to be resilient in the face of disasters. Creating or revamping response plans that can be applicable to various age groups and experience levels is essential. Constant training and discussion of new or improved procedures that can be implemented can influence and entire community to be prepared. With technology being so popular and common these days many universities are taking the online approach to preparing their students. The University of St. Thomas (n.d.) has created the “Get Ready, Already!” campaign that provides guidelines for emergencies to community members. There are other universities that utilize a program called “Star Alert” which sends a text to students’ phones with instruction and information during an emergency (St. Cloud State University, n.d.). While it is impossible to prepare for everything, preparation itself is necessary.

Appendix



March 2, 2022

Re: IRB Proposal [1880976-3] Emergency Preparedness Among University Students
Review Level: Exempt (Level I)

Congratulations! Your Institutional Review Board (IRB) Proposal has been approved as of March 2, 2022.

Please remember that research involving human subjects under the purview of the IRB should adhere to the most current COVID-19 guidelines available, as set by [MSU, Mankato](#) and the Minnesota Department of Health.

On behalf of the Minnesota State University, Mankato IRB, we wish you success with your study. Please remember that you must seek approval for any changes in your study, its design, funding source, consent process, or any part of the study that may affect participants in the study (<https://research.mnsu.edu/institutional-review-board/proposals/process/proposal-revision/>).

Should any of the participants in your study suffer a research-related injury or other harmful outcomes, you are required to report them immediately to the Associate Vice-President for Research and Dean of Extended Campus at 507-389-1242.

When you complete your data collection or should you discontinue your study, you must submit a Closure request. All documents related to this research must be stored for a minimum of three years following the date on your Closure request (<https://research.mnsu.edu/institutional-review-board/proposals/process/proposal-closure/>).

If the PI leaves the university before the end of the 3-year timeline, he/she is responsible for ensuring proper storage of consent forms (<https://research.mnsu.edu/institutional-review-board/proposals/process/leaving-campus/>). Please include your IRBNet ID number with any correspondence with the IRB.

Be well,

Julie Carlson, Ed.D.,
Co-Chair of IRB

Jeffrey Buchanan, Ph.D.,
Co-Chair of IRB

Jason A. Kaufman, Ph.D., Ed.D.,
Director of IRB

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