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Comparing Teacher Responses to the COVID-19 Pandemic in Venezuela and the United States

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COMPARING TEACHER RESPONSES TO THE COVID-19 PANDEMIC IN VENEZUELA
AND THE UNITED STATES

by

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ABSTRACT

The COVID-19 Pandemic has impacted the entire world. Teachers have been challenged throughout this time to adapt their teaching practices amidst a constantly changing environment. The purpose of this study was to answer the research questions: (1) how did teachers' responses to the COVID-19 pandemic vary between the United States and Venezuela? And (2) what do teachers perceive they need to better support children in the aftermath of the COVID-19 pandemic? This research used an interpretive, case study approach through kindergarten teacher interviews and curricula analysis. Teachers were included in the study if they had taught for more than five years and less than 15; served between 15 and 30 children in their classrooms during the pandemic; were lead teachers during the pandemic; and had a bachelor's degree in education. To respond to the pandemic, teachers experienced changes between the initial response and subsequent teaching approaches, they acquired new skills, used different forms of technology, were influenced by students' ages, had challenges with the home environment, found support from families, had to provide support to families, they required support, utilized school resources, and developed COVID-19 safety measures. Teachers in both countries had to provide increased support for children's wellbeing, but, in Venezuela, teachers had a stronger academic emphasis. To support children beyond the pandemic, teachers from both countries spoke about requiring materials, professional support, and comprehension from administrators towards their work. Teachers from both countries demonstrated low concerns about the future of young children.

ACKNOWLEDGEMENTS

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CHAPTER ONE: INTRODUCTION

Background

In early 2020, the novel COVID-19 virus reached most of the countries around the globe generating a sudden change in the lifestyle of many. Unlike other problematics that have occurred throughout the years, this disease infects people of all ages, nationalities, ethnicities, genders, socioeconomic status, or level of education. On January 23, 2020, the World Health Organization (WHO) confirmed the first case of COVID-19 in the United States (World Health Organization, 2020d). Months later, on March 14, 2020, the first cases of COVID-19 were reported in Venezuela (World Health Organization, 2020b). These two, very distinct countries are an example of how the virus has reached the entire world. On March 11, 2020, WHO declared the situation a pandemic based on the alarming rates at which the virus had been spreading across the globe (World Health Organization, 2020a).

Class dynamics played an important role in spreading the virus at the beginning stages of the pandemic. Early cases were common amongst people who had access to international travel (Chen & Krieger, 2020). Only those who had enough economic means to move between countries were affected. With time, other populations became infected and inequalities grew. People in the U.S. living in crowded areas, living in poverty, and people of color experienced COVID-19 deaths and infections more commonly (Chen & Krieger, 2020). States with higher income inequality in the U.S. experienced higher mortality rates due to COVID-19 (Oronce et al., 2020). In the United Kingdom, lack of hospital accessibility, increased percentage of minorities, and unemployment were related to higher COVID-19 mortality rates (Sun et al.,

2021). While infant mortality due to COVID-19 was low in parts of Brazil, deaths from the virus for children living in poor communities in the North of Brazil emerged (Martins-Filho et al., 2021). Some authors argue that the exacerbation of inequalities is due to preexistent diseases prevalent in certain populations that enhance the effects of the virus (Bambra et al., 2020; Patel et al., 2020). These diseases are present in underserved groups as a result of lack of access to social determinants of health, such as appropriate housing, work conditions, and access to healthcare.

When the numbers of people that became infected grew, governments started restricting the activities that citizens could engage on. On March 13, 2020, the Venezuelan government declared a permanent State of Emergency for the entire territory through a national decree. It announced the cease of all academic activities in the country starting on March 16 (Maduro Moros, 2020). In the United States, states closed schools as early as March 16, 2020. With the extension of regulations, teachers moved into emergency education to complete the academic school year. Teachers adapted their curriculum to meet the changing needs of children and families, while managing their own adjustment to the stay-at-home orders. Curfews and other restrictions on circulation were established to maintain the safety of citizens. Families were confined to their homes, while having to work and engage in school activities with children. This generated high levels of stress for families who already struggled to maintain simple routines before the pandemic (Walters, 2020).

Sudden transition into emergency instruction brought many challenges to teachers. Inequities in access to education were heighten during this time. Around the world, 50% of students did not have access to a computer to continue schooling (Walters, 2020). To continue

emergency, remote instruction access to internet was also required, yet 40% of children did not have it (Walters, 2020). For those that had access to internet, further challenges arose. Some teachers were able to use novel technology with multiple resources that allowed them to generate engaging content and reach many children. Other educators were limited by their ability to use such technologies, as well as the ability of families to respond to initiatives. Teachers received an increased workload as they were finding mechanisms to assess children while keeping them engaged (Kaden, 2020). Considering the diverse population that educators work with, emergency, remote instruction needed to be carefully planned to avoid further social divisions or inequalities (Kaden, 2020). With the sudden transition, teachers did not have adequate training that prepared them to address the varying needs of children. This generated variability in schools, with different levels of support coming from administrators. Schools that provided breakfast and lunch for the majority of their students had to target their efforts to provide food security before they could provide technology access to their students (Walters, 2020).

New challenges arose as the pandemic progressed. Children entered schools or maintained remote instruction after months without leaving their homes, being away from friends and family, having a different routine, and experiencing the loss of dear friends and family members. The stress caused by difficult economic situations and novel safety measures impacted how children responded to the new routine. While teachers worked to generate content for children to review at home, the educational gap between children whose families were able to take time to engage in academic activities, and families who were unable to do so, will be significant. The psychological and physiological impact of trauma (Danese & Baldwin, 2017; Masten & Narayan, 2012; van der Kolk, 2003), toxic stress (Mason & Cox, 2014; Odgers &

Jaffee, 2013), and Adverse Childhood Experiences (ACEs; Felitti et al., 1998) in children has been well established. Knowing the repercussions that these have leads to raising the question on how the pandemic has impacted children, and how teachers can prepare to help them in their classrooms.

<div align="center">Problem Statement</div>

The COVID-19 pandemic has impacted the education of children at critical ages. Two months of learning were lost for each month that children were out of schools or had little contact with teachers (Gustafsson, 2021). Therefore, it is crucial to understand the instructional practices that teachers have implemented within their contexts to determine future steps. The specific problem of interest is that the perspectives of kindergarten teachers regarding their responses to the COVID-19 Pandemic and their needs for the future are not well understood. The knowledge provided by their experiences is a starting point to inform further action steps to take.

The study of emergency education began in the 20th century as the world encountered multiple conflict situations (Kagawa, 2005). Emergency education has been used to ensure that children receive education during these contexts (Halstead & Affouneh, 2006). Rationale for emergency education is based on the right of all children to education, the physical protection of children by being in schools, the positive psychological impact due to normalcy and routine, and that education helps develop coping mechanisms for children (Kagawa, 2005). However, most of the literature on emergency education is about natural disasters or conflict situations (Halstead & Affouneh, 2006). Thus, there is a gap on effective practices used for emergency education amidst a pandemic. Similarly, research on the impact of trauma, toxic stress, and ACEs in child development (Danese & Baldwin, 2017; Felitti et al., 1998; Mason & Cox, 2014; Masten &

Narayan, 2012; Odgers & Jaffee, 2013; van der Kolk, 2003) show that experiences similar to that of the pandemic need to be addressed by teachers. Therefore, understanding how teachers continued instruction throughout the pandemic and their concerns for the future is key to target the needs of teachers and children.

Purpose of the Study

The purpose of this qualitative multiple case study was to explore how teachers in two different countries responded to the COVID-19 pandemic by adapting their instructional practices to meet the needs of children in kindergarten. This study also examined teachers' perspectives on professional and personal needs to address the complex repercussions of the pandemic in young children. This study aimed to provide administrators with a comparative evaluation of possible areas of growth in each country by obtaining an understanding of the modifications that have been made by teachers, and their needs to continue serving young children. The teachers' responses were obtained through semi-structured interviews with kindergarten teachers from Venezuela and the United States. The questions touched on the changes in instruction made during the pandemic, along with the teachers' overall experience as educators during this time. Interview transcriptions were coded, and themes were identified. Curricula was obtained from teachers to further demonstrate the changes made in instruction. Questions also touched on teachers' concerns about children, technology, and personal needs.

Research Questions

The following research questions guided this study:

1. How did kindergarten teachers' responses to the COVID-19 pandemic vary between the United States and Venezuela?

2. What do kindergarten teachers perceive they need to better support children in the aftermath of the COVID-19 pandemic?

<u>Need for the Study</u>

With a phenomenon that has impacted all children across the globe, there is a need for teachers to have resources that address the changes that they will experience in their classrooms due to COVID-19. Identifying the changes that have been made will help to establish a starting point for future measures to be taken. A comparative analysis between two countries allows for a broader perspective in understanding obstacles that have been overcome, and alternatives that could be implemented in each context.

Schooling disruptions during the pandemic varied depending on the region. Europe, North America, and Oceania experienced between 37% and 23% of school days lost; sub-Saharan Africa lost 49%; Eastern and South-eastern Asia lost 52%; and Latin America and the Caribbean lost 71% of school days (Gustafsson, 2021). Latin America and the Caribbean will be the last region to return to proficiency levels after the pandemic as a result of the high levels of disruption (Gustafsson, 2021). This region will require exceptional efforts to ensure that children receive an education that prepares them for the future. For this reason, Venezuela was chosen as one of the focus countries of this study. There is limited research on this country's educational system and impact on the pandemic. This study seeks to fill that gap in knowledge. The United States was chosen since it is located in a region that had smaller disruptions to schooling and there is vast research on the impact of the pandemic. Comparing both countries provides a perspective on the reasons behind disruption levels between regions and the efforts that will be required to counteract the learning losses during the pandemic.

This study used a qualitative methodology as it is the best method to explain the repercussions of the pandemic (Teti et al., 2020). Qualitative methodologies provide insights on social responses, such as the impact of the pandemic in individuals, while considering the contextual complexities (Webber-Ritchey et al., 2021). Situated methodologies were necessary as two distinct countries were analyzed. The design of this research was an interpretive, case study approach. Case-study research gives a deep holistic view of a particular event, but it limits generalizations (Dayal & Tiko, 2020). Interpretive research is helpful for events that are impacted by multiple factors and in which there are few theories (Watson, 2018). This mixed design was deemed appropriate as the goal of this study was to obtain insights on teachers' experiences during the pandemic at a time when information was scarce.

<u>Significance of Study</u>

The realities of children living in Venezuela and in the United States are considerably different. However, with the COVID-19 pandemic, both countries faced the challenge of moving instruction into an emergency, remote format. During stay-at-home orders, teachers generated learning experiences for children despite being limited by their own access to tools. Teachers in Venezuela and the United States had to create a curriculum that adhered to traditional standards, and that could be implemented by parents.

Kindergarten is a particularly important level in education. Access to quality early childhood programs has been associated with positive long-term outcomes such as educational attainment, later academic success, employment, and teenage pregnancy (Campbell et al., 2002). These early experiences with education are the building blocks for later success in school and life. Thus, the impact of the pandemic during this grade level needs to be understood. Further,

the teaching methods utilized for kindergarteners vary from the ones used for older students. Learning in kindergarten consists of hands-on experiences, as well as interactions with peers. Kindergarten teachers navigated such constraints while transitioning into a fully remote method. Thus, this study is relevant in providing knowledge on the changes that have been made to continue a quality education with developmentally appropriate practices.

As the future remains uncertain, teachers have to implement novel strategies depending on government guidelines. While still uncertain, the impact of the pandemic in children and teachers also plays a role in preparing educational experiences. Some children have spent months without in-person schooling, with increased gaps in knowledge based on the family's ability to provide curriculum instruction, and with new psychological needs that have yet to be determined. Further restrictions, such as social distancing or fully remote schooling, could impact children's ability to integrate into the classroom. With these undefined constraints, teachers are at the forefront of helping children adapt to their new reality. Having resources in regard to curriculum, technology, pedagogical, economical, and psychological aspects will be essential for them to support children. This study aimed to share information about successful approaches used by kindergarten teachers in both countries to inform teachers' decisions. Further, it aimed to share teachers' concerns and needs for administrators to address them through different forms of support.

Venezuela and the United States provide two distinct contexts as the governmental response to the pandemic is different, the problematics in education before the pandemic were varied, and the educational systems have several contrasting points. Further, while research on the U.S. is vast, there is a gap in knowledge of the Venezuelan educational system. Thus, this

study sought to fill the gap in research about Venezuelan practices. The comparison between the two countries serves to develop a deeper understanding on how the context dictates the experiences and decisions of teachers as they are distinct.

<u>Definition of Terms and Acronyms</u>

ACEs – Adverse Childhood Experiences. Felitti et al. (1998) categorizes the negative experiences that children go through in two main categories: abuse, and household dysfunction. Within abuse, there is psychological, physical, and sexual abuse. In the household dysfunction category, there is substance abuse, mental illness, mother treated violently, and criminal behavior in household. In the study, Felitti et al. (1998) discovered that individuals who have experienced more ACEs, have more health and lifestyle issues, as well as a lower life expectancy.

COVID-19 – According to the World Health Organization, "COVID-19 is the infectious disease caused by the most recently discovered coronavirus" (World Health Organization, 2020e). The first cases were found Wuhan, China in December 2019, and it achieved the category of pandemic due to the widespread presence in the world. While the symptoms vary, the most common are fever, cough, and tiredness. While most people recover without having to go to a hospital, extreme cases lead to death.

CRBV – *Constitución de la República Bolivariana de Venezuela*, or Constitution of the Bolivarian Republic of Venezuela.

INEE - Inter-agency Network for Education in Emergencies

ISTE - International Society for Technology in Education

Kindergarten – the year before first grade, usually for children at the age of five. In Venezuela, kindergarten is part of the preschool level of education.

MPPE – *Ministerio del Poder Popular para la Educación,* or Ministry for the Popular Power of Education.

NAEYC - National Association for the Education of Young Children.

Preschool – in Venezuela, preschool is the level of education between the ages of three and six, which encompasses the kindergarten grade (Ministerio del Poder Popular para la Educación, 2007). Preschool, in the United States, is education before free public education is available for children. For each state, this varies depending on the starting age.

Private Schools – schools that are not funded by the government and are not free to attend for children.

Public Schools – schools that are funded by the government and are free to attend for children.

UN – United Nations

UNESCO - United Nations Educational, Scientific and Cultural Organization

UNICEF - United Nations Children's Fund

WHO – World Health Organization.

CHAPTER TWO: LITERATURE REVIEW

The following chapter contains the literature review related to the COVID-19 pandemic in Venezuela and the United States with an emphasis on early childhood education. The first section stipulates the theoretical framework in which the study is based. The second section explains the role of comparative education in improving education around the globe. The third section establishes the early childhood education national contexts in Venezuela and the United States. The fourth section gives an overview of the existent guidelines for using technology in education. The fifth section reviews the literature on emergency education. Finally, the sixth section is an overview of the COVID-19 national contexts in Venezuela and the United States.

Theoretical Framework

This study builds on the Ecological Systems Theory proposed by Bronfenbrenner. According to the theory, the dynamic environment in which people are immerse impacts their development (Bronfenbrenner, 1979). There are four levels that classify the varied individuals and entities that interact together within the environment. The Microsystem involves the direct contacts that happen with the person and the perception of it by the person. For children, parents and teachers are part of this level. The Mesosystem encompasses the relationships that happen between the microsystems. In schools, the relationships between parents and teachers, and community and schools are part of this. The Exosystem comprises the influences between environments that can indirectly impact individuals. For children, a parent's workplace, the local government, school services, and mass media, constitute the Exosystem. The Macrosystem involves the cultural aspects, attitudes, ideologies, and laws in which people are submersed.

As the COVID-19 pandemic has impacted the living conditions at multiple levels around the world, the Ecological Systems Theory underlies the need to understand how these changes have made modifications in teachers' approach to instruction and children's development. Furthermore, it is essential to provide a framework that delivers an understanding of the different elements that impact the decisions made by teachers at the instructional level to meet the changing needs of children as the environments change by individuals.

<div align="center">Comparative Education</div>

Comparative education is a discipline within the social sciences that studies, evaluates, compares and seeks to understand the similarities and differences among educational systems globally. The purpose of comparative education is to improve educational practices by increasing the knowledge of approaches to diverse issues, and to avoid making foreseeable mistakes (Clarkson, 2009). It seeks to answer questions about the relationship between education and economic development, and the contextual factors that impact educational achievement (Hayhoe et al., 2017). More recently, research has focused on moving away from Westernized frameworks to integrate a wider perspective. Thus, comparative education promotes conversations from peoples and civilizations to generate awareness of global problematics, such as equality, sustainability, and peace (Hayhoe et al., 2017). Teachers can reflect on issues that appear on their classrooms within a wider global environment and learn from innovations in other contexts (Hayhoe et al., 2017). This knowledge also serves in the reform process for educational systems to address the underlying factors that impact equity.

Comparative education requires collection of data that serves to find the implications of following different educational paths, acknowledging the context in which they were constructed

(Clarkson, 2009). Thus, in order to reflect on the decisions made by educators at all levels of the educational system, the historic, social, political, and economic context have to be understood. While doing comparisons between national contexts, Clarkson (2009) cautions against claiming systems to be better than others, and instead focus on the differences that exist. Comparative education seeks to inform without imposing practices that could fail to conform to the contextual constraints of the educational systems in different nations.

Within comparative education, different tools function as guidelines to analyze the dynamic components of educational systems. Clarkson (2009) proposes the Didactic Triangle to analyze the data from different systems. The three components of the triangle are contents, transmitters, and receivers. Contents refers to the curriculum, issues, culture, knowledge, and attitudes of a particular system. The transmitters are those who share the knowledge, such as teachers and the environment. The receivers are those who obtain the knowledge, such as children and parents. This framework serves to analyze information based on the relationships between the components across different systems.

Early Childhood Education National Contexts

United States

In the United States, each state has autonomy to determine the compulsory school age to start; which ranges from the age of five to the age of eight (Kamerman & Gatenio-Gabel, 2007). While elementary school is mandatory in all states, kindergarten is up to each state's discretion (Kamerman & Gatenio-Gabel, 2007). Due to this, education from birth to five is mostly considered private, with the exception of the Head Start Program (Göncü & Howes, 2018).

Head Start was a result of the War on Poverty Act, creating a comprehensive model that provides services for young children and their families, in which the educational, health, and social domains are covered (Winter & Kelley, 2008). It is a federally funded preschool program that primarily serves children between the ages of three and four who are below the poverty line (Kamerman & Gatenio-Gabel, 2007). As families need to meet certain criteria to have access to Head Start, many other families have to recur to private programs to receive early childhood education. Other forms of public and private programs have been developed in each state to serve young children besides Head Start.

In 2018, a total of 39.7% of three-year-old children were enrolled in some type of program, 67.7% of four-year-old children, 89.8% of five-year-old children, and 97.2% of six-year-old children (U.S. Census Bureau, 2019). Of those, 5.7% of three-year-old children and a third of four-year-old children were enrolled in publicly funded preschool programs (The National Institute for Early Education Research, 2019). These numbers demonstrate the need for more government-funded programs that serve young children.

<div align="center">Venezuela</div>

In Venezuela, early childhood education, or *educación inicial*, is comprised of education since the moment of birth up to six years of age. This period is further broken down into *maternal,* for children between birth and three years old, and preschool, or *preescolar*, from three to six years of age, or before children enter first grade (Ministerio del Poder Popular para la Educación, 2007). According to the Venezuelan Constitution, gratuity in education is guaranteed from the *maternal* level to completion of undergraduate studies, while it is compulsory from *maternal* to completion of high school, or *ciclo medio diversificado* (CRBV, Art. 103). Thus,

early childhood education in Venezuela is free and mandatory for all children according to its Constitution. The last annual summary provided by the *Ministerio del Poder Popular para la Educación* (MPPE) stated that a total of 1,597,521 children were enrolled in public or private early childhood education centers in the 2014 – 2015 school year (Ministerio del Poder Popular para la Educación, 2016). Numbers after 2016 have not been published.

The MPPE published the National Curriculum delimiting the theoretical framework and methodological views to follow by early childhood centers across the country (Ministerio del Poder Popular para la Educación, 2007). According to the document, early childhood education focuses on the development of abilities, habits, dexterity, attitudes, and values that are particular to the cultural context each student lives. The values that are stressed in the National Curriculum are liberty, solidarity, cooperation, and solidarity. They acknowledge that children exist within their schools, families, and communities. The foundation of the methodology is based on intelligence, affectivity, and playfulness.

While the Constitution and the National Curriculum aim for schooling for all, an array of issues are present. Currently, there is a displacement crisis in Latin America and the Caribbean as approximately 5 million Venezuelans have left their country due to the national situation (International Organization of Migration, 2020). This impacted education as many migrants are teachers who have left behind empty classrooms. The national crisis also impacted enrollment, as about one million of children are out of school (Patino, 2019). Children fail to attend schools as fainting due to lack of nutrition is common and hunger ubiquitous (Kurmanaev & Herrera, 2019). The government has not shared further information and numbers on the crisis.

Technology in Early Childhood Education

Teachers faced the challenge of providing instruction through technology with sudden stay-at-home orders during the COVID-19 Pandemic. The International Society for Technology in Education (ISTE; 2008) specifies the focus of technology in teaching in its five standards. The standards are comprised of the following: (a) technology is used by teachers to facilitate the learning process in the online and in-person environments; (b) technology is used in instructional design to promote context embedded opportunities and develop different skills; (c) teachers demonstrate abilities that represent the global connectivity through virtual presence; (d) the responsibility of engaging in the online culture is demonstrated by teachers' behaviors; and (e) teachers engage in professional development opportunities regarding the use of technology and maintaining a digital presence. These standards offer a framework for teachers to engage in online practices in their schools. However, while these standards have been established for all teachers, there is still a gap in the access to technologies within the context of education. Though technology generates the potential to provide support for at-risk children, not all children are able to participate as resources are not available for all, and teachers need to have the abilities to generate quality resources through technology (International Society for Technology in Education, 2020).

To determine the type of knowledge required by teachers to effectively integrate technology, Koehler et al. (2014) propose the Technological Pedagogical Content Knowledge (TPACK). Content is the knowledge about the subject-matter that teachers have. Pedagogical knowledge is the understanding of practices that promote learning that teachers have. Technology is the knowledge about new and old technologies, and how they can be embedded in

instruction. This framework allows teacher preparation programs, and professional development programs, to generate curriculum targeting the elements needed for effective integration of technology.

The field of education has provided general guidelines to the inclusion of technology in schools. The National Association for the Education of Young Children (NAEYC) released a position statement that provides further guidance for the field of early childhood. The 16 principles that guide the use of technology in early childhood center around the understanding that technology tools and practices should be developmentally appropriate, teachers should have the knowledge to make instructional decisions regarding technology, tools should enhance the learning process, practices should be embedded into all aspects of education, technology should provide accommodations to children as needed, and digital citizenship and literacy should be focused (National Association for the Education of Young Children (NAEYC) and the Fred Rogers Center for Early Learning and Children's Media at Saint Vincent College, 2012). Rosen and Jaruszewicz (2009) coined the term Developmentally Appropriate Technology Use (DATU) to define "the use of digital tools and strategies in ways that capitalize on children's natural desire to actively, collaboratively construct knowledge, respecting the unique challenges presented by children's levels of development across all developmental domains" (p. 164). This term aligns with the principles in NAEYC's position statement. Both require teachers to have knowledge on child development as it transfers into instructional design. They also add to the ISTE standards by including the need to incorporate practices that focus on the individual needs of children as they are developing. Thus, careful and intentional use of technologies is needed in the early childhood setting.

In the United States, the Department of Education and the Department of Health and Human Services (2016) provides guidance on integrating technology in the early childhood context. They caution against replacing unstructured play with technology. They build on the principle that interactions with others when learning using technology is more effective for young children. Another opinion is that technology can strengthen relationships with all the members involved if used appropriately. They distinguish between active and passive use of technology, acknowledging that active use is more efficient as children are engaging through meaningful experiences. They state that for children between the ages of 0 and 2, there should be no exposure to technology as they require hands-on, unstructured experiences.

The previous documents delineate the requirements for effective integration of technology in the early childhood education setting. Further elements need to be considered as the COVID-19 pandemic has generated unique challenges. After observing over 50 live instructional sessions through a video-conference system during the COVID-19 pandemic, Szente (2020) divides implications to support early childhood teacher preparation programs in three categories. Formal access is the access to hardware and internet connection to all the participants in the videocall. Actual access refers to the possibility for teachers to decide on the specifics of the meetings to maintain early childhood education standards. Functional access is having the skills to utilize the tools available. This taxonomy serves as a framework to understand the contexts in which online instruction has taken place during the COVID19 pandemic.

Education in Emergencies

While the pandemic is a health emergency new to our current times, there have been other emergencies that have required shifts in education around the world. Whether it is violence, political unrest, natural disasters, or other events, cities, nations, and continents have been affected by varied circumstances that required adaptations in their educational systems. Children are more than twice as likely to be out of school in countries that require emergency education than their peers in other countries (United Nations Educational, Scientific and Cultural Organization, 2019). For this reason, organizations such as the United Nations (UN), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the Inter-agency Network for Education in Emergencies (INEE), and the United Nations Children's Fund (UNICEF) provide different forms of support to countries in the matter of emergency education.

The INEE divides emergency education in two categories: natural disasters and complex situations (Inter-Agency Network for Education in Emergencies, 2004). Natural disasters can be earthquakes, tsunamis, hurricanes, floods, etc. Complex disasters are those that are man-made, such as civil unrest, armed conflicts, wars, or other conflicts. UNICEF adds to the complex disasters' definition the examples of sustained poverty, child homelessness, and the HIV/AIDS crisis (Pigozzi, 1999). Complex disasters not only encompass violent situations, but also other phenomena that has destabilized the educational system in a given region. At the World Education Forum in 2000 assisting countries adopted the Framework for Action. They pledged to meet the educational needs of children in emergency situations (Kamel, 2006). In recent years, there has been an understanding that children are not required to forgo with their right to be educated, even in extraordinary circumstances. Emergency education is valued in these instances

as it helps to preserve human life by protecting against exploitation, expanding relevant messages, and by creating structure accompanied by a sense of future amidst crises (Inter-Agency Network for Education in Emergencies, 2004).

In an effort to provide guidance to communities affected by emergencies, the INEE developed a set of standards that are tied to the Dakar Education for All framework, the Convention on the Rights of the Child (CRC), the Sphere Project's Humanitarian Charter, and the UN Millennium 6 Minimum Standards for Education in Emergencies Development Goals (MDG). Together, these initiatives state the right to education, the right to humanitarian aid in times of emergencies, guidelines for sanitation and supply during disasters, law provisions, and the code of conduct for the Red Cross. Thus, the INEE foundational standards constitute a comprehensive understanding of the moving elements that interact with education during emergencies. The standards are divided into five domains: foundational, access and learning environment, teaching and learning, teachers and other educational personnel, and education policy (Inter-Agency Network for Education in Emergencies, 2010). The foundational standards provide guidelines for community participation, coordination, and analysis of the emergency education program. The access and learning environment standards discuss equal access, protection and well-being within the environment, and safety within facilities. The teaching and learning domain correspond to the curricula, training and preparation of staff, instruction and learning processes, and the assessment of learning. The fourth domain, teachers and other educational personnel, provide guidelines for recruitment of personnel, the staff's work conditions, and support and supervision. The last domain, education policy, delineates law and policy formulation for emergency education, and planning and implementation of such policies.

Overall, the standards provide guidance and requirements that promote the safety and well-being of all those involved in situations of emergency.

In early childhood, emergency education is essential as it is the building foundation of school readiness. Early childhood care and education provides children with basic human rights, such as protection, education, and participation from the moment they are born (UNICEF, 2014). These programs, besides the psychosocial and cognitive support they give children, allow for parents to be educated and to fulfill the basic needs of children through humanitarian aid (Kamel, 2006). However, during emergencies early childhood programs lack resources, are in poor conditions, or are inexistent (Kamel, 2006). This is worrying as children's needs are exacerbated during this time. Children may be experiencing the loss of family members, having to adjust to a new reality, be under high levels of stress, or living under difficult financial situations. Not having a consistent emotional support or a routine, which could be provided through education, can be more detrimental to their development.

COVID-19 Pandemic National Contexts

United States

In the United States, the first COVID-19 case was reported on January 23, 2020 (World Health Organization, 2020d). Measures were not taken for a few months as the spread took time. While some states had already declared a state of emergency, on March 13, 2020, the United States government declared a state of National Emergency (Kantis et al., 2020). A couple of days prior, on March 11, the United States suspended entry to foreign nationals traveling from certain countries (Kantis et al., 2020). Other travel bans occurred around the world that stopped travelling between countries. The economy was impacted due to the reduction in tourism, and

stay-at-home orders. On March 20, the U.S. stocks closed with their worse week since 2008 (Kantis et al., 2020). Regulations around the country left many Americans without jobs. Unemployment went from 3.5% in February to 13.3% in April (U.S. Bureau of Labor Statistics, 2020). Economic measures were taken to support Americans. On April 11, the Internal Revenue Service deposited the first round of stimulus checks, which came from a $2 trillion stimulus plan approved by the Senate (Kantis et al., 2020). This provided an instant cash flow for many Americans.

Like the economy, the health care system was impacted. New York City, on March 26, 2020, became the epicenter of COVID-19 in the U.S., and on April 10, more cases were reported in the city than in any other country (Kantis et al., 2020). Demand for hospital beds was very high due to the increased number of cases. While New York City was an extreme case in the United States, the overall system experience strenuous circumstances. The American Hospital Association predicted a loss of $202.6 billion for the health system and hospitals as testing increased, bed capacity had to be augmented, and isolation units were created (American Hospital Association, 2020). As an example of the measures taken to support the health system, the government recurred to the Defense Productions Act to stop exportation of medical supplies needed to combat the COVID-19 outbreak (Kantis et al., 2020). Measures by hospitals to provide care to COVID-19 patients included cancelling all elective or non-emergency surgeries until April 20 (Kantis et al., 2020). Overall, measures were taken at the federal, state, and local level with the intention of stopping the spread based on the diverse circumstances of each context.

Venezuela

In Venezuela, the first COVID-19 cases were reported on March 14, 2020 (World Health Organization, 2020b). By June 30, the last day of the school year in the country, a total of 5,297 cases had been confirmed (World Health Organization, 2020c). Under an authoritarian regime, the Venezuelan government used military and police forces to impose curfews, restrict transit across the country, increase gasoline prices and control its access, and continuously censored the information shared through different communication channels (Latouche, 2020). While the numbers were kept at a moderate rate, this could be attributed, not only to the measures taken by the government to avoid spreading, but to the low amount of testing available, leading to a false understanding of actual cases (Latouche, 2020).

The low numbers in Venezuela between March and June are important, as the health system is not in appropriate conditions to deal with the pandemic. The Venezuelan health system has been deteriorating for years. There is a lack of proper public and private infrastructure, and lack of personnel due to low salaries and migration of qualified staff (Laotuche, 2020). Also, scarcity of medical supplies, power shortages, unsanitary conditions, and infections are persistent issues that attack the Venezuelan health system (Carson, 2019). With the shortage of medical supplies, soap and disinfectant are not available, and water shortages impede health care providers from adhering to the recommendation of washing their hands (Taraciuk Broner, 2020). Furthermore, epistemology reports have not been released since 2014, demonstrating a lack of clarity of the continuing health crisis, and the inexistence of a system to track epidemiologic concerns (Taraciuk Broner, 2020). Adding the pressure of the pandemic could be catastrophic in an already stressed infrastructure.

While the health system was not adequately prepared for the pandemic, other aspects presented issues for stay-at-home orders. According to the Venezuelan Observatory of Public Services, 50% of the Venezuelan population experience electricity shortages every day of the week; 59.5% lack access to internet at home, and of those that have internet, 53% experience daily issues with connectivity; 39.2% do not have access to smartphones; 58.7% perceive that the internet in their phones is of low quality; 43.3% have failures in phone service every day; and only 23% of the population has constant access to potable water, and 65% rate the quality of the service as bad (Observatorio Venezolano de Servicios Públicos, 2019). People are unable to continue working from home and continue a consistent schedule of online instruction without access to electricity and internet connection. Synchronous online meetings cannot be programed around an uncertain state of connectivity. Furthermore, not having regular access to clean water difficult the adherence to sanitary measures to stop the COVID-19 spread.

Further issues have been present in Venezuela during this time. While the migrant crisis has created settlements in Colombia, Ecuador, and Peru over the past years, the COVID-19 measures in these countries lead to a change in the flow of migration. Venezuelans have started to return to their country having lost their jobs and facing a poor health system (Fernández-Niño et al., 2020). An already destabilized region is encountering movement between borders that could spread the virus. Despite borders between Colombia and Venezuela closing, illegal crossing is present (Fernández-Niño et al., 2020). This makes it more difficult to track the spread and to be able to provide appropriate care to Venezuelans. Overall, the Venezuelan context contains a variety of problematics that have been exacerbated or brought to light due to the pandemic.

CHAPTER THREE: METHODOLOGY

This chapter provides the methodology for this study. The first section contains specifications on the study design. The second section explains the sampling procedures that were used, specifying inclusion and exclusion criteria. The third section includes the information relating to instrumentation. The fourth section states the data collection process. Finally, the fifth section explains the data analysis procedures that were used. Prior to initiating this study, the researcher obtained an exempt determination letter from the Institutional Review Board (IRB) of the University of Central Florida on December 1, 2020 (see Appendix A).

Research Design

This study used an interpretive, case study approach to explore teachers' response to the COVID-19 pandemic and their concerns for the immediate future. Interpretive research is helpful for situations in which multiple factors impact a social process, where previous theories are scarce, when the event is context dependent, and when there is an intention to identify further research questions (Watson, 2018). As this study was multifaceted because the pandemic impacts teachers in varied aspects, there is a lack of understanding of how a pandemic can be addressed and how it impacts the educational process, the research questions are dependent on the context in which each teacher lived the pandemic, and requires the identification of further lines of research to successfully provide teachers with appropriate support, using an interpretative design was deemed appropriate.

<u>Sample</u>

Purposive sampling was used for the study. The inclusion criteria for teachers in the United States was limited to kindergarten teachers in the public school system at the time the COVID-19 pandemic started, who had to continue instruction in some format during stay-at-home orders. The inclusion criteria for teachers in Venezuela was teachers who were teaching the equivalent of kindergarten (the year before first grade) in a private school at the time the COVID-19 pandemic started, who had to continue instruction in some format during stay-at-home orders. Private schools were selected because the resources available in these are similar to those in public schools in the United States. Also, the Venezuelan government developed content for public schools that was shared through free TV. Thus, teachers did not continue instruction during the pandemic in Venezuelan public schools.

Teachers from both countries were included if they: had been teaching for more than five years and less than 15; served between 15 and 30 children in their classrooms during the pandemic; were lead teachers during the pandemic; and have a bachelor's degree in education. Three teachers from the United States and three from Venezuela were identified. In Venezuela, three schools were contacted due to the researcher's personal connections with these schools. Administrators were sent the recruiting email (see Appendix D) and they were asked to select one teacher that met the inclusion criteria. The researcher then contacted the teacher and invited them to join the study using the recruiting email and explanation of research (see Appendix E). Once teachers had reviewed the information, they were scheduled to meet with the researcher. Before finalizing the interview, teachers were asked to provide examples of the curriculum used during stay-at-home orders.

In the United States, teachers were contacted directly to determine interest in participation. Teachers were identified based on the researcher's personal connections or by mass emails sent to teachers in different U.S. counties. One teacher was selected based on personal connections and two teachers responded to mass emails. Teachers received an initial email with a description of the study and asking their willingness to participate (see Appendix D and E). Following their response, teachers were scheduled a time to be interviewed. Teachers were also asked to share via email examples of the curriculum used during stay-at-home orders.

<center>Independent Variable</center>

In this study, the independent variables were the countries of origin of the teachers. Venezuela was chosen to be studied as it is located in the region with the highest level of schooling disruption in the world during the pandemic (Gustafsson, 2021). The United States was chosen since disruptions were significantly lower in the region compared to the world (Gustafsson, 2021). Comparing two distinct regions gives insights on the complex contextual constraints and how teachers faced these challenges. Also, there is a gap on knowledge regarding the Venezuelan educational system and the impact of the pandemic in the country. This study seeks to fill that gap. Kindergarten was selected because it is a compulsory grade level in both countries and falls under early childhood education. Early childhood education is the building foundation for school readiness and later success in schools. Learning disruptions in early childhood due to the pandemic will carry over losses through future grade levels (Gustafsson, 2021). Thus, it is necessary to have a comprehensive understanding of the issues that teachers have faced at this level.

Dependent Variables

The dependent variables for this study were teachers' responses and perceptions. For RQ1, teachers' responses to the COVID-19 Pandemic were the dependent variable. For RQ2, teachers' perception on what they to better support children in the aftermath of the pandemic is the dependent variable. These experiences and perceptions were determined by the country of origin for each teacher. Interviews were conducted to obtain information from teachers about both variables. The interview was divided in two parts. The first part focused on teachers' experiences during the pandemic. The questions targeted the technology they utilized, the challenges they faced, and the support from administrators. The second part of the interview was about the future and the teachers' needs to support children. The questions focused on the problematics they expect children to demonstrate, the supports they need, and the strategies they will implement.

Instruments

A list of interview questions developed for the purpose of this study was used to conduct a semi-structured interview (see Appendix B). The instrument was translated to Spanish by the lead researcher and the research assistant. The lead researcher then compared the two translations and made adjustments as necessary to ensure consistency of ideas between translations. During the interview, the researcher asked follow up questions as necessary. A demographics questionnaire was also develop by the researchers to obtain information about the teachers (see Appendix C).

Data Collection

Data sources were interviews and curricula. Interviews were conducted via Zoom by the lead researcher. Teachers in Venezuela were interviewed in their native language, Spanish, and teachers in the United States were interviewed in English. Participants were asked to provide an hour of availability for the interview to take place at their best convenience. Participants were asked to be in an environment free of interruptions as much as possible, and in a place with strong access to internet. The interviews were recorded and later transcribed by the lead researcher and research assistant.

Data Analysis

Transcriptions of the interviews were added to NVivo 12 for coding purposes by the lead researcher. Initially, in vivo codes were used as they express ideas more concretely than other codes could (Corbin, 2003). In vivo codes contain the exact words that interviewees use, which permits ideas to remain unchanged. Subsequently, axial coding was used to identify linkage between data (Allen, 2017). Spanish transcriptions were coded in Spanish, and the codes were then translated to English. Curricula was used to illustrate teachers' use of technology during the remote instruction. After data were analyzed by the lead researcher, the research assistant conducted a review to identify any missing themes and review translation discrepancies.

Assumptions

This study was design based on several assumptions. Teachers had a sincere interest in participating in this study and there were no pressures to be involved. It was assumed that the teachers would answer the interview questions in an honest manner without direct influence from

other individuals. It was also assumed that they could clearly remember and articulate their experiences at the beginning of the pandemic.

<div align="center">Limitations</div>

The COVID-19 Pandemic had not ended at the time of the study. The answers to these questions need to be situated within the specific moment in time during the pandemic. Kindergarten in Venezuela is provided by preschools and elementary schools. Thus, variances in experiences depending on the settings is possible. Furthermore, as the researcher coded and interpreted the data, there was a possibility for subjectivity in the findings. Similarly, participants might not have felt comfortable sharing certain experiences related to the pandemic. Results demonstrate the points that teachers were willing to discuss. Finally, interview questions could have limited participants' responses and could fail to address further relevant points.

<div align="center">Delimitations</div>

This study was delimited to kindergarten teachers' perspectives and experiences in Venezuela and the United States. The participants in this study had the required credentials to be teachers in their home country. All taught kindergarten at the time the pandemic started and had to continue remote instruction to some capacity. Teachers in Venezuela worked with children in private schools while teachers in the U.S. worked in public schools. All the teachers had at least five years of experience teaching. The pandemic was a challenge, but they already had expertise teaching. Further, none of the teachers had taught for more than 15 years. Similarly, only teachers with class sizes between 15 and 30 were selected. Group sizes determines many of the pedagogical strategies utilized by teachers so groups were kept consistent.

CHAPTER 4: RESULTS

The purpose of this study was to answer the research questions: (1) how did kindergarten teachers' responses to the COVID-19 pandemic vary between the United States and Venezuela? And (2) what do kindergarten teachers perceive they need to better support children in the aftermath of the COVID-19 pandemic? This chapter illustrates the results obtained from interviews with three teachers from the United States and three teachers from Venezuela. The first section includes teachers' answers to the demographic's questionnaire. The following two sections have results divided by each research question.

Demographics

Three teachers were interviewed that taught kindergarten in the United States, and three taught in Venezuela. Demographic data from the participants are shown in Table 1. The six teachers were female, lead teachers during the Pandemic. Five teachers' ages ranged between 30 and 40, while one teacher's age ranged between 50 and 60. Two teachers identified as White, and four teachers identified as Hispanic or Latino. All had completed a bachelor's degree, or the equivalent, and one teacher from the United States had completed two master's degrees. One teacher had between one and five years of experience teaching, two teachers had between six and ten years of experience, and three teachers had between eleven and fifteen years of experience. Three teachers had between one and five years of experience teaching kindergarten, one teacher had between six- and ten-years teaching kindergarten, and two teachers had between eleven- and fifteen-years teaching kindergarten. Three Venezuelan teachers had experience teaching other levels of preschool, and one also had experience with first grade. One teacher in the United

States only taught kindergarten, one taught first and third grade, and one teacher taught third

grade. Class sizes varied within each country. Two teachers in the United States had between 21

and 25 students, while the other had between 16 and 20. In Venezuela, one teacher had between

11 and 15 students, another teacher had between 16 and 20 students, and the last teacher had

between 26 and 30 students. The six teachers had experience teaching language learners,

children from diverse cultures, and children with special needs.

Table 1

Participants Demographic Table

Teacher	Country	Race	Education	Class Size	Experience	KE
0.1	U.S.	W	Bachelor's	21-25	6-10	1-5
0.1	U.S.	W	Master's	21-25	11-15	11-15
0.1	U.S.	HL	Bachelor's	16-20	6-10	6-10
1.1	Vzla.	HL	Bachelor's	26-30	11-15	11-15
1.2	Vzla.	HL	Bachelor's	11-15	1-5	1-5
1.3	Vzla.	HL	Bachelor's	16-20	11-15	11-15

Note. KE = Experience teaching kindergarten. Vzla. = Venezuela. W = White. HL = Hispanic or

Latino

The following two sections contain the results obtained from the interviews to the six

teachers. The first section has the results found for the first research question about the responses

to the pandemic. This section is divided into ten categories: initial response, skills acquired,

technology, students' ages, home environment, support from families, support to families,

support to teachers, school resources, and COVID-19 safety measures. The following part

contains the results for the second research question about teachers supporting children in the

aftermath of the pandemic. This section is divided into four subtitles: materials, professional

support, comprehension towards teachers, and concerns about children.

<u>Research Question 1: How Did Teachers' Responses to the COVID-19 Pandemic Vary Between</u>

<u>the United States and Venezuela?</u>

RQ1 had three sub-questions to focus teachers' responses: what methodologies were used to respond to the pandemic? What resources and materials were provided for the transition? And what was your perception on the process? A total of ten themes were identified from teacher's interviews. Teachers discussed their initial response to the pandemic, the skills they acquired, the technology applications used, the creation of videos, their challenges with technology, and the adaptations based on children's ages. Related to families, teachers identified support from families, support to families, and the environmental challenges children faced. Teachers expressed the support they obtained, the changes schools made, and the safety measures implemented for return to in-person instruction.

Initial Response

<u>Guidelines</u>

All the teachers stated the chaotic nature of the initial educational response to the pandemic. Teachers from both countries said that guidelines were loose and changed as new information became available. All the teachers in the United States made videos or contacted families through audio. Two U.S. teachers were required to make at least weekly contact with children or families. However, the three interviewed teachers had a need to make more frequent contact with children resulting in meeting three times a week or daily with them. One teacher was not required to mandate daily contact with children as families lacked enough devices to be able to connect. Teachers in Venezuela did not mention being required to meet with children or families during this time either. Instead, the three utilized Whatsapp, which is an instant

messaging application, to communicate with families. Families were part of a group chat in which teachers communicated directly with the caregivers. This group chat had been established prior to the pandemic. Teachers in the United States were making contact with families and students through video conferences, while teachers in Venezuela spoke directly with caregivers.

Platforms

For the first months, the platforms utilized by teachers in each country were different. One U.S. teacher explained that her county provided grade-wide instructional packets. These consisted of weekly printed, self-paced materials for children to complete at home without submitting them for review to the teacher. The two other U.S. teachers used Google Classroom to post quick, simple assignments for children. One teacher in Venezuela mentioned sending textbooks home the last day of in-person instruction. She used these textbooks in her weekly planning to provide families with activities. Another Venezuelan teacher visited the school over a weekend to plan and generate content to send home. Finally, the last Venezuelan teacher mentioned only creating videos and sending them to families through Whatsapp. While the means used varied, all the teachers expressed that the activities were completely self-paced. It is possible that the initial uncertainty and belief that stay-at-home orders would last for a short period time led to schools relying on the return to schools.

Academic Rigor

Teachers mentioned that the level of academic rigor was substantially reduced. One Venezuelan teacher sent activities to maintain some continuity with school, but they were simple as parents needed to know how to explain them to their children. She expressed that parents are not adequately prepared with the tools necessary to provide academic support to their children.

She also had to adapt the explanations that she provided in video format to be succinct as to not distract children. A U.S. teacher expressed that activities had to be simple because the work done in kindergarten is not easily adapted to the online format. Another U.S. teacher expressed that parents struggle seeing their children have a hard time when completing certain tasks. The other U.S. teacher expressed that a guideline was to not post difficult assignments for parents not to feel overwhelmed. She said, "they didn't want you to post anything too hard because the kids were obviously not really learning, so kid of just review stuff." She was not allowed to introduce content as their notion was that children would not learn in the format that was being used. In contrast, one Venezuelan teacher said she was able to touch on all the objectives required for kindergarten. However, she mentioned later that with in-person classes, she is now able to fill in the gaps left from online classes. The emergency nature of this transition is demonstrated by some schools' guidelines to provide minimal academic continuity. This appeared to be connected to a belief that the pandemic had a psychological impact in families. At first, the guidelines were in contingency to wait for the return to schools. Schools developed a stronger emergency plan once the return date to schools was pushed indefinitely.

Skills Acquired

Technological Skills

The process of entering remote instruction was rapid. As one teacher said, "teachers had to learn in 30 seconds how to be an online teacher." While they were learning, the context was constantly changing. One teacher expressed that "every three weeks it is something different." Teachers developed technology and instructional skills to address the changes. Three teachers learned how to record and edit videos for their students. One Venezuelan teacher utilized

information provided by more technologically knowledgeable teachers. A U.S. teacher became comfortable talking to herself without a response. She had to record videos of herself reading books while she asked questions without an audience. Like in the classroom, she posed questions and gave wait time for children to answer when they watched the recordings. Two teachers, one from each country, acquired skills related to the platforms to provide academic content. The Venezuelan teacher was trained on how to use Canvas. She was interested in using the platform to create engaging content that went beyond creating simple presentations. The U.S. teacher became Nearpod certified to provide training to other teachers. Also, she became skillful in using Google Classroom. If she had to return to remote instruction, she feels she would do a better job at delivering academic content. Finally, one U.S. teacher became very comfortable with using Zoom. At first, she struggled with the different features, but she improved and often helps others when they use the platform. She said it was hard to determine what was showing when you were presenting information, but she understands it now. For technologies, teachers from both countries had to learn how to acquire skills that allowed them to present information to their students. Teachers had to quickly adapt to the technology requirements of remote instruction. While two received formal trainings, most of these skills were acquired through trying and modifying different strategies and platforms.

Instructional Practices

Teachers also had to develop skills related to their instructional practices. Two Venezuelan teachers mentioned their personalities. One found it difficult to demonstrate her personality through the new platforms. She is an extrovert that enjoys physical contact. At first, she found it difficult to portray her warmth through a virtual mean. The other teacher expressed

that her empathic personality permitted a better connection with parents during this time. While she already had this trait, she had to further learn ways to demonstrate it through remote classes. Teachers had to learn how to adapt their communication to ensure that their personalities were exhibited.

Flexibility

Besides personality elements, teachers learned to make new types of decisions. One U.S. teacher learned to discern what was necessary to provide quality education, and what failed to add instructional value. Initially, she assigned too many assignments, so she became overwhelmed with grading. She also found ample information online on strategies and platforms for online instruction. Part of the learning curve was to determine what was useful. Another U.S. teacher said that these decisions were made easier as she had many years of experience teaching. She was aware of what needed to be taught, she had to determine a new way of doing it. She became very clear with expectations and explanations for children as they lacked the materials necessary for her regular hands-on experiences. She also expressed that parent-teacher conferences were distinct from what she was accustomed. Finally, one Venezuelan teacher had to be flexible with her schedule. Instead of having a delineated work time, she completed schoolwork late at night. These teachers experienced new challenges to teaching young children. They had to quickly make adaptations to ensure that children received the best quality of education possible.

Adaptability

Teachers' perceptions were important throughout the process. One Venezuelan teacher expressed that this time served to acquire new knowledge that serves her in the professional and

personal level. She expressed that this experience expanded her horizons to see that there are many more skills to acquire. Her openness to try new strategies allowed her to continue adapting to the newly develop technologies and contextual constraints. Lack of adaptability would have resulted in teachers not working as the online instruction lasted longer than originally planned.

<div align="center">Technology</div>

Learning Management Systems

Teachers in the interviews discussed multiple technology applications that were used. Initially, all the teachers in Venezuela utilized Whatsapp to contact the families of their students and to provide academic content. Group chats between the parents and the teachers had been established prior to the pandemic, hence they utilized this existent method of communication. Two teachers mentioned sending emails to families to maintain additional contact. Later, they transitioned into other applications. One teacher used Google Classroom and Zoom. Another teacher used Canvas to provide content and Zoom for video conferences with children. The last teacher used Seesaw for academic content and Google Meet to interact with children. Two teachers expressed that the initial use of Whatsapp was chaotic for them. One mentioned that her phone collapsed from the amount of assignment submissions she was getting as photos. She was receiving information from the school through Whatsapp as well, thus it was difficult to keep track of all the texts. The other teacher expressed that the sense of collapse was also shared by the parents. Some parents were in multiple school chats as they had many children, and they were being bombarded with information. As the pandemic was prolonged, Venezuelan teachers transitioned to platforms that permitted them to organize content and receive assignment submissions in a simpler manner.

In the United States, one teacher used Class Dojo to interact with families and to provide content. Her district provided printed packets of handouts to families to complete. She also used Zoom to interact with children. The other two teachers utilized programs from Google. They used Google Classroom for academic content, and Google Meet to interact with children and families. One teacher explained that, when in person, had used Google Classroom. The same teacher mentioned using Google Phone to contact families who did not want to share their phone numbers with her as it creates an alternate caller number. In addition to Google platforms, she used NearPod to provide content to children. She stated being so interested in the platform that she later became a certified instructor for them. In regard to restrictions on applications, only one was shared by a teacher. She explained that, by security reasons, her county prohibited the use of Zoom. They were allowed to utilize Google Meet to interact with children as it provided stronger security measures. As teachers in Venezuela, once the stay-at-home orders were prolonged, teachers developed stronger platforms to maintain the emergency education.

Engaging Technology

Throughout the interviews, teachers expressed the need to make content that was of interest for kindergarteners. To do so, they employed further technology applications. Two teachers mentioned using Bitmojis, which is a personal cartoon avatar. One teacher from Venezuela said that this allowed her to connect with the playfulness of children. Another teacher from the United States thought this were interesting at first, but then she realized it was unnecessary. Further, three teachers used Google Slides to create assignments and presentations for children. One teacher from Venezuela enjoyed this format because she could present information in a visually engaging manner. One teacher from the United States felt this was

pointless work but used them if they were shared with her by other teachers. Another U.S. teacher expressed that she used a website to download premade presentations to share with her students. These teachers were familiar with strategies to make information more appealing to children as kindergarten teachers. During the pandemic, they had to utilize new tools to ensure that content was engaging and maintained their personal elements.

Videos

During the interviews, five teachers indicated creating or providing videos for continued instruction. While one teacher did not indicate using videos during the initial phase, she mentioned using them currently. Teachers utilized them for three reasons: explaining activities that were to be completed independently, explaining academic content, or reading stories. One teacher who used videos to explain activities mentioned that her explanations had to be succinct to avoid losing children's interest. While in-person she was able to provide extra language and content, online she needed videos to portray information in a simple way.

Mostly teachers from Venezuelan expressed using videos to provide academic content. The only teacher in the United States that said she did, expressed that she found them ineffective and she thought children were not reviewing them. After posting the videos for a few weeks she decided to stop it without notifying the families. None of the families contacted her about it after the sudden stop. In Venezuela, the videos contained academic information tied to the projects that were being worked on. One Venezuelan teacher requested recordings from a pilot father to include in her video about Venezuelan' landscapes. She expressed that sharing videos that were not created by her lacked the personal touch of a teacher. She wanted them to enjoy the project despite not being physically in the classroom.

Two teachers in the United States recorded themselves reading stories to children. One of them expressed that she thought this was the most effective part of the online instruction, and the one that parents commented on the most. She explained that reading books allowed her to maintain a personal connection with their children. Part of their classroom family time was to sit together and share beautiful stories that they could enjoy. She incorporated some academic elements to it, like making questions and pausing to give children time to respond, or providing a writing prompt based on the story. However, she expressed that, for her, the academic content was not the focus, as she wanted children to know that there was someone that cared for them and that the school was still there.

Teachers used videos in both countries based on their perception of children's needs for connections. For them, creating these videos in which they might see their teacher created an interaction that let them know that the teachers still cared for them despite the distance. While academic content was mentioned, the emphasis was on this personal connection. None of the teachers mentioned creating videos prior to the pandemic. Instead, they discussed the struggles they overcame to learn how to create and edit them.

Technology Issues

The interviewed teachers discussed difficulties with technology both with software and hardware. Teachers in Venezuela that utilized their cellphones to create academic content and to interact with parents mentioned their devices collapsing. One Venezuelan teacher had to visit the school as her computer stopped working. Two teachers in Venezuela had connectivity issues due to lack of quality of internet access. While the other teacher did not mention this, during the interview she stated having unstable internet connection. Connectivity issues were mentioned

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both at home and in the school. One teacher had yet to meet with students because some parents are unable to obtain access to internet. Another teacher expressed that internet was an issue to communicate through Zoom without losing connection. In the United States, only one teacher alluded to connectivity issues. She expressed that sometimes the connection would be slow for some students, so she requests that they are muted in videocalls to avoid interference with interventions. In Venezuela, access to quality internet connection is very scarce. Teachers had to work around these issues when conducting video conferences.

Equipment was also an issue. One teacher in the United States said that some parents lacked access to a computer, so they were unable to connect. The students in her school that classified as low income were able to retrieve computers from the school. However, many children that did not enter in this category were still in need of devices. She also explained that some children had to share devices which resulted in schedule conflicts. Students had to miss the videocalls with the teachers on a regular basis. Another teacher expressed having children join videocalls while parents were working in delivery services from the back of the car. The parent did not have another caregiver that could watch the child while she was working. While parents were trying to support the learning process, they were limited by their available resources.

Kindergarten Limitations

One teacher expressed that, at the kindergarten level, it was hard for children to utilize some of the platforms as they were used to different technologies. She said that children are accustomed to using tablets instead of computers with a mouse. Similarly, as they are learning how to read and write, they cannot use the chat tool to collaborate. Another U.S. teacher asked children to write on a piece of paper and then show it to the camera. Unfortunately, the camera

failed to register the information as the writing was not dark enough. The teacher said, "it's the first time in my career that I tell children to write in marker and not in pencil." This teacher shared that her school gave students several materials (e.g., whiteboards, markers, magnetic letters, PlayDoh) at the beginning of the new school year as they needed them to provide more hands-on experiences, which is a more appropriate approach to teaching at this level.

The three U.S. teachers discussed independence tied to technology. Two teachers shared with parents that children needed to become independent by being able to mute and unmute themselves and work on their activities without parental intervention. One teacher said that, while children were learning at first, parents should be there for support, but that eventually that support had to stop. They both expressed that children need to learn how to be independent at the kindergarten level. The last U.S. teacher is currently taking strides in case there is a regression and she has to return to online instruction. As they are in the classroom, she provides children with time to practice logging into the computers and lessons that are online. She wants them to be prepared so they are able to transition easily into remote instruction.

Technological Support

As far as learning to utilize the different platforms, teachers obtained support in different ways. Two Venezuelan teachers said their teenage daughters helped them navigate the different applications and provided new strategies to try. One Venezuelan teacher mentioned that her school provided her with a training for the Canvas platform through Zoom. Two Venezuelan teachers expressed obtaining support from fellow teachers through group chats. The three teachers from the United States mentioned being skillful in technology aspects, while one Venezuelan teacher expressed being the contrary. One U.S. teacher expressed finding resources

from forums online on how to utilize certain tools. Another teacher mentioned being resourceful with Nearpod, the platform she utilized for assignments, and that she later became certified to be able to train others to use it. Navigating the new technological requirements demanded support. Teachers in both countries had to proactively research how to use the new platforms and how to adapt their content to fit.

Students' Ages

One common theme between interviews was the relevance of children's age for the experience of teaching kindergartners during the pandemic. Four teachers believe that it was difficult, due to their age, for children to learn online. One teacher said that for some students it was beneficial, but for others it presented many challenges. Another teacher mentioned that her students were not habituated to utilizing computers in the school, in the way that older children use them. Three teachers expressed needed support from parents to children to learn how to use the video conferencing features. Another theme discussed by two U.S. teachers was children's understanding of normal schooling. For many of their students in the 2020-2021 school year, remote instruction was their first experience with being in school. They are unaware of what being in classrooms entails. Venezuelan teachers were teaching in preschools that provided services for younger children, which is a reason why they might not make this distinction.

Other elements regarding age were mentioned by four teachers. One U.S. teacher knows that her students require help with simple tasks, such as tying their shoes. This support requires proximity, which is difficult as social distancing rules are in place. Another teacher had to meet frequently with her students at the beginning of the pandemic because young children require that continuous interaction with teachers. One Venezuelan teacher expressed that it was difficult

to explain concepts concretely through remote instruction. Young children are unable to understand abstract ideas, therefore teaching online was a challenge to portray ideas without being physically present. The last teacher noticed that children struggled with the discrepancy between a strong implementation of safety measures at the school, and the lack of these at home. Friends cannot hug when they are at school, but they see each other in social outings and are not required to maintain social distancing. These challenges were several that impacted the learning process. However, two teachers expressed positive views on the future. One teacher said that children at this age are resilient, so they can overcome these obstacles. Another teacher believes that the biggest challenge for her students has been being at home. Once they return to in-person, she will be able to fill in the learning gaps. Nonetheless, age was a determining factor on the choices made by teachers regarding frequency of meeting, adapting content, and structuring their day.

Home Environment

The environment in which children live affected the learning process as children spent all their days at home. Two U.S. and one Venezuelan teacher made comments about this issue. One U.S. teacher experienced family members inappropriately dressed in the screens. Children were in noisy environments, eating while in class, and they lacked materials to complete schoolwork. The other two teachers also noted that children lacked resources. The Venezuelan teacher had to adapt her activities to ensure that parents did not leave their houses to buy supplies. She expressed that parents were working during this time, so they were unable to provide continuous support during online instruction. One U.S. teacher found that children had to share computers with siblings, which conflicted with their scheduled class times. She also expressed that children

lacked structure as their screen time at home was unlimited. These environmental factors made it difficult for teachers to evaluate children's progress on the skills they had to acquire. One of the teachers thinks that these factors will be limited and will allow children's learning process to be optimal when they return to the school. The teachers that did not express environmental concerns had mostly returned to in-person instruction. It is possible that the constraints from home are less present as they interact less with their students online. The one teacher that is fully online made the decision to continue with that modality, and her families had the option to return to in-person or stay online. Thus, it is likely that families have the capacity to make adaptations to ensure that children have adequate spaces and resources as they chose to continue online learning.

Support from Families

Views on the support from families were varied between and within the two countries. One Venezuelan teacher expressed that parents were very critical of every activity and decision made. She said that some parents were understanding of teachers, but there was a group that blamed the teachers and the school for the situation. She also expressed that she greets parents in their group chat and they ignore her comments. She is concerned that parents are upset about school aspects, yet they fail to voice those concerns. One U.S. teacher talked about one particular parent that was recorded on a child assessment blaming the teacher for her child not learning the skills necessary to complete the evaluation. While teachers expressed that the situation was stressful for parents, only the aforementioned teachers shared frustration on parents' perspectives towards the teachers' responsibilities. One U.S. teacher expressed that she had not received any complaints from parents, which she categorized as a good sign. A Venezuelan teacher

appreciated the feedback obtained from parents at the beginning of the transition to online

transition, and a U.S. teacher reached for this feedback to adjust online assignments.

Parents' Commitment to Learning

The support from parents towards assignments and meetings was a common theme across

interviews. One Venezuelan teacher stated that not all the children were able to obtain quality

education as their parents were not supportive of the school's initiatives. She was unable to

evaluate some of the objectives as children were not present in the videocalls or did not turn in

assignments. Another U.S. teacher was unaware of whether some parents were working or were

not preoccupied about the schoolwork provided as they missed videocalls or did not submit self-

paced activities. One U.S. teacher expressed frustration with one particular parent whose child

had to be removed from the school system as the child never completed activities and was

considered absent from all school activities. One Venezuelan teacher experienced this as she had

not met with five of her students for the first time.

Other experiences shared by teachers demonstrated the contrary. One U.S. teacher

mentioned that parents were committed to the process by having flexibility to meet throughout

the day. One child joined a videocall in the backseat of a car while his mother was delivering

food. One Venezuelan teacher mentioned getting calls from parents as their children refused to

complete their schoolwork. She advised them on how to support them and ensure they set

boundaries. A U.S. teacher mentioned that parents were constantly behind the camera during

video conferences. Children needed extra help for activities that were self-paced. She obtained

further support from parents for a book-writing project. Usually, she would invite parents into

the classroom for children to read the books they wrote in school to them. This time, the parents

worked with their children on their books and then presented in the video conference with the class. The teachers' perspectives were determined by the particular parents with whom they worked and their contexts. One Venezuelan teacher expressed that parents need to know that their involvement in the education of their children must not end with the pandemic. She expressed that parents have been forced to connect with their children, which has brought positive benefits to families. This connection should continue in the future. This takeaway from parent involvement demonstrates the decisive role that parents have played in the education of children during this time.

Developing Independence

While many teachers shared that parents provided support for children, sometimes it was more than necessary. Two U.S. teachers work with children to develop independence even during remote instruction. They state that children are able to be more independent than what their parents allow them to be. One U.S. teacher mentioned that parents told their children the exact answers to the questions she asked instead of allowing children to find the answer. Parents also completed homework assignments for their children. This difficulted teachers' evaluations of children's abilities. Another U.S. teacher touched on how assessment scores varied between the home and the school. Her students completed standardized assessments on the computer in both environments. Scores at home were higher as parents were there to aid children. Some teachers expressed that parents were not equipped with the appropriate tools to assist children with their schoolwork. Parents could have acted with the child's best interest in mind. They could have also acted based on the limited time they had to assist children with activities. Parents were working from home and had to attend to other tasks.

<u>Returning to Schools</u>

Parent support is also necessary as children return to in-person instruction. One Venezuelan teacher expressed a discrepancy between the safety measures taken at school and at home. She said that parents take children to the beach and to the park without masks and with their friends, but at school they cannot interact with the same children. In contrast, another Venezuelan teacher expressed that parents worked to teach children about safety measures. She stated that children came into school complying with social-distancing and mask-wearing measures. She said that they would have been unable to return to in-person instruction without the support from parents on this aspect. These opposed experiences demonstrate that teachers' experiences were highly dependent on the particular parents with whom they worked.

Support to Families

Teachers needed support from families during the pandemic. However, families also required support to adapt to their new responsibilities with remote instruction. Teachers expressed how difficult it was for parents to work while they had to assist children with schoolwork. Some teachers provided support as a requirement from administrators. One U.S. teacher had to make wellness checks with families. She was required to make contact with families at least once a week. She made contacts more than once a week as she thought it was beneficial for children and families. Another U.S. teacher made weekly contacts with students, but there was no mention of families. One U.S. teacher mentioned that one guideline was to make activities simple so parents could aid children. A Venezuelan teacher did this to ensure that parents' patience would be sustained. Requirements to connect with families were scarce, but teachers' initiatives demonstrated an understanding of the struggles that families were

undergoing. Contacts were kept to once a week as not all parents had access to technology or were unable to meet more consistently.

Materials

In terms of supplies, schools and teachers also helped families. One U.S. teacher explained how her district gave packets of printed information to her students as they did not have access to computers. While they were expected to be mailed to students' homes, the process took longer than expected and they were delayed. Thus, this teacher personally collected the packets and drove them to her students' homes to ensure that they received them on time. Another U.S. teacher stated that her school provided computers to students that were considered low income. One U.S. teacher that served primarily low-income students touched on food distribution. As her school had a high population of students under free and reduced lunch, the school quickly mobilized the community to ensure food distribution. They were concerned that families would lack the means to provide adequate nutrition, therefore community members delivered groceries to the school for children to take home right before the school closed. Afterwards, the district made a plan to generate weekly food distribution points for families. While this was a great initiative, many families lacked the means to consistently attend their allotted times for food pick up. This same teacher expressed that they also had to make weekly distribution of materials as children did not have resources to do schoolwork at home. One Venezuelan teacher expressed this issue with her families as well, but she did not provide information on supporting parents on this aspect. While the needs of families were varied, each school and district developed a plan based on the resources available and the prioritization of needs. The difference between initiatives by schools were determined by the income level of

families. Affluent families in Venezuela were expected to obtain these materials, while government funding was utilized for families at-risk in the United States.

Individualized Support

Besides guidelines provided by administration and supplies for families, teachers supported parents in other ways. One Venezuelan teacher contacted parents whose children required extra attention to provide strategies to utilize at home. Similarly, a U.S. teacher volunteered to tutor children in need of extra practice. A Venezuelan teacher called parents to let them know they were doing a good job and encourage them to continue. This same teacher called parents that were working to assist them with strategies to use with their children that could be applied within their contextual constraints. This teacher expressed that it would be helpful to provide parents with workshops on how to maintain online education. Overall, teachers took time out of their days to ensure that parents felt supported, even when they were undergoing some of the same struggles.

Support to Teachers

Teachers expressed the different approaches they took to support families during the pandemic. However, they had to sustain their families throughout the difficult times. Four of them mentioned having children of their own. The lines between home and work were blurred as teachers were working from home. Two had children who provided help to generate academic content. Besides family assistance, they required emotional support from school administrators, help from other school personnel, multiple trainings, and technology aid.

<u>Emotional Support</u>

Emotional support from school administrators was mentioned, mostly, from teachers in Venezuela. One group of parents made multiple complaints to teachers about the decisions made by the school. The teacher expressed the support from administrators to provide options for parents and teachers while confronting the situation. She found the school to be empathetic towards teachers needs and to not turn their backs when they required it. Another Venezuelan teacher said that the support from school "was always there." The last Venezuelan teacher feels the school is keeping them safe with the safety measures that are being taken in their return to in-person instruction. While these teachers felt supported, one teacher mentioned that teachers in the Venezuelan public school system were struggling. She felt that these teachers required more help from schools. This statement demonstrates the discrepancy of experiences based on the schools in which teachers worked.

From the United States, one teacher expressed that her district understood that the pandemic was difficult to all of them and that they had families to care for. She also commented on a particular incident with a mother in which the school's administrators demonstrated backing up teachers through difficulties. Finally, one U.S. teacher noted that administrators did not interfere with the instructional decisions they made at the beginning. She felt this was helpful as some teachers were limited by their technological abilities. Overall, teachers were emotionally supported by administrators in different ways in both countries.

<u>Collaboration</u>

Besides emotional help, school personnel and additional teachers were mentioned in providing other forms of aid. Two U.S. teachers utilized information and content found online

that was created by teachers from other schools. One U.S. teacher utilized online forums to obtain information about technology. Another U.S. teacher bought content from a website that provides academic resources created by teachers. Other teachers recurred to teachers within their schools. One U.S. teacher collaborated with another teacher in her grade level to create academic videos. Two Venezuelan teachers obtained information from teachers' group chats. They shared new tips they learned or platforms they utilized. Further, teachers also recurred to professional staff to address learning gaps. Two Venezuelan teachers had conversations with early childhood professionals on how to make curricula adaptations to meet the constraints of online instruction, and to find strategies for groups of children with specific needs. Teachers shared the strategies they learned to facilitate the learning process as they faced similar challenges

Trainings

Besides support from each other and from professional staff, more structured help was provided for some teachers through trainings. Two Venezuelan teachers received trainings. One received a training on how to use Canvas, the platform the entire school transitioned into during the pandemic. Another teacher received training on how to internalize and handle the pandemic. None of the U.S. teachers mentioned specific trainings during the pandemic. However, one teacher completed a trauma-friendly-classroom training prior to the pandemic which she found particularly helpful for the situation. This was not a mandatory training for teachers in her school. Another teacher has access to a data base with multiple trainings she can take. The last U.S. teacher said that the school did not provide any trainings or guidelines, but she also express that teachers receive excessive trainings. While Venezuelan teachers received more targeted training, U.S. teachers expressed receiving access to trainings that went beyond the pandemic.

<u>Equipment</u>

The last form of support provided to teachers during the pandemic was about technology. Four teachers, two from Venezuela and two from the U.S., obtained technology equipment from the schools. One Venezuelan school provided an economic plan with teachers so they could afford new computers. Two U.S. teacher requested to take home one of the computers they use in their classrooms. One of them said that many other teachers had to invest in technology to continue during online instruction. Finally, to combat the poor quality of internet, one Venezuelan school created a plan to provide access to reliable internet in teachers' homes. The teacher expressed that this had positive repercussions on her personal life as she could connect with family members as well. The pandemic demonstrated that teachers in both countries do not have access to advanced, personal technology. Schools had to develop arrangements to ensure teachers had enough materials to teach.

School Resources

Throughout the pandemic, some schools made changes to continue with instruction. One Venezuelan teacher expressed that her school had access to quality internet as her school was always ahead of other schools in obtaining necessary materials. One Venezuelan school had to invest in improved internet access for teachers to use. They also invested in interactive whiteboards for the classrooms. In the U.S., only one teacher made comments about school changes. The school obtained a literacy grant that allowed her to obtain materials for children to take home. In terms of schedule, her school transitioned into a hybrid modality. They included one full day for teachers to prepare materials as they will have a group of children in the classroom while another group is at home. She will need to prepare activities that are self-paced

for children at home, and activities for the students that are in-person twice a week. Overall, schools made few changes as teachers were mostly working from home.

<div align="center">COVID-19 Safety Measures</div>

Most of the changes made by schools were to adhere to safety measures for COVID-19. Two teachers, one from each country, expressed satisfaction with the safety measures taken by their schools. However, issues and concerns were raised by teachers on the U.S. before returning to the school. One teacher was worried that she had to return to in-person instruction as the budget that allowed her to teach from home past winter break was approved late into the school year. She was scared as she is immunologically compromised and had yet to receive a vaccine. She only felt comfortable returning if she had gotten one. Another teacher was concerned because she had recently given birth and did not want to be sick. She did return to in-person instruction and mentioned being the healthiest she had been in her life. Further, one U.S. district only approved return to in-person instruction once vaccines were made available to teachers. Teachers had one day off to receive the vaccine if they chose. This county also had to provide a plan delineating safety measures before re-opening schools for children. As information about the vaccine became available, U.S. teachers were expectant of it.

In Venezuela, the plans to return to schools were limited by governmental factors. As a safety measure, the country had an alternating free and radical week system. In free weeks, the country is open for business and mobilization is possible. During radical weeks, people have to remain at home and businesses are extremely limited. Thus, any plans to return had to take into account that children would not fully be in schools. The Ministry of Education did a visit to one of the schools that was providing in-person instruction during free weeks to review the school's

safety measures. While the decision was not made, it was possible for the Ministry of Education to mandate individual schools to return to online education if the inspection was not satisfactory. None of the Venezuelan teachers discussed the vaccine as a safety measure. This is likely due to lack of knowledge of vaccine availability in the country.

Safety Protocols

To avoid spreading COVID-19 schools developed cleaning, social distancing, mask-wearing, and organizational protocols. Four teachers mentioned cleaning as part of the protocols. One U.S. teacher said her school was doing a thorough job at cleaning the whole schools for the group that had returned. However, she had not returned to the school since the pandemic. One U.S. teacher that returned to her classroom cleans surfaces constantly, she has access to hospital-level cleaning supplies, and children have access to hand sanitizer everywhere. One Venezuelan teacher that is teaching at the school emphasizes hand washing and has easy access to hand sanitizer. Another Venezuelan teacher said her students brought their hand sanitizer to school.

Social distancing and mask protocols were more established. The six teachers mentioned mask or face shield wearing. One U.S. teacher said that her school would return with a four-feet-distancing rule. Students were divided into two groups that would alternate their assistance to the school. Another U.S. teacher said that partitions were available for teachers if they decided to use them. The two previous teachers said that lunch would be different to maintain safety measures. One Venezuelan teacher said they keep social distance in her school and doors remain open. Another school in Venezuela has posters with reminders to maintain distance.

<u>Safety Constraints</u>

However, there are some issues with maintaining social distancing. One U.S. teacher said there are classrooms in which distancing is impossible due to their sizes. Another U.S. teacher can take her mask off if distance is more than six feet, but this is never the case. The last U.S. teacher said the school planned to keep four-feet distance as it was impossible to reach the six-feet mark. Besides spatial constraints, teachers also have personal reasons to reduce social distancing. One Venezuelan teacher got scolded because she hugs her students. She stated that this is part of her personality. Another Venezuelan teacher takes her students to the playground when they need a break from masks. One U.S. teacher expressed that she would approach their students if they needed help. She said that kindergartners sometimes need an adult for simple tasks, such as tying their shoes. If, instead, another child were to help a child who cannot tie her shoes, it would require prolonged contact than an adult doing it. Thus, there are circumstances that make teachers evaluate the compliance with distancing rules.

<u>Materials</u>

The last safety measure taken was about the use of materials. One Venezuelan and one U.S teacher removed all materials from the classroom to avoid sharing. One U.S. teacher, instead, requested more materials for each student to have a set. They also have enough materials to keep a set at home and one at the school. She expressed that recess was inside and had to be modified so students avoided sharing. Kindergartners often times share toys, games, writing utensils, and other academic materials in school. Teachers had to rethink how to approach a playful, hands-on educational model to address the pandemic. Nonetheless, it was well

established that schools and teachers in both countries were complying with the different safety measures to be in the schools during the pandemic.

The teachers' understanding of what is required to help children succeed after the pandemic is based on the contact they had with children by the time of the interviews. The teachers had varied teaching modalities. Two Venezuelan teachers had returned for free weeks to the classroom and maintained online instruction for radical weeks. The other Venezuelan teacher was teaching remotely, but she met with her students once. In the U.S., the three teachers were at different points. One had started the new school year fully in-person with all of her students. Another teacher was about to transition from fully online to a hybrid mode in which students attended school two consecutive days and did self-paced work for the rest of the days. Students were divided into two groups so they could alternate their attendance to the school. The last teacher had the option to return to in-person, but she chose to remain online. The other kindergarten teachers in her school were teaching students in their classrooms. There was not a clear pattern between the return to in-person instruction between the two countries. However, Venezuelan teachers had to maintain some hybrid instruction as the regulations in the country did not allow them to fully return to schools.

RQ2 had two sub-questions to focus teacher responses: what challenges do you expect to encounter? And what do you need to be an effective teacher? Four clear patterns emerged when discussing these questions. The first was materials required in schools and at home. The second was professional support for teachers in the classroom and outside. The third was comprehension

from families and administrators. The last were the concerns about children's performance that developed as a result of the pandemic.

<div align="center">Materials</div>

One common theme among teachers was the need to obtain materials for students. Five teachers touched on this. Venezuelan and U.S. teachers mentioned technology requirements. Venezuelan teachers expressed the need for tablets and interactive boards. U.S. teachers need one computer for each student. One teacher mentioned needing computers that are up to date with technology. Another U.S. teacher, in whose classroom each child has a laptop, expressed being worried about children having to take computers from home to the school as they entered a hybrid modality. For her, allowing children to keep computers at home and having others at school would be ideal. Finally, one U.S. teacher expressed needing a better camera and the budget to obtain those as teachers had to buy their equipment during the pandemic. On the other hand, some teachers in Venezuela expressed having technology already that they could utilize. One teacher said she has a computer in her classroom which allows her to upload content to Canvas. Two teachers said they have interactive boards that should be utilized. The difference in perception of technology needs is determined by the country. Schools in Venezuela do not have access to varied forms of technology; thus, teachers are mostly satisfied with few resources. On the other hand, teachers in the United States want children to have personal access to computers. They also expressed needing support to obtain equipment for themselves.

Beyond technology the three teachers from the United States communicated needing materials for children. One touched on safety measures. She wants partitions available and masks, along with space to social distance. The other two teachers expressed needing materials

for children to avoid sharing. One stated that it would be helpful to send materials home, such as magnetic letters, so families have resources in case a transition to online classes is necessary. None of the Venezuelan teachers expressed needing materials. As these teachers work in schools in which parents provide them, it is possible that the school made requirements for parents to provide extra materials. Another explanation is that teachers from the U.S. have access to more instructional materials, such as individual whiteboards or books, that teachers in Venezuela do not use when teaching.

Professional Support

Support from Personnel

Help from other school personnel was noted by two U.S. teachers. One mentioned that specialized coaches should be in constant communication with teachers and observe those children that had additional needs. While this was done before the pandemic, she expressed extra support necessary in the aftermath. The other teacher conveyed needing an assistant, which could be shared by grade level, that was present in the classroom when she was conducting small reading groups or interventions. Another adult in the classroom that is available to answer questions from students working in small groups would allow her to maximize the time she spends with small groups. This teacher also mentioned needing temporary teachers to ensure that class sizes were reduced to be able to social distance. More teachers lead to smaller groups. Two Venezuelan teachers are already in constant communication with early childhood professionals to adapt content and find strategies for at-risk children. These professionals are similar to an instructional coach. They are part of the school personnel and consult with teachers as needed.

Overall, teachers from both countries noted that children have varying needs that will require collaboration with different professionals to provide services and modifications in the classroom.

Trainings

Beyond support from other professionals, teachers mentioned different trainings that can be provided. One U.S. teacher completed a training on trauma that she believes would benefit other teachers. She stated that the pandemic has been a traumatic experience and teachers need to be aware of the signs that children show that could point to further psychological needs. One Venezuelan teacher expects children to return with high levels of frustration to the school as children will have to develop many socio-emotional skills that were neglected when they were at home. Another Venezuelan teacher expressed wanting to learn how to handle critics without taking it personally, as this was a struggle during the pandemic. Finally, two Venezuelan teachers expressed a desire to continue learning about technology to better implement it in their classrooms with their return. In all, trainings requested were about children's needs, teachers' emotional needs, and technology implementation. One teacher expressed that it was helpful for her to attend trainings online as she could complete them while driving. However, not all the teachers shared positive views on trainings. One U.S. teacher stated that she is tired of all the trainings that her school does and that she has taught in the classroom for years. She does not need to learn how to teach when she has done it already. Another U.S. teacher said that her school has a database of trainings available, but she did not mention any particular trainings that she believed she needed. Perception on abilities could lead to teachers' rejection of trainings.

Comprehension Towards Teachers

One theme that two U.S. teachers expressed for the aftermath of the pandemic is understanding from administration and parents. One teacher communicated that she does not teach to her contract, and works for more hours than she is required. She is passionate about her job, but she also has a family to care for. Sometimes she needs to make arrangements so her children are in a safe place in which they can do remote instruction. Other times, she needs to attend a meeting while she is driving. She also mentioned that she is in a learning process that requires patience from administrators and parents. She has to adapt her teaching as new guidelines are delineated. The other teacher expressed a lack of support from her administrators. She feels that they only comment on the things that need to be improved or they side with parents when they make complaints about her instructional decisions. She was contacted once by her assistant principal, but never by the principal. She wants to feel appreciated and that she is doing a good job. As she is still teaching from home, she states that it is isolating. Knowing that the administration cares and understands her position is helpful to continue. Teachers in Venezuela expressed that they felt supported by their schools during the pandemic, which is an explanation for not discussing this point. Further, the preschools in which the Venezuelan teachers worked were smaller than the schools in the United States. This could provide a stronger sense of support and understanding for teachers.

Concerns about Children

Teachers from both countries discussed concerns regarding students return to in-person instruction. One teacher believes that learning the structure of being in school is difficult. Another teacher said that learning how to be in the classroom is hard. There are expectations and

routines that are different from what students experienced at home. This would usually be taught at the beginning of the school year, but it occurred later in the year. Finally, one teacher believes children will have to learn how to be independent, autonomous, and make choices. At home, parents made choices for children and they provided support beyond what they experience in the classroom. Thus, the transition will push children to learn these skills. The teachers that expect children to struggle with being in the classroom are from the United States. Children in the United States mostly enter schooling in kindergarten, which is a contrast with the schools interviewed in Venezuela. It is possible that the Venezuelan teachers expect children's previous experiences with schooling to inform the adaptation process. Also, most teachers in Venezuela had already returned to in-person instruction. They explained that children were compliant with safety measures, even beyond what they expected.

Socialization and Classroom Rules

Teachers made points about socializing when asked about social-emotional aspects that will be challenging. One Venezuelan teacher said that children will socialize easily as young children can relate to anyone. Another U.S. teacher expressed that children at this age love everyone and are cheerful. In contrast, another Venezuelan teacher said children will have difficulties sharing, taking compliments, and receiving negative comments. At home, they are used to having their own materials and hearing praise from parents. Thus, interactions that differ from the ones they had at home will be challenging. One U.S. teacher is worried that some children have only interacted with other children through video conferences and will not have the controls that they have in person. Whenever children are too loud, they could lower the volume, which is not possible in the classroom. Finally, one U.S. teacher mentioned that the socialization

rules in the classroom will be hard. Children will learn not to interrupt others, how to raise their hands, and knowing when to be quiet throughout the day. Overall, children have been deprived of social interactions with other children as they have been at home. Thus, entering school with large groups of children will provide challenges. However, some teachers believe children are resilient and able to surpass these challenges.

Learning Gains

Beyond socializing and learning how to be in the classroom, children's learning was mentioned as a concern. One U.S. teacher received students in her in-person classroom that had maintained online instruction for longer than her students. She noted that these children were substantially behind in learning gains. None of the other teachers expressed these concerns, but one noted that she would be able to address any learning gaps once she was physically with her students. This large learning gap is concerning, particularly for children that were already at risk. Teachers will need to properly assess students and provide opportunities to ensure that they are acquiring the skills necessary to stay within grade-level expectations.

CHAPTER 5: CONCLUSION

The main purpose of this study was to explore how teachers in two different countries responded to the COVID-19 pandemic and their perspectives on professional and personal needs to address the complex repercussions of the pandemic in young children. This chapter includes a discussion of the results with recommendations, limitations to the study, implications, and recommendations for future research. Results for the first research question are divided into seven categories: technology applications, technology challenges, children's age, interaction with families, support to teachers, school investment, and COVID-19 safety measures. Results for the second research question are divided in four categories: materials, professional support, concerns about children, and comprehension towards teachers.

Discussion

The COVID-19 Pandemic has impacted the entire world. Teachers have been challenged throughout this time to adapt their teaching practices amidst a constantly changing environment. To respond to the pandemic, teachers experienced changes between the initial response and subsequent teaching approaches, they utilized different applications to provide content, created videos for students, encountered challenges with technology, found support from families, had to provide support to these families, acquired varied skills, encountered home environment challenges, made adaptations based on children's ages, and they were personally supported. Schools also had to make changes and develop COVID-19 safety protocols. For the future, teachers require materials, professional support, understanding, and addressing concerns about children.

Research Question 1: How Did Teachers' Responses to the COVID-19 Pandemic Vary Between

the United States and Venezuela?

Initially, U.S. teachers experienced reduced emphasis on connection with students, diminished academic expectations, and lacked assessments. This finding is consistent with further research on the topic (Greenhow et al., 2020). Focus on contacting U.S. families instead of individual children was more predominant during this time. Teachers in Venezuela had to maintain continuous contact with families through group chats and generate academic contact through this mean, despite the reduced rigor in academic content. Nonetheless, all the teachers expressed the chaotic nature of the initial response. In Australia, teachers also had to adapt to changing governmental guidelines as the context of the pandemic shifted constantly (Dayal & Tiko, 2020).

Despite the chaos, some common strategies were used in several countries. Teachers in both countries created printed packets with activities for children, which is a strategy that other countries have used. Printed packages were utilized for families without access to technology in Australia (Dayal & Tiko, 2020). Research on Brazil, Costa Rica, the Dominican Republic, Mexico, Nicaragua, Paraguay, Puerto Rico, and the United States also showed that teachers created printed packets with instructions for caregivers (Atiles et al., 2021).

Technology Applications

As the online education continued, teachers explored applications to utilize for academic support. In Venezuela, teachers used Whatsapp to interact with families and share content. They utilized Google Meet and Zoom for videocalls. They used Google Classroom, Seesaw, and Canvas as learning management systems. In the United States, teachers used Class Dojo and

Google Phone to interact with families. They utilized Google Meet and Zoom for videocalls.

Google Classroom and NearPod were used as learning management systems. While the

applications used varied slightly between the countries, the three forms of technologies were

used by all the teachers. This is consistent with research on the three most common forms of

technologies that teachers used during the pandemic (Greenhow et al., 2020). Further, including

video conferences with young children is a practice that has been established by prior work in the

field (Szente, 2020). In a study conducted in Australia during the pandemic, teachers also had to

develop new channels to communicate effectively with families (Dayal & Tiko, 2020). In a study

in Latin and North America, teachers used resources that were already familiar to families, such

as Whatsapp and Facebook (Dias et al., 2020). This illustrates how the world has adapted the use

of technology during the pandemic.

Research on other areas of Latin America and the U.S. has shown conflicting views on

teachers' use of technological platforms. Public school teachers were shown to use WhatsApp to

communicate with families, while private school teachers used Zoom, Microsoft Teams, and

Google Classroom (Atiles et al., 2021). However, this research has found that private school

teachers in Venezuela used WhatsApp more often than private school teachers. This difference

could be attributed to the previous reliance of Venezuelan teachers to communicate through

WhatsApp before the pandemic.

Beyond using the platforms mentioned for instruction, teachers created videos for

children to review academic content. Previous research has demonstrated that teachers lacked the

preparation to develop quality programs of instruction using technology (Whalen, 2020). In this

study, only one teacher received formal training for using technology. This is consistent with

research in Latin American countries in which some teachers received training on how to use online platforms, but not on engaging in remote education (Atiles et al., 2021). Nonetheless, teachers were flexible to adapt the resources that they used and finding new avenues to educate children. Greenhow et al. (2020) found that video conferences, teacher-recorded videos, other videos, and game-based learning were the most effective strategies used by teachers during the pandemic. The interviewed teachers discussed all of these skills, except for game-based learning.

Technology Challenges

Through this adaptative process, teachers encountered multiple challenges with technology. Teachers struggled with formal, actual, and functional access. Szente (2020) established the need to obtain these three forms of access to provide online learning opportunities for children. For formal access, teachers in Venezuela expressed lack of access to quality internet. Research in Latin America and the U.S. has demonstrated that connectivity issues were more predominant in Latin American countries rather than the U.S. (Atiles et al., 2021). Teachers in the United States communicated lack of individual computers for students. However, some schools were able to provide these for their children. Issues with formal access for students is consistent with previous research in the United States (Garbe et al., 2020). Teachers also expressed lack of formal access to personal computers or other technology devices. For actual access, teachers in the United States stated issues tied to children. Some children joined with noisy backgrounds or in the backseat of a car. Siblings also had to share computers, so they were unable to access during the stipulated class times. Finally, functional access was a challenge for all the teachers. While many stated being technologically literate, they had to learn how to

navigate the platforms that they used. One school provided a training on a learning management system, but the other teachers recurred to colleagues to find tips and resources.

Children's Age

Some of the challenges that teachers experienced were tied to children's age. Young children's exposure to technology for learning was limited before the pandemic. Children had to acquire simple skills to manage video conferencing calls, they were limited by their verbal skills to use the platform features, and required initial help from adults to engage. Research has found that young children cannot utilize the collaborative features of online teaching because they cannot control the different tools and teachers are unable to supervise them at all times (Kim, 2020). High levels of interactions have been linked to high levels of engagement (Lucas et al., 2020). Thus, teachers were challenged to maintain interactions while making adaptations to address children's developmental levels. This is consistent with research in which teachers have shared a need to receive trainings to integrate technology in their practices (Dias et al., 2020) and with research that U.S. teachers struggled to incorporate hands-on activities in remote teaching (Kim, 2020). Teachers from many countries have shared the reliance on teacher-centered approaches to teaching as a result of the rapid shift to remote instruction (Dias et al., 2020). Finally, most U.S. kindergartners had their first experience with schools when they started online. Their understanding of school is limited by the experiences they had during the pandemic.

Interactions with Families

Throughout the pandemic, the interaction between families and teachers was increased. Perception of parent support to teachers grew as a result. Teachers had contradicting experiences

in this topic. Some teachers had parents that provided feedback on how to improve strategies, were responsive to their communication, supported their instructional decisions, and were flexible during the process. Other teachers found that parents were not committed to the emergency instruction, were critical of their decisions, or were unresponsive to their communication. Teachers also found that parents provided support beyond what was necessary, which hindered children's learning and independence. Teachers in other countries have also reported issues with parents allowing independence for their children (Atiles et al., 2021; Dias et al., 2020). These difficult interactions with families can be attributed to the difficulty of adapting to the pandemic. Teachers from Latin and North America have spoken to the high responsibility that families acquired during this time (Atiles et al., 2021). Managing adjusting previous routines and creating new habits could have created an added stress on parents that permeated on to their interactions with teachers.

Teachers and families were in a reciprocal relationship, which required teachers and schools supporting them. Some teachers expressed that parents lacked the tools to adequately help children during this process. This is consistent with research on the lack of pedagogical knowledge that parents reported during the pandemic (Garbe et al., 2020; Koskela et al., 2020) and with parent knowledge on technology (Atiles et al., 2021). For this reason, many teachers adapted content to make it simple and their explanations concise. To address learner needs, one teacher provided free tutoring for at-risk students. Teachers also contacted families weekly to check in on them. Some provided pedagogical support, while others gave words of encouragement. Research has shown that teachers in other countries had to teach caregivers and children in parallel so adults could instruct children during the pandemic (Dias et al., 2020).

Beyond contact, parents needed materials to continue education. Schools in the United States provided computers, food, and instructional materials. Food insecurity has been present in research in Latin and North America, pointing to the efforts enacted by governments to provide nutritional support during the pandemic (Dias et al., 2020). In Venezuela, one teacher expressed lack of materials at home, but her school failed to do material distributions. Other teachers in Latin and North America had to provide families with materials to complete activities, such as paper and crayons (Atiles et al., 2021). As schools in Venezuela were private, it is probable that the expectation was for parents to provide all the resources. On the other hand, schools in the United States have historically provided assistance to families, with programs such as free and reduced lunch. Thus, the expectation for parental support was higher for these schools.

Families were challenged with having to create a home environment that served for schooling. This brought several difficulties. Previous research suggests that parents felt overwhelmed with the demands of their children and balancing work (Garbe et al., 2020). Teachers found that this infused the environment. Background distractions, sharing computers, lack of structure, and lack of supplies were mentioned by U.S. teachers. This lack of access to technology by children has been found in research in Latin and North America, for private and public schools (Dias et al., 2020). However, as teachers in Venezuela served in a private school, it is possible that children had determined spaces to do their schoolwork. In contrast, families in the United States were limited by their contexts. Also, it is possible that due to the increased time that U.S. teachers spent with children on videoconferences they were able to observe these issues more than Venezuelan teachers.

<u>Support to Teachers</u>

To face the multiple challenges exposed above, teachers found support through different means. Emotional support by administrators was discussed by teachers in Venezuela. School personnel was empathetic and provided plans to fulfil their technological needs. U.S. teachers found support when administrators took a step back, initially, and gave them power to make instructional decisions and provided teacher computers to take home. Teachers also collaborated with unknown teachers online and with fellow coworkers on group chats on technology tips. Professional staff, such as coaches and other professionals helped in developing curricula and making adaptations. Finally, schools provided trainings. Venezuelan teachers received training for issues pertaining to the pandemic, while U.S. teachers had access to trainings that were voluntary on varied topics. Having support amidst the pandemic was key for teachers to continue providing quality education to their students.

<u>School Investment</u>

Schools also made some adjustment to address the varying needs. Schools in Venezuela obtained access to technology with new internet providers and new interactive whiteboards. These are elements that are already present in U.S. classrooms. In the U.S., one teacher obtained materials as part of a literacy grant. As students were learning from home, schools' investment in infrastructure was limited.

Most of the investments were instead made for COVID-19 safety measures. In the United States, teachers received partitions, hand sanitizer, cleaning products, and sets of materials for students. In Venezuela, teachers obtained hand sanitizer and posters of social distancing. Teachers from both countries spoke about social distancing, cleaning, and mask wearing

protocols. Social distancing, however, was limited by the space available in each school, which often violated mandates. Teachers from both countries removed their materials from the classrooms to avoid sharing. This is challenging for teachers as kindergarten requires concrete instruction with manipulatives and play-based strategies. Teachers will be severely limited if they lack access to materials for all students.

COVID-19 Safety Measures

In other safety measures, vaccines were only mentioned by teachers from the United States. One teacher had received hers, as her county determined teachers to be in the high priority list. One teacher said she would only feel comfortable returning to the school once she had received the vaccination. In Venezuela, none of the teachers discussed the vaccine. It is likely that teachers were not expecting to be vaccinated as the country has limited access to vaccines and the distribution process is unclear.

Further administrative elements were discussed. While one U.S. teacher expressed clear governmental guidelines to return to in-person instruction, one Venezuelan teacher stated that visits from the Ministry of Education were unannounced and they would determine during those visits if the measures were enough to keep the school open. This further demonstrates the chaotic nature of guidelines made in Venezuela towards the educational response to the pandemic.

Research Question 2: What Do Teachers Perceive They Need to Better Support Children in the Aftermath of the COVID-19 Pandemic?

Some teachers were teaching completely in-person, completely online, in a combination of both, or were about to transition to a hybrid modality. For this reason, the responses to the needs of children in the aftermath of the pandemic were varied between and within countries.

Teachers spoke about requiring materials, professional support, understanding, and they had concerns for young children.

Materials

In terms of materials, teachers require access to working technology for all students. Some examples were individual computers for students, tablets, equipment to provide quality video conferences, and interactive boards. Teachers in the United States requested technology for each student, while teachers in Venezuela requested technology for group use. U.S. teachers also wanted instructional materials for children to have at home. One possibility for this trend is that Venezuelan teachers use less materials when teaching, or that families are expected to provide those for their students.

Professional Support

Teachers expressed needing professional support through trainings and early childhood professionals' interactions. Trainings on trauma, handling critics, and technology use were requested. These trainings were dependent on teachers' perceptions of their weaknesses along with students' future needs. One teacher was adamant about not providing more unnecessary trainings for teachers. Further, professional staff help was required to assist in the development of interventions and to provide extra time for teachers to work with small groups of children in the classroom. The purpose of these is to provide individualized care to fill learning gaps. Venezuelan teachers expressed already having these support, and they did not recognize any extra help necessary from school personnel.

Concerns about Children

Concerns about children were varied. Learning to be in the classroom was mentioned by multiple teachers. This is consistent with prior comments by these teachers on online instruction being the only exposure of children to formal schooling. Learning concerns were only discussed by one teacher. This is a contrast as parents have expressed worries regarding the lack of learning gains by their children during online instruction (Garbe et al., 2020). Further, teacher perceptions are contrasting with research that has shown that substantial efforts need to be put forward to combat learning losses (Gustafsson, 2021).

Views on socializing were conflicting between the two countries. Some teachers said that children are resilient and can easily connect with others, while other teachers believe social competence will take time to develop. Parents, on the other hand, have shared socializing concerns as children had reduced interactions with peers (Garbe et al., 2020). Also, none of the teachers expressed concerns for children being exposed to violence in their homes. However, research in Australia and Kenya has demonstrated this being a worry for some children (Dayal & Tiko, 2020; Shumba et al., 2020). Also, teachers in Latin and North America have shared the importance of physical contact and emotional support for the lives of children (Atiles et al., 2021). Teachers in Venezuela and the U.S. shared these concerns transitioning into social distancing at schools. Evidence suggests that when children are confined to their homes, there are negative repercussions on the child's mental and physical health (Wang et al., 2020). None of the teachers expressed major concerns about this topic. Overall, evaluating children's need to determine further courses of action is necessary. Teachers in both countries have reduced worries on the impact of the pandemic compared to current literature.

<u>Comprehension towards Teachers</u>

Finally, teachers expressed a need to feel understood and encouraged by administrators. Instead of focusing on the elements that need to be improved, feedback should include the good work teachers did. Further, teachers mentioned this process as a learning curve that requires adaptations along the way. Patience will be required to continue improving. Society should be supportive of this process.

<u>Limitations</u>

The findings of this study should be interpreted based on the following four limitations. First, teachers in Venezuela were recruited based on the researcher's personal connections with the preschool. Teachers were approached by school administrators to decide if they wanted to participate in the study. Their responses may be conditioned to a viewed relationship between the researcher and the administrators. Second, while in vivo codes were used, the researcher made the final decision on emergent themes. The researcher's vocabulary was used to name these themes. It is possible that the researchers' opinions and ideas influenced this decision.

Third, comparative studies have limitations tied to their contextual constraints of each country and generalization. While ideas were overlapping between countries, teachers' experiences dictated their responses and perceptions. Some teachers were serving low-income students, while others were working with affluent families. In each country, different safety measures were implemented at the government level. Teachers were continuing instruction with different modalities, so their responses were limited to their interactions with children. Finally, only three teachers from each country were interviewed, which is a small sample size preventing generalizations of findings.

<u>Implications</u>

This study gave a space for teachers to voice their concerns going forward. The pandemic is yet to conclude. For this reason, implications on school measures, trainings, and preparation programs should be addressed.

Teachers need to feel supported by administrators to be able to provide quality instruction. Staying in constant touch and giving teachers opportunities to voice their concerns is necessary. The teachers that mentioned feeling supported by their schools shared a more positive outcome on the learning process during the pandemic.

Materials have to be acquired to ensure that teachers provide hands-on experiences for children. Kindergartners will have to acquire many skills and concepts that were not obtained during the pandemic. Conversations with teachers to determine the specific resources they need is necessary. Schools in both countries have different methods to obtain funding to fulfil this need. In Venezuela, schools can recur to parents to provide the materials. In the United States, schools can apply for grants and request donations from the community. Nonetheless, new resources to adhere to research-based practices is necessary.

Protocols to provide extra assistance to at-risk students have to be developed. The learning gains obtained by children are determined by their families' abilities to engage in learning opportunities. Thus, assessment and research-based approaches to provide interventions are necessary. Postpandemic strategies need to be developed to address the learning gaps and other repercussions of the pandemic (Dorn et al., 2020). Early childhood professionals will have to collaborate to ensure that the varying needs of children are addressed. Families should be

integrated in these teams to ensure continuity between the work conducted at home and in the school.

Preparation programs for teachers are necessary. One teacher expressed how the pandemic is a traumatic event. Teachers should have a strong knowledge on the signs of trauma and toxic stress to identify them and encourage assessments to evaluate the implications (Atiles et al., 2021). Similarly, teachers need to develop an understanding on how to address the socio-emotional needs of children after the pandemic. While there were conflicting views, being prepared and providing opportunities to overcome the delay in reaching developmental milestones will be necessary.

While teachers experienced professional development in technology, there are still concerns on how to incorporate technology in the early childhood classroom. Research on teacher preparation programs has demonstrated the need to generate opportunities for future professionals to develop skills to teach using technology (Kim, 2020). Research-based strategies should be provided for these teachers. Pre-service programs should include trainings on how to use technology, create developmentally appropriate activities, and how to work with families online (Atiles et al., 2021). As the pandemic has expanded our knowledge on the use of technology, studies will demonstrate new strategies that can be used

<u>Recommendations for Future Research</u>

Future research should focus on the following factors. Teachers noted learning gaps with students returning to in-person instruction. Further research should evaluate the learning goals obtained throughout the pandemic, along with programs that successfully allow children to reinforce the missing skills (Dorn et al., 2020).

One teacher expressed the traumatic nature of children's experience with the pandemic. Future studies should bring awareness to teachers' perceptions of the psychological impact of the pandemic in children. Exploring trauma and toxic stress on young children during this time would inform teachers on ways to address behavior in their classrooms and provide a holistic approach to teaching.

More studies on effective practices for teaching remotely would inform possible solutions for teachers in case they have to return to online instruction, or for those who have continued with a hybrid mode. Many teachers expressed difficulty implementing a hands-on approach to teaching during online instruction. Resources that integrate an understanding on developmentally appropriate practices along with online teaching will serve early childhood teachers to expand their tools for teaching.

This study looked at teachers' needs to support children in the aftermath of the pandemic. Future research should focus on parents' needs. Research from Kenya stresses the need to provide psychosocial support to families to ensure a nurturing environment at home to counteract the negative effects of the pandemic in the caregivers' mental health (Shumba et al., 2020). As children and families are still learning to adjust to living with the changing nature of the pandemic, they require tools to address the needs of their children. Knowing their concerns allow schools to provide workshops, trainings, and presentations that fill these gaps.

Finally, this study focused on private preschools in Venezuela. Further information on government initiatives for the pandemic are necessary to understand the learning gaps of Venezuelan children, along with teachers' needs.

APPENDIX A – IRB APPROVAL

UNIVERSITY OF CENTRAL FLORIDA

EXEMPTION DETERMINATION

December 1, 2020

Dear Maria Spinetti Rincon:

On 12/1/2020, the IRB determined the following submission to be human
subjects research that is exempt from regulation:

Type of Review:	Initial Study, Exempt Category 1 and 2(ii)
Title:	Teacher response to the COVID-19 Pandemic: A comparative study of early childhood professionals in Venezuela and the United States
Investigator:	Maria Spinetti Rincon
IRB ID:	STUDY00002411
Funding:	None
Grant ID:	None
Documents Reviewed:	• Demographics Questionnaire, Category: Survey / Questionnaire; • HRP-254-FORM Explanation of Research.pdf, Category: Consent Form; • HRP-255-FORM - Request for Exemption.docx, Category: IRB Protocol; • Interview Questions, Category: Survey / Questionnaire; • Recruiting Email.docx, Category: Recruitment Materials;

This determination applies only to the activities described in the IRB submission
and does not apply should any changes be made. If changes are made, and
there are questions about whether these changes affect the exempt status of the
human research, please submit a modification request to the IRB. Guidance on
submitting Modifications and Administrative Check-in are detailed in the
Investigator Manual (HRP-103), which can be found by navigating to the IRB
Library within the IRB system.   When you have completed your research, please
submit a Study Closure request so that IRB records will be accurate.

If you have any questions, please contact the UCF IRB at 407-823-2901 or irb@ucf.edu. Please include your project title and IRB number in all correspondence with this office.

Sincerely,

Renea Carver
Designated Reviewer

APPENDIX B – INTERVIEW QUESTIONS

1. How did the transition from in-person instruction to emergency, remote happened?

2. What modality did you use to continue with emergency, remote instruction (videos, assignments, videoconference)?

3. What type of resources (guidelines, trainings) were provided by schools for emergency, remote instruction?

4. What materials (computers, software, internet access) were provided by the school?

5. What skills did you have that you used during emergency, remote instruction? What skills did you have to develop?

6. What control did you have over the format of emergency, remote instruction (group size, modality, consistency, appropriateness)?

7. What challenges did you encountered that related to the families and children?

8. What do you think was effective? What was not effective?

9. How did you adapt content?

10. How would you feel about a sudden transition in the middle of the semester if it were necessary?

11. What type of technology challenges do you expect to encounter in the future moving into in-person instruction?

12. How do you expect to address/assess the learning gap between children? What strategies will be needed?

13. What socio-emotional aspects do you expect to be challenging with children once they return to in-person instruction? If they have returned to in-person instruction, what has been challenging?

14. What forms of training do you need to support children after emergency, remote instruction?

15. What new materials do you need to support children?

16. Personally, what types of support do you need from schools to support children?

17. What type of safety measures would you feel comfortable with moving into in-person instruction?

18. If a combination of remote instruction and in-person instruction were to be used, what extra resources, materials, and support would you need for it to be successful? If you are currently working in this modality, what measures are being implement? What else do you think is necessary?

<u>Spanish Version</u>

1. ¿Cómo sucedió la transición de clases presenciales a clases remotas de emergencia?

2. ¿Qué modalidad usó para continuar con las clases remotas de emergencia (videos, tareas, videoconferencias)?

3. ¿Qué tipo de herramientas (pautas, lineamientos, entrenamientos) fueron ofrecidas por el colegio para las clases remotas de emergencia?

4. ¿Qué materiales (computadoras, software/programas, acceso a internet) fueron provistos por el colegio?

5. ¿Qué habilidades que usted ya poseía utilizó durante las clases remotas de emergencia? ¿Qué habilidades tuvo que desarrollar?

6. ¿Qué tipo de control tuvo usted sobre el uso de las clases remotas de emergencia (tamaño de grupo, modalidad, consistencia, apropiado para la edad)?

7. ¿Qué obstáculos relacionados a las familias y niños encontró usted?

8. ¿Qué cree usted que fue efectivo? ¿Qué cree usted que no fue efectivo?

9. ¿Cómo adaptó su contenido?

10. ¿Cómo se sentiría con respecto a una transición abrupta en medio del lapso, en caso de que esto fuese necesario?

11. Con respecto a la tecnología, ¿qué tipo de obstáculos/retos espera enfrentar en el futuro una vez realizada la transición a clases en persona?

12. ¿Cómo espera abordar la brecha de aprendizaje de los niños? ¿Qué estrategias serán necesarias?

13. ¿Qué aspectos socioemocionales espera usted que sean desafiantes con los niños una vez que la transición a enseñanza en persona suceda? Si ya han regresado a enseñanza en persona, ¿qué ha sido desafiante?

14. ¿Qué tipos de entrenamientos necesita para apoyar a los estudiantes luego de las clases remotas de emergencia?

15. ¿Qué nuevos materiales necesita usted para apoyar a los niños?

16. De manera personal, ¿qué tipo de apoyo necesita de parte del colegio para poder apoyar a los niños?

17. ¿Con qué tipo de medidas de seguridad se sentiría cómoda volviendo a las clases

presenciales?

18. Si se utilizara una combinación entre clases remota y clases en persona, ¿qué recursos,

materiales y apoyo extra necesitaría usted para poder lograr su trabajo con éxito? Si usted

está actualmente trabajando con esta modalidad, ¿qué medidas están siendo

implementadas? ¿Qué otras cosas cree usted que son necesarias?

APPENDIX C – DEMOGRAPHICS QUESTIONNAIRE

1. What is your age?

    a. 20-30

    b. 30-40

    c. 40-50

    d. 50-60

    e. 60+

2. What is your gender?

    a. Male

    b. Female

3. What race you identify with?

    a. American Indian or Alaska Native

    b. Asian

    c. Black or African American

    d. Native Hawaiian or Other Pacific Islander

    e. White

    f. Hispanic or Latino

4. What is the highest level of education you completed?

    a. High School Diploma, or its equivalent

    b. A higher education degree, such as an Associate Degree or Técnico Superior

       en Educación

    c. Bachelor's degree in education, or Licenciado en Educación

    d. Bachelor's degree in a field unrelated to education, with a teacher certification

       (Componente docente)

    e. Master's degree, or its equivalent

    f. Doctorate degree, or its equivalent

5. What is your title?

    a. Teacher assistant

    b. Lead teacher

    c. Co-teacher

6. For how many years have you been teaching?

    a. 1-5 years

    b. 6-10 years

    c. 11-15 years

    d. 16-20 years

    e. 21-25 years

    f. 26+ years

7. How many years have you been teaching kindergarten?

    a. 1-5 years

    b. 6-10 years

    c. 11-15 years

    d. 16-20 years

    e. 21-25 years

    f. 26+ years

8. What grade levels have you taught? (select all that apply)

    a. Preschool (includes pre-k)

    b. Kindergarten

    c. 1st grade

    d. 2nd grade

    e. 3rd grade

    f. 4th grade

    g. 5th grade

    h. 6th grade

    i. 7th grade

    j. 8th grade

    k. 9th grade

    l. 10th grade

    m. 11th grade

    n. 12th grade

9. Have you worked with children from the following groups? (select all that apply)

    a. Language learners (depending on the country's native language)

    b. Special needs children

    c. Culturally diverse children

10. How many children were in your classroom last school year?

    a. 1-5 children

    b. 6-10 children

c. 11-15 children

d. 16-20 children

e. 21-25 children

f. 26-30 children

g. 31+ children

<center>Spanish Version</center>

1. ¿Cuál es tu edad?

    a. 20-30

    b. 30-40

    c. 40-50

    d. 50-60

    e. 60+

2. ¿Cuál es tu sexo?

    a. Hombre

    b. Mujer

3. ¿Con qué raza te identificas?

    a. Indígena Americano o Nativo de Alaska

    b. Asiático

    c. Negro o Afro-Americano

    d. Hawaiiano Nativo o Isleño del Pacífico

    e. Blanco

    f. Hispano o Latino

g. Otro: especifica

4. ¿Cuál es el nivel de educación más alto que has completado?

    a. Diploma de bachillerato, o su equivalente

    b. Un diploma de educación superior, como un Associate Degree o Técnico Superior en Educación

    c. Licenciado en Educación

    d. Licenciatura en un campo que no es educación, per completó componente docente

    e. Masterado, o su equivalente

    f. Doctorado, o su equivalente

5. ¿Cuál es tu título?

    a. Asistente de Maestra, Maestra Auxiliar

    b. Maestra principal

    c. Maestra Adjunta

6. ¿Por cuántos años has estado enseñando?

    a. 1-5 años

    b. 6-10 años

    c. 11-15 años

    d. 16-20 años

    e. 21-25 años

    f. 26+ años

7. ¿Por cuántos años has enseñado 3er nivel?

    a. 1-5 años

b. 6-10 años

c. 11-15 años

d. 16-20 años

e. 21-25 años

f. 26+ años

8. ¿Qué grados has enseñado? (selecciona todos los que apliquen)

    a. Preescolar

    b. 3er Nivel

    c. 1er Grado

    d. 2do Grado

    e. 3er Grado

    f. 4to Grado

    g. 5to Grado

    h. 6to Grado

    i. 7mo Grado

    j. 8vo Grado

    k. 9no Grado

    l. 10mo Grado

    m. 11vo Grado

9. ¿Has trabajado con niños de los siguientes grupos? (selecciona todos los que apliquen)

    a. Que estén aprendiendo el lenguaje del país

    b. Con necesidades especiales

    c.   De culturas diversas

10. ¿Cuántos niños había en tu clase el año escolar previo?

    a.   1-5 niños

    b.   6-10 niños

    c.   11-15 niños

    d.   16-20 niños

    e.   21-25 niños

    f.   26-30 niños

    g.   31+ niños

APPENDIX D – RECRUITING EMAIL

Dear [insert name],

My name is Maria Spinetti and I am a student from the Early Childhood Development and Education department at the University of Central Florida. I am writing to invite you to participate in my research study about teacher's responses to the COVID-19 Pandemic in Venezuela and the United States. You will be eligible to be a part of the study if you:

- Were teaching kindergarten at the time the switch to online instruction occurred;

- Have been teaching for more than five years and less than 15;

- Served between 15 and 30 children in their classrooms during the pandemic;

- Were lead teachers during the pandemic; and

- Have a bachelor's degree in education.

If you are eligible and decide to participate in this study, you will be part of a one-hour interview in which I will ask you to answer questions from a demographics questionnaire and questions about the process of transitioning into emergency, online instruction, and the new school year. All the questions will be asked during the interview process. This meeting will take place through Zoom and it will be recorded in order for the conversation to be transcribed for research purposes. The recording will be deleted five years after the research has concluded. I will also ask that you share some curricula that was used during the initial transition into emergency, online instruction. This will be used to see how the curricula used in the United States and Venezuela was different.

A research explanation form is attached to this email with more detailed information about your involvement in the process.

This is completely voluntary. You can choose to be in the study or not. If you'd like to participate or have any questions about the study, please email or contact me at Maria.SpinettiRincon@ucf.edu

Thank you very much.

Sincerely,

Maria Spinetti

Maria.SpinettiRincon@ucf.edu

<u>Venezuela Recruiting Email</u>

Apreciado [insert institution's name],

Mi nombre es Maria Spinetti y soy estudiante del departamento de Educación y Desarrollo de la Primera Infancia de la Universidad de Florida Central. Le escribo para invitar a su institución a participar en mi estudio de investigación sobre las respuestas de los maestros a la pandemia de COVID-19 en Venezuela y Estados Unidos. Las maestras de su institución serán elegibles para ser parte del estudio si:

- Estaban enseñando 3er Nivel en el momento en que ocurrió el cambio a la instrucción en línea;

- Han estado enseñando por más de cinco años y menos de 15;

- Sirvieron entre 15 y 30 niños en sus aulas durante la pandemia;

- Fueron maestras líder durante la pandemia; y

- Tienen una licenciatura en educación.

Si sus maestras son elegibles y deciden participar en este estudio, serán parte de una entrevista de una hora en la que les pediré que respondan preguntas de un cuestionario demográfico y preguntas sobre el proceso de transición a instrucción de emergencia en línea y sobre el nuevo año escolar. Todas las preguntas se harán durante el proceso de entrevista. Esta reunión se llevará a cabo a través de Zoom y se grabará para que la conversación se transcriba con fines de investigación. La grabación se eliminará cinco años después de que concluya la investigación. También les pediré que compartan algunos planes de estudio que se utilizaron durante la transición inicial a la instrucción de emergencia en línea. Esto se utilizará para ver en qué se diferenciaron los planes de estudio utilizados en Estados Unidos y Venezuela.

Una explicación del estudio está adjunta con información más detallada sobre la investigación

Esto es completamente voluntario. Puede elegir estar en el estudio o no. Si desea participar o tiene alguna pregunta sobre el estudio, envíeme un correo electrónico o contácteme por Maria.SpinettiRincon@ucf.edu

Muchas gracias.

Sinceramente,

María Spinetti

Maria.SpinettiRincon@ucf.edu

APPENDIX E – EXPLANATION OF RESEARCH

UNIVERSITY OF CENTRAL FLORIDA

EXPLANATION OF RESEARCH

Title of Project: Teacher response to the COVID-19 Pandemic: A comparative study of early childhood professionals in Venezuela and the United States

Principal Investigator: Maria Spinetti

Faculty Supervisor: Judit Szente

You are being invited to take part in a research study. Whether you take part is up to you.

The purpose of this study is to determine how teachers in two different countries responded to the COVID-19 pandemic by adapting their instructional practices to meet children in kindergarten.

If you decide to take part in this research project, you will be asked to meet for one (1) hour with the researcher to conduct an interview via videocall using Zoom. We ask that you conduct this in a quiet environment with stable internet connection. At first, you will be asked to complete a questionnaire about your demographics, and then to answer questions related to the research project. These questions will be regarding the process of having transitioned into emergency education at the beginning of the COVID-19 Pandemic, and the future issues that the COVID-19 Pandemic will bring to you as an educator.

You will be audio and video recorded during this study. If you do not want to be recorded, you will not be able to be in the study. Discuss this with the researcher. The recording will be kept in the Zoom cloud. Only the lead researcher has access to the recording. Per Florida law, the recording will be kept for 5 years, then it will be deleted.

While some identifiable information might be shared during the conversation (such as students' names, school name, and location), this information will be coded in the transcription process. Only the lead researcher will have access to the recording with identifiable data, which will be deleted after 5 years.

You must be 18 years of age or older to take part in this research study. You must have been teaching for more than five years and less than 15; have served between 15 and 30 children in their classrooms during the pandemic; have been a lead teacher during the pandemic; and have a bachelor's degree in education. If you live in the United States, you must be a teacher in the public school system working in kindergarten at the time the COVID-19 pandemic started, who had to continue instruction in some format during stay-at-home orders. If you live in Venezuela, you must be a teacher who was teaching the equivalent of kindergarten (the year before first grade) in a private school at the time the COVID-19 pandemic started, who had to continue instruction in some format during stay-at-home orders.

Study contact for questions about the study or to report a problem: If you have questions, concerns, or complaints: Maria Spinetti, Graduate Student, Master's of Science in Early Childhood Development and Education, College of Community Innovation and Education, Maria.SpinettiRincon@ucf.edu or Dr. Judit Szente, Faculty Supervisor, College of Community Innovation and Education by email at Judit.Szente@ucf.edu

IRB contact about your rights in this study or to report a complaint: If you have questions about your rights as a research participant, or have concerns about the conduct of this study, please contact Institutional Review Board (IRB), University of Central Florida, Office of Research, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901, or email irb@ucf.edu.

UCF HRP-254 Form v.5/1/2020

UNIVERSITY OF
CENTRAL FLORIDA

EXPLICACIÓN DE INVESTIGACIÓN

Título del proyecto: Respuesta docente a la pandemia COVID-19: Un estudio comparativo de profesionales de la primera infancia en Venezuela y Estados Unidos

Investigadora principal: Maria Spinetti

Supervisora de la facultad: Judit Szente

Se le invita a participar en un estudio de investigación. Si participa depende de usted.

El propósito de este estudio es determinar cómo los maestros de dos países diferentes respondieron a la pandemia de COVID-19 adaptando sus prácticas de instrucción para satisfacer a los niños en 3er nivel.

Si decide participar en este proyecto de investigación, se le pedirá que se reúna durante una (1) hora con la investigadora para realizar una entrevista por videollamada utilizando Zoom. Le pedimos que lo lleve a cabo en un entorno tranquilo con una conexión a Internet estable. Al principio, se le pedirá que complete un cuestionario sobre sus datos demográficos y luego que responda preguntas relacionadas con el proyecto de investigación. Estas preguntas serán sobre el proceso de transición a la educación de emergencia al comienzo de la pandemia COVID-19, y los problemas futuros que la pandemia COVID-19 le traerá como educador.

Se le grabará audio y video durante este estudio. Si no desea que se le registre, no podrá participar en el estudio. Discuta esto con la investigadora de ser necesario. La grabación se mantendrá en la nube Zoom. Sólo el investigador principal tiene acceso a la grabación. Según la ley de Florida, la grabación se conservará durante 5 años y luego se eliminará.

Si bien es posible que se comparta cierta información identificable durante la conversación (como los nombres de los estudiantes, el nombre de la escuela y la ubicación), esta información se codificará en el proceso de transcripción. Solo el investigador principal tendrá acceso a la grabación con datos identificables, que se eliminarán después de 5 años.

Debe tener 18 años o más para participar en este estudio de investigación. Debe haber estado enseñando durante más de cinco años y menos de 15; han atendido entre 15 y 30 niños en sus aulas durante la pandemia; ha sido un maestro principal durante la pandemia; y tener una licenciatura en educación. Si vive en los Estados Unidos, debe ser un maestro en el sistema de escuelas públicas que trabaja en el jardín de infantes en el momento en que comenzó la pandemia COVID-19, quien tuvo que continuar la instrucción en algún formato durante las órdenes de quedarse en casa. Si vive en Venezuela, debe ser un maestro que estaba enseñando el equivalente al jardín de infantes (el año anterior al primer grado) en una escuela privada en el momento en que comenzó la pandemia COVID-19, que tuvo que continuar la instrucción en algún formato durante la pandemia.

Persona de contacto del estudio para preguntas sobre el estudio o para informar un problema: Si tiene preguntas, inquietudes o quejas: Maria Spinetti, estudiante de posgrado, Maestría en Ciencias en Desarrollo y Educación de la Primera Infancia, Facultad de Innovación Comunitaria y Educación, Maria.SpinettiRincon@ucf.edu o la Dra. Judit Szente, supervisora de la facultad, College of Community Innovation and Education por correo electrónico a Judit.Szente@ucf.edu

Contacto del IRB sobre sus derechos en este estudio o para informar una queja: Si tiene preguntas sobre sus derechos como participante de una investigación o tiene inquietudes sobre la realización de este estudio, comuníquese con la Junta de Revisión Institucional (IRB) de la Universidad de Florida Central, Office of Research, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 o por teléfono al (407) 823-2901, o por correo electrónico irb@ucf.edu.

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