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Preschool Teacher Perspectives of Crisis Preparedness

Sara Ann Machado
Walden University

Walden University

College of Education

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Sara Machado

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Sue Subocz, Ph.D.

Walden University
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Abstract

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Dissertation Submitted in Partial Fulfillment

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Doctor of Philosophy

Early Childhood Leadership and Advocacy

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Abstract

The purpose of this study was to understand the perspectives of preschool teachers regarding school-based emergency planning in independently funded childcare centers. Current research has investigated perspectives of crisis preparedness by a variety of school staff but has not yet included the extent to which preschool teachers feel prepared to handle a school crisis event. This study was based on the integrated model of school crisis preparedness and intervention proposed by Jimerson, Brock, and Pletcher. This study examined how preschool teachers describe the effect of crisis preparedness drills and training on their ability to handle school crisis events prior to, during, and following a center crisis. Interview data for the study were gathered during one-on-one interviews conducted with 15 preschool teachers working in independently funded childcare centers. Preschool teachers indicated that some aspects of crisis preparedness drills and training have increased their ability to handle school crisis events while other aspects appear insufficient, both in anticipation of and during a real emergency. Participants indicated positive perspectives of their ability to provide some medical and psychological interventions to young children following a crisis event. The teachers indicated negative perspectives of preparedness for long term recovery measures at preschool centers following a crisis event. Results from the study may inform preschool center directors about the type of training that preschool teachers have, want, and need in order to best prepare these teachers to respond to a school crisis event, and thereby keep children safe.

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Dedication

This study is dedicated to William and Helen Pinkham, to Steve and Sherie Machado, and to my incredible husband, Burt Frandsen. Thank you for all of your support.

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I would like to acknowledge the support and encouragement of my dissertation chair, Dr. Patricia Anderson, in the writing of this doctoral study. Without your guidance, this dissertation would not have come to fruition quite like it did. Thank you.

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Chapter 1: Introduction to the Study

The purpose of this study was to understand the perspectives of preschool teachers who work in independently funded childcare centers regarding their preparation to manage an emergency that might endanger children in their care. Current research has investigated perspectives of crisis preparedness by a variety of school educators (Eklund, Meyer, & Bosworth, 2018; Ugalde, Giardino, Guffey, Minard, & Johnson, 2018), but the literature does not include the extent to which preschool teachers feel prepared to handle a school crisis before, during, and after a school crisis event. This study addressed this gap in the literature by presenting interview data gathered during one-on-one interviews conducted with 15 preschool teachers working in independently funded childcare centers. These data describe preschool teacher perspectives of crisis preparedness training prior to a school crisis event, actions deployed during a school crisis event, supports in place immediately following a school crisis event, and postimpact recovery and reconstruction measures in place for the weeks and months following a school crisis event. This research may result in positive social change by informing preschool center directors about the type of training that preschool teachers have, want, and need, thereby best preparing preschool teachers to respond to a school crisis event. This knowledge will result in positive social change related to the ability of center directors and preschool teachers to effectively prepare for school crisis events, and thereby keep children safe.

Major sections of this chapter include an overview of background literature, a statement of the problem, the purpose of the study, and the research questions. I present the conceptual framework upon which this study is founded, the nature of the study, a list

of definitions related to crisis and school crisis preparedness, and an overview of the assumptions, scope and delimitations, limitations, and significance of the study.

Background

Although much research has been conducted on the topic of educator perceptions of school crisis preparedness, the perspectives of preschool teachers working in independently funded childcare centers were yet to be investigated. For example, Eklund et al. (2018) administered a survey to 60 educators in schools across the Southwestern United States, 16 of whom were school resource officers, to investigate differences in perceptions of crisis preparedness by school resource offices and various other school staff. Eklund et al. (2018) found that school resource officers and mental health staff shared positive perceptions of crisis preparedness, while school administrators responded with less positive perceptions of school crisis preparedness. Altınbas, Tokel, and Dagli (2019) collected survey data from 376 secondary and high school teachers to investigate teacher perceptions of administrator competence related to school crisis preparedness. Altınbas et al. (2019) found positive secondary and high school teacher perceptions of administrator competence related to school crisis preparedness, highlighting the important role of school leaders and administrators in helping school staff to feel confident and prepared to face school crisis. In addition, Ugalde et al. (2018) conducted a quantitative study with 275 school nurses in Texas to determine perceptions of crisis preparedness by school nurses. Ugalde et al. (2018) found the most positive perceptions of crisis preparedness among school nurses with greater than 5 years of experience who

work at elementary schools and among those who provide care for fewer than 10 children per week.

In addition to identifying perspectives of crisis preparedness by school staff, researchers have approached the topic of school crisis preparedness in a variety of different ways. Thompson et al. (2017) conducted semistructured interviews with 56 school crisis staff in P-12 districts across six states to investigate social media challenges related to school crisis communication. Thompson et al. (2017) found that school staff are underprepared to utilize social media platforms to communicate school shootings and are similarly underprepared to address issues of misinformation related to school crisis on social media platforms. Lenhardt, Graham, and Farrell (2018) utilized a matrix instrument to determine risk factors associated with 16 shooters involved in acts of targeted school violence in the United States from the years 1996 through 2012 to investigate possible risk factors associated with targeted acts of school violence. Lenhardt et al. (2018) identified such risk factors in students as student temperament, strained familial relationships, and susceptibility to triggering events. Wombacher, Herovic, Sellnow, and Seeger (2018) conducted semistructured interviews with four leaders in the town of Newton, Connecticut, to investigate community response to a mass school shooting that took place at Sandy Hook Elementary School. Wombacher et al. (2018) found that administrator decisions surrounding the location of a major school crisis event have a significant effect upon community recovery.

Because there were not yet any studies exploring the perspectives of crisis preparedness by preschool teachers working in independently funded childcare centers,

this study makes an original contribution to the field of education. The results of this study may make a difference at the local, regional, and national level, as they contribute to the literature on school crisis preparedness. The results of this study may also allow center directors to become better informed of the crisis preparedness measures needed on childcare sites, which may result in safer childcare centers. This study was needed to address a gap in the literature related to the perspectives of preschool teachers working in independently funded childcare centers.

Problem Statement

This study was focused on the problem of school-based emergency planning, which, according to Kruger et al.'s (2018) findings, may fail to meet the individualized needs of children enrolled in independently funded childcare centers. Researchers investigated perspectives of crisis preparedness by school staff in a diverse array of contexts, including school administrators (Alba & Gable, 2011), school resource officers (Eklund et al., 2018), and school nurses (Ugalde et al., 2018). However, preschool teachers who work in independently funded childcare centers were previously absent from the literature related to teacher perspectives of school crisis preparedness. Of the 20 research articles related to school crisis preparedness published in the last 5 years and listed on Google Scholar, there were only two research articles related to crisis in early childhood settings. These two articles included one by Szente (2016), who discussed classroom interventions for children who have experienced crisis situations, and one by Chang, Bradin, and Hashikawa (2018), who described crisis management plans at early childcare centers in the state of Michigan. The lack of articles describing the lived

experiences of preschool teachers who work in independently funded childcare centers in relation to school crisis preparedness represents a gap in the literature. Because emergency planning described in the literature does not include emergency preparedness in independently funded childcare centers, preschool teachers may not be receiving research-based information and training and may feel unprepared to keep children safe during an emergency. Therefore, this study focused on the problem that there previously existed no scholarly data that indicated the perspectives of preschool teachers who work in independently funded childcare centers regarding their preparation to manage an emergency that might endanger children in their care.

Purpose of the Study

The purpose of this study was to understand the perspectives of preschool teachers who work in independently funded childcare centers regarding their preparation to manage an emergency that might endanger children in their care. By investigating the perspectives of crisis preparedness by preschool teachers who work in independently funded childcare centers, I am providing center directors access to data that may help them make informed decisions about the crisis preparedness measures that they choose to implement on site. This data may strengthen the ability of center directors to effectively prepare for school crisis events, thereby keeping children safe. To address a gap in the literature related to preschool teacher perspectives of crisis preparedness, I took a qualitative approach. A qualitative approach allowed me to explore the phenomenon of preschool teacher perspectives of crisis preparedness using phenomenological methods, thus inviting those preschool teachers who work in independently funded childcare

centers to provide thoughtful, detailed accounts of their experiences and areas of strength and weakness related to crisis preparedness and crisis preparedness drills. This study contributes new knowledge to the field of education by exploring the perspectives of school crisis preparedness by preschool teachers who work in independently funded childcare centers, a population that was not previously included in the literature related to school crisis preparedness.

Research Questions

This qualitative study was guided by four research questions. Each question focuses on one of the elements of crisis preparedness described by Jimerson, Brock, and Pletcher (2005).

RQ1: How do preschool teachers describe the effect of crisis preparedness drills and training on their anticipated ability to handle school crisis events?

RQ2: How do preschool teachers describe their preparedness to handle school crisis events during a time of crisis?

RQ3: How do preschool teachers describe their preparedness to provide medical interventions, psychological interventions, and other support systems to young children and their families during the recoil stage, immediately following a crisis event?

RQ4: How do preschool teachers describe the postimpact and recovery and reconstruction measures in place at preschool centers that are intended to aid in community recovery during the weeks and months following a crisis event?

Conceptual Framework for the Study

This study was grounded by the integrated model of school crisis preparedness and intervention proposed by Jimerson et al. (2005). The integrated model of school crisis preparedness and intervention outlines crisis interventions that should take place during the preimpact, impact, recoil, postimpact, and the recovery and reconstruction phases of a crisis event (Jimerson et al., 2005), the details of which are described in more detail in Chapter 2. The model is designed to be culturally sensitive and provide for the individualized needs of school children by combining those best practices identified by the International Crisis Response Network, the National Association of School Psychologists, and the National Organization for Victim Assistance (NOVA; Jimerson et al., 2005). By integrating the NOVA team model and providing dialogue to support group crisis intervention, Jimerson et al. (2005) emphasized the physical and emotional safety of young children in the preplanning and aftermath of crisis events.

The discussion of preimpact, impact, recoil, postimpact, and recovery and reconstruction phases of crisis events were integrated into the research questions for this study. When conducting interviews for this study, I sought preschool teacher perspectives related to preparedness in anticipation of a crisis event, and to preparedness for addressing the physical and emotional needs of young children during and following a crisis event. The background of my study identified a need for more qualitative research related to perspectives of crisis preparedness, especially research that investigates the perspectives of preschool teachers; the conceptual framework of this study informs the themes, target population, and research questions that the study addressed.

Nature of the Study

This study was qualitative in nature. Qualitative methods allowed me to take a phenomenological approach and thereby generate meaning when exploring perspectives of crisis preparedness by preschool teachers from independently funded childcare centers. Interviews with preschool teachers of varying educational backgrounds and years of experience were best for providing the rich descriptions of human experience that characterize qualitative research (see Kozleski, 2017); thus, for my study I conducted one-on-one interviews with preschool teachers of children from birth to age 5 who work in independently funded childcare centers in a western state of the United States. Interviews were transcribed and open-coded for themes.

Definitions

Crisis preparedness: This term refers to any active, anticipatory act intended to lessen the negative effect of medical emergencies, acts of violence, natural disasters, and man-made disasters that may take place at a childcare center (Staupe & Kruke, 2018). Such types of crisis situations have the potential to affect a few or many of the students and staff located on a preschool site (Heath, Ryan, Dean, & Bringham, 2007).

Crisis preparedness training and crisis preparedness drills: This term includes any ongoing emergency drills implemented at a childcare site in preparation for various medical emergencies, acts of violence, natural disasters, and man-made disasters that may take place at a childcare center (Staupe & Kruke, 2018).

Independently funded childcare centers: For the purposes of this study, this term describes locally owned preschool centers for which parents pay a fee to enroll their child in exchange for childcare services.

Preschool teachers: For the purposes of this study, preschool teachers are defined as teachers of children from birth to age 5.

Assumptions

This study was based on the assumption that preschool teachers would provide honest and complete responses related to questions of school crisis preparedness. I assumed that the sample population of preschool teachers interviewed accurately represents the larger population. I also assumed that the sample population of preschool teachers interviewed have engaged in crisis preparedness drills and training procedures that are typical of the general preschool teacher population. Each of these assumptions was necessary, as they contributed to a study that is generalizable and accurately reflects the preschool teacher population.

Scope and Delimitations

The scope of this study included a convenience sample of perspectives of school crisis preparedness among preschool teachers working in independently funded childcare centers because perspectives of crisis preparedness by preschool teachers were previously absent from the literature. This study was delimited to interviews of 15 teachers who work with children ages birth to 5 in independently funded childcare centers in a western state of the United States. Independent funding of the centers in which participant teachers work was a delimitation because such centers are less likely to be included in

tax-supported crisis preparedness planning than childcare centers sponsored by public school districts and federal agencies. Therefore, I excluded teachers who work in Head Start and state pre-K programs. I also excluded individuals who run a childcare business from their homes, because crisis preparedness expectations may be different in a home-based setting compared to expectations in a childcare center. The results of this study may be transferable across independently funded childcare centers in various parts of the United States, but results may not be transferrable across other preschool settings.

Limitations

This study was limited by a small sample size, which reflected a small part of the preschool teacher population in just one state in the United States. These limitations of sample size and geography are commonplace in an interview-based study (Merriam, 2009) and are offset by thick, rich descriptions gained through in-depth interviews. A second possible limitation to my study was that preschool teachers might fail to think deeply about crisis preparedness due to normalcy bias. According to Pfeufer (2016), under normalcy bias people downplay the likelihood and effect of a threat because they believe nothing bad will happen to them. I discuss this possible limitation in more detail in Chapter 5. This study was also limited by its focus on preschool teacher perspectives, which may be different from their actions in the face of an actual school crisis. However, as identified by Wiseman and Levin (1996), participants in a controlled setting have been shown to make similar decisions in real and hypothetical scenarios. These limitations and barriers may affect the transferability of results. I mitigated bias in this study through the use of reflexive journaling.

Significance

This study makes an original contribution to the field of education by exploring perspectives of school crisis preparedness by preschool teachers in independently funded childcare centers, a population not previously included in the literature related to school crisis preparedness. The results of this study have the potential to make a difference at the local, regional, and national level, as they contribute to the literature on school crisis preparedness. Center directors may wish to understand the type of training that preschool teachers have, want, and need to best prepare these teachers to respond to a school crisis at their centers. Thus, the results of this study may help center directors make informed decisions about the crisis preparedness measures that they choose to implement on site. Such decisions will result in positive social change related to the ability of center directors and preschool teachers to effectively prepare for school crisis events and to keep children safe.

Summary

This chapter provided an overview of current and historical research related to school crisis preparedness and was focused on the problem that emergency planning in educational settings has failed to include the perspectives of preschool teachers who work in independently funded childcare centers. In Chapter 1, I discussed the intended purpose of the study to investigate the perspectives of crisis preparedness by preschool teachers who work in independently funded childcare centers. I provided the research questions, a discussion of the conceptual framework, and a discussion of the nature of the study. Chapter 1 included definitions related to crisis and school crisis preparedness, and an

overview of the assumptions, scope and delimitations, limitations, and significance of the study. In Chapter 2, I provide a review of the literature related to school crisis and school crisis preparedness and elaborate on the integrated model of school crisis preparedness and intervention proposed by Jimerson et al. (2005), upon which this study is grounded.

Chapter 2: Literature Review

The purpose of this study was to understand the perspectives of preschool teachers who work in independently funded childcare centers regarding their preparation to manage an emergency that might endanger children in their care. Current research has investigated perspectives of crisis preparedness by a variety of school educators but has not previously included the extent to which preschool teachers feel prepared to handle a school crisis event. This study addressed this gap in the literature by exploring the perspectives of preschool teachers who work in independently funded childcare centers regarding their preparation to manage an emergency that might endanger children in their care.

In Chapter 2, I discuss the strategies by which I obtained articles related to school crisis and school crisis preparedness. In addition, I delve deeply into the integrated model of school crisis preparedness and intervention proposed by Jimerson et al. (2005) upon which this study was grounded. I also include a literature review, which provides an exhaustive list of articles related to school crisis and school crisis preparedness. In this literature review, I define *school crisis event* with the model of Jimerson et al. (2005) in mind. I present data and statistics related to various school crisis events that have taken place over the past 10 years. I explore crisis events that have taken place in schools and in childcare centers and examine the role of the preschool teacher as an agent of crisis response. I conclude the literature review with a discussion of preschool teacher feelings of preparedness in relation to their actual ability to respond to school crisis.

Literature Search Strategy

For my study, I used the Walden University Library to search the following databases: Academic Search Complete, Childcare and Early Education Research Connections, CINAHIL Plus, Child Stats, Child Trends, Data USA, EBSCO, Education Commission of the States, Education Source, ERIC, Library, Information Science & Technology Abstracts, Political Science Complete, ProQuest Central, Primary Search, PsycARTICLES, PubMed, SAGE Journals, Sage Premier 2019, SAGE stats, ScienceDirect Subject Collections-Social Sciences, ScienceDirect Subject Collections-Health Sciences, SocINDEX with Full Text, Taylor and Francis Online, and Teacher Reference Center. I found an exhaustive list of studies related to school crisis and school crisis preparedness. I also used the Google and Google Scholar databases, setting-up a Google Scholar alert for any new studies related to school crisis. Within each of these databases, I used such keywords as *school staff perspectives of crisis preparedness, school crisis, school crisis drills, violence in schools, schools and natural disasters, school emergencies, school crisis events, preschools and disaster, disaster preparedness and schools, preschool crisis preparedness, independent preschools and school crisis, preschool teachers and emergencies, childcare and disaster response,* and *preschool teacher crisis training,* among others. I reviewed the databases throughout my writing so as to stay up-to-date in my research and thereby reflect the iterative nature of this process.

I reviewed those studies pertaining to school crisis and school crisis preparedness according to the main themes presented in each article. The themes that emerged repeatedly among sources included: (a) the inadequacy of current crisis preparedness

plans in schools, (b) K-12 staff perspectives of crisis preparedness, (c) the psychological effect of school crises on students, and (d) a recent trend in studies related to student-initiated acts of violence on school campus.

Conceptual Framework

This study was grounded by the integrated model of school crisis preparedness and intervention proposed by Jimerson et al. (2005). The integrated model of school crisis preparedness and intervention combines best practices identified by the International Crisis Response Network, the National Association of School Psychologists, and the NOVA to outline crisis interventions that should take place during the preimpact, impact, recoil, postimpact, and recovery and reconstruction phases of a school crisis event (Jimerson et al., 2005). The model emphasizes both the physical and the emotional safety of young children in the preplanning and aftermath of crisis events, and it identifies the preimpact, impact, recoil, postimpact, and recovery and reconstruction phases of a school crisis event (Jimerson et al., 2005).

According to Jimerson et al. (2005) the preimpact stage describes the period during which educators should prepare for the possibility of crisis. The preimpact stage includes the use of crisis education, crisis drills, and various other preplanning measures that result in the gathering of resources, the allocation of responsibilities, the financial planning for, and the environmental preparedness for, a school crisis event (Jimerson et al., 2005). During the preimpact stage, school staff should also be briefed on how to effectively utilize crisis-related resources, how to provide psychological interventions to

students and fellow staff, and how to handle medical emergencies during a time of crisis, including the possibility of student and staff death (Jimerson et al., 2005).

The impact stage takes place during a school crisis event and refers to any immediate acts by staff to protect students from harm (Jimerson et al., 2005). This includes implementation of any of the emergency drill procedures learned during the preimpact stage. The recoil stage, which takes place immediately following a crisis, refers to those acts which are intended to minimize the effect of the crisis event (Jimerson et al., 2005). Medical interventions may be necessary during the recoil stage, depending on the severity of the crisis event. According to the NOVA, the recoil stage is characterized by a focus on the psychological safety and security of victims (Jimerson et al., 2005). A secure setting in which students and staff can share their experiences, reactions, and feelings should be established, and victim rights should be discussed (Jimerson et al., 2005).

The postimpact stage takes place during the days and weeks following a crisis event (Jimerson et al., 2005). Generally, students and staff will return to school during the postimpact stage and will engage in those normal classroom routines that occurred prior to the crisis event (Jimerson et al., 2005). Psychological screenings and debriefings may be necessary to mitigate any long term psychological effect of the crisis event on students and staff (Jimerson et al., 2005). During the postimpact stage, memorials may also be held for any students and staff members who have died as a result of the crisis event (Jimerson et al., 2005).

Recovery and reconstruction measures take place during the months and years following a school crisis event (Jimerson et al., 2005). Jimerson et al. (2005) recommended a psychoeducational approach to long term crisis intervention. Providing a psychological education to students and staff during the months and years following a school crisis supports victims of crisis in their comprehension and response to the event (Jimerson et al., 2005). All long term intervention strategies should be culturally sensitive and created to restore community amity (Jimerson et al., 2005). New crisis preparedness plans may also be designed and implemented in response to the perspicacity of those who experienced the school crisis event. Anniversary memorials may be held to honor those who died as a result of the crisis (Jimerson et al., 2005).

According to Seguin et al. (2013), the integrated model of school crisis preparedness and intervention proposed by Jimerson et al. (2005) is notable because of its applicability across various age groups and environments. The model accounts for diverse cultural needs and takes into consideration relevant theories of coping and resilience in the aftermath of a crisis event (Seguin et al., 2013). In doing so, the model integrates evidence-based strategies that help to mitigate the effect of traumatic events on students of all ages and cultural backgrounds (Seguin et al., 2013). According to Rees and Seaton (2011), this model is especially valuable because it integrates empirical data along with important facets of psychology and health sciences. Juhnke, Granello, and Haag Granello (2010) have cited the integrated model of school crisis preparedness and intervention by Jimerson et al. (2005) as an appropriate model to combat suicide, self-harm, and various acts of violence in schools. Further, Aspiranti, Pelchar, McCLeary,

Bain, and Foster (2011) have emphasized the appropriateness of the model to the writing of school crisis plans, as there are currently no regulations regarding the content of written school crisis plans.

Kuldas, Bakar, and Hairul (2017) elaborated upon classroom use of the integrated model of school crisis preparedness and intervention in the years following a crisis event. Kuldas et al. (2017) found that crises events, among various other significant life events, exist in a person's memory as a combination of prior perception, emotion, thought, behavior, and learning experience. Thus, Kuldas et al. (2017) suggested that school staff build upon these and other past memories in the time period following the event to help students derive meaning for their learning.

My study benefited from the framework of Jimerson et al. (2005) because the integrated model of school crisis preparedness and intervention supports scholarly investigation into school crisis preparedness in preparation for a school crisis event. The work of Jimerson et al. (2005) prompts research that explores school staff perspectives of preparedness in relation to providing medical interventions, psychological interventions, and other support systems to young children, and that investigates the relationship between schools and the community in the event of school crisis.

In the following literature review, I define *school crisis event* with the model of Jimerson et al. (2005) in mind. I present data and statistics related to various school crisis events that have taken place over the past 10 years. I explore crisis events that have taken place in schools and in childcare centers and examine the role of the preschool teacher as an agent of crisis response. I conclude the literature review with a discussion of preschool

teacher feelings of preparedness in relation to their actual ability to respond to school crisis.

Definition of School Crisis Event

A school crisis event may be defined as any emergency that either temporarily or permanently threatens the physical well-being of students and staff while they are on school site (Heath et al., 2007; Staupe & Kruke, 2018; U.S. Department of Education, National Center for Education Statistics, 2019). This definition includes natural disasters, such as tsunamis (Amitani, Sudo, Tsuboyama-Kasaoka, 2017; Stough, Kang, & Lee, 2018), floods, drought, wildfires, earthquakes (Gomez & Yoshikawa, 2017; Konakli & Kaplan, 2018; Stough et al., 2018), tornados (First, First, Stevens, Mieseler, & Houston, 2018; Ray & Hocutt, 2016; Stough et al., 2018), volcanic eruptions, hurricanes, and snowstorms. This definition also includes public health emergencies (Michail, Ioannidou, Galanis, Tsoumakas, & Pavlopoulou, 2017; Teasley, 2018), medical emergencies (Frenkel, Tandon, Frumkin, & Vander Stoep, 2019; Olympia, 2016; Ugalde et al., 2018), man-made disasters (Bravender & Walling, 2017; Trye et al., 2018), and various acts of on-campus violence (Brown, 2018; Jaymi Elsass, Schildkraut, & Stafford, 2016; Lenhardt et al., 2018; Nickerson & Cornell, 2019). In the past, on-campus school violence generally referred to acts of vandalism, theft, physical attacks, and fights without the use of a weapon (U.S. Department of Education, National Center for Education Statistics, 2019). A recent shift in public attention toward student initiated violent acts, however, has expanded the meaning of school violence to refer to multiple-victim shootings and other acts of episodic violence (Jaymi Elsass et al., 2016; Lenhardt

et al., 2018). Because disaster occurs in many forms, school administrators and teachers must be prepared to respond to a variety of school crisis events each school day.

Researchers who have documented the long term negative effects of school crises upon student physical and mental health help to define what constitutes a crisis situation in schools. For example, mounting evidence suggests that exposure to on-campus violence may result in young children expressing fearfulness to attend school, appearing withdrawn from classroom activities, exhibiting feelings of anxiety or depression, and displaying sudden physical or emotional outbursts (Ferrara, Franceschini, & Villani, 2019). Because an act of school violence poses a clear threat to the physical and psychological wellbeing of students, it may be appropriately defined as a school crisis event.

During a typical school day, head trauma, shortness of breath, and seizures in children appear to be among the most common life-threatening emergencies faced by school nurses across the United States (Olympia, 2016). In the case of public health emergencies, school nurses have been challenged with the task of helping to manage disease outbreaks, including H1N1 influenza, Ebola, Zika, and COVID-19, all of which have the potential for damaging physical effects upon children, characterizing public heath emergencies as school crisis events (see Dziuban, Peacock, & Frogel, 2017).

School crises can be triggered by naturally occurring or man-made events. For example, natural disasters like earthquakes, hurricanes, and tornadoes may cause injury, disease, anxiety, and posttraumatic stress in children, as evidenced by First et al. (2018), Lai, Lewis, Livings, La Greca, and Esnard (2017), and Proulx and Aboud (2019). Man-

made disasters include events related to exposure to toxins, building failure due to poor construction, and errors of public policy. For example, researchers at Virginia Tech brought academic attention to the Flint water crisis in Flint, Michigan, where a contaminated water supply triggered by events that started in 2014 exposed up to 12,000 schoolchildren to the harmful effects of lead (Pieper et al., 2018). Similarly, Trye et al. (2018) identified poor respiratory health in children as a crisis in New York schools, in the years following the World Trade Center disaster of 2001. The effect of these and similar disasters upon student growth and development also qualifies natural and man-made disasters as school crisis events.

Other crisis events may be specific to school locality, and may not elicit much public or media attention. These include incidents involving electrical or water outages, student contact with poisonous substances, missing-child emergencies, the rapid spread of illness and disease within a center, and issues of food contamination, among others (Field, Wehrman, & Yoo, 2017). These incidents, like more widespread events, have a negative effect on the learning environment, threaten the physical safety of students, and have the ability to impart trauma on the young child (Field et al., 2017). Just as in other crises, school staff, community members, and community leaders are at the forefront of identifying and labeling the crisis as such, and in managing preimpact, impact, recoil, postimpact, and the recovery and reconstruction phases associated with the event.

For the purposes of this study, *school crisis event* will be defined as any emergency that threatens the physical wellbeing of students and staff while they are on the school site. Identification of these crises will emerge during one-on-one interviews

with preschool teachers working in independently funded childcare centers in a western state of the United States. The school crisis events reported by preschool teachers working in independently funded childcare centers may go beyond the large scale crises most commonly reported by the media, to reflect site-specific incidents which have provoked feelings of physical and psychological distress by the young children in attendance (see Field et al., 2017).

Statistics on School Crisis Events Over the Past 10 Years by Crisis Type

Approximately half of all students in the United States will experience some form of school crisis event while in school (Carlton, 2017). This might include involvement in a school shooting, exposure to the violent death of a classmate, a natural disaster crisis, or a student being subject to some form of victimization by a fellow classmate (Carlton, 2017). In the following subsections, I will present statistics related to school crisis events over the past 10 years by crisis type. I will share scholarly data related to student-initiated violence and other acts of on-campus violence. I will also present data related to man-made disasters, natural disasters, and public health and medical emergencies. I will conclude this section with a brief discussion of additional considerations in labeling school crisis events.

Acts of On-Campus Violence

In 2016, 92% of public schools across the United States reported having crisis plans related to on-campus active shooter emergencies (U.S. Department of Education, National Center for Education Statistics, 2019, p. 22). This percentage increased dramatically since 2004, when only 79% of public schools across the United States

reported access to written active shooter crisis plans (U.S. Department of Education, National Center for Education Statistics, 2019, p. 22). The increase in preparedness plans for active shooter emergencies may be attributed to a perceived greater prevalence of student initiated violence in schools across the United States since the year 2000 (Clark, Bass, & Boiteaux, 2019; U.S. Department of Education, National Center for Education Statistics, 2019). From 2000 to 2017, 37 active shooter emergencies took place on elementary and secondary school campuses (U.S. Department of Education, National Center for Education Statistics, 2019). While these incidents are statistically rare, on-campus active shooter emergencies garner a substantial amount of media and public attention, resulting in significant community alarm, and often a call for administrators to do more to ensure the safety of students and school staff against active shooter incidents (Jaymi Elsass et al., 2016; Lenhardt et al., 2018; Nickerson & Cornell, 2019).

However, there appears to be an overall decrease in the number of incidents of K-12 students being threatened or injured with a weapon over the past 10 years (Carlton, 2017). This may be attributed to the 74% of suburban K-12 public schools and 73% of K-12 city schools who report having a formal program in place aimed at preventing or reducing on-campus violent acts (Diliberti, Jackson, & Kemp, 2017, p. 3). On-campus violence prevention measures are also in place at 62% of schools located in small towns, and in 51% of schools located in rural areas (Diliberti et al., 2017, p.3).

Man-Made Disasters

In 2014, the city of Flint, Michigan began sourcing its water from the Flint River, a river well-known in the area for its high levels of bacteria. Because city officials failed

to apply corrosion inhibitors during the treatment of the water, thousands of city residents were exposed to the harmful effects of lead (Boufides, Gable, & Jacobson, 2019; Bravender & Walling, 2017; Hanna-Attisha, LaChance, Sadler, & Schnepp, 2016). According to Pieper et al. (2018), the lead level in the Flint water supply tested at 13,200 parts per billion (ppb). Because the Environmental Protection Agency classifies water as hazardous waste at 5,000 ppb of lead, the findings by Pieper et al. (2018) were particularly alarming to the Flint community. The lead-contaminated water in Flint, Michigan put thousands of children in schools and throughout the community at risk for brain damage, behavioral disorders, and learning problems (World Health Organization, 2019), making this man-made disaster in Flint, Michigan one of the largest and most harmful to take place over the past 10 years.

In the aftermath of the World Trade Center disaster of 2001, Tyre et al. (2018) conducted studies related to the respiratory health of those children in New York schools who inhaled dust and numerous toxins following the collapse of the Twin Towers. Tyre et al. (2018) found a significant increase in the diagnosis of asthma in New York children who inhaled dust following the September 11th attacks, bringing scholarly attention to a health crisis in those New York schools located near the location of World Trade Center attacks.

Other man-made crises for school children include bus crashes (Donoughe & Katz, 2015), student exposure to chemical spills and other hazardous materials (Tinney, Denton, Sciallo-Tyler, & Paulson, 2016), bomb threats, gas leaks, issues of food contamination, and kidnapping and other missing student emergencies, among others.

However, current scholarly data and statistics related to these types of crises in schools are limited. Since 2010, only two published articles have included data related to school bus crashes, despite the fact that school bus safety data released by Fleming (2017) indicated an average of 115 fatal bus crashes each year since the year 2000. Poland, McKay, Zonfrillo, Barth, and Kaminski (2016) investigated changes in the concussion assessment scores of 30 high school athletes as a result of a high-speed school bus collision, finding that approximately half of the athletes involved in the crash demonstrated significant cognitive change in the months following impact. This negative effect on cognitive functioning with regard to school bus related crises is echoed in the research of Capurso, Dennis, Salmi, Parrino, & Mazzeschi (2020), who remind that the abduction of a busload of children in Chowchilla, California, resulted in depression, anxiety, and a presence of phobias, which affected the children well into adulthood. There have been no published scholarly journal articles over the past 10 years with regard to bomb threats, hazardous materials, gas leaks, food contamination, or kidnapping from school grounds or on a student's way to and from school.

Natural Disasters

The United States has experienced an increase in natural disasters over the past several decades (FEMA, 2017). In 2016, the United States was identified as second in the world in frequency of natural disaster, behind only China (Guha-Sapir, Hoyois, Wallemacq, & Below, 2017). For example, the United States experiences the greatest frequency of tornado disasters compared to all other countries (Miller, Tao, & Burleson, 2017). Since the turn of the century, every state in the United States has experienced a

major disaster, as declared by the Federal Emergency Management Agency (FEMA; U.S. Department of Education, National Forum on Education Statistics, 2019; U.S. Department of Homeland Security, FEMA, 2019), putting children across the United States at yearly risk for a natural disaster emergency. The state of Rhode Island experienced the fewest number of disasters, at six since the year 2000 (U.S. Department of Education, National Forum on Education Statistics, 2019; U.S. Department of Homeland Security, FEMA, 2019), but the state of Oklahoma experienced 45 natural disasters since the year 2000, the greatest number of disasters experienced by any state in the past 20 years (U.S. Department of Education, National Forum on Education Statistics, 2019; U.S. Department of Homeland Security, FEMA, 2019). The western region of the United States, the location of my study, presents an ongoing risk of natural disaster. Since the year 2000, Idaho has experienced 12 cases of FEMA-declared disasters, Oregon 14 cases, Washington 19 cases, Alaska 27 cases, and California 29 cases of major disaster (U.S. Department of Education, National Forum on Education Statistics, 2019; U.S. Department of Homeland Security, FEMA, 2019). Thus, students attending schools located in the western region of the United States are at yearly risk for the damaging physical and psychological effects of natural disaster. This risk is compounded by the fact that, on average, public school buildings are approximately 44 years old, and do not meet many of the modern building code requirements designed to best protect occupants against a natural disaster (American Society of Civil Engineers, 2017; FEMA, 2017).

Public Health Emergencies and Medical Emergencies

Medical emergencies may occur in response to natural disaster, school violence (Cowell & McDonald, 2018), illness (National Association of School Nurses, 2019; Ugalde et al., 2018), exposure to hazardous materials, or due to accidental injury (National Association of School Nurses, 2019). A national survey of school nurses indicated that head trauma, shortness of breath, and seizures in children were among the most common life threatening emergencies faced by school nurses across the United States (Olympia, 2016). Gormely (2019) found that school nurse attention to these issues, as well as school nurse attention to such health issues as asthma, diabetes, and allergies, has a positive effect on the outside community by decreasing the number of 911 calls related to health emergencies. There is also evidence that for every $1.00 paid towards school-based public health initiatives, there results a $2.20 cost benefit to society, because school nurses may provide interventions that reduce the need for medical transportation or costly medical procedures (Gormley, 2019).

With regard to acts of on-campus violence that may result in severe medical emergency, there has been a recent trend in the literature related to school nurse preparedness for massive bleeding (Erdman, Chardavoyne, & Olympia, 2019). Stop the Bleed training, in particular, aims to better prepare school nurses for bleeding control, tourniquet application, and wound-packing during a major school crisis event (Latuska, Graf, Zwislewski, Meyer, & Nanassy, 2019; Lei et al., 2019). There is also a call by researchers for authentic simulations and drills which focus upon preparing school nurses for disasters that result in mass injury and mass casualty (Opsahl et al., 2019; Rafferty-

Semon, Jarzembak, & Shanholtzer, 2017; Saber, Strout, Caruso, Ingwell-Spolan, & Koplovsky, 2017; Strout et al., 2017).

Outbreak of communicable disease adds to the complexity of the role of the school nurse (Cowell & McDonald, 2018). Over the past ten years, school nurses in the United States have been confronted with the task of managing disease outbreaks, including H1N1 influenza (Navarro, Kohl, Cetron, & Markel, 2016), Ebola (Hoffman & Silverberg, 2018), Zika (Hoffman & Silverberg, 2018), and COVID-19 (Capurso et al., 2020). In alignment with CDC recommendations, schools across the United States were closed in an effort to stop the rapid spread of H1N1 influenza in schools throughout the community (Navarro et al., 2016). Oftentimes, school nurses were the first to determine if a student exhibited influenza-like symptoms, and to refer the student for additional medical testing and services. This required school nurses to develop an understanding of the manner in which H1N1 influenza presented in children, and to manage community fear related to the rapid spread of the illness, alongside fluctuating Center for Disease Control (CDC) recommendations and legal considerations related to school closure policy (Navarro et al., 2016). School nurses had to navigate similar challenges in 2014 during the spread of the Ebola virus (Beckett & Wedgwood, 2014; Hoffman & Silverberg, 2018), in 2015 during the spread of the Zika virus (Hoffman & Silverberg, 2018; Shacham, Nelson, Hoft, Schootman, & Garza, 2017), and in 2020 during the spread of COVID-19 (Capurso et al., 2020). In each instance, community fear related to risk of infection put school nurses in a critical position to stay updated on CDC

recommendations, to be attuned to the signs and symptoms of each unique illness, and to minimize the spread of illness in schools.

In the western part of the United States, the responsibilities of the school nurse are further complicated by an overwhelming student-to-nurse ratio. In 2018, four states, including California, Idaho, Oregon, and Utah, were among the top 12 in highest student-to-nurse ratios, with California at 2,240:1, Idaho at 2,368:1, Oregon at 3,142:1, and Utah at 4,893:1 (National Education Association, 2019). In addition, 23.6% of schools in the western part of United States failed to employ a school nurse altogether (Willgerodt, Brock, & Maughan, 2018). There exists no scholarly research, however, which indicates employment of school nurses in independently funded childcare centers. Rather, preschool teachers are tasked with the responsibility of filling the role of school nurse, alongside typical teaching duties.

School crisis events are not limited to the acts of on-campus violence, man-made disasters, natural disasters, and public health and medical emergencies discussed within these subheadings. There remain several uncommon crisis events that have the potential to threaten the school learning environment and to expose children to physical and psychological risk. Identification of school crises events specific to this study will emerge during one-on-one interviews with preschool teachers working in independently funded childcare centers located in a western state of the United States.

Past Crisis Events in Schools and in Childcare Centers

Fire related disasters were among the first experienced by members of the school community (Heath et al., 2007). In 1851, forty children at a school in New York City

were trampled underfoot, after the false sounding of a fire alarm resulted in children of all ages haphazardly running throughout the school building in an effort to escape the supposed fire (Heath et al., 2007). As news of this tragedy spread throughout the United States, school staff and administrators sought effective mass evacuation procedures that could be used to help schoolchildren quickly and safely exit school buildings in the event of emergency (Heath et al., 2007).

The years following the 1851 tragedy in New York City, however, resulted in inconsistent policy surrounding emergency evacuation procedures in schools (Heath et al., 2007). In 1888, when an unexpected blizzard hit eastern Nebraska, 230 children died as a result of collapsing and poorly built school structures (Fothergill, 2017; Wiebe 2019). Mass tragedy also struck Collinwood, Ohio in 1908, when 172 schoolchildren and two teachers died after becoming trapped by rapidly spreading fire on the third floor elementary school building (Davis & Mazzolini, 2018). In 1958, another fire killed 93 students and three nuns at a Catholic elementary school in Chicago (Giesler, 2016). Additional crisis incidents, such as a 1927 school bombing in Bath, Michigan (Boissoneault, 2017; Lindle, 2019) and a 1937 gas explosion in Rusk County, Texas (Stough et al., 2018) highlighted a need for additional research related to school crisis events. These incidents served to remind administrators and school staff of the importance of comprehensive crisis preparedness measures in schools.

Consistent implementation of crisis drills and routines in schools across the United States in the 1960s resulted in an increase in studies related to fire drills and school fire evacuation (see Ehmann & Claus (1975); Phegley and Obst, 1976; Stahl,

1982). When a series of tornadoes destroyed nine schools across the state of Ohio in 1974 (Clay, Greer, & Kendra, 2018), school staff and administrators also sought-out evaluation measures to determine the effectiveness of school buildings in protecting students against tornadoes and other natural disasters (Stough et al., 2018).

When childcare centers gained popularity in the 1970s, similar policies related to preparedness for fires and were implemented in early childhood facilities across the United States. However, research related to these policies is limited. In 1985, the first fire evacuation study was conducted with young children attending childcare in Japan (Murozaki & Ohnishi, 1985). This study was followed-up in 2009 by a second study investigating fire evacuation with young children attending care centers in Denmark (Larusdottir, 2014). Save the Children is one of the few foundations in the United States that has sought to investigate crisis preparedness measures in place at preschools and in other early learning centers. In 2008, research by Save the Children indicated that only four states in the United States, Nevada, Utah, Washington, and Virginia, required preschool centers to meet emergency standards related to the evacuation of young children during crisis (Save the Children, 2015).

In 2014, Congress released the Child Care Development Block Grant Reauthorization Act, which aimed to redefine health and safety standards in preschools (Ferguson, 2015). By the year 2016, this legislation required that childcare facilities in all 50 states have crisis preparedness plans located on site (National Conference of State Legislatures, 2015). However, there were no specified guidelines for the writing of these plans, and individual states were delegated the task of establishing health and safety

requirements for childcare centers (National Conference of State Legislatures, 2015). Thus, crisis preparedness policy and research specific to childcare centers across the United States has remained limited, with regulations that vary across states.

Crisis in the Preschool or Childcare Center

Preschool teachers must be prepared for a variety of crisis events specific to the young child (Emergency Medical Services for Children, 2016). This might include electrical or water outages, student contact with poisonous substances, food contamination, missing-child emergencies, and the spread of illness and disease within a center, among various other school crisis events (Emergency Medical Services for Children, 2016). Young children complicate caregiver response to school crisis events because they may behave unpredictably during a time of crisis, as they may not truly understand the severity of the crisis situation (Terranova, Morris, Myers, Kithakye, & Morris, 2015).

Infant and toddler age children are unable to escape danger on their own (Bradin & Hashikawa, 2017) and are completely dependent upon their caregiver for protection and safety (Bartenfeld, Peacock, & Griese, 2014; Lai, Osborne, Piscitello, Self-Brown, & Kelley, 2018). Young children may also lack the communication skills necessary to identify themselves to emergency responders, to ask for help and express their needs (Fothergill, 2017), or to discuss their exposure to harmful events (Bartenfeld et al., 2014; Bradin & Hashikawa, 2017; Kousky, 2016). During a major disaster, infant feeding routines must still be reasonably maintained by preschool teachers (Kousky, 2016), and nutrition interventions may be necessary for young children if the crisis takes place over

an extended period of time (Pradhan, Dhital, & Subhani, 2016; Tandukar & Guldan, 2017). Due to the sensitivity of their developing organs, young children are also at high risk when exposed to toxins (Bartenfeld et al., 2014; Dziuban et al., 2017; Fothergill, 2017; Hlodversdottir, 2018). Young children breathe, pound-for-pound, 50% more air than adults, putting them at risk for the harmful inhalation of noxious substances (Vega & Avva, 2019). In addition, infant and toddler bodies contain less fluid in relation to body mass than do adults, making young children more susceptible to dehydration than adults during a time of school crisis (Vega & Avva, 2019). In the case of extreme school crisis events, such as natural disasters, children are more likely to suffer fatal injuries than adults due to their smaller physical size (Kousky, 2016).

Preschool teachers must also take into consideration the long term psychological effect of crises and crisis evacuation procedures upon the coping abilities of young children (Dyregrov, Yule & Olff, 2018; Kousky, 2016; Miller et al., 2017; Scannell, Cox, Fletcher, & Heykoop, 2016; Terranova et al., 2015). Young children are at particular risk for developing early childhood trauma following a school crisis event (Fothergill, 2017; Scannell et al., 2016). This is especially true if the crisis results in the extended absence or death of a loved one, if the child becomes displaced from their home or from the community, if the child experiences prolonged exposure to parent and caregiver stress, if the basic needs of the child become neglected during the time of crisis, or if the child's daily routine becomes significantly or permanently altered (Kousky, 2016). In addition, while responding to a crisis, preschool teachers must present themselves in a calm

manner because adult distress is often internalized by the children who observe it (Fothergill, 2017; Lieberman, Ippen, & Dimmler, 2018).

Trauma resulting from a school crisis event may result in posttraumatic stress symptoms (Cheng, Liang, Fu, & Liu, 2018; Dyregrov et al., 2018; Lai et al., 2018), depression (Cheng et al., 2018; Dyregrov et al., 2018; Dziuban et al., 2017; Hlodversdottir et al., 2018), and growth disturbances (Yokomichi et al., 2018) in young children. These disorders may become increasingly apparent as the child grows older (Yokomichi et al., 2018). Magruder, Kassam-Adams, Thoresen, and Olff (2016) suggested that crisis events and other major traumatic experiences in childhood may result in an elevated risk for alcoholism, drug abuse, and poor health in later adulthood. Thus, preschool teachers must be prepared to make choices during and following a school crisis event that will help to mitigate the possibility of negative developmental effect on the young child. According to Bartlett and Smith (2019), future research should investigate appropriate interventions for young children following a major school crisis event because current research is limited regarding therapeutic interventions to help mitigate the long term, negative effect of a crisis event upon the young child.

Preschool Teachers as Agents of Crisis Response in Childcare Centers

In preparation of a school crisis event, preschool teachers are at the forefront of emergency drills and preparedness. During and following a school crisis event, preschool teachers may be distinguished from other persons of responsibility, such as center directors, first responders, and disaster relief workers, due to their intimate knowledge of the individual needs of the children in their care (Miller et al., 2017; Recchia, Shin, &

Snaider, 2018). Preschool teachers who practice responsive care are able to interpret the nonverbal cues of young children (Davis & Dunn, 2018; Valentini, Mancini, Raiola, & Federici, 2019), thereby putting them in a better position to respond to the unique needs of their students during a time of crisis. Preschool teachers know child feeding and diapering schedules, which may allow them to maintain the consistency of individual student routines following a school crisis event (Colker & Koralek, 2018). In addition, preschool teachers are typically aware of child allergies, which may help to prevent the occurrence of anaphylactic reaction in the young child if food sources are altered during a time of school crisis (Dumeier et al., 2018).

Unlike other persons of responsibility, the preschool teacher fills the role of trusted adult to the young child, thereby helping the young child cope during a school crisis event (Bradin & Hashikawa, 2017; Miller et al., 2017). This quality may be particularly significant in helping a young child begin to recover from crisis in the weeks and months following a school crisis event (Vernberg, Hambrick, Cho, & Hendrickson, 2016). Preschool teachers may be further helpful with family reunification procedures, especially if parent and guardian records become lost or damaged as a result of the school crisis event (Bradin & Hashikawa, 2017; National Association of School Psychologists, 2015; U.S. Department of Health and Human Services, 2020).

Because of their intimate knowledge of the children in their care, preschool teachers are important to the development of the school crisis plans, especially in defining the role of each teacher during a crisis situation (Emergency Medical Services for Children, 2016; Homeland Security and Emergency Management, 2020). However,

there are several barriers inherent to the success of preschool teachers when responding to a school crisis event. In the following two sections, I will discuss several of these barriers, including the insufficient crisis preparedness training of preschool teachers in comparison to public school teachers.

Depending upon the state, student-teacher ratios may be as low as 3:1 or as high as 6:1 for infant classrooms, and as low as 3:1 and as high as 12:1 for toddler classrooms (National Center on Early Childhood Quality Assurance, 2015). During a school crisis event, preschool teachers may be burdened with the task of evacuating several infants, toddlers, or preschool-aged children, who have varying levels of mobility. These children may not understand the severity of the school crisis event and may be prone to emotional outbursts resulting from the confusion and fear caused by the school crisis event (Bradin & Hashikawa, 2017; Terranova et al., 2015). Depending upon the student-teacher ratio in effect at the time of the school crisis event, the task of one teacher evacuating multiple distressed children may be difficult or unmanageable. Insufficient numbers of teachers to safely evacuate small children is a barrier to crisis management in the childcare center.

Another barrier is that during a major crisis, preschool teachers simultaneously must not only evacuate children, but also evacuate the first aid equipment, breastmilk, infant formula, and diapers needed to effectively care for young children for the duration the school crisis event (DeYoung, Chase, Branco, & Park, 2018). Special consideration must also be made to evacuate supplies for students with special needs (Columbia, Clarke, & Weber, 2019). Because a teacher may not know at the time an evacuation of the building is ordered how long children will be sheltered elsewhere, the decision of

what to take as part of the evacuation may be a point of confusion for the teacher. However current policy does not require schools to integrate requirements related to individualized student needs into school crisis plans, and teachers may not have the ability to gather the supplies needed for long term sheltering and evacuation of young children with special needs in addition to all other evacuation materials and the children themselves (Columbia et al., 2019). Evacuation procedures that do not include materials and equipment small children will need to preserve their health and safety during the crisis create a major barrier to preschool teachers in responding effectively to a school crisis.

A third barrier to preschool teacher preparedness for a school crisis is described in reports that school staff feel unprepared to handle a school crisis event and find crisis preparedness training inadequate in preparing them to address individualized student needs (Brophy, Maras, & Wang, 2015; Kruger et al., 2018; Perkins, 2018; Steeves et al., 2017). Brophy et al. (2018) revealed that school crisis preparedness training fails to effectively prepare preschool teachers for a lack of resources following a school crisis event, coping with their own emotional response, helping students cope, and employing strategies for mitigating trauma in students. Kruger et al. (2018) attributed a lack of school staff preparedness to findings that small districts in the United States rarely provide funding for crisis preparedness training to staff. Perkins (2018) noted a major discrepancy between the writing of school crisis plans and the actual implementation of the plans in public school districts. Further, Steeves et al. (2017) noted low participation in crisis preparedness drills by school staff across the United States.

In addition, state requirements for crisis preparedness training among center staff are minimal (Chang et al., 2018). A 2015 disaster report released by Save the Children found that 18 states across the United States failed to mandate the presence of written evacuation plans for preschool and childcare centers, and that those preschool and childcare centers which did have written crisis plans failed to provide methods for reuniting families after disaster and neglected to include emergency evacuation procedures for children with special needs (FEMA, 2017; Save the Children, 2015). Four of the states which failed to meet emergency planning criteria are located in the western region of the United States, the region that is the location of my study (FEMA, 2017; Save the Children, 2015).

Differences in Preschool and Public School Crisis Training

Crisis preparedness training for teachers and school staff varies state-by-state. In 2014, the Child Care and Development Block Grant Act mandated that childcare providers have written plans for the evacuation, relocation, sheltering, and lockdown of students and staff (Bradin & Hashikawa, 2017). The act further required that written procedures outline plans for communicating with families during a time of crisis, continuing facility operations, and accommodating the specialized needs of young children (Bradin & Hashikawa, 2017; Department of Health and Human Services, 2014). The mandates within this act were reinforced at the state level by local licensing agencies (National Center on Early Childhood Quality Assurance, 2015). Local licensing agencies also made it mandatory that school staff in preschool centers across all 50 states have

proof of valid child and infant cardiopulmonary resuscitation (CPR) certification and pediatric first aid certification.

CPR certification for preschool teachers is generally obtained following successful completion of a four hour course, in which preschool teachers learn how to identify and respond to a breathing emergency or to a cardiac crisis (American Red Cross, 2020). Pediatric first aid certification may be obtained following a four hour training in which preschool teachers learn to respond to basic first aid needs and to care for a child who is having difficulty breathing (American Heart Association, 2020). In order to remain valid, CPR certification and pediatric first aid certification are to be renewed every two years (American Heart Association, 2020; American Red Cross, 2020). Licensing agencies in 38 states have also specified that CPR training for preschool teachers be specific to the needs of infants and children (National Center on Early Childhood Quality Assurance, 2015). Licensing agencies in 42 states mandate the implementation of fire drills in preschool facilities, while agencies in 38 states require preparedness plans for additional emergencies such as natural disasters and man-made disasters (National Center on Early Childhood Quality Assurance, 2015). In the western state in the United States in which this study will take place, all of these licensing requirements are present.

With regard to public school teacher training, there are no federal laws which require public schools to have emergency plans (Perkins, 2018). However, 43 states in the United States have laws which make crisis plans mandatory in public schools (Education Commission of the States, 2019), and the majority of these states require local

law enforcement to help develop these plans (Education Commission of the States, 2019; Erwin, 2019). Further, 42 states also require routine rehearsal of school emergency drills with staff and students (Erwin, 2019). In addition, four states in the western part of the United States have mandated CPR training for teachers. The state of Colorado requires at least one staff member on school site to be CPR certified (National CPR Foundation, 2018). The state of Utah requires all health, physical education, and drivers education teachers to be CPR certified (National CPR Foundation, 2018). The state of Alaska requires that all teachers trained in deescalation, restraint, and seclusion procedures be CPR certified, and the state of California requires all teachers to be CPR certified (National CPR Foundation, 2018).

In the western state in which this study will be conducted, school policy with regard to crisis preparedness also requires a designated school administrator provide in-service training to all school staff, in order to maintain staff knowledge and skills related to emergency procedures (U.S. Department of Education, 2019). School emergency plans are expected to be reviewed and updated, as necessary (U.S. Department of Education, 2019). Plus, specifications for students with special needs are to be detailed in writing (Embury, Clarke, & Weber, 2019), as are instructions for transporting an injured student (Alliance of Schools for Cooperative Insurance Programs, 2016). While some of these considerations may be made to the writing of crisis preparedness plans in preschools, they are not mandated by state law or by local licensing agencies, which is a major difference in public school teacher training compared to preschool teacher training in the western state of the United States in which this study will be conducted.

While there are additional considerations in public school teacher preparedness as compared to preschool teacher mandates, current research indicates several inadequacies in the efficacy of crisis preparedness planning for public school teachers. Kruger et al. (2018) found that small public school districts rarely provide crisis preparedness funding to staff. Perkins (2018) found that school districts write plans but often do not train teachers according to written procedure, and Carter (2019) noted that Kansas and Missouri school districts do not offer adequate crisis preparedness training to staff, predominantly due to lack of time, resources, and collaboration. Further, Carter (2019) identified inadequacies in superintendent planning for the recovery phase following a school crisis event.

Separate findings by Perkins (2018) indicated that over half of the 307 Rhode Island public school teachers surveyed on the topic of crisis preparedness reported never or rarely engaging in crisis preparedness training. This is consistent with findings by Nickerson and Cornell (2019) that school crisis preparedness planning in schools across the United States lacks comprehensive teacher training. Further, despite state mandates, crisis preparedness plans are particularly lacking when considering the needs of students who have disabilities and those who are of limited English language ability (Nickerson & Cornell, 2019). While there is much research that allows for public school administrators to glean a better understanding of the crisis preparedness plans and procedures needed on school sites, there is not yet any research that reveals the needs of preschool teachers working in independently funded facilities.

How Feelings of Preparedness Affect Ability to Respond to School Crisis

Contemporary researchers have investigated perspectives of crisis preparedness by a variety of K-12 school staff. Eklund et al. (2018) found that school resource officers and mental health staff across the Southwestern United States shared positive perspectives of crisis preparedness. According to Steeves et al. (2017), these positive perspectives of crisis preparedness are shared by school staff in schools across southeastern Louisiana. Altınbas et al. (2019) identified positive secondary and high school teacher perspectives of administrator competence related to school crisis preparedness, which served to highlight the important role of school leaders and administrators in helping school staff feel confident and prepared to handle school crisis. In addition, Ugalde et al. (2018) found positive perspectives of crisis preparedness among school nurses in Texas, especially when they have greater than 5 years of experience, work at elementary schools, and provide care to fewer than 10 children per week.

While this research is promising, it is in contrast to the findings of perspectives of crisis preparedness by various other school staff. Liu, Blankston, and Brooks (2015) identified a low level of university employee knowledge related to preparedness for crisis preparedness, with women reporting feeling slightly more knowledgeable than men. As a result of the study, Liu et al. (2015) urged for comprehensive training of university employees and increased communication related to crisis preparedness. Further, Clark et al. (2019) found in a survey of 366 university educators that less than half of the educators participating in the study indicated feeling even moderately prepared to respond to an active shooter emergency in the classroom. Clark et al. (2019)

recommended crisis preparedness training focusing on response and prevention of active shooter emergencies.

In addition, Perkins (2018) found that approximately half of all Rhode Island teachers surveyed in their study indicated feeling not at all prepared to handle a school crisis, with teachers working in urban schools feeling only slightly more prepared than their peers. Research by Perkins (2018) indicated a need for clear, consistent communication related to crisis procedures and highlighted a desire by Rhode Island teachers to experience authentic crisis preparedness drills and training. Further, the aforementioned positive perspectives of crisis preparedness noted by Steeves et al. (2017) are complicated by reports of low participation in preparedness activities and by findings that school crisis plans in Louisiana schools lack many components recommended by best practice.

Researchers in the field of education have noted differences between school staff perspectives of crisis preparedness and the actual implementation of crisis preparedness plans (Dyregrov et al., 2018). Giesler (2016) wrote that people generally fail to appropriately evaluate their ability to cope with a crisis event. People also tend to respond to a crisis event in a way that is familiar and rehearsed, rather than appraising the appropriateness of their actions during an actual time of crisis (Giesler, 2016). The choice to default to a normal, familiar crisis procedure during a school crisis event may prove detrimental if the crisis interferes with anticipated evacuation procedures. Giesler (2016) indicated that at the onset of a crisis people often underestimate the severity of the crisis event, resulting in a reluctance to act that is often dangerous and can prove fatal. When

considering school crisis preparedness by teachers in particular, Nickerson, Cook, Cruz, Parks, and Cummings (2019) found evidence that only 10% of what teachers learn during crisis preparedness drills and training transfers to actual job performance, highlighting a need for authentic crisis preparedness procedures that better resonate with teachers.

Despite a growing body of literature related to school staff perspectives of crisis preparedness, there has not yet been any research which indicates preschool teacher perspectives of crisis preparedness (Fothergill, 2017). Thus, my study will address this gap in the literature by investigating the perspectives of crisis preparedness by preschool teachers working in independently funded childcare centers.

Summary and Conclusions

In this chapter I provided an overview of current and historical research related to school crisis preparedness. While perspectives of crisis preparedness by K-12 school staff have been investigated in the literature, emergency planning in educational settings has failed to consider the perspectives of preschool teachers who work in independently funded childcare centers. In Chapter 2, I elaborated upon the conceptual framework of Jimerson et al. (2005) and provided an in-depth review of the literature related to school crisis and school crisis preparedness. In Chapter 3, I will seek to fill a gap in the literature related to preschool teacher perspectives of crisis preparedness by discussing my research design and rationale, describing my role as a researcher, elaborating upon my study methodology, and by detailing issues of trustworthiness inherent in my study.

Chapter 3: Research Method

The purpose of this study was to understand the perspectives of preschool teachers who work in independently funded childcare centers regarding their preparation to manage an emergency that might endanger children in their care. Current researchers have investigated perspectives of crisis preparedness by a variety of school educators but have not included the extent to which preschool teachers feel prepared to handle a school crisis event. In Chapter 3, I address this gap in the literature related to preschool teacher perspectives of crisis preparedness by discussing my research design and rationale, describing my role as a researcher, elaborating upon my study methodology, and detailing issues of trustworthiness inherent in my study related to preschool teacher perspectives of school crisis preparedness.

Research Design and Rationale

My study was guided by the following four research questions. Each question was focused on one of the elements of crisis preparedness described by Jimerson et al. (2005):

RQ1: How do preschool teachers describe the effect of crisis preparedness drills and training on their anticipated ability to handle school crisis events?

RQ2: How do preschool teachers describe their preparedness to handle school crisis events during a time of crisis?

RQ3: How do preschool teachers describe their preparedness to provide medical interventions, psychological interventions, and other support systems to young children and their families during the recoil stage, immediately following a crisis event?

RQ4: How do preschool teachers describe the postimpact and recovery and reconstruction measures in place at preschool centers that are intended to aid in community recovery during the weeks and months following a crisis event?

I investigated the phenomenon of school crisis preparedness by exploring the perspectives of preschool teachers working in independently funded childcare centers. In Chapter 1, I defined the term *school crisis preparedness* as any anticipatory acts taken by school staff that are intended to lessen the negative effects of medical emergencies, acts of violence, natural disasters, and man-made disasters on student health and well-being (Staupe & Kruke, 2018). I identified the term *independently funded childcare centers* to describe locally owned preschool centers for which parents pay a fee to enroll their child in exchange for childcare services, and I indicated that *preschool teachers* referred to those teachers who work with children birth to age 5.

A basic qualitative study that incorporated aspects of phenomenology was the research tradition most appropriate for my research. By conducting a basic qualitative study that incorporated phenomenology, I took a narrative approach to investigate the lived experiences of preschool teachers relating to crisis preparedness drills and training. Because I explored the impact of crisis preparedness drills and training upon a preschool teachers' perceived ability to handle various school crisis events, it was essential that I gathered first-person narratives related to the crisis preparedness drills and training experienced by preschool teachers working in independently funded childcare centers in a western state of the United States. By exploring perspectives of crisis preparedness by

preschool teachers working in the target state, I addressed a gap in the literature related to preschool teacher perspectives of school crisis preparedness.

Role of the Researcher

I acted as a passive participant in my study (see Research Design Review, 2017). I engaged in Zoom and phone interviews with 15 teachers who work with children ages birth to 5 in independently funded childcare centers in a western state of the United States. Due to my prior years of experience as a preschool teacher, I may have benefitted from "insider role status" in my role as a passive participant in this study (see Dwyer & Buckle, 2009). Insider role status stems from a shared identity between researcher and research participants (Dwyer & Buckle, 2009). Because I mentioned my prior role as a preschool teacher to some of my participants, I may have encouraged those participants to open up to me more rapidly and to share their experiences in greater detail, thereby eliciting information rich descriptions of preschool teacher perspectives of preparedness for a school crisis event.

I did not have any professional or personal relationships with the participants involved in my study. Though I have 10 prior years of experience teaching preschool, I am currently an elementary school teacher at a charter school in a western state of the United States. I am not employed by an independently funded preschool center in the western part of the United States, and thus my role precludes me from any supervisory or instructor relationships with preschool teachers working in independently funded preschool facilities.

Methodology

Participant Selection Logic

For this study, I investigated the perspectives of school crisis preparedness by 15 preschool teachers working in independently funded childcare centers. Using purposive sampling (Bullard, 2019), I conducted phone and Zoom interviews with preschool teachers who work in the target state. Purposive sampling allowed for me to deliberately select (see Patton, 2015) those teachers who met the criteria of providing care to birth to age 5 children while employed in an independently funded childcare center located in the target state. Purposive sampling also allowed me to select teachers who have participated in crisis preparedness drills and training. I ensured that each participant met the criteria by personally selecting participants whom I recruited online. In total, I conducted phone and Zoom interviews with 15 preschool teachers working in independently funded childcare centers in a western state of the United States. My study focused on the perspectives of a small population and thus required only few participants to reach data saturation (see Fusch & Ness, 2015).

I recruited participants for my study by using Facebook and Reddit groups aimed at preschool teachers and early childhood education. I used several Facebook groups, including: Preschool Teachers, Early Childhood Education and Development, National Association of Early Childhood Teacher Educators, and Early Childhood Education Resources and Ideas. I also used my personal Facebook account, and the Reddit group: r/preschool. I posted a recruitment flyer via each group discussion board, mentioning that I was looking to recruit preschool teachers who work in independently funded childcare

centers in the target state. I compiled a list of each preschool teacher who responded. Then, I followed-up with each prospective participant to share more details related my study, to answer any questions that they had, and to exchange contact information. Upon confirmation that each prospective participant met the inclusion criteria and was interested in proceeding with a formal interview, I sent a recruitment email that reiterated inclusion criteria and included a consent form. Shortly thereafter, I conducted phone and Zoom interviews with each willing participant.

Data saturation occurs when data gathered from study participants no longer contributes any new or relevant insight into a study (Lowe, Norris, Farris, & Babbage, 2018). For my particular study, I noted that data saturation began to occur during and following my interview with Participant 13. Because I developed a small study, fewer participants were needed to reach data saturation than would be necessary in a study investigating perspectives of school crisis preparedness by a more expansive study population (see Fusch & Ness, 2015).

Instrumentation

I was the primary data collection instrument for my study. I was responsible for writing all interview protocols, for conducting all phone and Zoom interviews, for gathering notes during each interview, and for taping and transcribing all interview recordings. I ensured that the writing of my interview protocols, the phrasing used during my interviews, and the notes and transcriptions that I made throughout the study were as objective and unbiased as possible by using reflexive journaling. Reflexive journaling allowed me to record my personal reflections related to the contextual details and

dynamics of each interview (see Meyer & Willis, 2019). I was then able to identify and control for any bias that emerged during the writing of my reflections, thereby enhancing the trustworthiness of my data (see Meyer & Willis, 2019).

I used eight interview questions as my data collection instrument. My interview instrument was researcher-produced and included six open-ended questions supported by two subquestions (Appendix A). I created the interview instrument based on my study framework and research questions, all of which emphasized the topic of school crisis preparedness. My interview instrument underwent the review of a Walden faculty member unaffiliated with my department of specialization to strengthen its alignment with my study purpose and research questions and to ensure content validity. The doctor of education with whom I met suggested only minor rewording of one question. I made the suggested change, and my interview questions were thus deemed valid for use in my study.

As part of asking interview question 1, I presented my participants with a list of emergencies (Appendix B) that might occur in the childcare center. This list of emergencies was e-mailed to each participant prior to our interview and reviewed again at the beginning of each interview. I asked each participant how prepared they felt to handle emergencies like the ones listed. This interview question was aligned with RQ2, by which I sought to identify how preschool teachers describe their preparedness to handle school crisis events during a time of crisis.

I then asked each participant to describe how much their ability to handle each of the emergencies that we discussed had been supported or not supported by the crisis

preparedness training and drills in which they had participated at their centers. This second interview question was aligned with RQ1, by which I sought to understand how preschool teachers describe the effect of crisis preparedness drills and training on their anticipated ability to handle various school crisis events. Interview question 2 was followed by two subquestions, which allowed me to probe deeper into participant experiences related to the crisis preparedness training that they had received from their centers. I asked each participant to describe any emergency response actions that they had learned and to discuss how each of those response actions contributed to their feelings of being most and least prepared to respond during a time of school crisis. The first subquestion allowed me to gather more data related to RQ2, while the second subquestion, in which I asked the participants to describe the ways in which their crisis preparedness training has contributed to their feelings of preparedness, allowed me to gather more data related to RQ1.

Interview question 3, which was about how prepared the participant felt to provide short- and long-term emergency, first aid, and medical interventions to students, was aligned with RQ3. I asked interview question 3 to identify how preschool teachers describe their preparedness to provide medical interventions, psychological interventions, and other support systems to young children and their families. In interview question 4, I asked each participant about how prepared they felt to provide short- and long-term psychological support interventions to students, in response to a school crisis event. Interview question 4 strengthened explication of RQ3 by probing for additional details

related to preschool teacher training and preparedness to provide psychological interventions to students.

During interview question 5, I asked each participant to discuss the plans that their center has in place for helping students and their families recover from a school crisis event. This interview question was aligned with RQ4, by which I sought to understand the postimpact and recovery and reconstruction measures in place at preschool centers, especially those that are intended to aid in community recovery during the weeks and months following a crisis event. During interview question 6, I asked each participant to describe plans intended to aid in larger community recovery.

Procedures for Recruitment, Participation, and Data Collection

I recruited participants for my study by using Facebook groups aimed at preschool teachers and early childhood education. I also used my own personal Facebook page, as well as the Reddit group r/ preschool. I gathered contact information including the email address and oftentimes the phone number, of each participant who expressed interest in my study, and I quickly followed-up with an email that reiterated inclusion criteria and included a consent form. Each participant was asked to respond to the email with the phrase “I consent.” Interviews were scheduled with each participant shortly after they reviewed the materials and provided consent to engage in interviews. A confirmation email was sent to participants one day prior to each interview, by which I linked the childcare emergency list (Appendix B) and suggested to each participant that they conduct the interview from a private location, so as to take reasonable precautions to protect their own privacy. Verbal consent was obtained prior to the start of each phone

and Zoom interview. I completed an audit trail of the entire participant recruitment, data collection, and data analysis process. Although I generated interest from an excess of 15 preschool teachers, several did not teach within the target state, and were thus unable to participate in my study.

There was no need to negotiate access to sites for the interviews to take place, as I conducted all interviews via phone and Zoom from my own home. Using a flexible timeline, I offered to meet with each participant on the weekends, after their scheduled weekday shifts, or at any time of the day most convenient for them. I conducted each interview from a quiet room in my home, one which was free of distractions (see Burkholder, Cox, & Crawford, 2016). An audio recorder app was installed on my phone and my laptop in advance. Plus, the Zoom chatroom presented a third method of recording, though the imbedded record feature. Interviews took anywhere from 25 to 55 minutes, depending upon the needs and comfort level of my participants. All interviews took place over the course of three weeks.

I personally collected all qualitative data. I began each interview by greeting the participant, providing an overview of the study, and verbally confirming participant consent in the study. I engaged each participant in a series of open-ended, conversational research questions, as included in my interview instrument. Through each question, I sought to evoke information rich descriptions of preschool teacher perspectives of preparedness for a school crisis event. I approached all of my interviews with a genuine interest in the lived experiences of the preschool teacher (see Raheim et al., 2016). I listened closely to participant answers while using a recording device to record each

interview, thus relying upon only minimal notetaking in an effort to maintain eye contact with each participant, especially via Zoom interviews. The few notes that I took were related to follow-up queries or were brief phrases meant to highlight major themes that appeared to emerge across interviews. I concluded the interviews by thanking each participant for their time, and providing an approximate date by which I intended to email a copy of the interview transcript for the purposes of member checking. I documented the time and date of each interview and all follow-up conversations on my audit trail. If a participant appeared to require emotional support as a result of any sensitive information discussed during our interview, I offered the phone number for the Disaster Distress Helpline at 1-800-985-5990, which is a hotline that provides crisis counseling to those experiencing psychological distress resulting from acts of natural and man-made disaster. Upon completion of this study, I emailed each participant a brief 1-2 page summary of the results.

Data Analysis Plan

I generated transcripts from each interview using the Kaltura audio recording device. I personally reviewed each Kaltura-generated transcript, and made edits to ensure accuracy. Within two days of every interview, I emailed each participant a copy of their transcript for the purposes of member checking. All 15 participants confirmed the accuracy of their transcripts. I recorded the date that I received confirmation of transcript accuracy on my audit trail.

I began the data analysis process with the intent of using an Excel spreadsheet to highlight similarities that exist within each transcript on a line-by-line basis. I am familiar

with use of the *lookup* and *find* features to navigate and search across transcripts, and how to use conditional formatting to highlight reoccurring themes within the transcripts (see Meyer & Avery, 2008), as I have effectively used this method for coding transcripts during prior Walden coursework. However I ultimately found that due to the large number of transcripts that required coding, printing each transcript and then using handwritten notes and highlights was a preferable data analysis process for me. Thus, I adapted to this new process shortly after data analysis began.

During my precoding stage, I read through each transcript while journaling my impressions related to the tone of the data and regarding any initial similarities and differences that I noted amongst interviewee data. These observations led to first level coding. First level coding generally relies upon low inference yet descriptive words and phrases that effectively summarize portions of the data (Elliott, 2018; Punch, 2014). Thus, I began to make handwritten notes directly within each transcript and highlighted any commonalities in the phrases and experiences discussed by my participants. Some of the first commonalities that I noted existed in discussions of liability, director discretion when reporting emergency incidents, the use of monthly onsite earthquake and fire evacuation drills, and the use of books and sing-alongs to help mitigate psychological trauma during a time of crisis.

During second level coding, I reread each transcript and highlighted the new similarities that emerged. I noted the use of repeated words, sentences, and phrases across transcripts, which allowed me to cluster my qualitative data and assign each cluster an appropriate code. According to Creswell (2015), it is common for a novice researcher to

begin with an excess of 30-50 codes, but it is important to narrow those codes to approximately 20. Following this advice, I worked to narrow 90 of my initial codes down to 37 categories. In addition to the commonalities noted during first level coding, these new codes grew to include: *know your students, no phones in classroom, first aid/CPR training, fire drill, background experience,* and *no long term plans*, among others.

Third level coding then granted me the opportunity to develop an even richer understanding of preschool teacher perspectives of school crisis preparedness. I reduced my 37 categories to 5 themes; an appropriate number of themes, as recommended by Creswell (2015). My themes resulted from the categorization and analysis of coded data (see Saldana, 2014), and included: *common emergencies in the childcare center, director discretion, inadequacies in center crisis preparedness, crisis preparedness training,* and *mitigating psychological trauma as instinctual response*. A summary of my interpretation of these themes will be shared in Chapter 4 of this study.

Discrepant cases constitute any bits of contradictory data provided to me by a participant over the course of a one-on-one interview. During each interview, I listened carefully for any contradictions to what the participant said previously, and asked clarifying questions to resolve any discrepancies. I did not note any major discrepancies during the coding of participant transcripts.

Issues of Trustworthiness

Credibility refers to the confidence that the reader may have in the truth and the accuracy of a researchers' findings (Korstjens & Moser, 2018; Stewart, Gapp, & Harwood, 2017). To ensure the credibility of my study, I recruited participants for

interviews until I reached saturation in my data and was able to code all of the complex themes associated with the topic of preschool teacher perspectives of crisis preparedness. Further, following each interview my participants engaged in member checking, thereby ensuring the collection of accurate and honest qualitative data (see Korstjens & Moser, 2018). I demonstrated reflexivity throughout my study by reflecting upon my journal entries and being transparent about my own personal biases.

Transferability refers to the degree to which my findings are applicable across other settings and other groups of people (Korstjens & Moser, 2018). To support the transferability of my data, I focused on gathering thick, rich descriptions related to perspectives of school crisis preparedness from preschool teachers who work in independently funded childcare facilities across a western state in the United States. I gathered interview data from these teachers until I reached saturation. I will share this rich data with my readers in enough detail that they may understand participant behaviors and experiences, as well as all relevant contextual details. Rich, detailed accounts are what will make the data meaningful for my reader (see Korstjens & Moser, 2018). Thus, the data that I yield alongside my discussions of participant recruitment and interview processes shall provide my readers enough information to make a valid determination about the transferability of my data to other contexts.

Dependability refers to the replicability of research study (Ravitch & Carl, 2016). To be dependable, research processes should be discussed in such detail that another researcher could conduct the same study and achieve similar results. To do so, I kept detailed records throughout the study (see Korstjens & Moser, 2018). I recorded all of my

interview procedures in an audit trail. An audit trail contributes to the transparency of my data collection by detailing the processes by which I recruit, interview, and follow-up with my study participants.

Finally, I met the hallmark of confirmability by being explicit in my recordkeeping with regard to not just my audit trails, but my journal entries. Confirmability refers to the extent to which my findings may be attributed to the data, rather than to my own biases (see Korstjens & Moser, 2018). Thus, I used audit trails alongside reflexive journaling to compile detailed and transparent documentation related to my process of data collection and data analysis, thereby allowing my results to be corroborated by others.

Ethical Procedures

In order to ensure ethical treatment of all of my participants, I sought approval of Walden University's Institutional Review Board (IRB) prior to collecting any data for my study related to preschool teacher perspectives of school crisis preparedness. Upon approval, I recruited participants online via social media forums (IRB approval number 05-14-20-0761373). I gathered contact information from those participants who expressed interest and met inclusion criteria and emailed each participant a consent form. The consent form provided a brief, written overview of the study background and procedures and listed two sample questions. In a series of bullet points, the consent form mentioned that each participant was agreeing to participate in an approximate 35 to 40 minute interview via Skype or phone, and was committing to an additional 20 minutes to review their interview transcript. The voluntary nature of the study was discussed in the

consent form, as were the risks and benefits of participation in my study. The consent form explained that if a participant were to divulge sensitive information during the interview, especially as it related to the neglect or harm of a child, that I would discontinue the interview immediately and report the information to the appropriate authority. The consent form also noted payment and privacy details and listed the persons with whom the participant might contact if they had additional questions. At the bottom of the consent form, each participant was asked to respond by email with the phrase "I consent," if they wished to proceed with participation in my study.

I personally collected all qualitative data and maintained the confidentiality of my participants through the use of pseudonyms. Pseudonyms were assigned to each participant shortly after I received their consent. While I had to be informed of participant names and contact information in order to schedule interviews and conduct member checks, identifying information was not included in the writing of my study nor was it revealed during any discussions of my study with personal or professional contacts. No identifiable demographic traits are revealed in my study, thus eliminating the possibility of deductive disclosure (see Geldenhuys, 2019). Plus, when I conducted interviews via phone or Zoom, the interviews took place with me sitting privately in my home with no other persons present.

All audit trail documentation of interview times and dates corresponds with participant pseudonyms. The notetaking sheets upon which I wrote notes and observations were also aligned with interviewee pseudonyms and did not include any sensitive or revealing information. I personally omitted any names and site-specific

location details from transcripts, in an effort to protect the privacy of any third parties, as well. Interview transcripts were sent to participants via email for member checking, and emails were deleted upon completion of member checking. No other persons had access to my email account login and password. None of my 15 participants chose to withdraw from the study.

I secured all qualitative data on my password-protected laptop. All data was also downloaded onto a USB drive, which is stored in my home safe. My audit trail notes and all printed transcripts are also stored in my home safe. Any Walden faculty member who reviewed my data was not provided any information which would reveal participant identities. I will retain all data for five years following my study. After 5 years, any printed data will be destroyed by paper shredder and any data stored on my laptop and USB drive will be erased.

To further secure the confidentiality of my participants, at no period prior to, during, or immediately following the data collection process did I seek a professional or personal relationship with them. I am an elementary school teacher who works at a charter school in a western state of the United States. I am not employed by an independently funded preschool center in the western part of the United States, and thus my current professional roles preclude me from any supervisory or instructor relationships with preschool teachers working in independently funded preschool centers.

Summary

In this chapter, I discussed my research design, described my role as a researcher, elaborated upon my study methodology, and detailed issues of trustworthiness inherent in

my study. I also discussed various ethical considerations related to the recruitment of participants for my study, and to the collection and storage of my qualitative data. In Chapter 4, I will share the results of my study.

Chapter 4: Results

The purpose of this study was to investigate perspectives of crisis preparedness by preschool teachers working in independently funded childcare centers in a western state of the United States. My study was guided by the following four research questions:

RQ1: How do preschool teachers describe the effect of crisis preparedness drills and training on their anticipated ability to handle school crisis events?

RQ2: How do preschool teachers describe their preparedness to handle school crisis events during a time of crisis?

RQ3: How do preschool teachers describe their preparedness to provide medical interventions, psychological interventions, and other support systems to young children and their families during the recoil stage, immediately following a crisis event?

RQ4: How do preschool teachers describe the postimpact and recovery and reconstruction measures in place at preschool centers that are intended to aid in community recovery during the weeks and months following a crisis event?

In Chapter 4, I address a gap in the literature related to preschool teacher perspectives of school crisis preparedness by sharing the results of my qualitative research study in which I explored the perspectives of crisis preparedness of 15 preschool teachers working in a western state of the United States. In the following chapter, I discuss the study setting and participant demographics, and I provide an overview of my data collection and data analysis techniques. I also provide evidence of the trustworthiness of my study and share my study results.

Setting

This study took place during the worldwide COVID-19 pandemic, which affected the salience of a conversation about disaster preparedness in the words of several participants. COVID-19 is a virus that can spread from person-to-person through respiratory droplets that are released during the talking, coughing, or sneezing of infected people (Centers for Disease Control and Prevention, 2020; World Health Organization, 2020). Believed to have originated in Wuhan, China, cases of COVID-19 rapidly spread around the world, resulting in the closure and government-ordered lockdown of entire industries across the globe (Capurso et al., 2020). Thus, COVID-19 resulted in the mandatory shut-down of various institutions in the United States, including several schools and childcare facilities across the target state in which this study took place. These forced shut-downs impacted the childcare centers where many of my participants were employed, resulting in abrupt changes to staffing, student ratios, and accessibility to school funding, as many parents who paid a fee to enroll their child in exchange for childcare services chose to withdraw their child suddenly from the childcare center. One teacher whom I interviewed discussed being recently furloughed, while another participant shared their experience of returning to a center after experiencing several weeks of closure. Several other participants noted navigating various state and local requirements as they reopened their childcare facilities or considered doing so. Altogether, seven participants noted a recent negative impact of COVID-19 on their daily lives. When discussing long term center crisis plans, many participants noted a lack of

long term crisis preparedness in the early childhood field, citing the impact of COVID-19 as evidence of existing inadequacies in long term center crisis preparedness.

Demographics

I conducted phone and Zoom interviews with 15 preschool teachers employed in independently funded childcare facilities in a western state of the United States. Fourteen participants presented as female and one participant presented as male. While all participants in the study self-identified as preschool teachers, it became apparent during interviews that several participants engaged in a dual role within their centers and either formerly acted, or were currently also acting, as center directors. Thus, many of the experiences described by the participants reflected their capacity as both preschool teacher and center director. Further, while I did not explicitly ask any demographic questions, some participants chose to share with me their years of experience in the early childhood field. Participant 5 mentioned working in various early childhood centers for 19 years. Participant 6 mentioned working at their current center for 8 years. Participant 7 noted working in the field for over 27 years. Participant 11 mentioned having 16 years of experience. All participants described during our interviews attending at least one CPR and first aid training and detailed being present for center provided trainings including fire and earthquake drills.

Data Collection

I conducted Zoom interviews with six participants and phone interviews with nine participants. I conducted each interview while sitting privately in my home, with no other persons present in the room. I conducted all 15 interviews over the course of three weeks.

Interviews varied from approximately 25 minutes to 55 minutes, depending upon the amount of detail provided by the participant. Generally, when an interview approached 45 minutes, I would check-in with the participant to be sure that they wished to continue beyond the amount of time that was indicated in my consent form. I referred to the list of childcare emergencies (Appendix B) and relied upon my interview questions (Appendix A) throughout each interview. I used Kaltura audio and a call recording app, which I downloaded onto my phone prior to the first interview, to record phone interviews. In addition, I used the embedded recording feature on Zoom to record all Zoom interviews. Data collection closely followed the plan presented in Chapter 3. However, I chose to enlarge the size of the font on my recruitment flyer to emphasize the phrase *Research Study*. Prior to this change, I had received eight responses to my flyer in which each sender expressed interest in a job opportunity. To avoid further confusion, I edited the flyer to make my recruitment intentions clear. Following this change, I did not receive any more inquiries regarding employment.

Data Analysis

I kept a separate tab for each participant in my audit trail notebook. Immediately following each interview, I wrote a brief series of notes about my general impressions related to each participant interview. I transcribed each interview shortly thereafter, and, after receiving confirmation of the accuracy of the transcripts following participant review, I conducted precoding as I read through each transcript and wrote my impressions related to the tone of the data, as well as any initial similarities and differences that I noted amongst participant data. Similarities and differences began to

emerge within the first four participant transcripts. There appeared a dichotomy between P1 and P3, who detailed several shared impressions related to the inadequacies in center crisis preparedness. This was in contrast to the experiences and perceptions shared by P2 and P4, who had received extensive center crisis preparedness training and believed crisis preparedness training to be adequate. These initial observations were made clear during first level coding, in which the words and phrases of P1 and P3 included *ratios* and *hands-on training*. In contrast, such phrases as *keep calm* and *staff member support* were shared by P2 and P4. As I continued to conduct first level coding of the interview data provided by the additional 11 participants, some of the most frequent codes to emerge included *seizure, choking,* and *lockdown.*

During second level coding, I reread each transcript and began categorizing my codes. I noted that the initial dichotomy in preschool teacher perspectives of crisis preparedness weakened as the interviews continued. The data shared by the majority of the participants exposed numerous concerns and highlighted several inadequacies in center crisis preparedness. I noted the use of such repeated words, sentences, and phrases, as: *know your students, keep calm, earthquake drill, fire drill, CPR/first aid training, choking, seizure, allergic reaction, EpiPen, sign in/out logs,* and *lockdown.* Additional common topics of discussion included the effect of background experience on perspectives of crisis preparedness, the effect of media reported disasters on center preparedness, the importance of whole-team response during a crisis, and a perceived lack of long term recovery plans following a crisis event. Overall, I compiled a list of 90 codes, which I worked to regroup into 37 categories. I made a handwritten list of these 37

categories, and, in parenthesis, indicated beside each category the number of participant transcripts in which discussion of the corresponding code could be found. A copy of this list may be viewed in Table 1.

Third level coding then granted me the opportunity to develop an even richer understanding of preschool teacher perspectives of school crisis preparedness. I consolidated my 37 categories into five themes; an appropriate number of themes, as recommended by Creswell (2015). My themes resulted from the clustering of my handwritten categories. Using different colored highlighters, I began to group related categories by the same color. Some themes emerged easily among categories. For instance, I was able to categorize *seizures, choking, allergic/allergy, stranger/homeless on-campus* and *lockdown*, which were discussed by at least 6 participants each, under the theme *crisis types. Director discretion* was also a theme that emerged prominently among my codes. The role of the center director in effectively preparing preschool teachers for a crisis event was discussed across several interview transcripts, as coded by *role of center director*. Further, participants noted director preference with regard to *medical supplies and training*, *crisis communication*, and *reporting*.

The theme *inadequacies in center crisis preparedness* emerged prominently amongst my categories as well, revealing several specific vulnerabilities in crisis preparedness training within early childhood centers across the target state. These vulnerabilities were highlighted by such codes as *classroom is not prepared*, *no outgoing calls, nowhere for the teacher to hide, need drills at different times,* and *no long term plans. Crisis preparedness training*, too, emerged as a major theme across transcripts,

Table 1

Codes and Categories that Emerged from the Data

Codes (frequency)	Categories
Stranger/homeless on-campus (9)	Crises experienced by participants
Seizure (8)	
Allergic/allergy (6)	
Choking (6)	
Lockdown (6)	
Deep cut (5)	
EpiPen (5)	
Asthma (3)	
Broken bone (3)	
Fight (3)	
Restraining order (3)	
COVID-19 (3)	
Electrical outage (2)	
Object in nose (2)	
Parents fighting (2)	
Shooting (2)	
Wild animal running around (2)	
Contact with bleach (1)	
Chemical burn (1)	
Finger crushed by ring (1)	
Hand, foot, and mouth disease (1)	
Infant not breathing (1)	
Parent stalking (1)	
Parent yelling at other children (1)	
Poisonous spider bite (1)	
Center director (5)	Role of center director
Director trained me (5)	
Not prepared (5)	Medical supplies and training
Many medical supplies (4)	
Not enough supplies (4)	
EpiPens in office (3)	
Type of supplies (3)	
CPR training not required (2)	
Give medicine/Benadryl (2)	
No phones in classroom (5)	Crisis communication
Help from other schools (4)	
Secret code (2)	
Walkie-talkies (2)	
Call director during emergency (2)	
Call office from outside (1)	

(Table continues)

Codes (frequency)	Categories
Director calls 911 (1)	
No cell phones (1)	
Written reports (1)	Reporting
Sign in/out logs (5)	
Call parent (3)	
Reporting choking (2)	
Evacuating children (4)	Classroom population
State licensing (4)	
Ratios (3)	
Nap time (2)	
Classroom is not prepared (5)	Environmental preparedness
No outgoing calls (3)	
Layout of center (3)	
Nowhere for the teacher to hide (2)	
Unlicensed area (2)	
Need drills at different times (4)	Teacher identified needs
No community partners (4)	
No long term plans (6)	
"Made my own plan" (3)	
Need teacher committees (2)	
Need to update supplies (2)	
Need checklists (1)	
No training for field trip (1)	
"Gaps" in training (6)	
"Freeze" (3)	
First aid/CPR training (15)	First aid/CPR training
First aid kits (10)	
Liability (4)	
Hands-on training (2)	
Emergency guide posted in classroom (1)	
"Must take classes seriously" (1)	
Fire drill (10)	In-center training
Earthquake drill (9)	
Crisis on TV (3)	
Emergency backpacks (2)	
"Plan B" (1)	
"Keep calm" (5)	Whole-team response
Staff member support (5)	
Dual roles (4)	

(Table continues)

Codes (frequency)	Categories
Background experience (7) Prior training (4) Life experience (3)	Effect of background experiences
Read books (6) Sing songs (6) Play to distract children (1)	Teachers distract children
Don't need training for trauma (7) "Know your students" (6) Children sensitive to fire alarm (3) Instinct (3) Warn students about drills (3)	Instinctual response actions

with codes that indicated routine *fire drills, earthquake drills*, and *first aid/CPR training* by preschool teachers working in the target state.

Finally, I reviewed the categories that had not yet been highlighted to indicate alignment within an existing theme. I was left to consider any shared themes among *read books, sing songs, children sensitive to fire alarm*, and *"know your students."* I reviewed the corresponding transcripts and found that participants most often told me what they would choose to do to help a child who appeared distressed during a crisis, rather than what they had been trained to do. In fact, many participants made it explicitly clear that they had received no training with regard to mitigating psychological harm in children. Clustered together, these categories indicated to me an overarching theme of *mitigating psychological trauma as instinctual response.* In review, my coded and categorized data ultimately produced the following 5 themes: *crisis types, director discretion, inadequacies in center crisis preparedness, crisis preparedness training*, and *mitigating psychological trauma as instinctual response.* These themes are depicted in Table 2:

Table 2

Codes, Categories, and Themes that Emerged from the Data

Codes	Categories	Themes
Stranger/homeless on-campus (9) Seizure (8) Allergic/allergy (6) Choking (6) Lockdown (6) Deep cut (5) Epi Pen (5) Asthma (3) Broken bone (3) Fight (3) Restraining order (3) COVID-19 (3) Electrical outage (2) Object in nose (2) Parents fighting (2) Shooting emergency (2) Wild animal running around (2) Contact with bleach (1) Chemical burn (1) Finger crushed by ring (1) Hand, foot, and mouth disease (1) Infant not breathing (1) Parent stalking (1) Parent yelling at other children (1) Poisonous spider bite (1)	Crises experienced by participants	Crisis types
Center director (5) Director trained me (5)	Role of center director	Director discretion
Not prepared (5) Many medical supplies (4) Not enough supplies (4) EpiPens in office (3) Type of supplies (3) CPR training not required (2) Give medicine/Benadryl (2)	Medical supplies and training	
No phones in classroom (5) Help from other schools (4) Secret code (2) Walkie-talkies (2) Call director during emergency (2) Call office from outside (1) Director calls 911 (1) No cell phones (1)	Crisis communication	

(Table continues)

Codes	Categories	Themes
Written reports (1) Sign in/out logs (5) Call parent (3) Reporting choking (2)	Reporting	
Evacuating children (4) State licensing (4) Ratios (3) Nap time (2)	Effect of ratios	Inadequacies in center crisis preparedness
Classroom is not prepared (5) No outgoing calls (3) Layout of center (3) Nowhere for the teacher to hide (2) Unlicensed area (2)	Environmental preparedness	
Need drills at different times (4) No community partners (4) No long term plans (6) "Made my own plan" (3) Need teacher committees (2) Need to update supplies (2) Need checklists (1) No training for field trip (1) "Gaps" in training (6) "Freeze" (3)	Teacher identified needs	
First aid/CPR training (15) First aid kits (10) Liability (4) Hands-on training (2) Emergency guide posted in classroom (1) "Must take classes seriously" (1)	First aid/CPR training	Crisis preparedness training
Fire drill (10) Earthquake drill (9) Crisis on TV (3) Emergency backpacks (2) "Plan B" (1)	In-center training	
"Keep calm" (5) Staff member support (5) Dual roles (4)	Whole-team response	

(Table continues)

Codes	Categories	Themes
Background experience (7) Prior training (4) Life experience (3)	Effect of background experiences	
Read books (6) Sing songs (6) Play to distract children (1)	Teachers distract children	Mitigating psychological trauma as instinctual response
Don't need training for trauma (7) "Know your students" (6) Children sensitive to fire alarm (3) Instinct (3) Warn students about drills (3)	Instinctual response actions	

Discrepant cases constitute any bits of contradictory data provided to me by a participant over the course of a one-on-one interview. During each interview, I listened carefully for any contradictions to what the participant said previously and asked clarifying questions to resolve discrepancies. I did not note any discrepancies during the coding of participant transcripts; thus I have no issues of discrepant cases to report.

Issues of Trustworthiness

As discussed in Chapter 3, a quality study shall meet the following four hallmarks of trustworthiness: credibility, transferability, dependability, and confirmability (Ravitch & Carl, 2016). Credibility refers to the confidence that a reader may have in the truth and accuracy of a researchers' findings (Korstjens & Moser, 2018; Stewart et al., 2017). To ensure the credibility of my study, I continued to recruit participants for my interviews until I reached saturation in my data and was able to code all of the complex themes associated with the topic of preschool teacher perspectives of crisis preparedness. In addition, I engaged each of my participants in member checking, thereby ensuring the collection of accurate and honest qualitative data (see Korstjens & Moser, 2018). I also

demonstrated reflexivity throughout my study by reflecting upon my journal entries and being transparent about my own personal biases. These thoughts will be shared in the writing of Chapter 5.

Transferability refers to the degree to which my findings are applicable across other settings and other groups of people (Korstjens & Moser, 2018). To support the transferability of my data, I focused on gathering thick, rich descriptions related to perspectives of crisis preparedness by preschool teachers who work in independently funded childcare centers across a western state in the United States. I gathered interview data from these teachers until I reached data saturation. In the results section of Chapter 4, I will share this rich data with my readers, in enough detail so that they may understand participant behaviors and experiences and be presented with all information related to relevant contextual details. Rich, detailed accounts are what make my data meaningful. Thus, the results that I share alongside my discussions of participant recruitment and interview processes, shall provide my readers enough information to make a valid determination about the transferability of my data to other contexts.

Dependability refers to the replicability of a research study (Ravitch & Carl, 2016). In order to produce data that are dependable, I recorded all of my interview procedures in an audit trail. An audit trail contributes to the transparency of my data collection by detailing the processes by which I recruit, interview, and follow-up with my study participants. Finally, confirmability refers to the extent to which my findings may be attributed to the data, rather than to my own biases (see Korstjens & Moser, 2018). My study meets the hallmark of confirmability because I was explicit in my recordkeeping

with regard to my audit trail notes and journal entries. I wrote objective audit trail notes alongside engaging in reflexive journaling, in order to provide detailed and transparent documentation related to my process of data collection and data analysis.

Results

Results for Research Question 1

In research question 1, I asked: How do preschool teachers describe the effect of crisis preparedness drills and training on their anticipated ability to handle school crisis events? Preschool teacher crisis preparedness training appears to consist predominantly of monthly fire and earthquake drills, and of completion of CPR and first aid training every 2 years. Preschool teachers shared positive perspectives of preparedness for fire and earthquake evacuations. All 15 preschool teachers shared positive perspectives of CPR and first aid training in preparing them to provide medical attention to a child, especially in anticipation of a choking emergency, deep wound, or allergic reaction. In-center crisis preparedness trainings were perceived by preschool teachers to be inadequate in preparing preschool teachers for such center crises as bomb threats, student contact with poisonous substances, water contamination, missing child emergencies, and threats of violence. As P15 elaborated:

> We don’t talk about water contamination. We don’t talk about kidnapping. We don’t talk about threat of violence. We don’t get any training on it. I don’t know what I would do if someone [threatening] were to come in [to the center]. We don’t talk about any of this. [State and local licensing agencies] push earthquake

and fire so much, but that's pretty much it. Nothing else is really mandated.

That's a bit scary. When taking care of children, that's a bit scary.

The perspective that crisis preparedness training requirements are "basic," and focus on fire and earthquake preparedness "but not much else," emerged across six participant transcripts. Thus, preschool teachers appear to have negative perspectives of crisis preparedness for bomb threats, student contact with poisonous substances, water contamination, missing child emergencies, and threat of violence.

Center provided training which emphasizes director authority over 911 calls and storage of EpiPens had a negative effect on perspectives of crisis preparedness by preschool teachers in anticipation of a crisis event. P3 and P11 mentioned director control over administration of EpiPens, which are single-dose vials of epinephrine, administered by injection to prevent anaphylactic shock. In each of these cases, preschool teachers were instructed to rely upon the director and members of the office staff to intervene during all medical emergencies. P11 also noted that preschool teachers were not to call 911, nor were they instructed to administer major medical or first aid attention to children. Rather, preschool teachers were instructed to "call the office," in the event of a medical emergency. With regard to allergic reactions, three teachers indicated that EpiPen were stored in the office for director and office staff use only. Basic first aid kits were made available in classrooms but no student-specific medical or emergency supplies were to be stored in classroom, as preschool teachers were not permitted to use these supplies without knowledge of the director. This experience emerged in contrast to the experiences of several other participants who indicated storage of EpiPen and other

medical and emergency supplies inside of the classroom, so as to be readily available to preschool teachers in the event of a medical emergency. Perspectives of crisis preparedness appeared positive in preschool teachers who had immediate access to EpiPen and other medical and emergency supplies inside the classroom, as compared to those preschool teachers working in the target state who did not. In fact, P3 elaborated upon their concern with a policy that relies solely upon director and office staff response during a crisis event, stating that, "I think it's just wasting time in addressing the child's needs. And, not only that, there's some times when we call the office and they're too busy; nobody is answering the phone."

Perceived vulnerabilities in center environmental preparedness contribute to negative perspectives of crisis preparedness by preschool teachers in anticipation of crisis event. P3 noted that despite receiving training that requires preschool teachers to close their blinds during an active shooter emergency, some classrooms at the center have blinds that cannot be closed. P3 stated:

> They've been telling us for three years that they're going to replace our blinds because some of the blinds in our classroom don't close all the way. They really need to address [this] so that we feel more confident. If we had to go through an [active shooter emergency], we [should] focus on comforting our students instead of worry[ing] that the active shooter is going to walk by our [open] blinds.

P11, P12, and P13 also questioned the layout of the childcare center, noting the effect that their classroom configuration and design would have on their response during an active shooter emergency. These participants expressed concern regarding the

visibility provided by large windows in the early childhood classroom. P11 mentioned carrying a small tool on their key chain, which they believe will allow them to easily shatter a large window to quickly evacuate from the classroom, in the event of actual emergency. P11 did not receive this tool or this training from the center director but found the emergency evacuation and crisis plans within the center to be inadequate, and thus took action believed to counter these perceived inadequacies, stating "I need to keep these children safe. It's not enough; everything we have, it's not enough."

Further, P15 shared concern that tables in the early childhood classroom are not sturdy enough to protect students from harm during a time of crisis. According to P15,

> You [should] get next to the table [rather than under it], so that if something falls and hits the table, it bounces off. That's something that they recommended in our emergency trainings because a lot of the tables in a preschool setting were collapsing on the children in a real-life situation.

Effective sheltering concerns during an earthquake were also voiced by P11, who questioned whether the classroom environment could effectively protect the preschool teacher from harm. P11 stated,

> In a Reggio-type environment where there's two tables in the classroom [for] all 20 children [to hide] there is no place for us. There's no space for us to seek refuge. There is nothing to protect the teachers. We have to [lead] all of [the emergency response and evacuation protocols], but there's no way that I can do it if the light structure falls on me.

Preschool teachers who discussed perceived vulnerabilities in center environmental preparedness shared negative perspectives of crisis preparedness, in anticipation of natural and man-made crisis events.

Access to crisis preparedness supplies beyond those contained in first aid kits contributed to positive perspectives of crisis preparedness by preschool teachers in anticipation of a crisis event. P2, P8, P9, and P10 described access to such supplies as an automated external defibrillator (AED) to use in the event of cardiac arrest, a portable toilet and toilet paper in the event of loss of plumbing, an ax which may potentially be used during building collapse, and a box of zip ties, masking tape, and duct tape which are stored together for the purposes of constructing temporary shelter. Access to a perceived surplus of emergency and medical supplies in the childcare center also appeared related to positive perspectives of crisis preparedness by preschool teachers in the target state. P9, who works in a center in which the director provides access to several emergency and medical supplies, stated that "[We are] very, very prepared. Maybe even over prepared if that's a possibility; if that can be. I know that there are [other centers] that don't provide anything other than first aid [kits]." P2, P8, and P10 shared that they, too, have access to various emergency and medical supplies not mandated by state licensing requirements. The experiences shared by P2, P8, P9, and P10, contrasted with several other preschool teachers working in the target state. For instance, P13 stated, "We don't have good first aid kids inside our classrooms, for sure. I've expressed that to my administrator. The first aid kits were made for years ago and aren't current."

Crisis preparedness training unrelated to preschool center preparedness training appears to contribute to positive perspectives of crisis preparedness by preschool teachers working in the target state, in anticipation of a crisis event. P1 described receiving firefighter training during prior employment, stating, "Unfortunately our center [crisis preparedness training] is really based on basic licensing requirements. I think that my background helps in letting me be more confident in case [an] emergency does happen." P14 expressed feelings of preparedness for an active shooter emergency, citing prior experience on a military base, as contributing to their confidence levels. P14 stated,

> We went through excessive training on base [and] had mock drills. I'm very familiar with a soft lockdown and hard lockdown. A lot of schools only do one lockdown, not two versions, but I like to [train for] two different versions.

P9 also cited experiences with prior military training as helpful to feelings of being "adequately prepared," for a center crisis. P8 revealed prior emergency medical training while discussing confidence in providing medical attention to children.

Prior personal experience with an emergency also appears to have contributed to positive perspectives of crisis preparedness in anticipation of a crisis event. As P11 stated, "I feel comfortable if there's a person on the grounds who shouldn't be, [or] if there's an animal that poses a danger to the children. I'm okay with that, [because] those things have happened." This perspective was shared by P5 who stated, "[I'm] very prepared because of my years of experience and situations," and by P2 who said, "I am confident. If we have any issues – and we *have* had issues arise that we've had to deal with – I'm pretty comfortable [reacting]." Overall, prior personal experience with an

emergency by preschool teachers in my study appeared to contribute to positive perspectives of crisis preparedness in anticipation of a crisis event.

In sum, preschool teachers shared positive perspectives of crisis preparedness for fire and earthquake evacuations. Preschool teachers also shared positive perspectives of CPR and first aid training in preparing them to provide medical attention to a child, especially in anticipation of a choking emergency, deep wound, or allergic reaction. Preschool teachers shared negative perspectives of crisis preparedness for bomb threats, student contact with poisonous substances, water contamination, missing child emergencies, and threat of violence. Access to crisis preparedness supplies contributed to positive perspectives of crisis preparedness by preschool teachers in anticipation of a crisis event. Perceived vulnerabilities in center environmental preparedness contribute to negative perspectives of crisis preparedness by preschool teachers in anticipation of natural and man-made crisis events. Overall, preschool teachers in this study indicated that, while some aspects of crisis preparedness drills and training increased their anticipated ability to handle school crisis events, other aspects seem insufficient or to be barriers to their anticipated response to a real emergency.

Results for Research Question 2

In research question 2, I asked: How do preschool teachers describe their preparedness to handle school crisis events during a time of crisis? In considering crisis events in the childcare center, medical emergencies emerged as most common among preschool teachers, as evidenced by Table 3.

Table 3

Frequency of Participant Reported Crisis Events

Type of crisis event	Name of crisis event	Frequency of crisis event
Medical emergency	Seizure	8
Medical emergency	Choking*	6
Medical emergency	Allergic reaction	6
Medical emergency	Deep wound	5
Medical emergency	Asthma	3
Medical emergency	Broken bone	3
Medical emergency	Object in nose	2
Medical emergency	Infant not breathing	1
Medical emergency	Infectious disease	1
Medical emergency	Student contact with poisonous substances	3
Man-made disaster	School lockdown	6
Man-made disaster	Intruder on premises (Does not result in full lockdown)	9
Man-made disaster	Stalking incident	1
Act of violence	Physical altercation on premises	3
Act of violence	Shooting emergency	2
Act of violence	Bomb threat	2
Unspecified	Electrical outage	2
Unspecified	Water outage	1
Unspecified	Wild animal on premises	2

*One choking emergency resulted in death

Preschool teachers who responded to common medical emergencies in the childcare center such as seizure, choking emergency, deep wounds, and allergic reaction, identified positive perspectives of CPR and first aid training in preparing them to conduct specific response procedures. Apart from medical emergencies, crisis events involving intruder and lockdown emergencies emerged as common among preschool teachers working in the target state (Table 3). Preschool teachers working in the target state shared personal experiences in which an unauthorized person entered their facility, sometimes forcibly so. In some cases, a member of law enforcement was required to remove the unauthorized person from the childcare center. P6 described one event thusly:

> We had a homeless man living on our property. We had to call the police in order to have him removed. We had to lock down the school. We had to take the children one-by-one to the restroom. We couldn't take them in groups because the restroom was outside in a different area. We had to mark every time we went outside of the building and inside of the building because we didn't know what the homeless man was going to do next.

Participants discussed six incidents unrelated to intruder emergencies, which also resulted in center lockdowns. Most often these lockdowns occurred in response to an off site, yet local community, threat. For P12, center lockdown occurred as the result of a drive-by shooting which took place in front of the childcare center. Participant perspectives of preparedness for these emergencies was mixed. Although all participants were confident in their response actions at the time of lockdown, many participants questioned their preparedness to respond effectively during an on site threat of violence. According to P12, inadequacies do exist with regard to crisis response during an open area shooting emergency. As P12 explained,

> The training was to just drop as low as we can to the ground until the gunfire stopped. If we are by any benches or tables, we can hide the children; try to move as many children under the covered space as possible. Then we could try to fit our own bodies.

P12 shared their belief that "[centers] should develop new training for the children and the staff so it doesn't have to come a teacher giving [their] life so that students [can]

live." Preschool teachers expressed negative perspectives of crisis preparedness during a time of crisis, especially with regard to lockdown and active shooter emergencies.

During discussions of preschool teacher preparedness to respond to a school crisis event during a time of crisis, there also emerged negative perspectives of crisis preparedness related to student-teacher ratios during a nap time crisis, and to effective crisis communication during nap time. P3 and P5 shared personal experiences of responding to a crisis event while alone with the children during nap time. P5 evacuated a classroom with 12 preschool students, as a result of a bomb threat. P5 shared:

> When [children] are asleep and they wake up to an alarm, they're very disoriented. [They] stumble and fall into things. We were struggling to get their shoes on because once they step[ped] on rocks and bump[ed] their toes, they just dropped to the ground. I can't carry [all] twelve children [when that happens].

In addition, P3 was alone during nap time when a child had a seizure. P3 works in a center in which the classroom phones do not make outbound calls and staff members are not permitted to bring personal cell phones into the center. P3 shared,

> I had to stick my head out [of the classroom] and yell down the hallway until the teacher in the office heard. I couldn't call 911. I should have been able to stay next to the child and help her, rather than leave her to go yell out the door.

Being alone with the children and ineffective methods of communication during a nap time crisis appeared to contribute to negative perspectives of crisis preparedness during a time of crisis by preschool teachers in this study.

P14 shared additional concerns with receiving timely guidance from local licensing agencies during a time of crisis. As P14 discussed,

> With [local licensing] it's very difficult to get the amount of training or information needed. We had a water outage in our building one year, and we had to move all of our kids into a different area that was not licensed for that age group. I was calling the analyst, and calling the analyst, and trying to figure out what we needed to do. We couldn't get a response from them about what to do in that situation. I [didn't] get an answer [until] two days later.

P8 shared the perspective that, "Through this Corona virus, the local [licensing agencies] are not necessarily long-step, and not necessarily able to take care of everything that needs to get taken care of, so we're on our own." Perspectives of preparedness to handle a center crisis event during a time of crisis by preschool teachers working in the target state, appeared negative with regard to the support of local licensing agencies.

Collaborative response actions taken by multiple members of center staff during a time of crisis contributed to positive perspectives of crisis preparedness during a time of crisis by preschool teachers in this study. As P10 noted, "[When] I'm doing first aid, the other coworker is aware and is taking care of the rest of the other kids." The usefulness of other teachers being responsible for taking care of the children who are uninjured, was reiterated by P4 during their discussion of response to a student with a deep wound. P4 detailed support received from additional center staff during the emergency, stating:

> The director, the assistant director, [and] two other teachers [were with] me. We tried to wrap [the wound] and we called the emergency right away. [The other

> children] wanted to see. We were all outside, so we took children back into the classroom. After, the assistant director stayed outside with him [until] the fire department came.

Background experiences shared with other members of center staff also appeared to contribute to positive response during an emergency. For example, P5 cited a childhood experience which effectively helped others in the center to identify a poisonous spider bite on a child stating,

> Four other teachers in the classroom thought it was just a scratch. [I] looked at his wrist and instantly knew it was a poison track going up his arm. [He was taken] to the hospital [immediately] for an antidote.

Thus, collaborating with other center staff members during a time of crisis appeared to contribute to positive perspectives of crisis preparedness during a time of crisis by preschool teachers in this study.

Participant observations that preschool teachers "freeze" during a time of actual school crisis were also shared with regard to crisis preparedness training. P1 stated that during a choking incident in which two other preschool teachers were present, "Nobody moved. They just saw [the child choking] and stood there." In response, P1 took action in successfully performing the Heimlich maneuver on the child. During a school shooting incident, P12 stated that "an assistant froze, and we had to drag her into the building because she was so frightened that she just froze into place." In addition, P5 shared an incident in which a teacher ran into their classroom shouting about a child having a seizure. P5 noted that the other teacher "panicked and didn't know what to do." P5

responded by joining the child in the classroom, removing furniture away from their body and instructing a fellow staff member to call 911.

In sum, preschool teachers who responded to common medical emergencies in the childcare center such as seizure, choking emergency, deep wounds, and allergic reaction, identified positive perspectives of CPR and first aid training in preparing them to respond to the emergency. Preschool teachers expressed negative perspectives of crisis preparedness during a time of crisis with regard to lockdown and active shooter emergencies. Overall, preschool teachers in this study indicated that, while some aspects of crisis preparedness drills and training increased their ability to handle school crisis events during a time of crisis, other aspects seem insufficient to their response during a real emergency.

Results for Research Question 3

In research question 3, I asked: How do preschool teachers describe their preparedness to provide medical interventions, psychological interventions, and other support systems to young children and their families during the recoil stage, immediately following a crisis event? Participants shared positive perspectives regarding the adequacy of CPR and first aid training in preparing them to respond to common medical emergencies such as seizures, choking incidents, deep wounds, and allergic reactions, immediately following the crisis event. With regard to seizures, deep wounds, and allergic reactions, all participants described calling 911 and reporting the emergency to the parents. With regard to choking incidents, perspectives related to the appropriateness of school staff response immediately following this crisis event were mixed. P1 and P3

indicated that they were discouraged from reporting choking incidents which required use of the Heimlich maneuver to the parents of a child. In response to discouragement by the center director, P1 stated:

> I said no because brain damage could occur. The child was choking. I tried every way to get it [and] the director [said], "Don't even call the parents. It's fine. There's nothing going on." I couldn't do that. I called the parents and told the parents, and I actually got in trouble for calling the parents.

P3 expressed guilt at following the guidance of their director and choosing not to report a choking incident to a child's family. A current gap in reporting guidelines in the target state may thus be associated with negative perspectives of crisis reporting by preschool teachers immediately following a choking emergency.

Several participants indicated that there exist no clear crisis preparedness guidelines for mitigating psychological trauma in children following a crisis event. P14 and P15 mentioned community partnerships which allow the center to refer students for psychological aid and counseling, but this was described as ongoing service and as unrelated to response immediately following a school crisis event. In considering the need to mitigate trauma immediately following a crisis event, P8 stated that preschool teachers

> have a basic understanding of children and, more importantly, an inherent understanding of the children and their needs. Most preschool teachers are caring, compassionate, loving people, and those are the people that you want to have around when a child is psychologically having some kind of difficulty. I don't

> think there's any particular training that – I guess you could do some trauma-informed training – but I think preschool teachers already have that. It's in [the] DNA [of the] preschool teacher.

The purported natural ability of a preschool teacher to respond to the psychological needs of a child was discussed by several other participants, many of whom detailed how they would choose to mitigate psychological trauma in a child following a crisis event. As P5 described:

> I don't have a lot of information about any kind of long term [support for students]. I do know that it would look like open conversation; whether it be at Circle Time or one-on-one. You hold them and reassure them. You let them know everything's okay. You draw pictures about it and answer [questions] and just reaffirm that they are safe.

Thus, preschool teachers in this study shared positive perspectives of to their ability to mitigate trauma in young children immediately following a crisis event, despite lack of explicit training.

P13 and P14 indicated that children with autism appear particularly sensitive to the sound of a fire alarm during and following a school crisis event. P5 described taking instinctive response actions to mitigate psychological harm to students with special needs during a fire drill. Predominately, these response actions included providing one-on-one attention and hand holding. One participant shared that the center director requested that a parent or specialist be present to support a child with autism during a fire drill. Many preschool teachers working in the target state indicated that they typically forewarn a

child with autism of the sounding of a fire drill so that the child is not surprised by the noise caused by the alarm. As P15 stated,

> When we have a child with special needs, we've established a relationship with them and we know how they react to certain things. The [children] really look to you when there is a panic situation, so we hope that we've already established [a] relationship so that the [child with autism is] not panicking.

Preschool teachers shared positive perspectives of their ability to mitigate trauma in young children with autism immediately following a crisis event, despite lack of explicit training.

It emerged across interviews with several preschool teachers that there exist no clear crisis preparedness guidelines for mitigating psychological trauma in children following a crisis event. Faced with a lack of clear guidelines, participants described behaving on instinct. Distracting children as a means to effectively mitigate harm was noted across seven participant transcripts. Most commonly, participants described distracting children during and following a crisis event using storybooks and song. As P5 discussed,

> There was no fear [following a bomb threat] because all the [children] really knew was that they were around me in a circle singing, [and they] got to go home early that day. There was no fear. When they came back the next day, there was nothing to worry about.

Preschool teachers also shared knowing their students interests, mannerisms, and needs, and discussed use of this knowledge to distract children and thereby mitigate trauma,

especially during and immediately following a medical emergency, bomb threat, and lockdown drill.

When I probed participants for additional details related to support systems available to young children and their families immediately following a crisis event, participants noted an overall lack of support. P9, who had prior experience working at a center located on a military base, contrasted their experience of working in the two centers, stating:

> [At the center on base] there's the family support center. They have all kinds of resources for families. They offer counseling [and] family advocacy. However, I find that resources are lacking in the public arena. In the other areas that I worked at, resources were extremely limited. There just wasn't enough. There wasn't any kind of counseling that families might need.

Further, P1 shared that

> It's kind of like, "What do you want to do? What can you look up? And what can you put together for your parents in order to help them with certain things?" There is nothing given to [us] to say, "Hey, in this county here's A, B, and C that they should go to." You actually have to look up that information.

P7 also shared very few details related to support system for children and families, stating, "[It's] just been us for the last 16 years." Thus, there did not exist any participant responses regarding additional support systems for young children and their families, immediately following a crisis event.

In sum, a lack of reporting guidelines for choking incidents was associated with negative perspectives of crisis reporting by preschool teachers in my study. Despite a lack of training, preschool teachers shared positive perspectives of their ability to mitigate trauma in young children, including young children with autism, immediately following a crisis event. Most often, preschool teachers shared distracting children with books and song as a means to mitigate trauma in young children with immediately following a crisis event. Preschool teachers also shared knowing their students interests, mannerisms, and needs, and discussed use of this knowledge to distract children and thereby mitigate trauma, especially during and immediately following a medical emergency, bomb threat, and lockdown drill. No data emerged among participants regarding providing additional support systems to young children, nor did there exist any participant responses regarding providing attention to student families, immediately following a crisis event. Overall, preschool teachers in this study indicated positive perspectives of their ability to provide some medical interventions and psychological interventions to young children immediately following a crisis event, but did not share any support systems intended to aid student families during the recoil stage, immediately following a crisis event.

Results for Research Question 4

In research question 4, I asked: How do preschool teachers describe the postimpact and recovery and reconstruction measures in place at preschool centers, intended to aid in community recovery during the weeks and months following a crisis event? Preschool teachers were unaware of procedures for long term recovery in the days, weeks, and months following a crisis event, indicating inadequacies in long term crisis

preparedness by childcare centers across the target state. All participants indicated planning for an off-site evacuation location, in the event that a crisis event forces students and staff off center premises. Participants discussed remaining with children following a major crisis until all parents have arrived to pick up their child. Following pick up of the final child, there appeared to be no explicit plans for the days, weeks, and months following a major crisis event. P4 appeared optimistic stating,

> I'm pretty sure they do have a plan, but they just don't tell us. I'm not sure what the plan would be, what the procedure would be, you know? We would call for the parents to pick up the children. We would make sure the children were okay. We would stay with the children until the end, making sure that they feel safe [and] secure until one of the family members comes for them, but after? I don't know.

Several participants shared these sentiments, reiterating that they, too, would stay with the children to keep them safe and secure until the final parent arrived, following a crisis event. However, there appeared no explicitly developed plans for recovery following pick up of the last child, as evidenced by several additional participant statements. P1 stated that, "I've not found guidelines [for long term recovery] in any of the paperwork here. A plan? No." P10 stated, "I don't think we have a plan. Today really shows that. This [current pandemic] really shows how much of a [long term] plan we did not have." In addition, P13 said, "To be honest with you, if they do have [a plan], I don't know about it."

Due to a lack of participant knowledge of long term recovery plans in the preschool center, there is little else to report related to preschool teacher perspectives of the postimpact and recovery and reconstruction measures in place at preschool centers. Overall, preschool teachers in this study indicated negative perspectives of the postimpact and recovery and reconstruction measures in place at preschool centers, intended to aid in community recovery during the weeks and months following a crisis event.

Summary

In Chapter 4, I shared my findings related to preschool teacher perspectives of crisis preparedness. I found that preschool teachers shared positive perspectives of crisis preparedness for fire and earthquake evacuations. Preschool teachers also shared positive perspectives of CPR and first aid training in preparing them to provide medical attention to a child, especially in anticipation of a choking emergency, deep wound, or allergic reaction. Preschool teachers shared negative perspectives of crisis preparedness for bomb threats, student contact with poisonous substances, water contamination, missing child emergencies, and threat of violence. I found that preschool teachers who responded to common medical emergencies in the childcare center such as seizure, choking emergency, deep wounds, and allergic reaction, identified positive perspectives of CPR and first aid training in preparing them to respond during a time of center crisis. Preschool teachers expressed negative perspectives of crisis preparedness during a time of crisis with regard to lockdown and active shooter emergencies. Being alone with the children and ineffective methods of communication during a nap time crisis contributed to negative perspectives of crisis preparedness. Background experience contributed to

positive perspectives of crisis preparedness during a crisis event. The importance of collaborating with other center staff members during a time of crisis was discussed by preschool teachers as an important factor in successful emergency medical response, as was the importance of background experience. I also found that despite a lack of explicit training, perspectives of preparedness for mitigating psychological trauma in students following a crisis event appeared positive in preschool teachers. Finally, I found that there existed negative perspectives of crisis preparedness with regard to plans for long term recovery, as very little attention has been made to creating detailed recovery plans in the days, weeks, and months following a crisis event. In Chapter 5, I will interpret these findings, share the limitations of my study, provide recommendations for future research, and share the positive social change implications related to my study of preschool teacher perspectives of crisis preparedness.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this study was to understand the perspectives of preschool teachers who work in independently funded childcare centers regarding their preparation to manage an emergency that might endanger children in their care. Current research has investigated perspectives of crisis preparedness by a variety of school educators but has not included the extent to which preschool teachers feel prepared to handle a school crisis event.

In gathering qualitative data from Zoom and phone interviews conducted with 15 preschool teachers working in the target state, I found that preschool teachers are most confident in anticipation of responding to fire and earthquake emergencies, as well as in anticipation of responding to such medical emergencies as seizure, choking, deep wounds, and allergic reaction. I also found that preschool teachers have negative perspectives of crisis preparedness for bomb threats, student contact with poisonous substances, water contamination, missing child emergencies, and threat of violence. I found that preschool teachers who responded to common medical emergencies in the childcare center such as seizures, choking, deep wounds, and allergic reactions, identified positive perspectives of CPR and first aid training in preparing them to respond during a time of center crisis. I also found that preschool teachers have negative perspectives of crisis preparedness regarding lockdown and active shooter emergencies. I found that despite a lack of explicit training, perspectives of preparedness for mitigating psychological trauma in students following a crisis event appeared positive in preschool teachers. Finally, I found negative perspectives of crisis preparedness regarding plans for

long term recovery because very little attention has been given to creating detailed recovery plans in the days, weeks, and months following a crisis event.

Interpretation of the Findings

For the purposes of this study, school crisis event was defined as any emergency that threatened the physical well-being of students and staff while on school site. Identification of perspectives on these crises emerged during Zoom and phone interviews with preschool teachers working in independently funded childcare centers in a western state of the United States. Preschool teachers in my study most commonly reported the following medical emergencies: seizures, choking incidents, deep wounds, and allergic reactions. Preschool teachers in my study also commonly reported intruder and lockdown emergencies. My findings confirmed some of the findings in the peer-reviewed literature described in Chapter 2. Olympia (2016) identified that seizures in children appear to be among the most common life-threatening emergencies faced by school nurses across the United States. Interviews with preschool teachers in the target state who are also tasked with the responsibilities of a school nurse indicated seizures as one of the most common medical emergencies at the childcare center.

In Chapter 2, I discussed that children across the United States are at yearly risk for a natural disaster as reported by the U.S. Department of Education, National Forum on Education Statistics (2019) and the U.S. Department of Homeland Security, FEMA (2019). The western state of the United States in which I conducted this study is at particular risk for fire and earthquake emergencies. Preschool teachers in my study discussed the occurrence of monthly fire and earthquake drills in the childcare center,

indicating the presence of crisis plans across the target state that focus on these two disasters. Further, several preschool teachers noted participation in lockdowns, although they questioned the adequacy of these procedures. As noted in Chapter 2, licensing agencies in 42 states mandate the implementation of fire drills in preschool facilities, while agencies in 38 states require preparedness plans for additional emergencies, such as natural disasters and man-made disasters (National Center on Early Childhood Quality Assurance, 2015). My findings indicated adherence to both of these mandates in the childcare centers in the target state where my participants have been employed.

My study also confirmed that state requirements for crisis preparedness training among center staff are perceived by preschool teachers to be minimal, as reported by Chang et al. (2018). A 2015 disaster report released by Save the Children (2015), found that 18 states across the United States failed to mandate the presence of written evacuation plans for preschool and childcare centers and that those preschool and childcare centers that did have written crisis plans failed to provide methods for reuniting families after disaster and neglected to include emergency evacuation procedures for children with special needs. The preschool teachers who took part in my study indicated the presence of written evacuation plans that provide methods for reuniting families immediately following a disaster. However, I found no evidence that the evacuation plans described by the teachers in my study specified procedures for children with special needs. In fact, the teachers in my study reported most commonly acting on instinct when tasked with evacuating children with autism. In addition, my study indicated a need for future research related to center implementation of the 2014 Child Care and Development

Block Grant Act. The 2014 Child Care and Development Block Grant Act mandated that childcare providers have written procedures that outline plans for communicating with families, for continuing facility operations, and for accommodating the specialized needs of young children during a time of crisis (Bradin & Hashikawa, 2017; Department of Health and Human Services, 2014). My research does not indicate preschool teacher knowledge related to center plans for continuing facility operations or for accommodating the specialized needs of young children during or following a crisis event. At the time of this study, local licensing agencies were responsible for enforcing all mandates within the 2014 Child Care and Development Block Grant Act (National Center on Early Childhood Quality Assurance, 2015).

In Chapter 2, I discussed several barriers to preschool teacher crisis preparedness. One of these barriers was discussed by Bradin and Hashikawa (2017) and by Terranova et al. (2015), who noted the burden on preschool teachers to evacuate several young children who have varying levels of mobility, who may not understand the severity of a school crisis event, and who may be prone to emotional outbursts resulting from the confusion and fear caused by a school crisis event. I found that the preschool teachers who participated in my study felt personally affected by this burden. One participant in particular detailed difficulties with evacuating a group of young children during nap time. Several other preschool teachers noted perceived difficulties in evacuating young children to off-site locations. Preschool teachers in my study, too, confirmed the findings of Kruger et al. (2018) and Perkins (2018), who discussed that school staff often feel unprepared to handle a school crisis event. Preschool teachers in my study expressed

concern in responding to such center crisis events, as bomb threats, student contact with poisonous substances, water contamination, missing child emergencies, and threat of violence.

My study was grounded by the integrated model of school crisis preparedness and intervention proposed by Jimerson et al. (2005). The integrated model of school crisis preparedness and intervention emphasizes both the physical and the emotional safety of young children during the preimpact, impact, recoil, postimpact, and recovery and reconstruction phases of a school crisis event (Jimerson et al., 2005). The preimpact stage describes the period during which educators prepare for the possibility of crisis (Jimerson et al., 2005). The preimpact stages include the use of crisis education, crisis drills, and various other preplanning measures that result in the gathering of resources, the allocation of responsibilities, the financial planning for, and environmental preparedness for, a school crisis event (Jimerson et al., 2005).

My findings indicate an emphasis on crisis preparedness preplanning for fires and earthquakes, but a perceived lack of preplanning for various other childcare emergencies, as discussed by the preschool teachers in my study. For instance, many preschool teachers commented on a lack of training for how to respond during such childcare emergencies as intruder emergencies, bomb threats, student contact with poisonous substances, electrical and water outage, missing child emergencies, and threat of violence. My findings indicated adequate preplanning for medical emergencies including seizures, choking incidents, deep wounds, and allergic reactions as a result of routine CPR and first aid training attended every 2 years by the preschool teachers in my study.

However, my findings revealed inconsistencies with regard to preschool teacher access to emergency supplies as part of preplanning for a crisis event. For example, some teachers reported having immediate access to EpiPens and other medical and emergency supplies in the event of emergency, while other preschool teachers did not have access to these supplies from within the classroom.

Throughout the interviews, participants also indicated various inadequacies in center crisis preparedness, especially regarding environmental preparedness. My findings indicated that the preschool teachers in my study do not receive explicit training for providing psychological interventions to students and fellow staff, although preschool teachers themselves did not identify this type of training as a need. These findings are at odds with the model of Jimerson et al. (2005), which indicated that during the preimpact stage school staff should be briefed on how to effectively provide psychological interventions to students and fellow staff.

The impact stage takes place during a school crisis event and refers to any immediate acts by staff to protect students from harm (Jimerson et al., 2005). This includes implementation of any of the emergency drill procedures learned during the preimpact stage. For the preschool teachers who participated in my study, school lockdown procedures were among the most prominent taken by staff to protect their students from harm. Participants identified their crisis preparedness training as adequate in preparing them to effectively lockdown the center when faced with a community threat, but they questioned their preparedness to effectively protect their students from harm in the event of an onsite threat. All participants discussed their CPR and first aid

training favorably, citing CPR and first aid training as adequate in preparing them to respond to medical emergencies such as seizures, choking incidents, deep wounds, and allergic reactions during a time of crisis. The preschool teachers in my study also described the positive effect of collaborative team response when responding to a center crisis event.

The recoil stage, which takes place immediately following a crisis, refers to those acts that are intended to minimize the effect of the crisis event (Jimerson et al., 2005). Medical and psychological interventions may be necessary during the recoil stage, and there should be established a secure setting in which students and staff can share their experiences, reactions, and feelings (Jimerson et al., 2005). My findings were at odds with the model of Jimerson et al. (2005) as the preschool teachers in my study did not discuss any crisis preparedness training that is targeted to provide medical and psychological aid during the recoil of stage of a crisis event. Based upon the experiences described by the preschool teachers in my study, director discretion appears to have an effect on preschool teacher reporting of student-specific choking emergencies, and there appear to be no clear guidelines for psychological interventions for students and staff. Of those teachers who experienced a crisis event, some described the immediate emotional toll that the event took upon them but indicated a lack of follow-up support for the students, themselves, and any other staff members affected by the crisis. Despite a lack of explicit training for mitigating psychological trauma in children, many preschool teachers described an instinctual response that they would take in helping to minimize resulting

trauma in their students. Most often, these instinctual response actions involved the use of singing and storytime.

The postimpact stage takes place during the days and weeks following a crisis event (Jimerson et al., 2005). Continued psychological screenings and debriefings are recommended to mitigate any long term psychological effect of the crisis event on students and staff (Jimerson et al., 2005). Again, my findings are at odds with the model of Jimerson et al. (2005). Preschool teachers in my study did not discuss any crisis preparedness training targeted for the days and weeks following a crisis event. Of those teachers who described experiencing a crisis event, not one discussed follow-up support for the students and staff members affected by the crisis. The same findings were true when considering recovery and reconstruction measures intended to mitigate psychological trauma and aid in community recovery in the months and years following a school crisis event (Jimerson et al., 2005). In fact, concerns regarding a lack of long term crisis preparedness plans were documented across participant transcripts. According to Jimerson et al. (2005), providing a long term psychological education to students and staff in the aftermath of a school crisis helps to support victims of crisis in their comprehension and response to the event.

Limitations of the Study

This study was limited by a small sample size, and reflects only a small part of the preschool teacher population in just one state in the United States. All participant interviews occurred during the COVID-19 pandemic, which affected the salience of the conversation about disaster preparedness. It was expressed to me by several participants

that the COVID-19 pandemic affected the way that they thought about crisis preparedness, and that COVID-19 challenged them to consider to what extent one can truly be prepared for a crisis event. Rather than my study being limited by normalcy bias, which is failure by people to think deeply about crisis preparedness due to the belief that nothing bad will happen to them (Pfeufer, 2016), the COVID-19 pandemic appeared to heighten participant awareness of center vulnerabilities in the face of an actual school crisis event. The effect of the COVID-19 pandemic also resulted in use of phone and virtual only communication between me and all study participants, instead of face-to-face interviewing. One participant indicated the virtual format was problematic, but agreed to conduct an interview after I helped them to navigate the Zoom meeting chatroom. These limitations may affect the transferability of results.

Recommendations

I recommend that additional research related to preschool teacher perspectives of crisis preparedness be conducted in different states across the United States, to provide a richer and more detailed understanding of perspectives of crisis preparedness among preschool teachers. During the recruitment process, preschool teachers working in northwestern and eastern states of the United States expressed interest in participating in my study. In both cases, these teachers discussed with me a need for similar studies in their locality. Future research, too, is needed to investigate and identify the crucial components of long term center crisis preparedness plans. Recommendations may then be made for the writing of quality long term recovery plans, which might adequately address

the anticipated needs of young children and center staff in the days, weeks, and months following a crisis event.

Further, because young children are at particular risk for developing early childhood trauma following a school crisis event (Fothergill, 2017; Scannell et al., 2016), it is essential that future research investigate the effectiveness of preschool teacher instinctual response in mitigating immediate and long term psychological trauma in young children. In particular, research should focus upon the extent to which preschool teacher instinctual response actions for mitigating trauma, such as singing to, reading to, and distracting a child during a time of crisis, are adequate in contributing to positive outcomes for young children. Research related to effective standards-based strategies for mitigating trauma in the young child may be needed. I also recommend that future research investigate psychological supports for preschool teachers in the aftermath of a crisis event, as the preschool teachers in my study indicated a lack of emotional support following choking and seizure incidents in the classroom.

Implications

Several vulnerabilities related to center crisis preparedness in the target state emerged in my research. These vulnerabilities include inadequacies in center environmental preparedness, a lack of training for preschool teachers regarding implementing psychological support to children in the aftermath of a crisis event, and the absence or insufficiency of long term center crisis plans. Such vulnerabilities indicate a possible need for reform to center crisis preparedness plans and policy across the target state. In addition, policies should be reviewed regarding the director discretion related to

the storage of EpiPens, which teachers in this study said delayed delivery of this life-saving intervention, and with regard to crisis reporting to parents and others, such as following application of the Heimlich maneuver. Due to the severity of those incidents involving use of the Heimlich maneuver, in particular, it may be advisable for state or local licensing agencies to implement explicit reporting guidelines for common childcare emergencies, such as choking.

This study has the potential to affect positive social change at various independently funded childcare centers in the western part of the United States by informing preschool center directors about the type of crisis preparedness training that preschool teachers have, want, and need. This information may be used to effectively prepare center staff to respond to various school crisis events, thereby keeping children safe. This study in conjunction with future research may also be used to illicit change at the local and state licensing levels in the western part of the United States. There appear to be several inadequacies in center crisis preparedness plans that will most effectively be addressed as a result of significant change to state and local licensing requirements, especially with regard to implementing psychological support to children in the aftermath of a crisis event, the writing of long term center crisis plans, and crisis reporting. If future research indicates similar inadequacies, it is my wish that this study be used to evidence need for significant change. So, too, should this study serve as a model for the need for future qualitative studies which seek to explore the perspectives of preschool teachers, especially with regard to crisis preparedness, as more rich data is needed to provide

insight into the beliefs, perspectives, and experiences of those teachers working with a young, vulnerable populace.

Conclusion

The purpose of this study was to understand the perspectives of preschool teachers who work in independently funded childcare centers in a western state of the United States, regarding their preparation to manage an emergency that might endanger children in their care. Although researchers have investigated perspectives of crisis preparedness by a variety of school staff, perspectives of preschool teachers have been largely absent from the literature; this study may be the first to provide insight into the perspectives and experiences of preschool teachers with regard to crisis preparedness. As such, several unique findings emerged.

Overall, preschool teachers in this study indicated that some aspects of crisis preparedness drills and training increased their ability to handle school crisis events while other aspects seemed insufficient, both in anticipation of and during a real emergency. Preschool teachers in this study indicated positive perspectives of their ability to provide some medical interventions and psychological interventions to young children immediately following a crisis event, but did not share any support systems intended to aid student families and fellow staff during the recoil stage, immediately following a crisis event. Finally, preschool teachers in this study indicated overall negative perspectives of the postimpact and recovery and reconstruction measures in place at preschool centers, intended to aid in community recovery during the weeks and months following a crisis event. It is essential that future research continue to investigate the

perspectives of crisis preparedness by preschool teachers, to develop those best crisis preparedness practices which will keep both young children and preschool center staff safe. More attention to crisis preparedness in preschool centers, especially with regard to psychological supports for children in the aftermath of a crisis event, to the writing of long term center crisis plans, and to crisis reporting, will help young children and preschool center staff become safer in the future than they are today.

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Appendix A: Interview Questions

IQ1. Here is a list of emergencies that might come up in the childcare center [present card with a list of emergencies]. How prepared you feel to handle each of these types of emergencies?

IQ2. Describe how much your ability to handle each of these emergencies has been supported – or maybe not supported - by crisis preparedness training and drills in which you have participated at the center.

a. Please describe the emergency response actions that you feel *most prepared* to take during a time of school crisis? And in what ways would you say that your training has contributed to your positive feelings of preparedness?

b. Please describe the emergency response actions that you feel *least prepared* to take during a time of school crisis? And in what ways would you say that your training has contributed to your negative feelings of preparedness?

IQ3. During an emergency, children might need first aid, or might need to continue receiving medical interventions they need every day. Please describe how prepared you feel to provide these sorts of short and long term medical interventions to students, in response to a school crisis event?

IQ4. During an emergency, children might become so stressed or traumatized that they need short and long term psychological support. Please describe how prepared you feel to provide these sorts of short and long term medical interventions to students, in response to a school crisis event?

IQ5. Based upon the knowledge that you have received during your school crisis preparedness training, describe the plan you and other members of the school staff have created for recovering from a school crisis and helping students and their families to recover.

IQ6. Describe the plan you and other members of the school staff have created for working with the larger community to help students and families recover from a major crisis event.

Appendix B: Interview Aid