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Teachers' Perspectives About Strategies to Address the Influence of Adverse Childhood Experiences

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This is to certify that the doctoral study by

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Walden University
2020

Abstract

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Experiences

by

Marie Carmen Walker Arroyo

MA, Universidad Metropolitana, 2003

BS, Universidad de Puerto Rico, 1998

Project Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

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August 2020

Abstract

Each year, the people of Puerto Rico prepare for hurricane season by attending to their properties and families' needs, such as food, water, and supplies. Many educators on the island of Puerto Rico were not prepared for the adverse childhood experiences (ACEs) faced by children during and following Hurricanes Irma and Maria in September 2017. This basic qualitative interview study explored preschool teachers' perspectives about strategies they used to address the influences of ACEs during and following the hurricanes. Resilience theory and Bronfenbrenner's bioecological systems theory provided the conceptual framework for the study. The study sought to identify educators' capacities to address the influences of ACEs in their classrooms following natural disasters. Semi structured interviews were conducted with 16 preschool teachers from 4 different centers in a large metropolitan program that employed teachers during the 2017–2018 academic year; the interviews were designed to reveal strategies that teachers used to support children with ACEs. An inductive data analysis approach was used to analyze the gathered data. A professional development plan was created to address the local problem by providing teachers with tools they need to address the influences of ACEs following a natural disaster. Findings from this study provided prekindergarten teachers in Puerto Rico the ability to share their perspectives from their own lived experiences during and following September 2017. This study may result in professional development that will give teachers the knowledge, skills, tools, and strategies needed to support children in developing resilience and coping skills.

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Dedication

To my best project in life, Fabián. You inspire me to be the best person I can be.

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Being grateful is one of the greatest characteristics that a human being can have. I have the privilege to be surrounded by so many great people who always encourage me to be my best and to never give up. Without them, I am sure that I could not do this, and I am grateful for that.

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Section 1: The Problem

The Local Problem

Two devastating hurricanes hit the island of Puerto Rico in September 2017, that sent many families into extreme poverty conditions. Many people were without necessities of life; businesses, industry, and schools closed for many months; and a wide range of other ill effects existed throughout the island (Fox & Long, 2017; Pares, 2018). The direct impact of both natural disasters left the people of the country living in devastation. Children, who experienced adverse childhood experiences (ACEs), were greatly affected by these disasters (A. Morales, personal communication, April 3, 2018). Schools were closed for months, making parents anxious and causing hardships and struggles as people adapted to a new way of living (Echautegui et al., 2018). When schools started to open, teachers experienced additional challenges in working with children's emotions and behaviors. Teachers found new and different strategies were needed to help children cope with the realities of their lives after the hurricanes.

Although everyone is affected by disasters, children are the most vulnerable (Kousky, 2016). Researchers suggested that natural disasters cause ACEs, which negatively influence children's lives by increasing their chances of developing cognitive, physical, and social-emotional problems (Campbell, Roberts, Synder, Stambler, & Crusto, 2016; Metzler, Merrick, Kelvens, Ports, & Ford, 2017; Okuyama, Funakoshib, Tomita, Yamaguchie, & Matsuoka, 2017). While gains have been made in understanding the influences of ACEs on children, less is known about educators' perspectives of strategies to address the influences of ACEs (Powell & Thompson, 2016). Researchers

have called for further studies to identify successful strategies to develop children's coping and resilience skills (Archdall & Kilderry, 2016; Beutel, 2017; Campbell et al., 2016; Fujiwara et al., 2014; Grolnick et al., 2018; Metzler, et al., 2017; Powell & Thompson, 2016). The problem addressed by this basic qualitative interview study is the need to discover Head Start teachers' perspectives about strategies to address the influences of ACEs following two natural disasters during September 2017. This project study addresses a gap in the research on practice by seeking Head Start teachers' perspectives about strategies they used to address the influences of ACEs following Hurricane Irma and Hurricane Maria on the island of Puerto Rico. This study also addresses gaps in the literature on practice identified by several researchers (Grolnick et al., 2018; Jimenez et al., 2016; Terranova et al., 2015).

Rationale

Researchers have suggested that when children face ACEs, a need arises for the adults in their lives to foster and help children develop and use effective coping strategies that build resilience, rather than follow an unguided trial-and-error approach (Archdall & Kilderry, 2016; Beutel et al, 2017). Archdall and Kilderry (2016) recommended that more studies are needed to understand strategies and to provide educators' guidance and professional learning opportunities to prepare their students for the influences of ACEs.

In a recent study of the effects of Hurricane Maria on the children of Puerto Rico (Echautegui et al., 2018), researchers discussed how none of the teachers or social workers interviewed for the study knew, used, or followed any emergency plan suggested by the Department of Education before, during, or after Hurricane Maria hit the island (p.

56). Also, the researchers recommended the creation of emergency plans that consider that children are one of the most vulnerable populations; such plans should prioritize establishing legitimate actions to ensure children receive the help that they need before, during, and after the emergency. The plan should include activities for educators and the school community. Therefore, the purpose of this project study was to explore Head Start teachers' perspectives about strategies to address the influences of ACEs following a natural disaster and the creation of a professional development plan to help teachers and school communities support children before and after a disaster.

Definition of Terms

The following concepts will be used in this study:

Adverse childhood experiences (ACEs): Stressful events occurring in childhood. The Centers for Disease Control and Prevention (2016) defined it as any childhood experience, both positive and negative, that has an impact on a child's future.

Coping: The change of cognitive and behavioral skills that a person uses to manage the demands that a specific difficult situation can bring (Audulv et al., 2016). Coping is needed to face and deal with responsibilities, problems, or difficulties successfully or in a calm or adequate manner.

Head Start program: The Early Childhood and Knowledge Center (2018) defines the Head Start program as a preschool program that serves children 3 to 5 years of age who have not yet entered kindergarten. Children enrolled in Head Start live in communities where people live at or below the federal poverty level in the United States and its territories, including Guam, Puerto Rico, and the U.S. Virgin Islands.

Natural disasters: Severe weather that can potentially pose a significant threat to health, safety, and security of the people and the country (Department of Homeland Security, 2018). Earthquakes, tsunamis, hurricanes, and snowstorms are some examples of natural disasters.

Resilience: The process of adapting to new circumstances after facing adversity; it involves the capacity to recover quickly from difficulties (American Psychological Association, 2014).

Significance of the Study

Multiple researchers have addressed the difficulties and problems that children experience after surviving a natural disaster (Grolnick et al., 2018; Jimenez et al., 2016; Terranova et al., 2015). Kousky (2016) identified a disproportional effect on children than on adults following a traumatic event and suggested there is a need to discover what strategies mitigate those influences on children. Children are more vulnerable because they rely on their parents or caregivers to communicate and fulfill their needs. Findings from Kousky's study informed countries, communities, and schools about the need to create and identify better strategies to support children before, during, and after a natural disaster. Although gains have been made in understanding the effects of disaster on children, less is known about the effectiveness and implementation of empirically supported treatments on children's behavioral health, resilience, coping skills, and learning after a disaster (Grolnick et al., 2018; Kousky, 2016).

The people of Puerto Rico were unprepared for the devastation brought by Hurricanes Irma and Maria in September 2017 (Pares, 2018). Those unprepared included

administrators and educators of the Head Start program in San Juan, Puerto Rico. This basic qualitative interview study is designed to discover Head Start teachers' perspectives about strategies to address the influence of ACEs following a natural disaster. Findings from this study have the potential to promote positive social change by giving Head Start teachers in Puerto Rico the ability to share their perspectives from their own lived experiences. They may gain confidence in sharing their perspectives, knowledge, and skills that they have perceived to have helped children develop resilience, coping skills, and gain optimism for their futures. Additionally, because Navarro et al. (2016) emphasized that children's responses to disasters are similar across cultures, the findings from this study have the potential to contribute to positive social change in the field of early childhood education on a global scale.

Research Questions

This basic qualitative interview study is designed to explore Head Start teachers' perspectives of strategies they use to address the influences of ACEs to help their students cope and build resilience as a result of experiencing Hurricanes Irma and Maria in September 1017. Echautegui et al., (2018) supported the importance of knowing and understanding the different experiences children live through during and after natural disasters. As researcher, I intend to answer the following research questions to investigate the nature of the problem and seek the best solution:

RQ1: What are Head Start teachers' perspectives about strategies they use to address the influences of ACEs following Hurricanes Irma and Maria in September 2017?

RQ2: What supports do Head Start teachers need to address the influences of ACEs and build resilience in the children they serve?

Review of the Literature

Conceptual Framework

Resiliency theory and Bronfenbrenner's bioecological theory provide the conceptual framework for this basic qualitative interview study. Key elements of resilience theory and bioecological systems theories are connected in the microsystem and mesosystem of each child. These theories frame this basic qualitative interview study to explore Head Start teachers' perspectives about strategies they used to address the influences of ACEs following natural disasters. Resilience and bioecological systems theories relate to a basic qualitative interview study approach because Head Start teachers engage with children within each child's microsystem and mesosystem to influence ACEs that impact children's lives.

The term *resilience* has been used to describe the ability of a person, who has been able to recover, bounce back, cope, and adapt after experiencing a traumatic event. The American Psychological Association (2014) defined resilience as "the process of adapting well in the face of adversity, trauma, tragedy, threats or even significant sources of stress" (para. 4). Southwick, Bonanno, Masten, Panter-Brick, and Yehuda (2014) asserted that resilience is defined based on the contexts of cultures and individuals and their families. Zimmerman (2013) explained that resilience theory can provide a conceptual framework and unifying themes to "guide researchers and practitioners interested in studying and enhancing assets and resources" (p. 383). In working with

children, resilience theory is based on a strengths-based approach to understanding child development and the most appropriate interventions and approaches, such as the following three characteristics of teachers: (a) teachers promote preschool students' protective factors by building strong relationships with children and promoting attachments among significant adults in the lives of children; (b) teachers support preschool students' coping skills by fostering children's development of self-control and abilities to handle stress and frustration; and (c) teachers enhance students' optimism by helping them gain self-confidence and self-esteem and develop independence to meet their needs in positive ways (Zimmerman, 2013). Bronfenbrenner's (1977) microsystem and mesosystem are the systems within which children, families, caregivers, and teachers interact.

Resilience and bioecological theories guide the methodology and research question of this study. A basic qualitative interview study methodology was implemented to understand the perspectives of Head Start teachers in Puerto Rico with more than 5 years of experience in the program and who have worked directly with children and their families prior to, during, and after Hurricanes Irma and Maria. Transcripts from audiotaped interviews with teachers and samples of teachers' lesson plans over a 12-month period were reviewed. Data from interviews and lesson plans were analyzed based on three characteristics of interventions and approaches of resilience theory.

Review of the Broader Problem

To gain a deeper understanding of the topic related to the study, I reviewed existing peer-reviewed literature using several databases, including the Walden

University Library database, ERIC database, and Google Scholar, among others. The key concepts searched included *resilience*, *adverse childhood experience*, *coping*, *teaching coping and resilience skills,* and *professional development*. A comprehensive overview of peer-reviewed literature about ACEs, resilience, childhood trauma experienced during and after a natural disaster, and strategies to foster resilience was conducted. In the following section, I present findings from studies on ACEs, coping, resilience, and teaching coping and resilience skills.

Every year many children around the world are affected by natural disasters (Hlodversdottir et al., 2018). Kousky (2016) identified a disproportional effect on children than on adults following a traumatic event and the need to discover what is needed to mitigate those effects on children. Children are more vulnerable because they rely on their parents or caregivers to communicate and fulfill their needs. Osofsky and Osofsky (2018) asked for further attention to individual and community resilience and how interventions could enhance mental health functioning and prepare children and families to deal with future traumatic experiences and disasters. School leaders, teaching personnel, counselors, and service providers need to support resilience after a disaster (Osofsky & Osofsky, 2018). Masten (2018) asserted that "parents, communities, and societies all have a considerable stake in the development of resilience at multiple system levels as an investment in the future of their children, families, communities, and societies" (p.15).

Adverse Childhood Experience

The level of exposure to a natural disaster has been found to be a key factor in explaining differences in children's emotions (Raccanello, Burro, & Hall, 2017). In humanitarian emergencies, adults, adolescents, and children are more prone or exposed to potentially traumatic experiences (Cannie, 2018). These types of experiences can trigger a range of symptoms that can affect a child's healthy development. Beutel et al. (2017) suggested that understanding the long-term effects of childhood adversities and building resilience helps traumatized children develop an effective way to cope with any situation they encounter. Campbell et al. (2016) sought to examine the needs of young children as a means of preventing long-term effects associated with experiencing trauma during childhood. ACEs have a direct effect on children's healthy socioemotional development. School settings are ideal for contacting, addressing, and supporting children and their families after being exposed to trauma (Shiwaku et al., 2016). Therefore, schools become one of the best places for educators to develop and use strategies that build children's resilience (Gronlnick et al., 2018; Shiwaku et al., 2016). When an educator builds positive relationships with their students that emphasize respect and empowerment, their resilience resources are enhanced (Sanders et al., 2016). Gronlnick et al. (2018) suggested that the best time for an intervention depends on the child's needs, the capacity of the community, and on how prepared the school personnel are. Detecting, addressing, and preventing the influence of ACEs in children following a disaster is essential, and communities and schools can prepare to address ACEs in case a disaster occurs (Gronlnick et al., 2018).

McKelvey et al. (2018) found that exposure to ACEs was associated with increased maladaptive behaviors. It was further suggested that children with maladaptive behaviors have less optimal academic outcomes (McKelvey et. al., 2018). Likewise, Osofsky, Kronenberg, Bocknek, and Cross (2015) found that preschool children who faced trauma as a result of Hurricane Katrina had maladaptive behaviors due to multiple attachment-related risks related to direct exposure to trauma associated with the natural disaster.

Coping

Coping is an individual's ability to deal successfully with a difficult situation (Lai et al., 2017). Coping might refer to how a child or individual manages their emotions after being exposed to a natural disaster (Lai et al., 2017). Navarro et al. (2014) suggested children's responses to disasters are similar across cultures, and mental health services are needed to support recovery. There is a high risk for children who experience anxiety, posttraumatic stress symptoms, and depression following a natural disaster (Navarro et al., 2014). Blame, anger, and avoidant behaviors are some of the negative coping reactions that children exhibit after experiencing a natural disaster. However, negative behaviors can be minimized if proper and positive coping strategies are developed (Lai et al., 2017; Navarro et al., 2014; Powell & Thompson, 2016). A lack of coping strategies can contribute to an increase in the level of stress in a child's environment (Cantero-Garcia & Alonso-Tapia, 2018). However, healthy coping strategies may promote resilience (Powell & Thompson, 2016).

Although there is no single standard for coping, multiple strategies are used and discussed. These strategies will vary by region, community, gender, age, social group, household, time period, and situation (Samaraweera, 2018). In a study about the coping strategies used by families affected by flooding, Danso and Addo (2017) found that most families used coping strategies that were reactive and preventive and to recover. Danso and Addo (2017) explained the following:

> The reactive strategies can be explained as the immediate responsive measures used by victims to reduce the effects of flooding. The recovery strategies were meant to reclaim destroyed properties and assets, while the preventive strategies were employed to avoid the recurrence of flooding in the future. (p. 544)

Resilience

Since the early 1990s, resilience to disaster has become an important issue to discuss (Coetzee, Van Niekerk, & Raju, 2016). Resilience has been defined in different ways by multiple authors, however, key concepts are mentioned consistently in every definition. In the educational environment of schools, teachers, parents, and students may have a different opinion of what being resilient means (Miljević-Riđički Plantak & Bouillet, 2017). In talking about resilience, Bellis et al. (2018) described the ability of children to accustom successfully to situations that menace the healthy development of life or its ability to restart following periods of adversity. Cortina et al. (2016) explained that "a key factor in determining resilience is likely to be the cognitive style by which children interpret experiences around them" (p. 39). Rocanello et al. (2017) suggested that helping children build resilience might help them overcome traumatic experiences

that occur later in life. Children experiences and resources can promote resilience (Heard-Garris et al., 2018). Individuals who suffered ACEs and learned resilience skills during childhood reported a lower level of depression as adults (Poole et al., 2017). Interventions can be made to increase the level of resilience in an individual to help them limit the negative outcomes associated with later adverse experience (Edwards et al., 2016).

Teaching Coping and Resilience Skills

Children can learn coping and resilience during early childhood schools when staff are prepared (Gibbs, et al, 2018; Mutch, 2016). Mutch (2016) concluded that "teachers and other school staff should have professional development on school-based strategies for emergency response and recovery, including appropriate strategies for ongoing emotional support and processing of experiences" (p. 135). Disaster preparedness and prevention environmental education programs are a primary strategy for promoting child and youth safety, decision-making skills, and resilience (Gibbs et al, 2018).

Shiwaku et al. (2016) suggested that resilience is influenced by the efforts of school and educational governance. Archdall and Kilderry (2016) discussed the importance of having curricula that include strategies that teach children the skills to cope and manage stress associated with their daily lives. Without coping strategies and resilience, children's learning and development may be adversely affected following a natural disaster. Those skills and strategies are needed to be taught as soon as practicable so that children are prepared for potential adversities and can make the most of future learning opportunities. Vance, Pendergast, and Gravis (2015) suggested that it would be

beneficial to know the perceptions of teachers across a wider spectrum of schools as they promote social and emotional wellbeing in students. Creation of positive school environments, trauma sensitive curriculum, and educational strategies are needed to support and educate children to cope with any ACEs in the future by fostering their resilience (Ellis et al., 2017). Further, Ellis et al. (2017) promoted the idea of professional workshops for educators.

Fostering resilience in early childhood is important to avoid negative consequences later in life (Lin, 2016). Teaching resilience is important to honor children's feelings and strengths and learn how they deal with adversity (Petty, 2014). Terranova et al. (2015) studied adjustment of preschool children after experiencing hurricane Katrina. Researchers' findings suggested the importance of considering all different aspects of children's functioning: cognitive, physical, socioemotional (Terranova et al., 2015). Researchers investigated the teachers' perceptions about their own resilience and how it affects the way they teach. Teachers of this study expressed that they normally do not think about the term resilience while teaching, in fact they believe that because they are good teachers the resilience skills come out naturally (Terranova et al., 2015). One's level of resiliency, which may serve as a protective social resource against the impact of ACEs, is an important coping skill to consider (Rigles, 2017).

Sanders, Munford, and Liebenberg (2016) found that when teachers build a positive relationship with their students using empowering methods, the students' resilience resources are enhanced. Teaching children how to cope after a traumatic event

is a way to nurture and prepare the child for future challenges (Woods-Jaeger et al., 2018). The social processes of resilience are an interlink of students' attitudes with the adults' support, proceeding from a cultural belief (Li, Bottrell, & Armstrong, 2017).

Professional Development

Education is always in a constant state of change; therefore, teachers need to learn new skills and competencies, which make professional development important (Ekinci & Acar, 2019). Professional development has gained such importance that every year Head Start teachers take 15 clock hours of workshops. Head Start policy regarding professional development suggests that it is essential to have teachers acquire sustainable practices to achieve school improvement (Samuel et al., 2016). Sandilos et al. (2018) concluded that "participating in a professional development course significantly moderates the relationship between one specific source of job stress and changes in two domains of observed teacher-child interaction quality" (p. 287). Professional development provides teachers with necessary skills, which they need to meet all the challenges of teaching and improving the quality of interactions with their students and families (Sandilos et al., 2018).

In some countries, there has been a growing tendency to create disaster preparedness education programs (Ronan et al., 2015). Ronan et al. (2015) suggested that these programs seek to help children, families, and communities reduce risk and increase resilience because of a natural disaster. The main objective of a disaster preparation program is to build resilience in people that reduces stress and risks of families having trouble adapting to a new reality after experiencing a natural disaster. School

communities have become a secure place for many families. When school leaders recognize and respond to traumatic stress or ACEs experienced by individuals within the school community, and provide teachers with tools they need to support and promote their students' protective factors, traditionally underserved children will have the resources they need to build resilience and develop coping skills (see Ijadi-Maghsoodi et al., 2017).

Implications

Evidence in the literature has suggested that having well prepared teachers with enough strategies and tools to address ACEs and build resilience in children before and after they experience a disaster will make the recovery process from natural disasters less harmful and more efficient (Ijadi-Maghsoodi et al., 2017; Samuel et al., 2016; Sandilos et al., 2018). Long term adverse effects will be minimized if children receive the support that they need from family members, caregivers, and teachers. This study looks to create a professional development program for Head Start preschool teachers where they can learn and put into practice different strategies to develop resilience and coping skills in children.

Summary

For a long period of time, Puerto Rico was not impacted by a high category hurricane. Even when every year people in the island prepared for the hurricane season nothing could have prepare them for the devastation from Hurricanes Irma and Maria and the impact these two hurricanes brought to the island and the people who lived there. Two devastating hurricanes hit the Island of Puerto Rico in September 2017, sending

many families into extreme-poverty conditions without necessities of life; causing

business, industry, and school closings for many months; and influencing a wide range of

other ill effects throughout the Island (Fox, & Long, 2017; Pares, 2018). This project

study looks to explore teachers' perspectives about strategies used to address the

influences of ACEs following a natural disaster. Participation in the study will give

teachers' opportunities to discuss coping strategies that support the development of

resilience and optimism that each teacher used and taught in their classrooms, as well as

to learn the influence of strategies teachers used with their students after the hurricanes

hit the Island in September 2017.

The purpose of this study was to discover Head Start teachers' perspectives about

strategies to address the influences of ACEs following a natural disaster. The problem of

this study is the need to explore Head Start teachers' perspectives about strategies they

used to address the influences of ACEs following a natural disaster. This project study

addresses a gap in the research on practice by seeking Head Start teachers' perspectives

about strategies they used to address the influences of ACEs following Hurricanes Irma

and Maria on the Island of Puerto Rico. This chapter included the local problem,

rationale, the definition of key terms, significance of the study, the research question that

will guide the study, a comprehensive overview of peer reviewed literature about ACEs,

resilience, childhood trauma experienced during and after a natural disaster and strategies

to foster resilience and the implications of the study.

In the next chapter, the methodology selected for this project study will be

discussed. This discussion will include the research design and approach, the participants

and how they will be selected, the data collection procedure, data analysis plan and the

limitations will also be discussed.

Section 2: The Methodology

Introduction

In this basic qualitative interview study, I explored preschool teachers'

perspectives about strategies they used to address the influences of ACEs during and

following Hurricanes Irma and Maria on the island of Puerto Rico in September 2017.

Purposeful sampling was used to select Head Start teachers who worked in San Juan,

Puerto Rico during the 2017–2018 school year. According to Creswell (2012), purposeful

sampling allows the researcher to choose individuals who have experienced the

phenomenon being investigated. Meaningful data were collected from a total of 16

participants who understood the issues children had experienced (see Bogdan & Biklen,

2007). The interview process followed an interview protocol, and interviews were

conducted, recorded, translated, and transcribed by me in both Spanish and English.

Research Design and Approach

A basic qualitative interview study with standardized open-ended questions was

most appropriate for this study. This design allowed teachers the ability to contribute

precise information as they desired and granted me opportunities to ask probing questions

to gather more in-depth information. In qualitative research, the research question is not

formulated to be solved by variables; instead, it is formulated to study the topic and its

complexity (see Bogdan & Biklen, 2007). Qualitative research is concerned with

understanding a behavior from the informant's frame of reference (Bogdan & Biklen,

2007). Interviews provide in-depth information related to participants' practices and

perspectives of an issue. A phenomenological design was considered for this study

because this design attempts to explain and interpret a series of events that occurred (see Bogdan & Biklen, 2007). Phenomenological studies try to describe the nature of the particular phenomenon; however, this design was rejected because it is not compatible with the focus of this study. A case study design was also considered for this research. Case studies are commonly used because of their outlook and focus (Lodico et al., 2010). This design was not appropriate for the current study because the study focused on teachers' perspectives and not on multiple perspectives or variables (see Lodico et al. 2010). A grounded theory approach was considered. The goal of a grounded theory design is to generate a theory with specific components, such as a fact, circumstances, strategies, context, and consequences (Creswell & Poth, 2016). A grounded theory design was considered because this study looks to identify the strategies used by the teachers to develop resilience, but it was rejected because the aim of the study was not to develop a theory; instead the goal was to identify the strategies used.

The basic qualitative interview study design follows logically from the problem by addressing a gap in local practice, as well as a gap in the literature on practice related to limited knowledge about (a) educators' perspectives about strategies to address the influence of ACEs in natural disasters (Powell & Thompson, 2016), and (b) strategies that develop children's coping and resilience skills in educational settings (Archdall & Kilderry, 2016; Beutel, 2017; Campbell et al., 2016; Fujiwara et al., 2014; Grolnick et al., 2018; Metzler, 2017; Powell & Thompson, 2016). The study was based on two research questions:

RQ1: What are Head Start teachers' perspectives about strategies to address the influence of ACEs following Hurricanes Irma and Maria?

RQ2: What supports do Head Start teachers need in order to address the influences of ACEs and foster resilience in the children they serve?

The research questions guided the interview questions used to solicit the perspectives of Head Start educators who have worked with preschool children before, during, and after Hurricanes Irma and Maria in September 2017.

This study took place in Head Start programs for preschool children in San Juan, Puerto Rico. Data were collected using digital audiotapes and journal notes. Sixteen Head Start teachers volunteered for semi structured interviews to understand their perspectives on strategies to address ACEs following Hurricanes Irma and Maria. If there had been a need, interviews would have continued with additional teachers until saturation was reached; however, that was not necessary (see Lodico et al., 2010). Education sociologists have used different methods such as in-depth interviews and observations to describe how teachers and children view their social world to help them develop their insights about the social reality in schools (Bogdan & Biklen, 2007). To reduce or eliminate any signs of bias, I used member checking following the transcription of digital audiotapes to ensure that the transcribed data expressed what participants intended to say.

To recruit participants for the study, I had a meeting with the Head Start program director to explain the purpose of my request and the details about the basic qualitative interview study. I asked for the program director's approval to distribute a letter to each eligible teacher via school mail. Then, I requested a letter that gave the program

director's support and authorization. The letter is in Appendix G. After receiving the program director's written approval, I contacted the program's human resource department to obtain a list of the active teachers in the program before, during, and after September 2017. After receiving the list, I sent an invitation letter and consent form, with a preaddressed, stamped envelope, to each teacher of the Head Start centers located in the San Juan, Puerto Rico.

Participants

Participants in this study were recruited from a Head Start program in San Juan, Puerto Rico. For this study, volunteers were sought from various regions of San Juan where I was not employed and was not known to avoid any conflict of interest or ethical issues. None of the selected volunteers had been supervised by me in the past, nor were they under my supervision at any time during the conduct of the study or during the data analysis and writing processes of this project study. Because this study discussed teachers' perspectives about strategies they used to address the influences of ACEs during and following Hurricanes Irma and Maria, the main criteria used for selection of participants, was for teachers to have been employed in the program during the 2017–2018 school year when both hurricanes occurred. I initially intended to recruit 12 educators to participate; however, I interviewed a total of 16 participants. All 16 letters arrived about the same time from teachers who met the qualifications for the study. Burkholder et al. (2016) indicated that the researcher "cannot fully predict the number of people to be interviewed" (p. 74); therefore, I provided an estimate of the number of

people in my prospectus. It is also appropriate to continue the recruitment process as data

are collected until data saturation is reached (Burkholder et al., 2016).

Data Collection

This section presents data collection for this qualitative interview study. Merriam

and Tisdell (2016) explained that having sufficient participants is important so that the

data collected will begin to tell the same stories. The data collection process ends when

data saturation is reached. I selected a total of 16 participants by accepting the first

volunteers who responded. For this study, an interview protocol was followed (see

Appendix B). To prepare for the interviews, I translated the interview protocol and

questions and prompts into Spanish. All the documents and the process were approved by

Walden University Institutional Review Board (IRB). All interviews were conducted in

Spanish. Volunteers, who became participants in the study, were proficient in Spanish,

and although several spoke English, participants elected to have their interviews

conducted in Spanish and their responses recorded and transcribed into Spanish for the

member-checking process. Using Spanish was more comfortable for the participants and

made their language comprehensible. Data were collected in face-to-face interviews

using a digital audio recorder as approved by IRB.

RQ1 was supported by resilience theory, which addressed how teachers can help

their students recover, bounce back, cope with, go through, and adapt to their new

realities after experiencing Hurricanes Irma and Maria. RQ2 was supported by both

resilience theory and Bronfenbrenner's bioecological theory. These two theories address

supportive conditions for both teachers and children. The theories are revealed in how the

Head Start program supports teachers and children and their families.

Interview questions included four semi structured, open-ended questions guided

by the conceptual framework, with prompts and probes to encourage participants to

elaborate. In closing, I thanked participants for their contribution and asked if there was

anything further they wanted to add. This final closing question allowed participants to

elaborate on any question or mention something they felt was important to add. Interview

questions were designed to collect all possible data (see Appendix B). The interview

protocol and the research questions were validated by the San Juan, Puerto Rico, Head

Start Mental Health Specialist, who specializes in ACEs education. The two RQs and

four interview questions are aligned in Table 1.

Table 1

Alignment Between Research Questions and Interview Questions

Research Question	Interview question
RQ1: What are Head Start teachers' perspectives about strategies they used to address the influences of ACEs following Hurricanes Irma and Maria in September 2017?	• What choices did you made to help your children develop resilience and learn to cope with their adverse childhood experiences? • Describe and changes in your curriculum, classroom organization, daily schedule of routines, and/or strategies you used in your classroom after the hurricanes.
RQ2: What supports do Head Start teachers need to address the influences of ACEs and build resilience in the children they serve?	• What can the San Juan Head Start Programs do to help you and other educators to increase their knowledge about disaster preparation and adverse childhood events? • Describe professional learning experiences such as professional development or training that you have had related to adverse childhood experiences.

According to Castillo-Montoya (2016), valuable qualitative data can be obtained from interviews because they provide rich and detailed experiences from the participants and the meaning that these experiences have for them. When a researcher wants to discover what is known about the phenomenon of the study from the insiders' perspectives, there is a tendency to use open-ended questions in the interview to get the participant to respond in a more detailed way (Chanail, 2011; Roulston & Shelton, 2015). It is important to note that volunteers for this study were able to choose between the English language or the Spanish language for their interviews. Spanish was chosen because it is the home language for all the participants, I conducted all interviews in Spanish. Both Spanish and English documents (recruitment information, interview questions) were approved by the Walden University IRB. The Walden University's approval number for this study is 12-04-19-0517202. I requested and received input from a Head Start Mental Health Specialist, who has been trained in resilience during the 2018-1019 school year, about the appropriateness of the questions for interviews to obtain teachers' perspectives. A letter requesting validation from this specialist is included in Appendix F.

To collect the data for this study, invitation letters, with no specific names, were sent to approximately 200 Head Start teachers. Letters were sent using a driver who drove to the Head Starts and delivered the letters to the Managers. Each manager then delivered letters to each center that belonged to their region. Each manager distributed the letters to the staff who worked in the center. A recruitment letter was sent to a pool of teachers who met the criteria of the study with a detailed explanation of the study. After

candidates contacted me, I held an initial meeting with each in a place of their choosing, where their confidentiality was protected. In this meeting with a purposeful sample of volunteers. A formal interview was then scheduled with the first 16 teachers who volunteered. Interviews were held with each participant in a place where confidentiality was assured and each teacher felt comfortable to speak, for example, local coffee shops (6), a library (3), a park (3), and a shopping mall (4). Participants were treated with respect, and they were fully aware that they could stop the interview and leave the study at any time. No incentive was given to the participants, which was explained in the informed consent form and in the interview meeting. The duration of the interviews varied from 45 minutes to one hour and thirty minutes. Interviews were conducted in Spanish, digitally audio recorded, and then translated to English. All interviews were digitally audio-recorded and transcribed into Spanish, and then summarized in Spanish for member checking. Participants were notified that they may withdraw from the study at any time without penalty, and that their anonymity and confidentiality are a priority and assured by me.

Interview data from 16 participants were labeled with alpha-numeric codes and a catalog of the data was created to organize the collected data to keep data confidential. Only I had access to the list of names and contact information from participants and the corresponding alpha-numeric codes. Copies of data were backed up in a media file and stored on my password protected laptop, to which only I have access. Chronological date order was used to arrange written notes I took, as researcher. Each hard copy file with relevant data was labeled and stored in a different file in a locked file cabinet in my home

office. The digitally audio recorded interviews and my data collection journal of notes taken during interviews are stored in a locked file cabinet that only I have access to in my home office with no names or other identifiers. For verification of accuracy of data, each participant received a summary of their interview and each was asked to verify the accuracy or add clarification to my summary and return the corrected copy to me within a week. Data collected digitally were backed-up on a media file and stored on my password protected laptop, to which only I have access. Hard copies of data are stored in a locked file cabinet that only I have access to. All data will be destroyed 5 years after the approval of the dissertation as per Walden University requirements.

For this study, participants were selected from regions where I have not been employed for the purpose of negating any concerns about conflict of interest or ethical issues. None of the participants who participated in the study have been under my supervision. If any of the participants had been supervised by me in the past, they would not have been eligible for the study. I clearly made volunteers aware that participation in the study is voluntary and that they could stop their participation at any time.

As a Puerto Rican and a mother of a 6-year-old boy at the time of the hurricane, I experienced professional and personal struggles that both hurricanes Maria and Irma had on my life and the lives of my family. I know that what my son experienced during the hurricanes might have been different from what other children living in disadvantage communities might have experienced. When children returned to school after having experienced the impact of the hurricanes, their teachers played important roles in making children's lives easier in their new realities. My opinions and experience were not shared

with participants at any time to eliminate any influence on what was shared during interviews due to my bias. Participants interview responses reflect exactly what they said. I read and reread interview transcript numerous times before completing the transcription because I wanted to capture the participants' own perspectives (see Lodico et al, 2010).

Data Analysis

Lodico et al., (2010) outlined the qualitative data analysis process, as follows: (a) organize data to facilitate its analysis, (b) code and organize the data, and (c) record new codes and categories as they emerge. After collecting data, I began by organizing data by following the first step in the qualitative data analysis process outlined by Lodico et al. (2010). I listened to each participants' interview responses several times and took notes to make sure that all the questions were answered. Second, I transcribed each interview by going back and forth in each question to make sure that details were captured accurately. After completing each transcription, I replayed the interview recording again and read as I listened to make sure that no detail was left out. I repeated that process for all 16 interviews. I then summarized each interview transcript and sent a summary to each participant. Each participant was asked to review the summary and verify its accuracy to complete the member-check process. Each participant was asked to respond to my correspondence by confirming the accuracy, by clarifying any points that needed clarification, or by setting up a schedule for another interview. No participants asked to reschedule the interview. Last, I translated all data from Spanish to English.

After collecting, organizing, and reviewing the data, I used an inductive data analysis approach to classify, tabulate, and summarize the collected data. Lodico et al.

(2010) explained that "inductive reasoning is most closely associated with qualitative research which collects and summarizes data using primarily narrative or verbal methods: observations, interviews, and document analysis" (p.10). The data for this study came from interviews that were digitally recorded, transcribed, and organized by me in chronological order. A review of data was made to understand the scope of the data (see Lodico, et al., 2010). The coding process included creating categories to facilitate the analysis of data. A software application was not used during the coding or for the data analysis process. Written detailed descriptions were made to combine interviews that have the same or similar codes. Major themes or concepts were identified to understand and explain the data (see Bogdan & Bilken, 2007). A research report was created that included the data interpretation in narrative form, including quotes and examples given by participants of the study.

To establish credibility in the study, after each interview was transcribed and summarized, the member checking strategy was used so that participants could review a summary of their transcripts (see Lodico, et al., 2010). Member checking of data was conducted with everyone who participated in the interview process. Rich and thick data were collected and the accuracy of the data was verified by all participants. After I received each participants' confirmation that the summary of his or her transcript was accurate, I saved the data. I used interview transcripts and journal notes to compare and find responses that occurred to identify patterns. I highlighted all reoccurring words, concepts and patterns and found four main themes, as follows: (a) Individualized strategies and materials to teach resilience are effective; (b) Current tools are limited in

addressing influences from ACEs as a result of natural disasters; (c) Teacher-child

relationships and strong attachment by children contribute to resilience; and Professional

learning and resources for educators, families, and communities are needed. This will be

discussed in more detail in the Data Analysis Results section. Data were used to explain

results of the study. Data can be used as a frame for further research. Analysis of the data

verified that the participants' interview responses all supported each other's responses

and there was no discrepant data found and no outliers. However, if there had been

discrepant data, it would have been handled appropriately and could have potentially

been used as recommendations for further study.

Limitations

There were various possible limitations in this study. The first limitation of this

study was the number of participants. Rubin and Rubin (2012) noted that a small sample

size in qualitative research is typical. The number of participants does not represent all

Head Start teachers of the 78 municipalities of Puerto Rico, nor does the number

represent the totality of teachers of the San Juan Head Start programs. The number of

participants makes it difficult to generalize the findings. The small sample size limited

the experiences and opinions to a small subgroup of the population of Head Start

prekindergarten teachers, curriculum specialists, and administrators. However, the small

sample size is typical of qualitative research (Rubin & Rubin, 2012). Another limitation

could be that experiences of participant teachers might differ from teachers who worked

in the suburbs or rural parts of the Island.

Data Analysis Results

Bogdan and Biklen (2007) defined data analysis as the process that involves working, organizing, coding, synthesizing, and looking for patterns in the collected data. Lodico et al. (2010) suggested that the process to analyze qualitative data includes several steps that follow a general direction even when there is back and forth movement during the different stages of the analysis. The steps include prepare, organize, review and explore, code, describe, build themes, report, and interpret the data (Lodico et al., 2010).

After all data were collected, transcribed, and translated, I followed a general inductive approach to analyze the data. This approach is commonly described using standardized schemes to identify themes in the data that are prevalent or significant (see Dufour, Richard, & Li, 2019). I used the Lodico et al., (2010) qualitative data analysis process, as follows: (a) I organized data to facilitate its analysis; (b) after data were organized and reviewed, I coded and organized the data; and (c) I recorded new codes and categories as they emerged as each interview was reviewed. Belloto (2018) suggested that coding is a decision-making process. Flores-Kanter & Medrano, 2019) suggested that categorizing is the process of identifying and detecting patterns in the collected data. I accurately recorded, transcribed, and translated detailed descriptions of events that occurred during and after the two hurricanes hit the island in 2017. Data were carefully recorded, transcribed, translated, written, and coded to provide accurate, rich descriptions from teachers' interviews about their first-hand experiences. Later, themes were identified from the coded data. I created a diagram to help me understand the relationship between the themes and how they help answer the research questions that guided this

study. At the end of the processes, interpretations of data were made, and quotes from participants were included to support my data analysis and present findings of the study.

Lodico et al. (2010) defined coding as the process where sections of the data are categorized in different segments and the connection between them. After assembling all the collected data, I broke up the data by open coding. Bogdan and Biklen (2007) suggested that developing a list of codes is a relevant step in data analysis. To create the codes, I read and reread all the data transcripts numerous times. A set of codes that represented every recurring idea or word that related specifically to the research questions was developed. Codes were categorized by context, situations, activities, strategies, or perspectives of the participant. The identified patterns were later translated to new sets of codes to facilitate the analysis and the answering of the research questions. Some of the themes overlapped; in these cases the code was categorize where it was used more often, and an example was written to support the categorization of the code in that theme. As the coding process was occurring, different themes and patterns emerged from the data. These themes served to answer the research questions of the study.

As I began to interpret the data, I had to go back and forth several times to analyze and recode. To interpret the data, I followed the steps outlined by Bogdan and Biklen (2007). For example, I revisited the interview transcripts; reviewed my review of the literature to evaluate the quality of the data; asked myself how the data related to my study, research questions, interview questions, and conceptual framework; and summarized what I read to move forward in the process. During this process I wanted to

make sure that my interpretations were accurate and true in answering research questions, as well as to facilitate others' reading and understanding of the findings.

As I analyzed data, I read and re-read interview transcripts. I checked for patterns and themes that emerged from this data. I found that some concepts were continuously mentioned during interviews in response to interview questions that aligned with the research questions of the study. To protect the identities of participants, I assigned alpha-numeric codes to each individual and those codes were then used to cite each participants' perspectives about each theme. Examples used by participants were included to support findings of this study.

Two research questions were developed from the problem of the study and guided by the conceptual framework. I considered both RQ1 and RQ2 when analyzing teachers' responses. I was able to code responses, recognize themes, and identify patterns that addressed research questions. Patterns found in participants' responses were as follows: children emotions were mentioned by 15 participants; professional development for families, communities, and school personnel was mentioned by 12 participants; educational activities were mentioned by 10 participants; people's needs were mentioned by 10 participants; the need for drills was mentioned by eight participants; ACEs were mentioned by eight participants; ongoing professional development related to ACE's was mentioned by eight participants; strategies for teaching resilience were mentioned by eight participants.

After reading all transcripts and interview notes numerous times, coding, and organizing data, four major themes were identified and organized. They are, as follows:

(a) Individualized strategies and materials to teach resilience are effective; (b) Current strategies, tools, and materials were limited in addressing ACEs; (c) Strong teacher-child relationships and attachment by children to their caregivers/teachers contributed to resilience; and (d) Professional learning/development for educators, and workshops for parents and community members supported by resources are needed. Both research questions generated a set of themes (see table 2). Analysis of responses to RQ1: "What are Head Start teachers' perspectives about strategies they used to address the influences of ACEs following Hurricanes Irma and Maria in September 2017?" revealed the following themes: Individualized strategies and materials to teach resilience are effective; Current tools are limited in addressing influences from ACEs as a result of natural disasters; and Teacher-child relationships and strong attachment by children contribute to resilience. Analysis of responses to RQ2: "What supports do Head Start teachers need to address the influences of ACEs and build resilience in the children they serve?" revealed the following theme: Professional learning/development and resources are needed. Following Table 2, each theme will be discussed further.

Table 2

Relationship Between Research Questions and Themes

Research question	Subthemes	Themes
RQ1: What are Head Start teachers' perspectives about strategies they used to address the influences of ACEs following Hurricanes Irma and Maria in September 2017?	1. Teachers expressed that the variety of strategies and resources they used in their classrooms varied based on their students' emotional needs.	Individualized strategies and materials to teach resilience are effective
	2. Teachers expressed that they needed additional tools (curriculum, materials, resources, to understand and change the influences of ACEs to help children develop resilience.	Current tools are limited in addressing influences from ACEs as a result of natural disasters
	3. Teachers believe that the prior relationships that they had with children before the hurricanes were important as trust was established.	Teacher-child relationships and strong attachment by children contribute to resilience
RQ2: What supports do Head Start teachers need to address the influences of ACEs and build resilience in the children they serve?	1. Teachers expressed their need for workshops, trainings, and resources related to preparing children, families and communities before a natural disaster or event.	Professional learning/development and resources are needed
	2. Teachers expressed their perspectives that Head Start administrators should provide workshops for families, communities and HS personnel.	Community workshops are needed
	3. Teachers believed that Head Start should provide an emergency plan, information, and appropriate resources.	An emergency plan, information and resources for stakeholders are needed

Theme 1: Strategies, Tools, and Materials to Teach Resilience

The first research question focused on how teachers were able to help their students recover, bounce back, cope with, go through, and adapt to their new realities after experiencing Hurricanes Irma and Maria. The second research question focused on how the program address supportive conditions for both teachers and children. The interviews findings from the first research question revealed some of the strategies that teachers used after the hurricanes. Some of the teachers expressed their needs to gain more knowledge and tools and learn more strategies to support children in developing resilience and coping skills. The findings from the second research question revealed the need for teachers to have a plan for professional learning and professional development to support their efforts for effectively addressing the influences of ACEs with their students and resources for teachers, families, and the community.

The conceptual framework for this study was derived from resiliency theory and Bronfenbrenner's bio-ecological systems theory. This framework was used to guide the data analysis on how the teachers engage with children within each child's microsystem and mesosystem to address the influences of ACEs which has impacted the lives of Head Start children. For example, in responding to interview questions, participants explained that they were not clear on what strategies could be used to teach resilience.

There are multiple definitions for resilience. Most definitions lean on the individual's ability to cope and bounce back after adverse circumstances. The exact meaning of resilience depends upon the problems or conflicts confronted. According to Mate and Ryan (2015), resilience is not exclusively connected to individuals but is

connected to other issues including social context. Mansfield et al. (2016) explained that developing educational curriculum to build resilience in teachers greatly benefits teachers who model resilience for children, families, and communities. Likewise, educational curriculum that addresses resilience education for children has multiple benefits for the children and families with whom teachers interact (Mansfield et al., 2016).

Van der Linden et al. (2018) shared that people react in similar ways to life experiences. Some of them will react in a strong way to some minor life stressors and others might remain calm in a stressful situation (van der Linden et al., 2018). Researchers suggested that early childhood preschool teachers can prepare themselves to make critical decisions by taking advantage of their resources, past experiences, and knowledge (Mansfield et al., 2016). In an educational context, resilience is defined as a teacher's capacity to work with their personal and contextual resources to address challenge (Beltman, 2015). Using strategies enables early childhood teachers to grow, commit, and enhance his or her sense of wellbeing, which also influences the wellbeing of children taught by the teacher (Beltman, 2015; Mansfield, et al., 2016).

In general participants in the study defined resilience as the ability of the human being to deal with traumatic events in their lives. This definition is similar to other definitions found in the literature. Participant G defined resilience as "the ability of every human being of any age to deal with or face traumatic events in their life and their environment." Participant A defined resilience as, "the ability we have as individuals to recover after having gone through a difficult or traumatic situation."

When teachers were asked what changes, they observed in their children after the hurricanes, a variety of responses were given. Overall, teachers responded that they observed different emotions in their students. Teachers suggested that children's responses varied depending on the type of services that the family received after the hurricanes (center-based services, home-based services) and the elapsed time when the services began after each hurricane. One of the teachers, who started providing services in her own center-based classroom just three weeks after the hurricane explained, as follows:

> I could observe in my children after the two hurricanes behaviors of fear, happiness and sadness at the same time. Some of them were happy to see their friends but others cried every time that started to rain and look for me or my assistant for comfort.

Another teacher who started services five weeks after the event with a new group of children said, as follows:

> The behavior I observed in the children I received back then was encouraging. They were happy to be in school, even when some of them were moving to a new place due to their home losses. They were cheerful and affectionate with each other and even with me.

A teacher who started services 5 months after the hurricanes and worked in a home-based service expressed the following, "Most of my children reacted well to Hurricane Maria's situation. Teaching them in their homes was the best way, in my opinion, to create a safe, positive and loving environment."

Theme 2: Current Tools Are Limited

Most teachers indicated that they did not feel the training that had been given nor the resources they had were adequate in helping them meet the needs of the children in their classrooms during and after the hurricanes. The following is a representative:

Participant F expressed her need to have tools, resources, and strategies to help her students. She said,

I didn't know what to do when one of my students started crying when she heard that another Hurricane would come in three days. How can I tell her that everything will be alright or what can I do as a teacher to make her feel safe and good? I need to know how to work with this situation if that happens to me again.

Theme 3: Teacher-Child Relationships and Strong Attachment

Teachers were asked to describe strategies they used with their children when they returned to school after the hurricanes. Teachers' answers varied. Participant A said, "I use strategies with my students to express their feelings through the arts such as painting, dancing, singing, and so on to deal with their emotions at all times." Participant A also expressed that he tended to talk with children about their experiences before, during, and after the hurricanes. He talked with them about their day-to-day experiences as they adapted to their new lifestyle. He expressed the need to learn effective strategies to teach resilience to his students.

Participant B said, "I presented pictures about what happened. We talked about what happened around their homes. The children drew about their experience, since,

through drawing, they can express their emotions." Participant B also indicated that she felt she needed more ideas to teach resilience. Participant J stated,

> To identify the individual needs of the children, it was necessary for me to observe them in the period of the imaginary game, where we identified how we could help develop a sense of resilience. In the first place, we reviewed the rules of healthy coexistence, then if some companion was needed, we gave it to the one based on need. I tried to tell them daily that each day was new and special. Each day was full of new experiences and that sometimes the experiences of that day would not be pleasant, but you still must live with the hope that new days and experiences.

Participant N discussed the importance of being able to identify which strategy works better with each child because "there is no one size fits all strategy to use in every case." Participants believed the serves they provided promoted resilience. Educators communicated through their interview responses that communities, families, and children knew the teachers cared about them and wanted to help them. Hatzichristou and Lianos (2016) suggested that when schools have been labeled as resilient, caring, or supportive of their communities, this label usually refers to strong bond and emotional relationships between members of the school community.

Social-emotional learning is needed to guarantee the well-being of all students and faculty in a school community (Hatzichristou & Lianos, 2016). Participants in this study talked about their need to talk to their children about emotions and how they need to validate those emotions to help them learn how to be resilient. Participant L expressed,

I listened to children, through home visits, about their experience after the

phenomenon, most of them cry and others were angry because they lost their

favorite toys, it was emotionally challenging to keep calm and to tell them that

everything will be fine, when I personally didn't know how we were going to be.

Participant P said,

How was I supposed to smile and give emotional support to them? I was having a

hard time dealing with our new reality. I believe that I found my strength to smile

and give them hope from God. But when they left the classroom I cried; I cried

every day. It was hard.

One disorder that commonly occurs after a disaster is the posttraumatic stress

disorder (Van der Linden et al., 2018). Socioemotional support was mentioned by several

teachers. Participant H said, "I believed we, the teachers, need emotional support to deal

with everything that happen in our classroom, not only after a natural disaster but the

things that happens daily." Previous disaster studies showed that several post-disaster

psychological distresses are resolved in the first months after disasters, but early

interventions can be important step in identifying those vulnerable to present persistent

mental health problems (Thordardottir et al., 2018).

Theme 4: Professional Learning/Development, Workshops, Resources and

Emergency Plan

Effective teacher professional development includes the creation of and

experiences to encourage teacher learning with the objective to improve the practices and

outcomes in the classrooms (McElearney et al., 2019). A planned, permanent, and

differentiated training for educators, families, students, and community members will increase risk perception and reduce damage to individual and collective health (Roque Herrera, et al., 2016). Participant M said,

> Preparing for disaster and adverse events is important. Emergencies can occur at any time or place. Annual workshops should be offered that continue to train educators and help them have the knowledge and preparation to face and manage a disaster before, during and after it. A plan for emergencies is needed.

Participant I said,

> I think the program has a lot to work in this area (professional development), because in this particular case of hurricanes the municipality identified the families in need, but we didn't have the resources as faculty members to give them the physical, structural, as well as emotional support that our families and our coworkers needed.

> Traumatic experience, level or chronic, impacts the behavior of the person that

suffers the trauma (Hollingsworth, 2019). It is important for teachers to have a plan of action to appropriately respond during natural disasters. A plan and the tools that can allow them to work with traumatic experiences and help their students to accept, cope and resurface from that traumatic experience are needed.

Both research questions generated a set of themes (see Table 2). Analysis of responses to RQ1: "What are Head Start teachers' perspectives about strategies they used to address the influences of ACEs following Hurricanes Irma and Maria in September 2017?" revealed the following themes: Individualized strategies and materials to teach

resilience are effective; Current tools are limited in addressing influences from ACEs as a result of natural disasters; and Teacher-child relationships and strong attachment by children contribute to resilience. Analysis of responses to RQ2: "What supports do Head Start teachers need to address the influences of ACEs and build resilience in the children they serve?" revealed the following theme: Need for professional learning/development, workshops, and resources.

Summary

This basic qualitative interview study explored preschool teachers' perspectives about strategies they used to meet their students' needs during and following Hurricanes Irma and Maria on the Island of Puerto Rico in September of 2017. As a result of natural disasters, children experienced ACEs and Head Start teachers used strategies to address their influences. In section 2, I described the methodology followed in the study, which included the research design and approach; participants; data collection, analysis, and results; and limitations of the study.

Data collected for this study revealed a need for professional learning to support teachers, so they gain knowledge, tools, and skills to address ACEs in their classroom. Through professional learning, teachers will gain tools and strategies to support children as they develop resilience and coping skills in the event of further natural disasters. In this study, teachers expressed their needs for an emergency plan that they can follow in the event of a natural disaster. Teachers responded that professional development for themselves, for families, and for the community is needed. Teachers wished to effectively teach resilience and help their children overcome the effects of ACEs. Teachers

acknowledged that the shortage of trainings and workshops related to preparing for and coping with a natural disaster before September 2017 was a barrier to teaching after the hurricanes. Teachers acknowledge that they needed specific training in ACES to better meet the needs of their students; and they need tools such as curriculum, resources, and strategies to help build resilience in children. The most pertinent project to address the findings of this study was to create a three-day professional development workshop for Head Start educators, including administrators, specialists, teachers, and paraprofessionals. Therefore, a professional development plan that is designed to help teachers gain knowledge about ACEs and acquire skills and tools that will enable them to work more effectively in the local setting. Included in the plan will be provisions for resources. An important resource that will be collaboratively developed by Head Start educators is an emergency plan to follow in the event of a natural disaster or other traumatic experience. This workshop focuses on capacity building of teachers to address resilience and social-emotional support. I will describe this professional development plan, which was based on findings from analysis of teachers' interviews, in the next section. Section 3 includes the rationale, a literature review, the project description, the project evaluation plan, and implications of this professional development plan.

Section 3: The Project

Introduction

This section is focused on the project that I created based on the findings from my study. Through my research, I was able to identify Head Start teachers' perspectives of their needs to address the influences of ACEs and work more effectively with students after a natural disaster. Teachers who participated in the study shared challenges they encountered during and after the hurricanes in September 2017. These challenges included finding ways to provide social and emotional support for children to help them develop resilience and coping skills. Teachers also expressed that they needed tools and strategies to help their students, families, and communities.

Rationale

Puerto Rico has faced natural disasters like hurricanes, flooding, and earthquakes. These events have changed the economic, social, and educational development of the island, creating new challenges for teachers and students who were not expecting these new ways of living. But schools and educators have become an essential part of helping children adapt and overcome the challenges these natural disasters bring to the island. Thus, improving children's and teachers' ability to cope and adapt to new circumstances is one of the goals I sought to achieve with this project.

The purpose of this project was to provide teachers with a variety of tools and strategies to work with their students before, during, and after natural disasters. The goal was to guide Head Start teaching staff in identifying the available research-based strategies that contribute to and promote socioemotional development of children.

Teachers identified several different strategies: strategies to support children's development of resilience through play, strategies to identify available community resources, and strategies to ensure that technical assistance was available to all program personnel during an emergency. After analyzing the collected data and considering the teachers' suggestions, I chose to create a professional development plan. An important resource that will be an outcome of the professional development will be a collaboratively developed emergency plan for Head Start educators to follow in the event of a natural disaster or traumatic event. Professional development is used around the world to raise positive outcomes for teachers and students (Freeman et al., 2016).

Review of the Literature

Many studies address professional development for teachers, but few addressed the issue of professional development to teach resilience. To address the purpose of the study, which was to explore and create a professional development plan based on Head Start teachers' perspectives about strategies to address the influences of ACEs following a natural disaster, I conducted a search of scholarly literature. To conduct the literature review I used the Walden Library database, Google Academic, ERIC, ProQuest, SAGE, EBSCO, and Center on the Developing Child. The keywords used for this search were, as follows: *professional development, teacher's perspective about professional development, what is professional development, teachers' professional development, resilience, resilience curriculum, teaching resilience, trauma-informed school, trauma-informed teaching,* and *emergency planning.* This literature review covered themes that emerged from the data analysis process. The literature review is divided into the

following sections: teachers' professional development, teaching resilience, trauma-informed school and teaching, and social-emotional competence.

Teachers' Professional Development

Professional development is an important factor in education due to continual changes in society and the implementation of new pedagogical approaches (Choi & Kang, 2019; Sakin, 2020). Professional development for teachers plays a determinant role when improving classroom teaching and achieving quality education (Ayodele & Govender, 2018). Teachers' professional development has become a strategy used by many schools to impact teachers and increase student outcomes. Professional development programs support teachers in ways that are directly connected to their classroom work (Cooper et al., 2018). A well-designed and implemented professional development program includes the essential components of teaching and learning that will help students develop the knowledge, capabilities, and proficiency needed (Darling-Hammond, Hyler, & Gardner, 2017). Teachers' professional development can positively impact student outcomes (McElearney, Murphy, & Radcliffe, 2019) and have positive results with sustainable changes in teachers' practices and student outcomes (Darling-Hammond et al., 2017).

Researchers have studied teachers' perspectives of their professional development experiences in an attempt to understand what makes each approach effective (Martin et al., 2018). To maximize the effectiveness of professional development and lead to continuous changes in teachers' knowledge, beliefs, and instructional practices, researchers have suggested that developers of professional learning aim to gather

information about the beliefs, attitudes, and knowledge that teachers have prior to the

professional development to help plan the content (Scarparolo & Hammond, 2018).

Further, the design of the professional development plan with activities and content

should also be bound to teachers' instruction (Rodgers et al., 2019). However, there are

still questions on the way teachers learn new skills and how professional development

can help improve teacher practices (Darling-Hammond et al., 2017), which can be

addressed in part by conducting evaluations and following up with peer mentor support.

Teaching Resilience

Resilience, or the ability to adapt and develop competence after experiencing or

being exposed to difficult, stressful, and/or traumatic experiences, may provide some

explanation for how teachers respond to challenges of teaching (Easterly & Myers, 2018).

Teachers, who naturally work with many difficulties, need higher resilience to adapt in

the workplace (Polat & İskender, 2018). Teachers also have the task to raise generations

of children with resilience skills; therefore, it is imperative to examine strategies teachers

can use to confront difficulties that require resilience and coping skills (Polat & İskender,

2018).

Research has indicated approaches that teachers need to comprehend to teach and

build resilience in students and others around them (Ijadi-Maghsoodi et al., 2017). For

example, problem solving, stress management, support from others, goal setting, wellness

planning, effective communication, emotional boundaries, and emotional regulation are

some approaches teachers can use (Ijadi-Maghsoodi et al., 2017). Harfitt et al. (2019)

also suggested six principles in teaching that teachers need to be aware if they want to be

effective when teaching resilience: (a) communicate goals, (b) provide thinking time through questioning, (c) increase students' participation, (d) promote cooperation among students, (e) provide feedback, and (f) use assessment. Integrating plans, documentation, and strategies between the educational systems also promotes educating and learning resilience (Masten, 2018). Additionally, an understanding of children's sources of resilience can help inform educators regarding how families and schools should prepare and teach children to cope in the event of a major disaster (see Rahiem, Krauss, & Rahim, 2018).

Trauma Informed Schools and Teaching

Childhood trauma has a longstanding effect that can lead to numerous negative outcomes throughout students' lives (Crosby, Howell, & Thomas, 2018). Teachers are on the frontline when it comes to seeing the impact of trauma and the needs of children in schools (RB-Banks & Meyer, 2017). Trauma informed teaching involves seeking to understand how children's lives are affected by trauma and involves use of trauma sensitive strategies instead of traditional strategies (Crosby et al., 2018). Gaywsh and Mordoch (2018) stress that it is imperative that educators understand the effects of traumatic events on student performance. To help students heal after experiencing trauma, requires that teachers follow a trauma informed approach to work effectively with students.

In a trauma informed school system, school personnel recognize and respond to traumatic stress and strengthen children's protective factors by teaching skills for coping and resilience for all students (Cosby et al., 2016). A trauma informed approach can

reach traditionally underserved students who have been exposed to trauma and adversity. However, trauma-informed school practices require that teachers receive basic training on childhood trauma and learn to recognize the ways trauma is manifested in student behaviors and how trauma affects student behaviors (Crosby et al., 2018; Crosby, Somers, Day, & Baroni, 2016). When school personnel are aware of the short- and long-term effects of trauma and how these present themselves in children's emotional and behavioral actions, teachers can respond to the students in a trauma sensitive ways by supporting their healing processes and limiting traumatization in students (Stewart & Martin, 2018). Grasping a schoolwide trauma informed perspective requires school personnel to design a professional development curriculum (Paiva, 2019). Paiva suggested that this curriculum includes adding social–emotional learning (SEL) and changing school policies to reflect trauma informed ideals. Students who are exposed to these practices have shown improved resilience, social emotional skills, improved attendance and behavior, and greater academic success (Dotson, 2019).

Social Emotional Competence

Emotions are part of a continuous process driven and molded by daily experiences and behaviors but are not apart from or controlled by social influences (Aspelin, 2019). Aspelin (2019) suggested that socioemotional competence, an important pedagogical competence, can be developed by students. Smith et al. (2018) said, "the development of social-emotional skills begins in infancy and continues in early childhood when children begin developing relationships with peers and adults in multiple settings" (p. 3). Teachers are the instruments that drive social-emotional learning programs and practices in schools

and classrooms (Schonert-Reichl, 2017). As a result, Schonet-Reichl (2017) emphasized that paying attention to their own social emotional competence and wellbeing is important for teachers to do because of the strong influences made on their students. Teacher emotional support is fundamental to high quality education (Ruzek et al., 2016). A teacher who recognizes the importance of knowing about children development will be able to provide learning experiences that will support social, emotional, and academic competence and strengthen student outcomes (Schonert-Reichl, 2017). Emotional competence has been related to school success. Researchers found emotional competence is conducive to children's learning, children's understanding of and ability to regulate their emotions, and children's emotional knowledge and positive social behavior (Housman, Denham, & Cabral, 2018).

Project Description

A 3-day professional development workshop for Head Start educators that includes administrators, specialists, teachers and paraprofessionals will be presented. The workshop will be offered in a theater where most of the Head Start workshops takes place. Audiovisual equipment will be available, including Internet access. Adult learning strategies will be used to get the participants engaged in the workshops and to maximize their understanding of content. The date of the workshops will be established using the Head Start professional development calendar and will not affect the student's services. The workshop will focus on outcomes of the basic qualitative interview study by employing professional learning strategies that will prepare educators to address influences of ACEs by teaching about resilience and coping strategies. The workshop

will provide resources for teachers to use with children and training on how to use the resources. During the workshop Head Start educators will collaboratively create an emergency plan which will support an effective plan of action in the event of a natural disaster or traumatic event. My role in the workshop will be contacting experts in teaching the topics, compiling and gathering resources, and creating the educational materials. I will work with the Head Start mental health specialist to prepare for and deliver the workshop. The mental health specialist will support me in the processes. It will be my responsibility to organize, discuss, and create materials that will be used during the workshop.

One potential barrier to this workshop could be the numbers of teachers that the program has versus the capacity of the theater. The possible solution for this barrier will be dividing teachers into groups that accommodate the occupancy of the theater, and presenting the workshop in two different sessions. Another barrier could be participants' lack of interest, which can be addressed by asking a sample of teachers what kind of activities they like in a workshop and incorporate those activities to the final presentation. Interest can also be increased by using different types of audiovisual materials (eg: videos, Q & A, arts & craft, music). Another potential barrier is the technology and audiovisual equipment functioning. To prevent any kind of malfunction of the equipment, a second set of equipment could be available. A complete check of the equipment and presentations will also be done early each morning on the days that the workshop will be given, and a copy of all the presentations and materials will be available for workshop attendees.

Proposal for Implementation and Timetable

A meeting with the Head Start program administrators will be held to discuss the results of the study and to receive their approval to conduct the professional development workshop plan. Goals and objective of the training will be discussed with the administrators. My presentation of the results of the basic qualitative interview study will include content from the current literature related to the topic, which will also support the findings and the training. During the implementation process, problems and situations may arise, but they will be addressed as they appear.

A 3-day workshop/training has been planned for Head Start educators in San Juan, Puerto Rico. On the first day of training, I will focus on topics related to ACE's, resilience, trauma, and natural disasters. A brief discussion of findings from the study will also be made. On the second day of training, I will focus on research-based strategies to build resilience and social–emotional competence in children and adults who work with children. On the third day, I will focus on research-based teaching practices and adult–child interactions that promote resilience. The afternoon of the third day will be focused on collaboratively developing an emergency plan for Head Start educators to follow if a natural disaster or any type of traumatic event occurs. After receiving approval from Head Start administrators, I will be contacting the audiovisual department and the facilities department to start making arrangement to conduct the workshop.

<div align="center">

Project Evaluation Plan

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The goal of this professional development plan is to give educators the opportunity to gain knowledge, skills, tools, and strategies to address the influences of

ACEs in their classrooms to support their students in developing resilience and coping skills. This workshop is designed to expose teachers to different tools, strategies, and resources that they can use in their classrooms to address the influences of ACEs experienced by the children in their care. By the third day of the workshop, Head Start educators will have the knowledge, dispositions, and skills to collaboratively develop an emergency plan, which will be one of the most important resources of the workshop.

Formative assessments will be conducted throughout the day during workshop sessions by presenters so they are able to determine educators' learning based on their active participation and overall contributions to the workshop experiences. Workshop presenters will conduct summative assessments daily to collect feedback from workshop participants about the effectiveness of the workshops in achieving the goals/objectives for educators' learning and skill development. At the end of each training day, an evaluation form will be given to each participant. The purpose of this form is to receive anonymous feedback. Included, will be opportunities for participants to assess the quality of the workshop, their levels of satisfaction with the workshop, and their suggestions about any changes that need to be made (see Elizondo-Garcia, Schunn, & Gallardo, 2019). Feedback and assessment are important elements in developing learners' capacities and helping them notice their own learning processes (Haukenes, 2017). Participants' responses will allow me to make any necessary changes to the workshop in an ongoing manner. Following the initial workshop, I will be able to revise and improve the workshop for any subsequent deliveries of the content.

Project Implications

This project study was designed to impact positive social change that will benefit all program stakeholders in San Juan, Puerto Rico. Stakeholders include all personnel in the Head Start program and the children, families, and communities they serve. This project has the potential to promote positive social change by giving Head Start teachers in Puerto Rico multiple opportunities to increase their knowledge and practices related to strategies and skills to teach and develop resilience and coping skills in their students. Findings from the basic qualitative interview study guided me in the creation of a professional development plan that will support teachers in the acquisition of additional proactive strategies to help students develop resilience. This project can also help Head Start administrators as they engage in the creation of a socioemotional response to planning for disasters and other traumatic events. This professional development plan can support Head Start administrators, specialists, teachers, paraprofessionals, children, families, and community members in developing resilience and coping mechanisms to effectively work with their emotional competence before, during, and after a disaster.

Section 4: Reflections and Conclusions

This professional development plan project was created to explore Head Start teachers' perspectives about strategies to address the influence of ACEs following a natural disaster. Teachers' perspectives about working with children after two major hurricanes struck the island of Puerto Rico in September 2017, led me to engage in research and create this project study to impact positive social change that will benefit all Head Start program stakeholders in Puerto Rico. Section 4 includes the projects' strengths and limitations. Recommendations for alternative approaches, scholarship, project development and leadership, and change are also included. Further, I present reflections about the importance of this project study, its implications, applications, and directions for future research. These sections are followed by the conclusion.

Project Strengths and Limitations

This project has several strengths. The first strength is the cost of implementation. The investment needed to implement this professional development plan is minimal. All the equipment needed will be available at the workshop location. The workshop location will be a municipality property used every year without cost. The location has a free parking lot.

Another strength of this project is the quality of collected data that supports and frames the project study. Data collected in the basic qualitative interview study represented the authentic experiences that each teacher participant lived through during and after September 2017. Each participant talked about his or her experiences in a thoughtful, reflective manner. I followed an interview protocol to maintain consistency in

my interview questions; however, based on the responses of participants, I was able to ask individual participants to extend their responses by using appropriate and sensitive prompts. All information that participants wanted to share was received by me, the researcher, in an objective manner. Four major themes were identified and organized from the basic qualitative interview study, as follows: (a) individualized strategies and materials to teach resilience are effective; (b) current strategies, tools, and materials were limited in addressing ACEs; (c) strong teacher-child relationships and attachment by children to their caregivers/teachers contributed to resilience; and (d) professional learning/development for educators, and workshops for parents and community members supported by resources are needed. An important sub-theme related to resources identified an emergency plan was needed for reacting to natural disasters or other traumatic events. Findings from the collected data created the basis for this project study and professional development plan.

A limitation to this study could be the new guidelines implemented by the government related to large gatherings due to the COVID-19 pandemic. New protocols have been established related to the amount of people who can be in a room. In case that these new guidelines directly affect the plan, I will be looking for alternative ways to offer the workshop, including the possibility of digital media tools like webinars and virtual meetings.

Recommendations for Alternative Approaches

This research focused on Head Start teachers' experiences after two natural disasters. Hurricanes are not the only natural disasters that Puerto Rico has experienced in

the last 3 years. This research could be expanded by including other teachers' experiences after the earthquake that struck the island in January 2020, and any other adverse situations presented in other educational settings or grade levels serving early childhood students. Findings from the basic qualitative interview study can support the creation of an island-wide professional development plan for all levels of education. With additional research and minor adjustments, this project study with the professional learning plan could become a standard training for new teachers.

An alternative approach to the professional development workshop plan that is suggested is to expand this research by adding more participants, including parents, community members, and teachers from elementary, middle, and high school. This new study could potentially give clarity on what is needed for the community with families and every level of education. When the content of the professional development plan is appropriate to the teachers, the positive impact and appropriate practices in the classroom will result in a visible change (see Ekinci & Acar, 2019).

Scholarship, Project Development and Evaluation, and Leadership and Change

If I need to use a word to describe the process for completing this study, that word would be *learning*. I had to learn how to leave behind my ideas, assumptions, biases, feelings, and insights to let the voices and perspectives of the participants be heard and understood. I learned to see through the eyes of the participants. I learned from other researchers the patience and skills needed to complete a study. Also, I learned how to be more analytical and critical with my writing. Writing at a doctoral level in English was a challenge due to Spanish being my mother tongue. Thinking in Spanish and writing in

English made the processes of critical thinking, reflection, and writing more challenging. I did see growth in my writing skills and can attest to greater receptive language skills and increased ease when thinking in English. I found that I did not always have to translate English words into Spanish and then back into English to express my ideas.

While conducting interviews, I gathered relevant data that helped me in the development of this project study. The quality and depth of the participants' answers let me understand the teachers' realities and their needs to be able to help their students before and after the natural disasters. Findings from the data analysis process guided and supported the creation of this professional development plan. This plan may help teacher learn new strategies to teach resilience to their students. This plan allowed Head Start educators to have a voice in creating a valuable resource with their colleagues, which was an emergency plan for natural disasters or other traumatic events that was meaningful to them.

Developing a professional development plan required me to meet with scholars with expertise in this area. Their input and recommendations related to the different professional development strategies and how to use the findings of the research to develop the plan made the creation process more rewarding. Meetings with experts in adult learning theory and professional learning for Head Start resulted in a research-based professional development plan that can be used for preschool teachers. The professional development but can also be used with families, community members, and teachers from other levels.

In my role as a Head Start Education Specialist in San Juan, Puerto Rico, I can take a leadership role in creating new protocols and procedures for professional learning workshops. The experiences that I have gained during this journey to complete my degree and this project study, have resulted in my own increased levels of resilience, professionalism, competence, and confidence. I recognize and value my abilities to collaborate and lead a group to achieve a goal. I had always considered myself a team worker and during this process I sharpened the skills that are necessary to work as a team leader. I feel ready to take more initiative in creating new projects that support teachers to improve educational practices and in turn improve services for children and families and increase prekindergarten students' performance levels. I can impact positive social change as I implement my professional development plan.

Reflection on Importance of the Work

Every year when the hurricane season starts, I see how the government and residents of Puerto Rico prepare for the season. Prior to September 2017, preparing for these atmospheric events was routine. After Hurricanes Irma and Maria in 2017, that preparation changed. I have seen the need to become emotionally ready to face the hurricane season is now a priority. In addition, I realize the importance of developing resilience in children and adults for handling any natural disaster or pandemic.

Teachers need to prepare their students to deal with these events by providing strategies that help children understand that no matter what happens they are equipped to get ahead. I observed the children's physical and emotional needs after the hurricanes, in addition to observing how the teachers worked with this new reality, which made me

want to explore and learn the strategies that they used to develop resilience. As a teacher, I know how stressful it can be receiving a group of students who have experienced a traumatic event, and not knowing what to do or how to handle the mix emotions and reactions brought about by the events. I hope that each teacher that can have a set of resilience strategies and that they can be used to help them but also their students in times of needs. I know each teacher will be equipped with an emergency plan that she or he may follow in any natural disaster or traumatic event.

Implications, Applications, and Directions for Future Research

The purpose of this project study was to explore Head Start teachers' perspectives about strategies to address the influences of ACEs following a natural disaster. After collecting and analyzing data, I concluded that providing teachers with professional development aimed at increasing their knowledge and skills with tools to address the influences of ACEs was a viable option. My aim was to provide workshop training in additional strategies to build children's resilience. I also learned that students' needs did not vary even when the elapsed time to return to school was longer. Learning that prompted me to research scholarly literature that addressed the same issues that teachers experienced. Teachers' responses, together with information gathered from my literature reviews, served as a foundation for the creation of the professional development plan in this project study. The plan can help teachers develop bring together tools that include strategies to use in their classroom. Teachers will have the knowledge, skills, understandings, and dispositions to impact positive social change in their classrooms, with children and families they work with, and communities they serve.

Future research on this topic should be considered in the context of culture and language. Researchers may consider the location of communities because each community is unique. Knowing the history, culture, background, needs and behaviors within each community allows for the creation of personalized plan for teachers working within any given community. This professional development plan can be adapted to include strategies relevant for each community. Also, future research should cover a broader sample of perspectives that includes all stakeholders -- parents, community members, and educators from prekindergarten through 12th grade, to increase the scope of the proposed plan.

Conclusion

The purpose of this study was to explore Head Start teachers' perspectives about strategies to address the influences of ACEs following a natural disaster. The process of reviewing literature in two occasions related to the topic, collecting, and analyzing the data, and creating this professional development plan helped me grow in multiple ways. I feel prepared to embark on new research projects and be an advocate for the early childhood community. I hope that this work will promote positive social change in the field and that it will expand to the rest of Puerto Rico, positively impacting the development of children on the island.

When deciding the topic of my study, I thought about how the result will help me understand what teachers experienced during and after the hurricanes. I considered the notion that results from a basic qualitative interview study would give me a clearer idea of what teachers experienced, how they felt, what they knew, and whether they needed to

know or learn new strategies to help their students, families, and community members.
As I started the interviews, I found out how deep, real, and authentic educators' emotions
were based on the experiences that were lived by these teachers with their students.
Teachers' desires to help and provide security for their students, even when they did not
feel secure or emotionally prepared for these traumatic events, contributed to my own
understanding of the importance of creating professional learning opportunities for them.
I hoped to design a professional development plan that could and would positively impact
the learning processes and their interactions with their students. Findings of the study
demonstrated a need for me to create a professional development plan addressing their
contributions to this project study. need to know strategies to teach resilience and
address ACEs in their classrooms. I hope that this work will promote positive social
change in the field and that it will expand to the rest of Puerto Rico, positively impacting
the development of children on the island. I hope that the work will provide not only to
the teachers but the entire school community with tools that allow them to prepare
students to face and overcome any adverse situation that may arise. I hope that my work
will be used not only on the preschool stage but that it will be used by any educator of
any level of education.

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Appendix A: The Project

Purpose:

The purpose of this professional development plan is to provide all Head Start teachers in San Juan on the Island of Puerto Rico, the opportunity to receive professional learning workshops. The workshops are designed to present and engage participants in strategies and skills in order that they may improve their abilities to develop skill-building strategies to promote resilience in the children of their classrooms.

Goals:

The goals of this 3-day professional development workshop are to provide participants opportunities to share their experiences while teaching after September 2017, to develop in participants better understanding on how resilience is developed, to discuss and deepen understanding about how meaningful adult-child interactions support socio-emotional development of young children, and to create lesson plans to teach and promote resilience in their students. During the first and second days of training, the teachers will learn and review the strategies to build resilience and reflect on implementation of the strategies in their classrooms. The third day of training will engage participants in creating lesson plans and materials for use in their classrooms; and collaboratively developing an emergency plan to follow in natural disasters or other traumatic events.

Learning Outcomes:

After completing the 3-day professional development the participants will:

- Discuss the importance of teaching and learning about resilience
- Discuss the importance of meaningful adult – child interactions

- Learn and review strategies used to teach resilience
- Develop lesson plans using the strategies learned
- Identify and create materials to support lesson plans
- Create an emergency plan by collaborating with colleagues

Target audience:

The targeted audience for this professional development plan will be Head Start

staff, including the following:

- Teachers
- Coaches
- Education Coordinators
- Coordinators for Students with Special Needs
- Specialists for Students with Special Needs
- Education Specialists
- Paraprofessionals

Schedule and Activities

Day 1

8:00 am – 8:30 am – Registration

8:30 am – 9:30 am – Findings from the study

9:30 am – 9:45 am – Bathroom and water break

9:45 am – 11:45 am – Resilience, Trauma and ACE's

11:45 am – 12:45 pm – Lunch

12:45 pm – 2:45 pm – Resilience, Trauma and ACE's

2:45 pm – 3:00 pm - Evaluation

Day 2

8:00 am – 8:30 am – Registration

8:30 am – 9:00 am – First day summary

9:00 am – 9:30 am – Bathroom and water break

9:30 am – 11:45 am – Strategies to Build Resilience

11:45 am – 12:45 pm – Lunch

12:45 pm – 2:45 pm – Social-emotional Competence

2:45 pm – 3:00 pm - Evaluation

<div align="center">Day 3</div>

8:00 am – 8:30 am – Registration

8:30 am – 9:00 am – Second day summary

9:00 am – 9:30 am – Bathroom and water break

9:30 am – 11:45 am – Teaching practices to promote resilience

11:45 am – 12:45 pm – Lunch

12:45 pm – 2:30 pm – Create an emergency plan

2:30 pm – 2:45 pm- Summary

2:45 pm – 3:00 pm - Evaluation

Appendix B: Interview Questions

1. Please give me a definition for the term *resilience* in your own words.
2. Please give an example related to a child who has demonstrated resilience.
3. Please give me a definition for the term *coping* in your own words.
4. Please give an example related to a child who has demonstrated coping skills.
5. Describe your experiences teaching children prior to September 2017.
6. Describe your experience teaching children after the two hurricanes hit the Island in September 2017.
7. What kind of behaviors did you observe from children in your classroom before and after the hurricanes?
8. Describe and changes in your curriculum, classroom organization, daily schedule of routines, and/or strategies you used in your classroom after the hurricanes.
9. What choices did you made to help your children develop resilience and learn to cope with their adverse childhood experiences?
10. Describe professional learning experiences such as professional development or training that you have had related to adverse childhood experiences.
11. What can the San Juan Head Start Programs do to help you and other educators to increase their knowledge about disaster preparation and adverse childhood events?

Appendix C: Participation Agreement

I _____, teacher in the San Juan Head Start Program agree voluntarily to participate in the basic qualitative interview study by Maria Walker Arroyo, "Teachers' Perspectives about Strategies to Address the Influence of Adverse Childhood Experiences." I understand that all the information given will be confidential and if at any time I wish to withdraw from the study, I will notify, the researcher immediately.

For statistical purpose please fill the following questions:

1. Gender: ___ M _____ F _____ Prefer not to say

2. Highest degree completed:

    _____ Bachelor's degree
    _____ Master's degree
    _____ Doctoral degree

3. Years of Experience _____

4. Have you received professional learning training, workshops, or professional development on ways to support children during adverse childhood experiences in the past three years? _____ yes _____ no

5. Contact information:

Appendix D: Enrollment Letter

Dear Teacher:

My name is Marie C. Walker Arroyo. I am enrolled at Walden University in the Richard W. Riley College of Education to pursue a Doctoral Degree (EdD) in Early Childhood Education and Leadership. As a requirement of degree completion, I will be conducting a basic qualitative interview study to help me arrive at a project that will benefit the Head Start teachers of San Juan, Puerto Rico. My dissertation has a working title, "Teachers' Perspectives about Strategies to Address the Influence of Adverse Childhood Experiences."

A semi structured interview protocol will be followed. A series of questions that will give you an opportunity to talk about what you observed before and after the hurricanes in September 2017, and any changes in your curriculum, classroom organization, daily schedule and routine, and strategies that you used with children in your classroom to address the adverse experiences children had during and following Hurricane Irma and Maria. With the results, I will develop a professional development plan to give teachers, school community, and administrators, professional development to prepare themselves and the children for any adverse situation including a natural disaster. With their permission, any teachers who share valuable information and/or original work will be credited in the professional development plan.

If you are interested in participating in this basic qualitative interview study, please contact me.

Thanks in advance for your support.

Marie C. Walker Arroyo

Walden University

Appendix E: Program Director Authorization Request Letter

Director
Programa Head Start
San Juan, Puerto Rico

Dear Director:

My name is Marie C. Walker Arroyo. I am enrolled at Walden University in the Richard W. Riley College of Education to pursue a Doctoral Degree (EdD) in Early Childhood Education and Leadership. As a requirement of degree completion, I will be conducting a basic qualitative interview study to help me arrive at a project that will benefit the Head Start teachers of the San Juan, Puerto Rico, Head Start Program. The working title of my dissertation is, "Teachers' Perspectives about Strategies to Address the Influence of Adverse Childhood Experiences." The semi structured interview protocol that I will follow has series of questions that will give teachers an opportunity to talk about what they observed before and after the hurricanes in September 2017, and any changes in their curriculum, classroom organization, daily schedule and routine, and strategies that they used with their children to address the adverse experiences faced during and following Hurricane Irma and Maria. With the results, I will develop a professional development plan for teachers, school community, and administrators, related to preparation of teachers to support children during any adverse event including a natural disaster. Teachers who share valuable information and/or original work will be credited in the document with their permission.

I am planning to interview 12 preschool teachers form the Head Start Program who were working in the program during the 2017-2018 school year. I kindly ask for your authorization to conduct my study in your Head Start program. My wish is to share and discuss the professional development plan created from the findings with your administration.

Thanks in advance for your help.
Marie C. Walker Arroyo
Walden University

Appendix F: Mental Health Specialist Validation Request

Mental Health Specialist

Dear Mental Health Specialist:

My name is Marie C. Walker Arroyo. I am enrolled at Walden University in the Richard W. Riley College of Education to pursue a Doctoral Degree (EdD) in Early Childhood Education and Leadership. As a requirement of degree completion, I will be conducting a basic qualitative interview study to help me arrive at a project that will benefit the Head Start teachers of a San Juan, Puerto Rico, Head Start Program. The working title of my dissertation is, "Teachers' Perspectives about Strategies to Address the Influence of Adverse Childhood Experiences." It is planned for the study to use a semi structured interview protocol with a series of questions that will give teachers an opportunity to talk about what they observed before and after the hurricanes in September 2017, and any changes in their curriculum, classroom organization, daily schedule and routine, and strategies that they used with their children to address the adverse experiences faced during and following Hurricane Irma and Maria.

You are a well-known Mental Health Specialist in San Juan and therefore, I am requesting your support in the evaluation of the questions that I will ask the teachers. I will be open to hear, discuss, and follow your recommendations.
Thanks in advance for your help.

Marie C. Walker Arroyo
Walden University