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Factors Impacting Technology Use Amongst Latinx Children in Early Childhood

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Factors Impacting Technology Use Amongst Latinx Children in Early Childhood

By

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Abstract

The purpose of this research study was to explore to what extent Latinx children between the ages of birth to five are using screens and technology, the factors that influence their caregivers' decisions about allowing screen time, as well as what resources caregivers need to navigate screen time use and technology for their young children.

A survey was distributed to Latinx caregivers who were participating in a parent education program in an urban Minnesota school. The goal of the survey was to gather data about parent and child screen time use, the principal reasons that parents allow screen time, attitudes about screen time, and impacts of screen time on the household and relationships. In addition, the study sought to learn about tools and resources that may be helpful to families.

The study found that 39% of the participants' children exceeded the screen time limits set by the World Health Organization to some extent. However, the average amount of screen time reported by caregivers was below the national average for Latinx children. The majority (94%) of survey respondents expressed desire to reduce their children's screen time. Caregivers articulated that they would like some training on how to implement parental controls on their home devices, monitor content closely, and set timers on devices. In addition, they expressed a need for educational activities to do at home with their children. The findings of this study demonstrate the need for educational programming to support caregivers with navigation of technology use for their young children.

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Chapter One: Introduction

We live in a time where technology is rapidly changing, with increasing access and usage in households across the globe. Not only has media usage increased as technological advances have been made, the Covid-19 pandemic further shifted our reliance on technology use. There was an increase in children's screen time usage by an average of 150 percent in the United States during the Covid-19 lockdown (Ellis, 2022). Technology use perhaps even became a means of "survival" for some families during the pandemic as we relied on screens for connection, entertainment, education, work, and possibly childcare. Not only did screen time usage amongst children increase more than ever during the pandemic, this increase has been sustained, despite a return to post-pandemic times in our daily lives and practices (Rideout & Robb, 2020). Further, higher rates of child screen time use have been found in families with lower socioeconomic status, particularly amongst Black and Latinx families (Nagata et al., 2022). This may be due to a broad range of factors, including but not limited to: lack of afterschool programming, unsafe neighborhoods, stressed caregivers, etc. (Nagata et al., 2022).

Countless studies have shown that excessive screen time usage in children has been associated with a multitude of potential risks, including developmental delays, obesity, depression, and poor social emotional skills (Kerai et al. 2021; McArthur et al., 2021; Muppalla et al., 2023). The first three years of life are crucial for development, and the care, connection, experiences, and guidance that children receive at this age have a lifelong impact. When excessive screen time begins to replace these critical interactions and developmental experiences, children's development may be compromised.

Considering that caregivers have a large influence on their children's habits and daily activities in early childhood, it is important to explore the factors that impact caregivers' decisions and permissiveness regarding screen time. With evidence that this phenomenon impacts certain communities more than others, it is also crucial to understand the unique factors that influence screen time use in these communities in order to provide support and resources that are culturally specific and meet the needs of these particular families. Therefore, this research study is designed to gather data regarding screen time practices in Latinx households in an urban Minnesota community. Additionally, the study will use a questionnaire to determine perceptions, beliefs, and factors that influence caregiver decisions around screen time and technology usage for their children under the age of five.

Background of study

Technology use in households has increased at a rapid pace, with child usage doubling in the past two decades (Kerai et al., 2021). Furthermore, the Covid-19 pandemic increased our reliance on technology and screens for much of our daily activities. Not only has screen time increased, it is starting at a younger age; in 1970, the average first exposure was at four years old. Now, kids have their first screen interactions at an average of four months of age (Muppalla et al., 2023). One third of parents in the United States report that their children under the age of five have begun interacting with a smart device (Auxier et al., 2019). While technology and screens have provided many educational opportunities and advances in our society, they must be used with caution and intentionality, especially in the early years of development.

Countless studies have shown the negative impacts of excessive screen time on the development of young children; it can lead to a variety of problems, such as: vision problems, trouble sleeping, less physical activity, obesity, increased anxiety and depression, language delays, and less time engaging with family members and playing. One study found that more than one hour of screen time per day was correlated with "vulnerability" in developmental domains of physical, social emotional and cognitive health for children under the age of five (Kerai et al., 2021). These findings have led to recommendations by the American Association of Pediatrics and the World Health Organization to place strict limits on screen time for children under the age of five (Chong et al., 2023). Notwithstanding, it is evident that many children continue to exceed these recommended limits on a daily basis. According to a study conducted by the American Academy of Pediatrics and the Canadian Pediatric Society, the average screen time usage for children under the age of two is 42 minutes a day, and the average usage for children ages two to four is two hours and 39 minutes (Gagne, 2021), which is over double the recommended amount. The statistics show that excessive screen time usage for young children is a pervasive problem in our society.

While quite a lot of research has been dedicated to exploring the impacts of technology on young children, there remains a lack of research that explore the factors that lead to excessive technology use amongst young children (Morowaska, 2023). In order to address excessive screen time usage in young children, we must better understand the factors that impact caretakers' decisions around technology usage for their children, given their high level of influence during early childhood.

Statement of the Problem

Despite the growing evidence of potential harms, many young children's screen time use continues to exceed recommended limits, with higher rates in communities of color and lower socioeconomic status (SES). Screen time use was found to be higher for children living in Hispanic and Black families with lower incomes, which may be due to lack of access to extracurricular activities (Hartshorne et al., 2021), or a belief that exposure to technology has educational benefits (Chong et al., 2023). For example, Latinx immigrant families stated using television as a tool for their children to learn English (Nagata et al., 2022). Children under the age of five are highly influenced by their caregivers, and caregivers presumably have a fair amount of control of their children's daily activities. Several studies have also found that parental screen time use is highly correlated with their children's screen time use (Lauricella et al., 2015).

The health of our future generations is crucial, and it is critical to investigate the ways that this current generation of children is being impacted by technology use. Further, it is worthwhile to explore the unique factors that influence caregiver decision-making when it comes to technology use for their children, as they have the power to influence their children's technology use and content. Given the higher rates of technology use amongst children in the Latinx community, this particular research study will be exploring this issue in the context of the Latinx immigrant community in Minneapolis, with an attempt to understand the factors that are unique to this community's home technology practices.

Purpose of the Study

According to research, many habits are learned and developed during the preschool years, and these tend to carry on into adulthood (Määtä et al., 2017). Young children are highly influenced by their caregivers; beginning in the first few months of life, infants begin to imitate their caregivers. Not only are young children constantly watching and emulating their caregivers, their daily activities are often highly dictated by them. Given that caregivers have such a profound influence on their children's well-being and habits, it is crucial that they are making choices that are beneficial to their children's health and development.

Thus, caregivers need to have access to information that can inform their parenting choices. However, we also know that even when caregivers have information about technology use, many do not adhere to the guidelines. Consequently, we must explore the factors that influence an inability to adhere to recommended guidelines for technology use, or an apathy to these guidelines altogether. In addition, we should explore what supports caregivers need in order to follow the guidelines. While pediatricians and organizations such as the World Health Organization offer guidelines, they seldom offer guidance on how to adhere to these recommendations.

This study aims to explore the factors that influence Latinx caregiver behavior around the use of technology for their young children. In addition, the study will attempt to identify ways to support caregivers in navigating technology use and screen time for their children.

Research Questions

This study will explore the factors that influence decision-making around screen time use for caregivers of young children (birth-five years) through the investigation of the following research questions:

1. To what extent are Latinx caregivers currently following recommendations provided by the World Health Organization (WHO) and American Association of Pediatrics (AAP) for screen time usage for young children?
2. What factors, attitudes and beliefs influence Latinx caregiver permissiveness and limit-setting around technology use for their children?
3. What are the barriers that Latinx caregivers face when trying to find alternatives to technology/screen time for their children?
4. What tools and resources do Latinx caregivers need to navigate the ever-changing realm of technology and media use?

Assumptions of the Study

This research study assumes that the following statements are true and that they will support the exploration of this topic. They include:

1. Participants will respond honestly to surveys.
2. There is currently an over-reliance and over-use of technology and devices in households.
3. Caretakers have the ability to influence their child's screen time and technology usage.

Objectives of the Study

The objectives for this study include the activities that the principal investigator will carry out in order to pursue the research on this topic. These include:

1. Obtain permission from the Institutional Review Board to conduct the research study.
2. Obtain permission from Minneapolis Public Schools to conduct surveys with caregivers who participate in our Early Childhood Family Education Program.

Delimitations of the Study

The delimitations of the study are the variables and factors that are either included or excluded for this particular research investigation. They are as follows:

1. This study will only include Latinx families who currently have children ages zero to five and are participating in our Early Childhood Family Education program at a Minnesota School.

Institutional Review Board Approval

The researcher has taken and passed the appropriate IRB training. The researcher will submit the appropriate approval form to the Institutional Review Board (IRB) for review which will ensure the confidentiality of data to be collected and protection for the participants of the study. Upon approval, the researcher will undergo training on responsible conduct of research involving human subjects. This is to ensure that all requirements established by St Cloud State University Institutional Review Board are strictly observed. All study participants are volunteers who can decline to participate in the study or stop taking the survey at any time. The survey data was collected without the identification of respondents and would be destroyed at the study's completion.

Definition of Terms

Screen Time: Any amount of time that a child is interacting with a technology device; television, cell phones, tablets, and computers are all included in this category.

Caregiver: An adult that is primarily raising a child; this is often a parent, but the term is also inclusive of other types of caregivers who may be in the role of raising a child, such as a grandparent, aunt, or other family member. Caregiver and parent may be used interchangeably throughout the course of this research study.

Early Childhood: The pivotal time in development that begins before birth and continues through the age of eight when the brain is rapidly developing.

Early Childhood Family Education (ECFE): ECFE is a program offered through the public school system in the state of Minnesota. ECFE offers weekly classes for caregivers and their young children under the age of six. Classes include developmentally appropriate activities for young children, as well as parent education for parent/caregiver participants in the program.

Technoference: Intrusions in time parents and children spend together due to technology (McDaniel & Radesky, 2018).

Latinx: Gender-neutral term to refer to individuals who have origins in Spanish-Speaking countries.

Chapter Two: Review of Literature

This review of literature is designed to better understand the current context regarding screen time and young children, as well as the factors that influence their screen time usage, with a particular focus on the immigrant Latinx population. This will include an exploration of the research that has shown the impacts of screen time on young children's development, the extent to which caregivers are currently following recommendations provided by the World Health Organization and the American Association of Pediatrics for screen time usage, and the factors that influence caregiver permissiveness and limit-setting around their children's screen time usage. In addition, there will be an exploration of what information, tools and resources are needed for Latinx caregivers to navigate the ever-changing realm of technology and media usage for their young children.

Children Screen Time Usage

The current generation of children are the first to grow up in a world where screens have become ubiquitous, providing them access to technology earlier and more easily than any other generation before them. Research has shown that, on average, a child has their first exposure to a screen at four months of age (Muppalla et al., 2023), while the recommendation by the World Health Organization is zero screen time before the age of two (Gagne, 2021). The recommendation for children between the ages of two and five years old is less than one hour of screen time daily; however, the average use is two hours and 39 minutes (Gagne, 2021).

The negative impacts on children's development, mental health, and physical health have been shown in a multitude of studies. There is a vast amount evidence that excessive screen time has a lasting detrimental impact on a child's cognitive development, language

acquisition, self-regulation, physical health, and behavior (Muppalla et al., 2023). A study by McArthur et al. (2021) found that children whose screen time use exceeded the one-hour recommendation had higher rates of developmental and language acquisition delays. When technology is used as an emotional regulator for young children, they can fail to develop their own skills in this area, leading to problems with emotional regulation in their development (Radesky et al., 2023). It has also been found that screen time interferes with other developmental tasks that increase skills and development in early childhood (McArthur et al., 2021). Nonetheless, technology use amongst children is widespread and has become part of daily practices in households across the globe.

As screen time exposure increases at this crucial age of development and attachment in early childhood, it is important to consider not only the impacts that screens can have on development, but also, what interactions young children may be missing when they are spending time on screens. Children learn best through interactions and connection with their primary caregivers, and excessive screen time is associated with the displacement of these essential interactions that young children need in order to thrive in their development (Arumugam et al., 2021). Parent-child interaction plays a crucial part in a child's development self-regulation and language development during the first several years of life, thus it is important to consider how these areas of development may be impacted when these interactions are interrupted by screens (Lopes Almeida et al., 2023). Due to the addictive nature of screens, managing screen time can be particularly difficult for both children and their caregivers, leading to challenges in enforcing and abiding by limits and rules (Arundell et al., 2022).

Caregiver Screen Time Usage

One of the factors that most correlates with child screen time usage is the screen time use of a child's caregiver/parent; studies show that the average adult accesses digital media an average of nine hours daily (McDaniel & Radesky, 2018) and checks their phone up to 80 times each day (McDaniel, 2019). Not only does technology take caregiver/parent attention away from their children, it may also role-model unhealthy screen time habits for their young children (Chong et al., 2023 & Lauricella et al., 2015).

Caregiver Mental Health

A multitude of studies have shown that caregivers who report higher levels of stress and depression also reported more technology use when their children are present (McDaniel & Radesky, 2018). Parents have reported using technology as a way to connect with the outside world when they are feeling isolated by being stuck at home with their young children. Caregivers also reported using their personal devices to self-regulate, distract, and calm down when experiencing parenting-related stress (Uzundağ et al., 2022). Caregiver screen time use has also been seen to increase with children who have difficult behaviors. Parent screen time use, however, can exacerbate these behaviors, as children are often vying for their caregiver's attention (McDaniel, 2019). Not only can caregiver screen use lead to an increase in difficult behaviors, it can also send a message to children that they are not as important or interesting as the device or screen. Another study found that the more absorbed a parent is in their own screen time, the more harshly they reacted to their child (Radesky et al, 2016). Parental phone use has also been found to result in less parental responsiveness to their children's needs and cues (McDaniel, 2021).

Technoference

Caregiver screen time can also interrupt the quality and quantity of their time with their children, which can lead to child depression, unmet needs, and lack of warmth in their relationship (McDaniel & Radesky, 2018). There are concerns that frequent interference in the caregiver-child relationship caused by parental screen time use may lead to difficulties in a child's socioemotional and cognitive development (Uzundağ et al., 2022). Several studies have shown that children overall have a negative association with their parent's device usage, stating feelings such as sad, lonely and angry (McDaniel, 2019). This phenomenon is known as "technoference", which is defined as "intrusions in time parents and children spend together due to technology" (McDaniel & Radesky, 2018). It is worth noting that this has become such a widespread problem that it has acquired its own terminology.

The perpetual presence of screens and technology in households has an inevitable impact on the interactions and relationships in families. An Australia study on screen time found that screen time led to conflict amongst family members, with disagreements regarding quantity of screen time and difficulty ending screen time being common issues (Arundell et al., 2022). In addition, many caregivers report that screen time management create conflict in their relationship when there is inconsistency in the limits and regulation (Arundell et al., 2022). McDaniel (2019) found that when caregivers are using their technological devices, they are less likely respond timely or appropriately to their children's needs.

Caregiver Technology Use and Attachment

One of the most concerning findings is the researcher's literature review is the possible link between parent technology use and parent-child attachment issues (McDaniel, 2019). Attachment is the irreplaceable bond that develops between a primary caregiver and an infant during the first year of life (Berk & Meyers, 2016). Half a century of research on this topic has demonstrated that parent-child attachment is fundamental to the socioemotional well-being of a child throughout their lifespan (Berk & Meyers, 2016). Children that do not form a secure attachment to at least one adult in their infancy often struggle for the rest of their lives with relationships and socioemotional development (Berk & Meyers, 2016).

A study by Linder et al (2021), suggests that as caregiver/parent screen time increases, their level of connection with their infant decreases. Joint attention is one of the foundational aspects of connection and learning for infants and young children and is a cornerstone of attachment. Joint attention requires the caregiver to be actively engaged with their infant, with full attention and eye contact. Unfortunately, when a caregiver has a device in their hand, their attention and eye contact are often averted, which takes away from this essential interaction with their child (Berk & Meyers, 2016). Given these findings, we should be very alarmed at the possible connections between technoference and attachment, as it has the potential to impact young children for the rest of their lives.

Factors Influencing Screen Time Permissiveness

Several of the factors that have been shown to most impact caregiver permissiveness around their children's screen time use are the parent's own use of screens, their beliefs about screen time, and their motivation to regulate their children' screen time

use (Morawska et al., 2023). Studies have found that when caregivers believe that screen time use is beneficial for their children, they tend to be more permissive (McDaniel et al., 2023). Some caregivers believe that introducing technology to their children at an early age will give then an advantage in future educational and career endeavors (Radesky et al, 2016). However, it is also common for parents to struggle with abiding screen time limits even when they are aware of the risks and negative impacts on their children (Morawska et al., 2023).

A survey of Australian parents found that parents use screens to manage their children's behavior, distract their child, and reward desired behavior (Halpin et al., 2021). Elias et al. (2019) found eight common reasons that caregivers utilize screens for their young children: keeping child occupied, regulate child's schedule, calming the child, rewarding behavior, use as a background, mealtime facilitation, putting child to bed, enrichment, and parent-child bonding. Additionally, Common Sense Media found the following as common reasons that caregivers allowed screen time: educational, fun, parents need to get things done, to relax, keep child busy, boredom, calms my child (Rideout & Robb, 2020).

Caregiver Stress

A common factor in screen time permissiveness is caregiver stress; caregivers with higher levels of stress tend to utilize screen-time for their children as a way of coping with their stress (Uzundağ et al, 2022). Many parents report that they lack the supports to raise children, and have reported that technology and screens can provide a respite from the demands and stresses of parenting (Hamilton et al., 2015). In addition to technology being

highly appealing to young children, it can offer a much-needed break to caregivers who often face stress and isolation (McDaniel, 2021).

Parenting Style and Self-efficacy

Parenting style is another factor that influences children's screen time usage. Parents who are more permissive or overreactive tend to permit more screen time for their children (Halpin et al., 2021). Several studies have found that caregivers who feel confident in their parenting abilities are more likely to set limits regarding screen-time use for their children. On the other hand, parents who feel ineffective or incompetent as parents are less likely to set boundaries, resulting in their children having more screen time (Arumugam et al., 2021; Carson & Janssen, 2012; Chen et al, 2020; Halpin et al. 2021; McDaniel, 2021).

One study posited that caregivers may turn to screen time as a resource when they are unable to fully meet their children's needs (Hartshorne et al., 2021). A study by Chen et al. (2020) found that lower income parents who doubted their parenting skills were more likely to offer their child a screen than to read books with them.

Socioeconomic Status and Screen Time Usage

Studies have found that parents with lower income and less education tend to be more permissive with screen time use for their children (Määtä et al., 2017). Several studies found that children from lower income families averaged almost twice as much screen time as their higher income peers (Rideout & Robb., 2020; Thompson et al., 2023). One possible reason for this trend may be that caregivers feel that access to technology and screens will enhance their child's opportunities in the future (Määtä et al., 2017). Radesksy et al. (2016) found that caregivers from lower socioeconomic status (SES) backgrounds had

a tendency to feel less confident setting limits with their children, which is a factor that strongly correlates with higher technology use amongst children. Another factor is access to quality programming for children, as well as safe areas to spend time outdoors. When families feel that their neighborhood is unsafe, and lack safe places to bring their children, they tend to rely more on screens to occupy and entertain their children (Thompson et al, 2023). Low-income families also have less access to preschool programming and childcare, which leads to them spending more time at home, and their caregivers resorting to screens as a way to entertain and/or educate their children (Nagata et al., 2022).

Weather

Weather, particularly cold weather, was stated in several studies as a reason that parents let their children spend more time on screens. For families living in colder climates, they felt they were refined to their homes and unable to take their children out. This tendency may be even higher amongst immigrant families who have come from warmer climates and are unaccustomed to spending time in cold weather (Thompson et al., 2023).

Latinx Children and Screen Time Usage

On average, Latinx children living in the United States use a screen more than an additional hour each day than their white peers (Rideout & Robb, 2020). Studies have found that the average screen time use amongst Latinx toddlers was two and a half hours daily (Duch et al., 2013, Rideout & Robb, 2020). There are a variety of factors that influence a higher rate of technology use for this population. A study exploring Latinx caregivers' beliefs about their children's screen time use revealed that virtually all study participants believed that screen time was educationally beneficial for their children (Ochoa & Reich,

2020). In a screen time study done by Common Sense Media, 72% of Latinx caregivers believed that technology and media use had educational benefits for their children (Rideout & Robb, 2020). Low maternal self-efficacy was another factor identified specifically amongst Latinx mother's screen time permissiveness for their children (Thompson et al., 2018). Other studies have found that lack of access to programming, unsafe neighborhoods, and isolation also contributed to higher screen time use (Duch et al., 2013). Poor weather is another reason that has been cited, particularly amongst Latinx caregivers living in the United States (Thompson et al., 2023).

Tools and Resources for Caregivers to Manage Screen Time Usage

It is important for interventions for excessive screen time use amongst this age group to focus on the caregiver, as young children do not have the capacity to self-regulate their technology use (Morawska, 2023). Several studies have found that when parents feel confident in their skills and abilities as caregivers, they are more likely to set consistent limits for their children around technology (Arumugam et al., 2021). Given the numerous findings that point to a strong relationship between parent self-efficacy and screen time permissiveness, one of the potential tools for caregivers could be general parenting support around boundary and limit-setting with their children (Mupalla et al., 2023). Other research has found that providing caregivers with accurate education about the potential harms of technology can help to change parent perceptions about their children's technology use (Lewis et al., 2021). However, it is also known that knowledge isn't enough to change behavior; thus, caregivers also need support in the implementation of healthy habits, limit setting, and alternative activities for their children (Morawska, 2023).

Caregivers may also benefit from support in reducing their own screen time, since it has been found that parental screen use is highly correlated with the amount of time their children spend on a screen (Asplund et al., 2015; Lauricella et al., 2015; Xu et al., 2015). Given the high correlation between caregiver mental health and their use of screens, addressing caregiver mental health also seems to be a key factor in reducing problematic screen time use (McDaniel, 2021).

Interventions should also be realistic; we live in a world where technology has become a part of our daily sphere, and it is improbable that caregivers will eschew technology altogether. Rather than focus so much attention only on a reduction of screen time, it would be worthwhile to focus on the specific ways in which children are using and interacting with screens (Morawska, 2023). Research has shown that technology can be beneficial when content is high-quality and there is co-viewing occurring with an engaged adult (McDaniel et al., 2023); thus, education about navigating content and co-viewing strategies is another area that could be explored.

Literature Review Summary

It is widely known that excessive screen time has been found to have a negative impact on child development and health outcomes, prompting strict screen time limitations by leading organizations on children's health. Nonetheless, the majority of children are being exposed to technology at an earlier age and for longer periods of time than ever before. Further, statistics show that low-income children of color are most impacted by this phenomenon. Child screen time habits are highly associated with the screen time habits of their primary caregivers. Household screen time habits impact family dynamics

and parent-child relationships, and may even cause disruptions in these relationships and attachment.

Caregivers allow their children to use screen time for a variety of reasons, even when they are aware of the possibly negative effects. Households have become reliant on screens as a source of entertainment, education, emotional regulation, and behavior management tool. For families who lack access to safe places to play and extra-curricular activities, screens have become a way to keep their children occupied. Rather than avoid technology completely, caregivers must learn to navigate technology use with their children, as they have become an impermeable part of our existence.

Chapter Three: Methodology

Research on technology usage by young children predominantly focuses on its impacts, rates of usage, recommended usage, and is often generalized across communities and races. This study will explore to what extent are Latinx caregivers currently following recommendations provided by the World Health Organization (WHO) and American Association of Pediatrics (AAP) for screen time usage for young children. Further, the goal of this non-experimental survey research study is to better understand the specific factors that influence Latinx caregivers' permissiveness around their children's technology usage. The study aims to identify current practices, beliefs, and environmental factors that impact screen time use amongst children in this community.

Data for this study will be captured via a questionnaire to Latinx families who are participating in Early Childhood Family Education (ECFE) Classes in a Minnesota School. The survey will contain questions that explore current household technology use amongst the Latinx caregivers' children, including: beliefs about technology use, factors influencing technology use, and the desire to change technology use. The data will subsequently be analyzed using basic descriptive statistics in order to capture trends and identify any key factors influencing technology use practices. Further, the study aims to explore any barriers that exist for limiting technology use amongst children, and possible tools and resources for caregivers.

Research Questions

This study will investigate technology usage and practices amongst Latinx caregivers and young children by exploring the following questions:

1. To what extent are Latinx caregivers currently following recommendations provided by the World Health Organization (WHO) and American Association of Pediatrics (AAP) for screen time usage for young children?
2. What factors, attitudes and beliefs influence Latinx caregiver permissiveness and limit-setting around technology use for their children?
3. What are the barriers that Latinx caregivers face when trying to find alternatives to technology/screen time for their children?
4. What tools and resources do Latinx caregivers need to navigate the ever-changing realm of technology and media use?

Research Design

This study will use a quantitative non-experimental survey design to capture data from participants regarding their beliefs and practices surrounding technology usage for their young children. The survey design includes a four-point Likert-type rating scales, checklists, and open-ended questions. The rating scales will provide quantitative data that will be analyzed using basic descriptive statistics. Numerical responses will provide the opportunity for the data to be analyzed in terms of the frequency, mean, and mode, and will be able to capture any trends that are present in the collected data. In addition, qualitative strategies will be used to analyze data gathered through open ended questions, which will provide the opportunity for participants to share additional information that may be beneficial to the study.

Independent Variables

The independent variables for this study will be the participants' current technology practice and usage that they self-report in the survey.

Dependent Variables

The dependent variables will be the participants' perceptions on technology practices and usage that will be captured in the survey. Validity of this study is established through the expertise of the researcher, having worked as a Parent Educator with Latinx families in Minneapolis, as well as the review of literature and empirical research. Research and experience will address the validity issues regarding the survey and research design. Pilot testing of the survey materials will be used to determine readability, linguistic validity and clarity of the survey, and will be administered with a bilingual colleague or other non-participant.

Instrumentation

The survey instrument for this study will be a questionnaire with twenty-five items that are designed to explore caregiver practices, beliefs, and sentiments regarding screen time usage for themselves and their young children. The questionnaire will contain a variety of question types, including a Four-Point Likert Scale, open-ended questions, and checklists.

The survey will be divided into four sections. The first section will utilize checklist format questions to collect information regarding child age, amount of child screen time use, and amount of adult screen time use. The following will utilize a Four-Point Likert-type Rating Scale to capture data regarding caregiver attitudes about screen time use in their household. The subsequent section will investigate reasons for screen time usage using checklist format questions and open-ended questions. The final section will explore opinions regarding the desire to change household screen time usage amongst participants using open-ended questions (See Appendix C).

Context of the Study

Volunteers for this study are current participants in a Minnesota Early Childhood Family Education (ECFE) program. ECFE is a program offered for caregivers and their children ages birth to five in Minnesota public school districts. Caregivers typically attend a 16-18 session weekly class with their child, where they connect with other caregivers, participate in developmentally appropriate activities for their child, receive parent education and parenting support. When possible, the class is offered in the families' home language or interpretation is provided. The ECFE program from which this study will draw participants is situated in an urban Minnesota school district that offers linguistic and culturally specific classes for families that comprise its population. The particular classes that will be participating in this study are the Latinx ECFE classes for caregivers with children ages birth to five.

Study Participants

The participants of this research study will be comprised of Latinx caregivers that are currently participating in an Early Childhood Family Education (ECFE) program at a Minneapolis School. Ninety-eight percent of the caregivers in this program are mothers, with other caregivers being comprised of grandmothers and fathers. It is important to note that the Latinx population in Minnesota is not monolithic, and vast diversity exists within this community. Some families who are participating in the program are newly arrived immigrants, while others have lived in Minnesota for several decades. Families also vary in socioeconomic status, documentation status, and education levels. Families are also linguistically diverse, with some speaking Spanish as a second language to their local indigenous language in their country of origin. Families speak and understand varying

levels of English; some speak fluently, while others speak and understand very little English. Participants come from a variety of Spanish-speaking countries, including Mexico, Ecuador, Guatemala, Venezuela, Chile, Peru, Argentina and El Salvador.

Participation in this study is voluntary, and no identifying information will be used, in order to assure anonymity for participants. There are 67 Latinx caregivers available to participate in the selected ECFE program for the study. All 67 participants will be invited to participate in the study, therefore, there will be no random sampling used to select participants.

Criteria for Participation

All participants in this study must be Latinx caregivers of at least one child between the ages of birth to five years old and participating in a selected Early Childhood Family Education (ECFE) program in Minnesota.

Securing Permission

Permission to survey caregivers for this study will be sought from the Superintendent and Board of Education. An email will be sent to request permission along with a written cover letter detailing the study and a sample template that may be used to verify written permission by the Chief Executive Officer of the Organization.

Recruiting Strategies

Latinx caregivers who are currently participating in the ECFE program will be invited to participate in the survey, but are under no obligation to do so. Caregivers will be given the opportunity to complete the survey during the ECFE class time. The survey will be anonymous and the researcher will not be present in the room at the time of the survey to ensure that participants do not feel pressured or obligated to participate. The survey

will be translated into Spanish to meet the linguistic needs of study participants. A cover letter including participant consent will be distributed during our ECFE class. Caregivers will read and sign the letter of consent, and then be given a paper survey. When the participants have completed the survey, they may insert it into the envelope provided. The current researcher is an instructor in the program in which the participants will be selected to participate. The purpose and nature and request to participate will be verbally communicated by the researcher to each group of Latinx caregivers that physically attend the Early Childhood Family Education (ECFE) classes.

Sampling Procedure

This study uses a convenient sample, as all participants in the study are Latinx families who are participating in ECFE classes for which the researcher instructs. The option to participate in the study will be offered to all caregivers who are attending the researcher's ECFE classes. This study will gather data for this population in its entirety in hopes of a higher return rate of responses.

Data Collection Procedures

Prior to data collection, permission will be sought by the Institutional Review Board to conduct this study. In order to protect the privacy of participants, no identifying information will be collected in the surveys. The survey will be distributed via a paper survey to participants in the researcher's ECFE Parent Education class. A paper survey has been chosen for this research study to eliminate any barriers that an electronic survey may present for participants who are unfamiliar with navigating new technology. Prior to taking the survey, the researcher will give an explanation of study participation, risks, and background information. Study participants will sign a consent form to confirm that they

have received information and consent to participating. After the overview, the participants will be allowed time to complete the survey if they wish, during which time the researcher will leave the room to allow for privacy and confidentiality. Participants who are not present on the day of the class will receive the survey the following class session, and will have the opportunity to complete it within two weeks.

Completed surveys will be collected and inserted into sealed envelopes by the researcher where they will be stored in a locked file cabinet until data analysis. Once all surveys are distributed and completed, the researcher will enter data from surveys into an excel spreadsheet on a password protected computer.

Data Analysis Procedures

As stated, data collected will be entered into an excel spreadsheet and analyzed with the support of a data analyst. This study will use basic descriptive statistics to analyze and capture any trends in the collected data. Numerical responses from the rating scale items of the questionnaire will be analyzed using measures of central tendency. Responses from items using a checklist will be ranked in order, and will be analyzed by measures of frequency, mean, and standard deviation. The open-ended questions will be analyzed qualitatively to search for trends that are present in the responses.

Data Security

All data that is collected for the purposes of this research study will be kept confidential and individual results will remain unidentifiable to the researcher and review board in order to protect participants. The researcher's computer is password protected using multi-factor authentication. The researcher will offer to share aggregated results of the study upon request.

Chapter Four: Results

The goal of this study is to explore the specific factors that influence Latinx caregivers' permissiveness around their children's technology usage. This information is important so that we can better understand how to support these caregivers around best practices with technology use for their young children. The overuse of screens has become a public health issue that has been linked with obesity, depression, cognitive and language delays, sleep problems, attention and self-regulation problems, and social emotional issues. It has also been found that excessive screen time impacts Latinx children at higher rates than other demographic groups (Thompson et al., 2023).

During the first three years of life neural pathways are developing rapidly, making children at this age are even more vulnerable to the impacts of screen exposure due to their high level of neuroplasticity (Lopes Almeida et al., 2023). Given the strong influence of caregivers over their young children, our best opportunity to address this issue is by working closely with those who have most influence over young children. Thus, it is important to understand what factors are influencing caregivers' decisions around technology usage for their young children, and what support they need in order to develop healthy technology use in their household. In addition, it is important to understand the unique circumstances that may impact the Latinx immigrant population in regards to technology use.

This research study collected information that explored caregivers' screen time practices, beliefs, and the factors influencing their household screen time use. Data was gathered using a survey that contained open-ended questions, checklist questions, and a

Likert-type rating scale. This chapter will discuss the research findings that were analyzed via collected data.

Basic Descriptive Findings

In order to assure anonymity and increase the likelihood of honest survey responses, minimal demographic information was collected on the survey. The demographic data that was collected included the age of the child participating in the program as well as the amount of time each caregiver had participated in ECFE programming.

Demographic Findings

The charts below share the demographic data that was collected in this study. Table 1 displays the ages of the children in the study, and what percentage of the overall participants are in each age group.

Table 1

Age of Children

Age:	0-11 mo.	1 year	2 years	3 years	4 years	5 years
Count:	2	4	9	15	12	4
Percentage:	4%	9%	20%	33%	26%	9%

Note. Survey Item 1, Basic Results (N=46)

Table 2 shows the amount of time that each respondent has been participating in the ECFE program. The goal of collecting information about the amount of time in the ECFE program was to see if this had any relationship with child screen time usage or parenting self-efficacy. No relationship was found in either of these categories.

Table 2

Time Participating in ECFE

Time in ECFE:	< 1 year	1 year	2 years	3 years	4 years	5+ years
Count:	18	6	8	4	1	9
Percentage:	39%	13%	17%	9%	2%	19%

Note. Survey Item 5, Basic Results (N=46)

Screen Time Practices

The survey also collected information about caregiver and child daily screen time practices. The average amount of daily time that adults reported being on a screen themselves was 2.2 hours. The average amount of daily screen time that adults reported for their child was approximately 1.3 hours. In general, children who had excessive screen time (more than 2 hours daily), also had parents who spent a higher amount of time on their screens each day. Table 3 illustrates the relationship between child and adult screen time reported in this study.

Table 3

Child and Adult Screen Time Relationship

Child Screen Time	Adult Screen Time Average
More than 1 hour daily	3.5 hours
Less than 1 hour daily	1.3 hours

Note. (N=46)

Given that screen time recommendations are generally grouped by age ranges of under two and two to five, I have disaggregated the information by these age ranges as well, as seen in Table 4. When disaggregated by these age groups, the average screen time

use for children under age of two was .5 hours, and screen time use was 1.3 hours for children ages two to five.

Table 4

Screen Time by Age Group

Age Group	Quantity	Average Screen Time	Low	High
Under 2 years	6	.5 hours	0 minutes	1 hour
2-5 years	40	1.3 hours	30 min	5+ hours

Note. Survey Item 2 (N=46)

Table 5 displays the screen time amounts for children when disaggregated by more specific ages of the children, and Graph 1 shows this information in a graph format. It is notable that screen time is highest in 3-year-olds, and then decreases for 4- and 5-year-olds.

Table 5

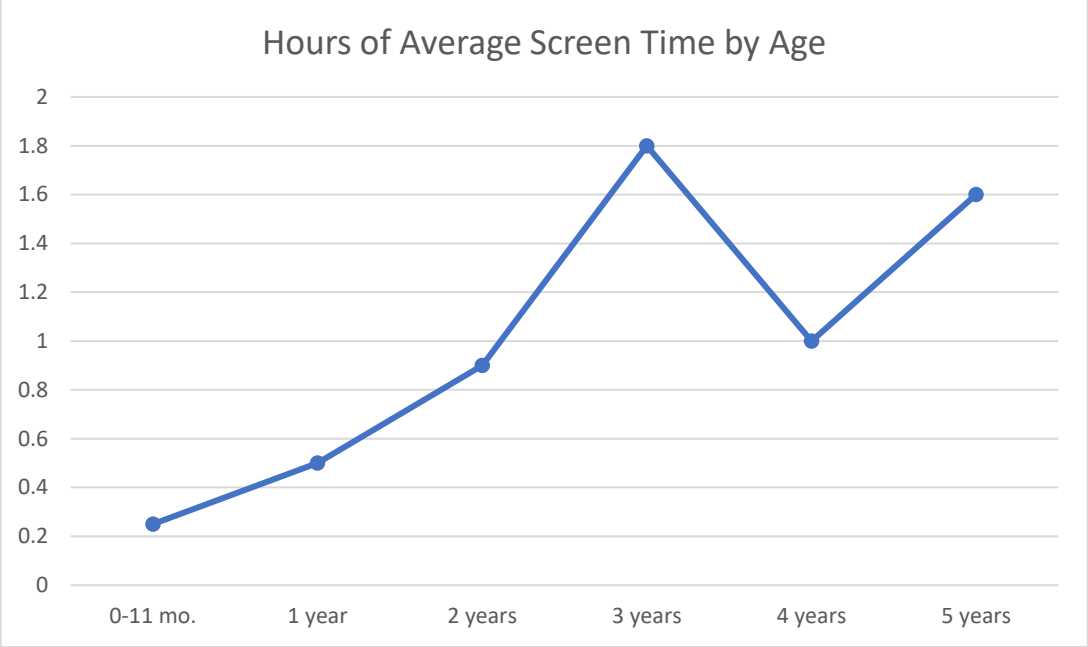
Child Screen Time by Age

Age of Child	Screen Time Average	Count	Low	High
0-11 mo.	.25 hour	2	0	.5
1 year	.5 hour	4	0	1.0
2 years	.9 hour	9	.5	1.5
3 years	1.8 hours	15	.5	5+
4 years	1 hour	12	.5	3.0
5 years	1.6 hours	4	1.0	3.0

Note. Survey Item 2 (N=46)

Figure 1

Average Screen Time by Age



Note. Survey Item 2 (N=46)

Table 6 displays the percentage of children in each age group who are currently exceeding screen time recommendations made by the World Health Organization. In total, the results show that 39% of the children in the study exceeded screen time to some extent.

Table 6

Percentage of Children Exceeding Screen Time

Age	Quantity in Age Category	How many exceeded?	Percent of total
0-11 m.	2	1	50%
1 yr	4	3	75%
2 yr	9	2	22%
3 yr	15	8	53%
4 yr	12	2	17%

5 yr	4	2	50%

Note. (N=46)

Beliefs and Attitudes

Beliefs and attitudes regarding household screen time usage were also explored in this study using a Likert-type rating scale with a goal of gaining an understanding of the beliefs and values that influence screen time usage amongst caregivers and their children. Table 7 describes the responses to survey items six to fourteen, which were based on a four-item Likert-type rating scale. Participants chose from strongly disagree (1), disagree (2), agree (3), or strongly agree (4). Survey responses showed that the majority of caregivers in our program feel confident in their ability to set limits for their children, with 96% of respondents choosing agree and strongly agree for item number six. Similarly, the majority of caregivers also responded that they feel confident setting limits for screen time for their children, with 95% having chosen agree and strongly agree to item seven.

While 58% of caregivers responded that they "feel good" about their child's daily screen time usage (item 9), 94% expressed a desire to decrease their child's daily screen time usage (item 11). The majority (69%) of caregivers agreed or strongly agreed that screen time reduces the quality of interactions with their child (item 13).

Table 7

Caregiver Attitudes about Screen Time

Item #	Item Descriptors	Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
6	I am confident in my ability to set limits for my child.	4% 2	0% 0	45% 19	51% 22

7	I am confident in my ability to set screen time limits for my child.	2% 1	2% 1	40% 18	55% 25
8	I feel good about the content that my child is viewing while on a screen.	7% 3	13% 6	53% 24	27% 12
9	I feel good about my child's amount of daily screen time use.	4% 2	38% 17	38% 17	20% 9
10	I feel good about my own amount of daily screen time use.	4% 2	36% 16	38% 17	24% 11
11	I have a desire to decrease my child's daily screen time usage.	4% 2	2% 1	57% 26	37% 17
12	I have a desire to decrease my own daily screen time usage.	5% 2	9% 4	61% 28	26% 12
13	I think that screen time decreases the quality of interactions with my child.	7% 3	24% 11	43% 20	26% 12
14	I think that screen time helps me connect with my child.	24% 11	47% 21	22% 10	7% 3

Note. Basic Statistical Results by Item (N=46)

Table 8 continues to describe household screen time usage, as well as some of its potential impacts on the household. A four-point Likert-type rating scall was used, with participants rating based on frequency; never (1), sometimes (2), often (3), always (4). The purpose of items 15 and 16 were to better understand to what extent technology may be interfering with parent-child relationships. Only 9% of survey respondents indicated that

their own screen time use interrupts interactions with their child on a regular basis (often or always). Ten percent of participants responded that they are distracted (often or always) by their phone when spending time with their children. A small portion of survey respondents indicated that their own screen time use interferes with the parent-child relationship on a regular basis.

Table 8

Screen Time Impacts on Household (N= 46)

Item #	Item Descriptors	Never	Sometimes	Often	Always
		1	2	3	4
15	My screen time use interrupts my interactions with my child.	23% 10	68% 30	7% 3	2% 1
16	I am distracted by my phone when I am with my child.	32% 14	59% 26	5% 2	5% 2
17	It is easy to get my child to end screen time.	5% 2	48% 21	16% 7	31% 14
18	It is easy for me to end screen time for myself.	5% 2	48% 21	9% 4	39% 17
19	Screen time is a source of conflict in my household.	45% 20	36% 16	11% 5	7% 3
20	I monitor my child's screen time use and content.	0% 0	16% 7	14% 6	70% 31

Note. Survey Items 15-20 (N=46)

Table 9 is a frequency count of the reasons that caregivers selected as top reasons that they allow screen time for their child. It is in reference to survey question #21, "what are the main reasons that you allow your child to have screen time?" Study participants could select as many items as they chose on this question. The goal of this question was to learn more about what factors influence screen time permissiveness for parents. The most common reason that caregivers selected for why they allow screen time is "because they asked for it", with 56% of respondents selecting this option. "Bad weather" was selected by 35% of respondents, with the next most popular response being "for entertainment" (30%). A portion of respondents believe that screen time has some benefit for their child; 21% selected "it is educational", 17% "to learn English", and 20%, "it is beneficial". Environmental factors also seem to play a role for several participants. As mentioned above, the second most common response was "bad weather" (35%), and an additional 20% responded that they lacked safe places to bring their child to play outdoors.

Table 9

Common Reasons for Screen Time Allowance

Basic Description	Frequency Count
They ask for it	26
The weather is bad	16
Entertainment	14
Reward good behavior	13
Calm them down	12
It is educational	10

Lack of safe places to play outdoors	9
It is beneficial	9
To learn English	8
My child is bored	8
They cry if I don't let them	7
Lack of access to transportation to bring my child places	6
Other people in my household are on their screens	6
Manage behavior	5
I am stressed out	5
It is hard to say "no" to my child	4
Other people in my household offer my child a screen	4
Lack of programming for my child	2
Other: To be able to do things my child resists (hair, car rides, diaper, etc.)	2
Other: Childcare provider allows it	1
Other: When I need to put my other child asleep	1

Note. Survey Item 21 (N=46)

Table 10 explores possible tools or resources that caregivers may need to reduce screen time for their child, based on survey item #22. Caregivers most frequently selected needing "activity ideas for their child" (57%) and "places to bring my child to play" (57%) as potential factors that would help reduce/manage screen time for their child.

Table 10

Tools and Resources Needed, N=46

Basic Description	Frequency Count
Programming or school for my child	18
Activity ideas for my child	26
Places to bring my child to play	26
Access to transportation to take my child places	5
Strategies for setting screen time limits for my child	12

Note. Survey Items 22 (N=46)

Open Ended Comments

Three qualitative questions (23-25) were included at the end of the survey. The purpose of these optional questions was to provide survey participants an opportunity to share other thoughts, ideas, or questions regarding the topic of screen time and technology usage in their household. These responses may be used to inform further research and curriculum development on this topic.

Question 23 asked, "What, if any, barriers do you have to reducing screen time for your child?" Several participants responded that the cold climate is a barrier as it causes them to be stuck indoors for several months; lack of ideas for activities to do with their children was brought up by several respondents as well.

In response to Question 24 (What other resources or tools (if any) do you need to navigate your child's technology use?), ten participants responded that they would like some training or classes on how to manage their children's devices, such as putting time limits, limiting content, and placing restrictions. Several others responded that they would

need some resources regarding educational activities that they could do with their children.

The final qualitative question asked, “What other questions do you have about technology use for your child?”. Several participants asked about the impacts of screen time use, how much screen time and what content is appropriate for their child. Some expressed a desire to learn strategies for how to decrease screen time for their child.

Chapter Five: Findings and Conclusions

The goal of this study was to better understand the factors that influence parent/caregiver decisions around screen time use for their young children. By learning more about these factors, the researcher aims to develop tools and resources for caregivers and their children based on what is learned in this study.

Summary of the Study

In order to examine caregiver practices and beliefs regarding screen time use for their young children, a survey was developed and administered. The survey contained checklist questions, Likert rating scale questions, and several open-ended questions to gather some qualitative data that may not have been captured in the aforementioned portions of the survey. A paper survey was distributed to participants during a parenting class in an Early Child Family Education (ECFE) class to parents who consented to be part of the study. The survey was translated to Spanish, which is the primary language of the program participants. Of the 67 program participants, 46 completed the survey, resulting in a return rate of 68%. Most participants who did not complete the survey were absent the two weeks during which the survey was administered. All but one participant who was present during the survey distribution completed the survey.

The caregivers who participated in the survey were all Latinx immigrant families living in an urban Minnesota community. All families are currently participating in an Early Childhood Family Education (ECFE) class and currently have at least one child under the age of six. Approximately half of the study participants were new to ECFE, having participating for less than two years. The other half of the respondents had been participating for three or more years in the program. One third of respondents had

children under the age of two, while two-thirds of participants had children between the ages of three and five. The average reported screen time use for children under two years old in this study was 30 minutes. The average reported screen time use for children between two and five years of age was one hours and twenty minutes.

The survey revealed that nearly all participants (94%) have the desire to decrease their child's screen time usage. Parenting self-efficacy did not seem to be a factor in screen time permissiveness for study participants, as a high percentage of them had strong parenting self-efficacy (96%). Rather, caregivers cited reasons such a boredom, lack of alternative activities and bad weather as principal reasons for allowing their child to utilize screens. In addition, many of the respondents stated that they believed that screen time had some benefits for their child. The majority of caregivers (90%) responded that their own technology use was not interrupting their relationships and interactions with their children on a regular basis.

Conclusions

The following conclusions have been made in regards to the research questions of the study, based on the information provided by research participants.

Research Question 1:

To what extent are Latinx caregivers currently following recommendations provided by the World Health Organization (WHO) and American Association of Pediatrics (AAP) for screen time usage for young children?

As mentioned previously in this study, the World Health Organization (WHO) and American Association of Pediatrics (AAP) recommend no screen time for children under the age of two, and less than one hour for children between the ages of two and five (Gagne,

2021). This study found that the reported average screen time use amongst the children under the age of two was 30 minutes, and the average screen time for children between two and five was approximate 1.3 hours. There was a broad range of usage, while some families limited screen time to 30 minutes or an hour, while seven participants reported that their children typically had over two hours of screen time daily.

Interestingly, the screen time amounts reported in this research survey are lower than the statistics found by a study done by Common Sense Media, which found that Latinx children under the age of two averaged 49 minutes daily, and children between the ages of two and four averaged two and a half hours daily (Rideout & Robb, 2020).

Thus, according to the data collected in this research study, most caregivers are not exceeding screen time limitations for their children by a very large margin. However, it is notable that amongst the children in this research study, screen time increased for each age group until three years of age, and then declined again for four and five-year-old children, as displayed in graph 1.

Research Question 2:

What factors, attitudes and beliefs influence Latinx caregiver permissiveness and limit-setting around technology use for their children?

The vast majority (94%) of caregivers responded that they have a desire to decrease their child's screen time use, as well as their own (87%). They generally believe that screen time is not beneficial to their children and would like to reduce household screen time.

The most common response to why caregivers allow their children screen time (item 21) is "because they ask for it", with 57% of respondents selecting this reason.

Environmental factors such as poor weather (35%, *f*=16), and lack of safe places to play outdoors (20%, *f*=9) were also common responses. In addition, many caregivers reported using technology as a behavior management tool; they used screen time to reward good behavior (28%, *f*=13), manage behavior (11%, *f*=5) calm child down (26%, *f*=12). Many participants also responded that they allowed their child to use technology because they believed it had educational value (*f*=10), could help their children learn English (*f*=8), or was generally beneficial for their children (*f*=9).

The data suggests that although parents may not necessarily want to offer their children screen time, they allow their children to do so because their children ask for it. Environmental factors and housing also seem to have a significant impact on parent's decisions around technology use. Considering that all of the survey participants are immigrants that come from warmer climates, one could assume that harsh winters in Minnesota are a particular barrier for families taking their children outside as an alternative to screen time. In addition, unsafe neighborhoods and lack of yards are other factors that disproportionately impact immigrant families. Another theme in the data is the belief that technology is beneficial to their children, offering either education or linguistic opportunities to their children. This is consistent with previous research which has found that when caregivers believe that their children benefit from technology, they are much more likely to be permissive with screen time (Radesky et al, 2016).

Research Question 3:

What are the barriers that Latinx caregivers face when trying to find alternatives to technology/screen time for their children?

The barrier that was most commonly expressed was a lack of other activities for their child. The majority of caregivers who took the survey are home with their child all day, and expressed having difficulty finding engaging activities for their children. As mentioned above, cold weather is another barrier for families in this study. The inability to play outside or leave the house leads to an increase in screen time permissiveness as they feel that their children are bored and lacking ample activities and entertainment options.

Research Question 4:

What tools and resources do Latinx caregivers need to navigate the ever-changing realm of technology and media use?

Almost a quarter of study participants expressed a desire to learn how to better navigate technology themselves when asked about what tools and resources they need in open-ended question (item 24) on the survey. Caregivers want to learn how to monitor their child's screen time, control content, administer time limits, and assess the quality of the programming available for their children. Caregivers also responded that they would like educational resources and activity ideas for their children at home.

Discussion

The findings in this study suggest that the Latinx children in our program are not exceeding the recommended screen time guidelines by a very large amount. The screen time of children in this study actually fell below the averages reported by Latinx families in a study conducted by Common Sense Media (Rideout & Robb, 2020). However, 44% of the children in the study did exceed screen time guidelines to some extent. As mentioned above, screen time amounts were highest for the three-year-old children in the study. Given the trend in this particular study of screen time generally increasing with the age of

the child, it was interesting that screen time decreased after the age of three for these children. It is worth noting that the majority of children over the age of three in this study are in full day pre-Kindergarten programming; it would be worth exploring how access to educational programming is related to screen time usage in young children.

Even though most of the caregivers in the study did not report excessive screen time use for their children, the majority of caregiver respondents (94%) did express a desire to decrease their child's screen time. As reported by caregivers, a variety of beliefs and factors influence screen time in their households, the most common being that their child desires screen time, using it as entertainment, to manage behavior, lack of other activities and bad weather, and the belief that screen time is beneficial/educational for their child.

Findings in this study are consistent with prior research on screen time use amongst young Latinx children, although the reported screen time in this study fell below what other studies had found (Rideout & Robb, 2020). The reasons for allowing screen time were also fairly consistent- particularly the belief that technology use is beneficial for young children as well as the environmental factors that influence screen time use, such as weather and unsafe neighborhoods (Thompson et al., 2023).

One aspect of this research study that was not consistent with other studies was the way in which parenting self-efficacy has been widely found to impact screen time permissiveness (Arumugam et al., 2021; Carson & Janssen, 2012; Chen et al, 2020; Halpin et al. 2021; McDaniel, 2021). Almost all respondents in this survey (96%) reported confidence in their ability to set limits for their child. The few caregivers who responded low parenting self-efficacy did *not* report excessive screen time amounts for their children. Parenting stress has also been found to be related to permissiveness around screen time

(Uzundağ et al., 2022), but only a small percentage of caregivers in this study (10%) cited stress as a reason that they allowed their child to use a screen.

Several research studies have found that parent technology use can begin to interfere with parent-child interactions, interrupting the quality and quantity of these interactions, a concept which has been coined as "technoference" (McDaniel & Radesky, 2018). Only ten percent of caregiver in this study self-reported that they feel that their own screen time use interrupts their interactions with their children some of the time. Caregiver screen time use has also been found to be one of the biggest predictors of their children's screen time habits (Chong et al., 2023; Lauricella et al., 2015). This study also found that child screen time was indeed correlated with their caregiver's screen time; caregivers whose children exceeded screen time recommendation reported almost three times the amount of screen time than caregivers whose children were within the recommended screen time limits.

One of the purposes of this study is to learn about ways to support caregivers in navigating technology with their young children. The caregiver responses provide some tangible solutions that could be easily implemented by parent education programs. For example, parents expressed a desire to learn how to navigate parental controls and content on their children's technological devices. In addition, caregivers also shared that they would like more educational resources and ideas for developmentally appropriate activities to do with their children at home.

The information gathered in this study is promising, as it shows that overall, the Latinx children of the study were not exceeding screen time amounts by a very large margin. Further, the majority of caregivers (94%) expressed a desire to reduce their

children's screen time. The tools and resources that caregivers requested to navigate technology with their children are very tangible and could be easily implemented in a parent education program such as ECFE. For example, a training on reviewing content, parental controls, and placing time limits on technological devices could be designed and implemented each semester. Parent educators can also create a list of high-quality content programming for young children, as well as ideas for developmentally appropriate activities that parents can use as an alternative to screen time for their children.

Limitations

The following limitations are acknowledged in this study:

1. This study was limited to Latinx caregivers in one school district in Minnesota who are participating in the Early Childhood Family Education (ECFE) program.
2. All of the data collected for this study was self-reported. Caregivers were asked to estimate their own screen time usage and their child's average daily screen time, and the reported numbers may not be accurate.
3. All of the surveys were completed individually by caregivers in the program. There is a varying range of reading and writing proficiency amongst our participants, many of whom have not had access to formal education. This may have impacted comprehension of survey questions, and thus, the validity of the survey responses.

Recommendations for Further Research

Recommendations for further research include:

1. Replicate study to include larger population sample across demographic groups and compare screen time use between different groups in order to get a more complete picture of technology use amongst young children in this community.
2. Investigate the relationship between access to preschool opportunities and screen time usage amongst preschool aged children.
3. Conduct a longer term pre and post study as a follow up to this study that implements the tools and resources to help caregivers navigate technology use for their young children and analyze their effectiveness in reducing screen time.
4. Conduct a qualitative study to better understand the experiences, values, and beliefs related to children screen time usage with various target groups.

Recommendations for Practice

Based on the findings of this research study, recommendations for future practice include:

1. Provide educational programming for caregivers about the impacts of technology use on the development and wellness of children.
2. Provide a technology training for caregivers that focuses on how to set parental controls and screen time limits on household devices.
3. Assist families in creating a family media plan, as well as strategies for limit setting around technology usage in their household.
4. Provide resources such as educational activity ideas and affordable extra-curricular activities for their young children.

References

Arumugam, C. T., Said, M. A., & Nik Farid, N. D. (2021). Screen-based media and young children: review and recommendations. *Malaysian Family Physician*, *16*(2), 7–13. https://doi.org/10.51866/rv1143

Arundell, L., Gould, L., Ridgers, N. D., Ayala, A. M., Downing, K. L., Salmon, J., Timperio, A., & Veitch, J. (2022). "Everything kind of revolves around technology": A qualitative exploration of families' screen use experiences, and intervention suggestions. *BMC Public Health*, *22*(1). https://doi.org/10.1186/s12889-022-14007-w

Asplund, K. M., Kair, L. R., Arain, Y. H., Cervantes, M., Oreskovic, N. M., & Zuckerman, K. E. (2015). Early childhood screen time and parental attitudes toward child television viewing in a low-income Latino population attending the Special Supplemental Nutrition Program for Women, infants, and children. *Childhood Obesity*, *11*(5), 590–599. https://doi.org/10.1089/chi.2015.0001

Auxier, B., Anderson, M., Perrin, A., & Turner, E. (2019, December 30). *Parenting Children in the Age of Screens*. Pew Research Center. http://www.pewresearch.org/

Berk, L. E., & Meyers, A. B. (2016). *Infants and Children Prenatal Through Middle Childhood* (8th ed., pp. 261-275). Pearson.

Carson, V., & Janssen, I. (2012). Associations between factors within the home setting and screen time among children aged 0–5 years: A cross-sectional study. *BMC Public Health*, *12*(1). https://doi.org/10.1186/1471-2458-12-539

Chen, C., Chen, S., Wen, P., & Snow, C. E. (2020). Are screen devices soothing children or soothing parents? Investigating the relationships among children's exposure to different types of screen media, parental efficacy and home literacy practices. *Computers in Human Behavior*, *112*, 106462. https://doi.org/10.1016/j.chb.2020.106462

Chong, S. C., Teo, W. Z., & Shorey, S. (2023). Exploring the perception of parents on children's screentime: A systematic review and meta-synthesis of qualitative studies. *Pediatric Research*, *94*(3), 915–925. https://doi.org/10.1038/s41390-023-02555-9

Duch, H., Fisher, E. M., Ensari, I., Font, M., Harrington, A., Taromino, C., Yip, J., & Rodriguez, C. (2013). Association of Screen Time use and language development in Hispanic toddlers. *Clinical Pediatrics*, *52*(9), 857–865. https://doi.org/10.1177/0009922813492881

Elias, N., & Sulkin, I. (2019). Screen-assisted parenting: The relationship between toddlers' screen time and parents' use of media as a parenting tool. *Journal of Family Issues*, *40*(18), 2801–2822. https://doi.org/10.1177/0192513x19864983

Ellis, R. (2022, November). *Parenting Center: Parenting tips and advice from WebMD.* WebMD. https://www.webmd.com/parenting/news/20221114/kids-screen-time-rose-sharply-during-pandemic-study-says

Gagne, C. (2021, June 8). *This is the average screen time for kids. how do your kids measure up?* Today's Parent. https://www.todaysparent.com/family/family-life/this-is-the-average-screen-time-for-kids-how-do-your-kids-measure-up/

Halpin, S., Mitchell, A. E., Baker, S., & Morawska, A. (2021). Parenting and child behaviour barriers to managing screen time with young children. *Journal of Child and Family Studies*, *30(*3*),* 824–838. https://doi.org/10.1007/s10826-020-01881-4

Hamilton, K., Spinks, T., White, K. M., Kavanagh, D. J., & Walsh, A. M. (2015). A psychosocial analysis of parents' decisions for limiting their young child's screen time: An examination of attitudes, social norms and roles, and control perceptions. *British Journal of Health Psychology*, *21*(2), 285–301. https://doi.org/10.1111/bjhp.12168

Hartshorne, J. K., Huang, Y. T., Oppenheimer, K., Robbins, P. T., Molina, M. D., & Aulestia, P. M. (2021). Screen time as an index of family distress. *Current Research in Behavioral Sciences, 2*. https://doi.org/10.31234/osf.io/zqc4t

Kerai, S., Almas, A., Guhn, M., Forer, B., & Oberle, E. (2021). Screen time and developmental health: Results from an early childhood study in Canada. *BMC Public Health*, *22*(1). https://doi.org/10.21203/rs.3.rs-496452/v1

Lauricella, A. R., Wartella, E., & Rideout, V. J. (2015). Young children's screen time: The complex role of parent and child factors. *Journal of Applied Developmental Psychology*, *36*, 11–17. https://doi.org/10.1016/j.appdev.2014.12.001

Lewis, L., Povey, R., Rose, S., Cowap, L., Semper, H., Carey, A., Bishop, J., & Clark-Carter, D. (2021). What behavior change techniques are associated with effective interventions to reduce screen time in 0–5 year olds? A narrative systematic review. *Preventive Medicine Reports*, *23*, 101429. https://doi.org/10.1016/j.pmedr.2021.101429

Linder, L. K., McDaniel, B. T., Stockdale, L., & Coyne, S. M. (2021). The impact of parent and child media use on early parent–infant attachment. *Infancy*, *26*(4), 551–569.

Lopes Almeida, M., Garon-Carrier, G., Cinar, E., Frizzo, G. B., & Fitzpatrick, C. (2023). Prospective associations between child screen time and parenting stress and later inattention symptoms in preschoolers during the COVID-19 pandemic. *Frontiers in Psychology*, *14*. https://doi.org/10.3389/fpsyg.2023.1053146

McArthur, B. A., Tough, S., & Madigan, S. (2021). Screen time and developmental and behavioral outcomes for preschool children. *Pediatric Research*, *91*(6), 1616–1621. https://doi.org/10.1038/s41390-021-01572-w

McDaniel, B. T. (2019). Parent distraction with phones, reasons for use, and impacts on parenting and child outcomes: A review of the emerging research. *Human Behavior and Emerging Technologies*, *1*(2), 72–80. https://doi.org/10.1002/hbe2.139

McDaniel, B. T. (2021). The disrupt: A measure of parent distraction with phones and mobile devices and associations with depression, stress, and Parenting Quality. *Human Behavior and Emerging Technologies*, *3*(5), 922–932. https://doi.org/10.1002/hbe2.267

McDaniel, B. T., & Radesky, J. S. (2018). Technoference: Longitudinal associations between parent technology use, parenting stress, and child behavior problems. *Pediatric Research*, *84*(2), 210–218. https://doi.org/10.1038/s41390-018-0052-6

McDaniel, B. T., Rasmussen, S., Reining, L., Culp, L., & Deverell, K. (2023). Pilot study of a screen-free week: Exploration of changes in parent and child screen time, parent well-being and attitudes, and parent-child relationship quality. *Human Behavior and Emerging Technologies*, *2023*, 1–13. https://doi.org/10.1155/2023/5545779

Morawska, A., Mitchell, A. E., & Tooth, L. R. (2023). Managing screen use in the under-fives: Recommendations for parenting intervention development. *Clinical Child and Family Psychology Review*, *26*(4), 943–956. https://doi.org/10.1007/s10567-023-00435-6

Muppalla, S. K., Vuppalapati, S., Reddy Pulliahgaru, A., & Sreenivasulu, H. (2023). Effects of excessive screen time on child development: An updated review and strategies for Management. *Cureus*, *16*(6). https://doi.org/10.7759/cureus.40608

Määttä, S., Kaukonen, R., Vepsäläinen, H., Lehto, E., Ylönen, A., Ray, C., Erkkola, M., & Roos, E. (2017a). The mediating role of the home environment in relation to parental educational level and preschool children's Screen time: A cross-sectional study. *BMC Public Health*, *17*(1). https://doi.org/10.1186/s12889-017-4694-9

Nagata, J. M., Ganson, K. T., Iyer, P., Chu, J., Baker, F. C., Pettee Gabriel, K., Garber, A. K., Murray, S. B., & Bibbins-Domingo, K. (2022). Sociodemographic correlates of contemporary screen time use among 9- and 10-year-old children. *The Journal of Pediatrics*, *240*. https://doi.org/10.1016/j.jpeds.2021.08.077

Ochoa, W., & Reich, S. M. (2020). Parents' beliefs about the benefits and detriments of Mobile Screen Technologies for their young children's learning: A focus on diverse

Latine mothers and fathers. *Frontiers in Psychology*, *11*. https://doi.org/10.3389/fpsyg.2020.570712

Radesky, J. S., Eisenberg, S., Kistin, C. J., Gross, J., Block, G., Zuckerman, B., & Silverstein, M. (2016). Overstimulated consumers or next-generation learners? parent tensions about Child Mobile Technology use. *The Annals of Family Medicine*, *14*(6), 503–508. https://doi.org/10.1370/afm.1976

Radesky, Jenny S., Kaciroti, N., Weeks, H. M., Schaller, A., & Miller, A. L. (2023). Longitudinal associations between use of mobile devices for calming and emotional reactivity and executive functioning in children aged 3 to 5 years. *JAMA Pediatrics*, *177*(1), 62. https://doi.org/10.1001/jamapediatrics.2022.4793

Rideout, V., & Robb, M. B. (2020). The Common Sense census: Media use by kids age zero to eight, 2020. San Francisco, CA: Common Sense Media.

Thompson, D. A., Jimenez-Zambrano, A. M., Ringwood, H., Tschann, J. M., & Clark, L. (2023). Parenting a toddler in the era of pervasive screens: Interviews with low-income Mexican American parents. *International Journal of Environmental Research and Public Health*, *20*(8), 5461. https://doi.org/10.3390/ijerph20085461

Thompson, D. A., Schmiege, S. J., Johnson, S. L., Vandewater, E. A., Boles, R. E., Zambrana, R. E., Lev, J., & Tschann, J. M. (2018). Screen-related parenting practices in low-income Mexican American families. *Academic Pediatrics*, *18*(7), 820–827. https://doi.org/10.1016/j.acap.2018.05.002

Uzundağ, B. A., Oranç, C., Keşşafoğlu, D., & Altundal, M. N. (2022). Relations among self-reported maternal stress, smartphone use, and mother–child interactions. *Journal of Child and Family Studies*, *31*(11), 3058–3068. https://doi.org/10.1007/s10826-022-02371-5

Xu, H., Wen, L. M., & Rissel, C. (2015). Associations of parental influences with physical activity and screen time among young children: A systematic review. *Journal of Obesity*, *2015*, 1–23. https://doi.org/10.1155/2015/546925

Appendix A

INSTITUTIONAL REVIEW BOARD (IRB)
720 4th Avenue South AS 101, St. Cloud, MN 56301-4498

January 29, 2024

Katherine Percuoco
Email: katherine.percuoco@my.metrostate.edu

Faculty Mentor: Frances Kayona

The Institutional Review Board has reviewed your protocol to conduct research involving human subjects.

Project Title: Factors Influencing Screen Time Use Amongst Latinx Children in Early Childhood

Your project has been: Approved

IRB PROTOCOL DETERMINATION: Exempt

SCSU IRB#: 59115005

Please read through the following important information concerning IRB projects .

- The principal investigator assumes the responsibilities for the protection of participants in this project. Any adverse events must be reported to the IRB as soon as possible (ex. research related injuries, harmful outcomes, significant withdrawal of subject population, etc.).
- The principal investigator must seek approval for any changes to the study (ex. research design, consent process, survey/interview instruments, funding source, etc) by completing an IRB Modification/RevisionequestForm:https://webportalapp.com/webform/irb_modification_request_form
- The IRB reserves the right to review the research at any time.

Feel free to contact the IRB for assistance at 320-308-4932 or email ResearchNow@stcloudstate.edu and reference the SCSU IRB number when corresponding for expedited response. Additional information can be found on the IRB website https://www.stcloudstate.edu/irb/default.aspx.

Sincerely,

IRB Chair:	IRB Institutional Official
Dr. William Collis-Prather	Dr. Claudia Tomany
Program Director	Associate Provost for Research
Applied Clinical Research	Dean of Graduate Studies

Appendix B

February 6, 2024

Dear Caregiver:

In an effort to gather information regarding screen time use among children under the age of five, I am seeking your participation for my thesis research. My research centers on factors that influence screen time use among young children, such as caregiver attitudes and screen time practices. The overall purpose of the research is to better understand how to support caregivers in navigating technology use and screen time with their young children.

Would you be willing to take a few minutes and complete the attached study about screen time use in your household? Participation is voluntary and you are free to withdraw your consent and to discontinue participation in this study at any time. All data provided will be kept confidential. Only this investigator will be involved in the tabulation of the data. No birthdates, social security numbers, or names will be required. The time required to complete the 23-item questionnaire is approximately 10-15 minutes.

There are no anticipated risks associated with participating in this study. Your participation in this survey will help our program learn more about how to best support caregivers in navigating screen time with young children and inform future curriculum on this topic.

The district will be provided with an analysis and description of the results at the conclusion of the study. Included is the questionnaire, which you are asked to complete of you wish to participate in this study. If there are any questions, concerns, or objections please speak with Kate at (612) 405-3473.

Upon completion of the questionnaire, place the questionnaire in the envelope provided, seal it and return it to your Parent Education Instructor.

If you consent to participate in this study, please sign and date on the line below:

_____ _____

Signature Date

Thank you for your time and participation in this study.

Sincerely,

Kate Percuoco
Early Childhood Teacher
Minneapolis Public Schools
612-405-3473, Katherine.percuoco@mpls.k12.mn.us

Enclosures: (1) Caregiver Questionnaire

6 de febrero, 2024

Estimada Familias:

En un esfuerzo por aprender sobre el uso del tiempo de pantalla entre niños menores de cinco años, estoy buscando su participación para mi investigación de tesis. Mi investigación se centra en los factores que influyen el uso del tiempo de pantalla de los niños pequeños, como las actitudes del cuidador y las prácticas de tiempo de pantalla en casa. El propósito general de la investigación es entender mejor cómo apoyar a los cuidadores con el uso de la tecnología y el tiempo de pantalla con sus hijos pequeños.

¿Estaría dispuesto a tomar unos minutos y completar la encuesta adjunto sobre el uso del tiempo de pantalla en su hogar? La participación es voluntaria y usted es libre de retirar su consentimiento y de interrumpir la participación en este estudio en cualquier momento. Todos los datos proporcionados se mantendrán confidenciales. Solo este investigador estará involucrado en la tabulación de los datos. No se requerirán fechas de nacimiento, números de seguro social o nombres. El tiempo requerido para completar el cuestionario es aproximadamente 15 minutos.

No hay riesgos anticipados asociados con la participación en este estudio. Su participación en esta encuesta ayudará a nuestro programa a aprender más sobre cómo apoyar mejor a los cuidadores en la navegación del tiempo de pantalla con niños pequeños e informar el futuro plan de estudios sobre este tema.

Si usted tiene cualquier pregunta sobre el estudio, pueden contactar a Kate (612) 405-3473.

Al completar el cuestionario, coloque el cuestionario en el sobre proporcionado por su Instructor de Educación para Padres.

Si usted acepta participar en este estudio, por favor firme y poner la fecha en la línea de abajo:

_____ _____

Firma Fecha

Gracias por su tiempo y participación.

Atentamente,

Kate Percuoco
Early Childhood Teacher, Minneapolis Public Schools
612-405-3473 Katherine.percuoco@mpls.k12.mn.us

Enclosures: (1) Caregiver Questionnaire

Appendix C

Parent/Caregiver Survey

1. Age of Child:

   ____0-11 months
   ____1 year old
   ____2 years old
   ____3 years old
   ____4 years old
   ____5 years old

2. Average amount of your child's daily screen time:
   _____0 minutes
   _____1-30 min.
   _____31-60 min.
   _____61-90 min.
   _____91-120 min.
   _____2-3 hours
   _____3-4 hours
   _____4-5 hours
   _____5+ hours

3. Average amount of your (caregiver) daily screen time:
   _____0 minutes
   _____1-60 minutes
   _____1-2 hours
   _____2-3 hour
   _____3-4 hours
   _____4-5 hours
   _____5+hours

4. How many children live in your house?
   __ 1
   ___ 2
   ___ 3
   ___ 4
   ___ 5
   ___ 6 or more

5. How long have you participated in ECFE?
   ___ less than 1 year
   ___ 1 year
   ___ 2 years

___ 3 years
___ 4 years
___ 5 years or more

Rating Scale

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

6. I am confident in my ability to set limits for my child.
7. I am confident in my ability to set screen time limits for my child.
8. I feel good about the content that my child is viewing on a screen.
9. I feel good about my child's amount of daily screen time use.
10. I feel good about my own amount of daily screen time use.
11. I have a desire to decrease my child's daily screen time usage.
12. I have a desire to decrease my own daily screen time usage.
13. I think that screen time decreases the quality of interactions with my child.
14. I think that screen time helps me connect with my child.

Rating Scale

1	2	3	4
Never	Sometimes	Often	Always

15. My screen time use interrupts my interactions with my child.
16. I am distracted by my phone when I am with my child.
17. It is easy to get my child to end screen time.
18. It is easy for me to end screen time.
19. Screen time is a source of conflict in my household.
20. I know what my child is viewing then they are on a screen.

21. What are the main reasons that you allow your child to have screen time? (Mark all that apply)

_____They ask for it
____Reward good behavior
____Manage behavior
____Calm them down
____They cry if I don't let them
____I need to things done
____It is difficult for me to say "no" to my child
____Entertainment
____I am stressed out
____My child is bored
____It is educational
____To learn English
____It is beneficial
____The weather is bad
____There is not enough programming for my child
____I don't have access to a safe place to play outside
____I don't have access to transportation to bring my child places
____Other people in the household are on their screens
____Other people in my household offer my child a screen
____Other_____

22. If you feel that your child has too much screen time, what would you need in order to reduce it?

____Programming for my child
____Activity ideas for my child
____Places to bring my child to play
____Access to transportation to take my child places
____ Strategies for setting screen time limits for my child
____ other_____
____ other _____

23. What, if any, barriers do you have to reducing screen time for your child?

24. What resources do you need to navigate technology use for your child?

25. Do you have any questions about screen time use for your child?
26.

Encuesta Para Cuidadores o Padres de Familia

1. Edad de su niño/a que está participando en ECFE:

   ____0-11 meses
   ____1 año
   ____2 años
   ____3 años
   ____4 años
   ____5 años

2. ¿Cuánto tiempo pasa en frente de una pantalla su hijo/a durante el día?
   _____0 minutos
   _____1-30 min.
   _____31-60 min.
   _____61-90 min.
   _____91-120 min.
   _____2-3 horas
   _____3-4 horas
   _____4-5 horas
   _____5+ horas

3. ¿Cuánto tiempo pasa usted en frente de una pantalla durante el día?
   _____0 minutos
   _____1-60 minutos
   _____1-2 horas
   _____2-3 hora
   _____3-4 horas
   _____4-5 horas
   _____5+horas

4. ¿Cuántos niños/as viven en su casa?
   ___ 1
   ___ 2
   ___ 3
   ___ 4
   ___ 5
   ___ 6 o más

5. ¿Cuánto tiempo tiene usted participando en ECFE?
   ___ menos que 1 año
   ___ 1 año
   ___ 2 años
   ___ 3 años
   ___ 4 años
   ___ 5 años o más

6. Me siento yo seguro de mi capacidad para poner límites a mi hijo/a.

1	2	3	4
Muy en desacuerdo	En Desacuerdo	De acuerdo	Muy de Acuerdo.

7. Me siento yo seguro de mi capacidad de poner límite de tiempo para el uso de la pantalla a mi hijo/a.

1	2	3	4
Muy en desacuerdo	En Desacuerdo	De acuerdo	Muy de Acuerdo.

8. Me siento a gusto con lo que está viendo mi hijo/a en la pantalla.

1	2	3	4
Muy en desacuerdo	En Desacuerdo.	De acuerdo	Muy de Acuerdo.

9. Me siento a gusto con la cantidad de tiempo que mi hijo/a pasa en la pantalla.

1	2	3	4
Muy en desacuerdo	En Desacuerdo	De acuerdo	Muy de Acuerdo.

10. Me siento bien con la cantidad de tiempo que paso yo en una pantalla.

1	2	3	4
Muy en desacuerdo	En Desacuerdo.	De acuerdo	Muy de Acuerdo.

11. Tengo el deseo de disminuir la cantidad de tiempo que mi hijo/a pasa en una pantalla.

1	2	3	4
Muy en desacuerdo	En Desacuerdo.	De acuerdo	Muy de Acuerdo.

12. Tengo el deseo de disminuir la cantidad de tiempo que yo estoy pasando en una pantalla.

1	2	3	4
Muy en desacuerdo	En Desacuerdo.	De acuerdo	Muy de Acuerdo.

13. Yo creo que el uso de la pantalla en mi hogar disminuye la calidad de interacciones que tengo con mi hijo/a.

1	2	3	4
Muy en desacuerdo	En Desacuerdo.	De acuerdo	Muy de Acuerdo.

14. Yo creo que el tiempo en pantalla me ayuda conectar con mi hijo/a.

1	2	3	4
Muy en desacuerdo	En Desacuerdo	De acuerdo	Muy de Acuerdo.

15. Interrumpe el tiempo que paso yo en frente de la pantalla con las interacciones que tengo con mi hijo/a.

1	2	3	4
Nunca	A veces	Muy seguido	Siempre

16. Mi teléfono me distrae cuando estoy pasando tiempo con mi hijo/a.

1	2	3	4
Nunca	A veces	Muy seguido	Siempre

17. Es fácil convencer a mi hijo/a que deje de ver la pantalla.

1	2	3	4
Nunca	A veces	Muy seguido	Siempre

18. Es fácil para mi limitarme el tiempo en frente de la pantalla.

1	2	3	4
Nunca	A veces	Muy seguido	Siempre

19. Causa conflictos en mi hogar el uso de las pantallas.

1	2	3	4
Nunca	A veces	Muy seguido	Siempre

20. Yo sé lo que está viendo mi hijo/a cuando está en una pantalla.

1	2	3	4
Nunca	A veces	Muy seguido	Siempre

21. ¿Cuáles son las razones principales que permiten que su hijo/a use una pantalla? (Marque todas las que apliquen)

____Me lo pide
____Premio para buen comportamiento
____Para que se porte bien
____Para calmar al niño/a
____Lloran si no los permito usar una pantalla

____Porque tengo cosas que hacer
____Se me hace difícil decir “no” a mi hijo/a
____Para entretenerlos
____Porque estoy bajo estrés
____Porque mi hijo/a están aburridos/as
____Es educacional
____Para aprender inglés
____Tiene beneficios para mi hijo/a
____El clima está mal
____No hay suficiente programación para mi hijo/a
____ No tengo acceso a un lugar seguro para jugar afuera
____ No tengo acceso a transporte para llevar a mi hijo a otros lugares
____Otras personas en la casa están usando una pantalla
____Otras personas en la casa le dejen usar una pantalla a mi hijo/a
____Otras cosas (escribe aquí o abajo):_____

22. Si usted cree que su hijo/a tiene demasiado tiempo en la pantalla, ¿que necesitaría para reducirlo?

____Programas educacionales para mi hijo/a
____Ideas para actividades con mi hijo/a
____Un lugar donde puedo llevar a mi hijo/a para jugar
____Acceso a transporte para llevar a mi hijo/a a otros lugares
____ Estrategias para poner límites en el tiempo de pantalla de mi hijo/a
____ otras _____
____ otras_____

23. ¿Existen barreras para reducir el tiempo de pantalla de su hijo/a? ¿Cuáles son?

24. ¿Qué clase de recursos necesita usted para navegar el uso de tecnología de su hijo/a?

25. ¿Tiene usted alguna pregunta sobre el uso de la pantalla para su hijo?